

**Title 296 WAC
LABOR AND INDUSTRIES,
DEPARTMENT OF**

Chapters

- 296-04** Internal rules—State apprenticeship and training council.
- 296-13** Practice and procedure—Electrical advisory board and electrical examining board.
- 296-14** Industrial insurance—Reciprocal agreement.
- 296-15** Workmen's compensation self-insurance rules and regulations.
- 296-15A** Industrial insurance discrimination.
- 296-16** Employer—Worker reemployment incentives.
- 296-17** Manual of rules, classifications, rates, and rating system for Washington workers' compensation insurance.
- 296-18A** Rehabilitation review.
- 296-19** Classification of state employees.
- 296-24** General safety and health standards.
- 296-30** Rules for the administration of the crime victim compensation program.
- 296-46** Safety standards—Installing electric wires and equipment—Administrative rules.
- 296-52** Safety standards for the possession and handling of explosives.
- 296-56** Safety standards—Longshore, stevedore and related waterfront operations.
- 296-62** Occupational health standards—Safety standards for carcinogens.
- 296-65** Asbestos removal and encapsulation.
- 296-80** Safety rules governing the construction, operation, maintenance and inspection of inclined passenger lifts.
- 296-81** Safety rules governing existing elevators, dumbwaiters, escalators and other lifting devices—Moving walks.
- 296-93** Material lifts.
- 296-104** Board of boiler rules—Substantive.
- 296-116** Pilotage rules.
- 296-124** Rules and regulations for the administration of the Theatrical Enterprise Act.
- 296-150A** Rules and regulations for factory-built housing and commercial structures and governor's advisory board administrative rules.
- 296-150B** Standards for mobile homes, commercial coaches, and recreational vehicles.
- 296-155** Safety standards for construction work.
- 296-200** Contractor certificate of registration renewals—Security—Insurance.
- 296-310** Farm labor contracting rules.
- 296-360** Discrimination, pursuant to RCW 49.17.160.

- 296-400** Certification of competency for journeyman plumbers.
- 296-401** Certification of competency for journeyman electricians.
- 296-402** Electrical testing laboratory accreditation.

Chapter 296-04 WAC**INTERNAL RULES—STATE APPRENTICESHIP AND TRAINING COUNCIL****WAC****INTERNAL RULES**

- 296-04-005** Apprenticeship and training agreements—Proposed standards.
- 296-04-040** Council meetings—When held—Notice—Who may attend—Quorum.
- 296-04-060** Officers, appointment, duties—Ex officio members.
- AFFIRMATIVE ACTION PLAN**
- 296-04-500** Repealed.
- 296-04-501** Repealed.
- 296-04-502** Repealed.
- 296-04-503** Repealed.
- 296-04-504** Repealed.
- 296-04-505** Repealed.
- 296-04-506** Repealed.

DISPOSITION OF SECTIONS FORMERLY CODIFIED IN THIS CHAPTER

- 296-04-500** Registration fees for apprenticeship and training agreements and standards. [Statutory Authority: 1982 1st ex.s. c 39 §§ 1, 3. 82-22-042 (Order 82-30), § 296-04-500, filed 10/29/82.] Repealed by 84-04-024 (Order 84-1), filed 1/25/84. Statutory Authority: 1983 c 90.
- 296-04-501** Registration fees for apprenticeship and training agreements. [Statutory Authority: 1982 1st ex.s. c 39 §§ 1, 3. 82-22-042 (Order 82-30), § 296-04-501, filed 10/29/82.] Repealed by 84-04-024 (Order 84-1), filed 1/25/84. Statutory Authority: 1983 c 90.
- 296-04-502** Registration fees for apprenticeship and training standards. [Statutory Authority: 1982 1st ex.s. c 39 §§ 1, 3. 82-22-042 (Order 82-30), § 296-04-502, filed 10/29/82.] Repealed by 84-04-024 (Order 84-1), filed 1/25/84. Statutory Authority: 1983 c 90.
- 296-04-503** Registration fees for apprenticeship and training standards—Limitation on fees. [Statutory Authority: 1982 1st ex.s. c 39 §§ 1, 3. 82-22-042 (Order 82-30), § 296-04-503, filed 10/29/82.] Repealed by 84-04-024 (Order 84-1), filed 1/25/84. Statutory Authority: 1983 c 90.
- 296-04-504** Registration fees—Application to existing apprenticeship and training agreements and standards. [Statutory Authority: 1982 1st ex.s. c 39 §§ 1, 3. 82-22-042 (Order 82-30), § 296-04-504, filed 10/29/82.] Repealed by 84-04-024 (Order 84-1), filed 1/25/84. Statutory Authority: 1983 c 90.
- 296-04-505** Registration fees for apprenticeship and training agreements and standards—Effect of failure to make timely payment. [Statutory Authority: 1982 1st ex.s. c 39 §§ 1, 3. 82-22-042 (Order 82-30), § 296-04-505, filed 10/29/82.] Repealed by 84-04-024 (Order 84-1), filed 1/25/84. Statutory Authority: 1983 c 90.
- 296-04-506** Registration fees for apprenticeship and training agreements and standards—Mailing address. [Statutory Authority: 1982 1st ex.s. c 39 §§ 1, 3. 82-22-042 (Order 82-30), § 296-04-506, filed 10/29/82.] Repealed by 84-04-024 (Order 84-1), filed 1/25/84. Statutory Authority: 1983 c 90.

INTERNAL RULES

WAC 296-04-005 Apprenticeship and training agreements—Proposed standards. The Washington state apprenticeship and training council is the body responsible for matters concerning apprenticeship and training in the state of Washington. The principal function of the council is to approve and register apprenticeship and training agreements. Persons or organizations desiring to institute an apprenticeship or training program must first prepare proposed standards which conform to these rules and to RCW 49.04.050. The standards must also include the composition of and general rules for the committee which will administer the program. The supervisor, or Washington state apprenticeship coordinators, are available to give assistance in this task.

These standards, which will be either a plant program or committee program as defined herein, must then be presented to the supervisor at least 45 days before the regular meeting at which the council will be requested to consider such proposed standards. The standards proposed will then be discussed by the council and approved, disapproved, or approved subject to enumerated changes. The council, at its meetings, will allow changes made for clerical errors and additions of standard approved language deleted from the proposed standard if authorized representatives of all concerned are present and authorized to accept changes. The council will not accept changes at its meetings in the format or language not deemed standard by the council.

The committee thus set up then begins functioning. Its duties are to run the day to day operations of the apprenticeship and training program. It is charged with operating the program in accordance with the standards as approved by the council. It is charged with accepting or rejecting applicants for apprenticeship or training, registering accepted applicants as apprentices or trainees with the supervisor of apprenticeship and training, removing apprentices or trainees from the program in accordance with the standards and informing the supervisor of any matters which affect the standing of individuals as apprentices or trainees. Persons not registered with the supervisor as apprentices or trainees cannot be recognized as apprentices or trainees by the council.

The supervisor and his staff may be consulted on any matters concerning apprenticeship and training, and they will provide any information concerning apprenticeship training which is available to them. They are also required to investigate any discrepancies between the actual and required operation of any program and conduct systematic reviews of the operation of all programs. The supervisor may recommend cancellation of any program which is not operated in accordance with its approved standards after notice of violation is given in accordance with the provisions of WAC 296-04-270(3).

The supervisor and the council will act to assist in the resolution of any complaints against local committees, or other organizations administering apprenticeship agreements, by any apprentices who have completed their

probationary period, as provided in WAC 296-04-295. [Statutory Authority: Chapter 49.04 RCW. 85-22-035 (Order 85-31), § 296-04-005, filed 11/1/85. Statutory Authority: RCW 49.04.010. 80-03-004 (Order 80-2), § 296-04-005, filed 2/8/80; Order 71-3, § 296-04-005, filed 3/25/71.]

WAC 296-04-040 Council meetings—When held—Notice—Who may attend—Quorum. Council meetings shall be of two kinds—regular and special meetings.

(1) **Regular meetings.** Regular meetings of the council shall be held at least quarterly during each year beginning on the third Thursday of the months of January, April, July and October. Such regular meetings shall be held at such locations within the state of Washington which in the opinion of the council will best promote the purposes of the Washington State Apprenticeship and Training Act. All meetings of the council shall be open to the general public, and all actions, transaction of official business of the council, collective decision, commitment or promise, and all collective discussion, acquisition and exchange of facts in the course of deliberation prior to any action of the council shall only be made in meetings open to the public consistent with the provisions of the Open Public Meetings Act of 1971 (chapter 250, Laws of 1971 1st ex. sess.) and chapter 34.04 RCW. No member of the general public will be required as a condition upon attending any council meeting to register his name or give any other information or to fulfill any condition precedent to his attendance at council meetings. Notice of such meetings shall be given to all approved committees and may be given to any persons, organizations, or agencies in the direction of the council, or any member thereof, and in addition shall be given to any newspaper, news service, television or radio station which has requested to be notified of council meetings. Committee programs, plant programs, or amendments thereto, may be approved or disapproved only at regular meetings.

(2) **Special meetings.** Special meetings of the council may be called by the chairman or by majority of the council members by delivering personally or by mail written notice to each member of the council and all approved joint apprenticeship and training committees and to each newspaper of general circulation, television or radio station which has on file with the council or the supervisor a request to be notified of such special meeting of the council, which shall be ineffective unless it sets forth the date, time and location of the meeting and specifies the business to be transacted by the council at such special meeting. Final disposition may not be made of any matter at such special meeting other than specified in the notice of such special meeting. Special meetings shall be open to the general public to the same extent as the quarterly regular meetings of the council. Notice of special meetings must be delivered personally or by mail at least twenty-four hours before the time specified in the notice of such special meeting, except in the case of rule changes pursuant to chapter 34.04 RCW which must be at least 20 days before the time specified in the notice.

(3) **Notice of council meetings.** Notice of each quarterly regular meeting of the council shall be given to all council members by the supervisor at least 20 days before the date set for the meeting and in addition shall give notice to such other persons and organizations as specified in subsection (1) of this section.

(4) **Notice of special meetings of the apprenticeship council.** Notice of special meetings of the council may be given by the supervisor at the request of the chairman or the majority of the members of the council in the manner and form specified in subsection (2) of this section. If such notices are not given, no action taken by the council shall be effective at such meetings unless each regular council member at such meeting, or prior thereto, gives a written waiver of notice of such meeting to be filed by the supervisor and the notice shall be deemed to be waived by any member who is present at the meeting at the time it convenes. *Provided*, That rule change may not be made at such special meeting unless the requirements of chapter 34.04 RCW have been complied with.

(5) **Submission of petitions or requests.** The council will not act upon any petition or request which is addressed to the council unless such a petition or request is submitted in writing to the supervisor at least 45 days prior to the date of such quarterly regular meeting, and any petitions or requests not submitted 45 days prior to such quarterly meeting shall be deferred to the next quarterly regular meeting of the council and the petitioner shall be so notified by the supervisor.

(6) **Quorum.** Two-thirds of the council members entitled to vote shall be considered a quorum. [Statutory Authority: Chapter 49.04 RCW, 85-22-035 (Order 85-31), § 296-04-040, filed 11/1/85. Statutory Authority: RCW 49.04.010, 79-03-023 (Order 79-3), § 296-04-040, filed 2/22/79; Order 72-8, § 296-04-040, filed 6/8/72; Order 71-3, § 296-04-040, filed 3/25/71; § V, filed 10/11/65; § V, filed 2/12/65; § III, filed 3/23/60.]

WAC 296-04-060 Officers, appointment, duties-- Ex officio members. The officers of the council shall be a chairman, vice chairman, and secretary.

(1) Chairman and vice chairman.

(a) The chairman and vice chairman shall be elected by majority vote of the council members present and voting at the quarterly business meeting nearest to the month of June in each odd-numbered year. They shall hold office for a term of two years and until their successors are elected, or until their death or resignation.

(b) The chairman shall preside over all meetings, conducting them in accordance with *Robert's Rules of Order* as modified by these rules and regulations. He may vote in all matters before the council as a regular member and may participate in discussion of all matters before the council. He shall have such other powers and duties as are now or hereafter provided in these rules and regulations and as are usual or necessary to chairmen, as provided in *Robert's Rules of Order*.

(c) The vice chairman shall preside over all council meetings in the absence of the chairman. He shall have

all of the powers and duties of chairman when he is so presiding.

(2) Secretary:

(a) The supervisor shall be the secretary of the council. He shall hold the office of secretary during his tenure as supervisor.

(b) The secretary shall, with the assistance of a recording secretary, keep minutes of all special and regular meetings. He shall keep a copy of the minutes of all regular and special meetings on file in his office as supervisor. He shall forward copies of minutes of all meetings to all regular and ex officio members of the council and shall make copies of the minutes of all meetings available to the public upon written request. He shall have other powers and duties as are provided in these rules and regulations and as are usually or necessarily concomitant with the office of secretary.

(3) Ex officio members of the council shall have the full right to participate in discussion of any matters before the council. They shall have no vote. [Statutory Authority: Chapter 49.04 RCW, 85-22-035 (Order 85-31), § 296-04-060, filed 11/1/85; Order 76-4, § 296-04-060, filed 2/20/76; Order 71-3, § 296-04-060, filed 3/25/71; § VII, filed 10/11/65; § VII, filed 2/12/65; § V, filed 3/23/60.]

AFFIRMATIVE ACTION PLAN

WAC 296-04-500 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-04-501 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-04-502 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-04-503 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-04-504 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-04-505 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-04-506 Repealed. See Disposition Table at beginning of this chapter.

Chapter 296-13 WAC

PRACTICE AND PROCEDURE--ELECTRICAL ADVISORY BOARD AND ELECTRICAL EXAMINING BOARD

WAC

296-13-001	Foreword.
296-13-010	Definitions.
296-13-020	Officers.
296-13-030	Internal management.
296-13-035	Dates of meetings.
296-13-040	Duties of advisory board.
296-13-045	Duties of examining board.

296-13-050	Hearings.
296-13-052	Hearing before administrative law judge or a board member.
296-13-053	Appeal of proposed decision to board.
296-13-055	Quorum.
296-13-057	Place and time of filing.
296-13-060	Appearance and practice before board.
296-13-070	Repealed.
296-13-080	Standards of ethical conduct.
296-13-090	Appearance by former employee.
296-13-100	Former employee as expert witness.
296-13-110	Computation of time.
296-13-120	Repealed.
296-13-130	Notice and opportunity for hearing.
296-13-140	Service of process—By whom served.
296-13-150	Service of process—Upon whom served.
296-13-160	Service of process upon parties.
296-13-170	Method of service of process.
296-13-180	When service of process is complete.
296-13-190	Subpoenas.
296-13-200	Subpoenas—Service and fees.
296-13-210	Quashing of subpoenas.
296-13-220	Enforcement of subpoenas.
296-13-230	Right to take depositions and interrogatories in contested cases.
296-13-240	Officer before whom depositions are taken.
296-13-250	Notice of depositions.
296-13-260	Depositions and interrogatories in contested cases—Protection of parties and deponents.
296-13-270	Oral examination and cross-examination in depositions.
296-13-280	Recording of depositions.
296-13-290	Depositions in contested cases—Signing attestation and return.
296-13-300	Use and effect of depositions.
296-13-310	Fees of deponents.
296-13-320	Submission of interrogatories.
296-13-330	Attestation and return of interrogatories.
296-13-340	Official notice—Matters of law.
296-13-350	Official notice—Material facts.
296-13-360	Presumptions.
296-13-370	Stipulations and admissions of record.
296-13-380	Form and content of board decisions in contested cases.
296-13-390	Definition of issues before hearing.
296-13-400	Prehearing conference.
296-13-410	Submission of documentary evidence in advance.
296-13-420	Continuances.
296-13-430	Rules of evidence—Admissibility criteria.
296-13-440	Rules of evidence—Tentative admission—Exclusion—Discontinuance—Objections.

DISPOSITION OF SECTIONS FORMERLY CODIFIED IN THIS CHAPTER

296-13-070	Solicitation of business unethical. [§ VI, filed 10/15/65.] Repealed by 84-18-009 (Order 84-16), filed 8/27/84. Statutory Authority: RCW 19.28.123 and 19.28.590.
296-13-120	Administrative Procedure Act. [§ XI, filed 10/15/65.] Repealed by 84-18-009 (Order 84-16), filed 8/27/84. Statutory Authority: RCW 19.28.123 and 19.28.590.

WAC 296-13-001 Foreword. (1) The electrical law, chapter 19.28 RCW, establishes the electrical advisory board and the electrical examining board and fixes their responsibilities. The advisory board's principal function is to advise the department in adopting rules with respect to electrical installations and appliances. The advisory board will also act as a board of appeals in contested cases regarding the application or interpretation of a rule. The examining board's principal function

is to establish tests and test procedures for electricians and administrators. The examining board will also act as a board of appeals in contested cases regarding the revocation or suspension of an electrical contractor's license or an electrician's or administrator's certificate.

(2) The purpose of this chapter is to provide a uniform procedure for persons, firms, corporations, or other entities to (a) communicate with the department about rules that should be adopted, amended, or repealed, (b) appeal an order of the department revoking or suspending a contractor's license, an electrician's certificate, or an administrator's certificate, and (c) appeal a ruling or interpretation of the provisions of chapter 19.28 RCW or chapter 296-46 WAC made by the department. [Statutory Authority: RCW 19.28.123 and 19.28.590. 84-18-009 (Order 84-16), § 296-13-001, filed 8/27/84; Foreword, filed 10/15/65.]

WAC 296-13-010 Definitions. Whenever used in these rules, the words:

(1) **Administrative law judge:** Means an administrative law judge appointed pursuant to chapter 34.12 RCW.

(2) **Advisory board:** Means the electrical advisory board established pursuant to RCW 19.28.065.

(3) **Board:** Means the electrical advisory board and the electrical examining board. The term "board" also includes an administrative law judge or a board member appointed by the board to hear a contested case.

(4) **Chapter:** Means chapter 296-13 WAC.

(5) **Contested case:** Means a contested case as defined by RCW 34.04.010(3). It includes appeals from decisions or orders of the department revoking or suspending an electrical contractor's license or an administrator's or electrician's certificate. It also includes challenges to the department's interpretation of the installation requirements of chapters 19.28 RCW and 296-46 WAC.

(6) **Department:** Means the department of labor and industries of the state of Washington.

(7) **Director:** Means the director of the department.

(8) **Examining board:** Means the electrical examining board established pursuant to RCW 19.28.123.

(9) **Proceeding:** Means any matter before the board other than a contested case. [Statutory Authority: RCW 19.28.123 and 19.28.590. 84-18-009 (Order 84-16), § 296-13-010, filed 8/27/84; Definitions, filed 10/15/65.]

WAC 296-13-020 Officers. In addition to the chairperson, the board shall elect from its members a vice chairperson who shall perform all functions of the chairperson in his or her absence. [Statutory Authority: RCW 19.28.123 and 19.28.590. 84-18-009 (Order 84-16), § 296-13-020, filed 8/27/84; § I, filed 10/15/65.]

WAC 296-13-030 Internal management. The board adopts *Roberts' Rules of Order*, revised as its rules of procedure. [Statutory Authority: RCW 19.28.123 and 19.28.590. 84-18-009 (Order 84-16), § 296-13-030, filed 8/27/84; § II, filed 10/15/65.]

WAC 296-13-035 Dates of meetings. (1) The advisory board shall hold regular meetings on the last Friday of January, April, July, and October of each year.

(2) The examining board shall hold regular meetings on the first Monday of February, May, August, and November of each year.

(3) The director or the chairperson of the board may call a special meeting at any other time. [Statutory Authority: RCW 19.28.123 and 19.28.590. 84-18-009 (Order 84-16), § 296-13-035, filed 8/27/84.]

WAC 296-13-040 Duties of advisory board. (1) The advisory board shall study proposed rules submitted to it by the department and shall make recommendations concerning their adoption.

(2) The advisory board shall develop and submit for consideration to the department administrative procedures, organizational plans, and rules relating to improving the functions of the electrical section.

(3) The advisory board shall at each meeting consider any written proposals made by any persons, firms, corporations, or other entities for electrical rules or for changes in administrative procedures of the electrical section.

(4) The advisory board shall hear formal appeals in contested cases involving a ruling or interpretation of the provisions of chapters 19.28 RCW and 296-46 WAC made by the department. [Statutory Authority: RCW 19.28.123 and 19.28.590. 84-18-009 (Order 84-16), § 296-13-040, filed 8/27/84; § III, filed 10/15/65.]

WAC 296-13-045 Duties of examining board. (1) The examining board shall consider proposed expenditures from the electrical fund.

(2) The examining board shall establish tests and test procedures for journeyman and specialty electricians and for general and specialty administrators.

(3) The examining board will hear informal appeals, including those from persons who desire to contest:

(a) Decisions of the department that they do not qualify to take an examination;

(b) The loss of a certificate because of a failure timely to renew the certificate; and

(c) Grades given on examinations for administrator or specialty electrician certificates.

(4) The examining board will hear formal appeals in contested cases involving an order of the department that revokes or suspends an electrical contractor's license, an administrator's certificate, or an electrician's certificate, or lessens the number of hours of work a trainee electrician has accumulated. [Statutory Authority: RCW 19.28.123 and 19.28.590. 84-18-009 (Order 84-16), § 296-13-045, filed 8/27/84.]

WAC 296-13-050 Hearings. (1) The board will grant a formal hearing on contested cases. It will grant an informal hearing on all other proceedings that are within its jurisdiction.

(2) A person, firm, corporation, or other entity that desires a formal hearing on a contested case must file a

written appeal of the department's decision, order, or interpretation with the board. An appeal of a decision or order of the department must be filed within fifteen days of the day the appellant received notice of the department's decision or order.

(3) The board may delegate to an administrative law judge or a board member the responsibility to preside over the hearing and to issue a proposed decision and order. If the board does so, the administrative law judge or a board member shall set the time and place for the hearing. If the board retains the responsibility to preside over the hearing, the board shall set the time and place.

(4) A person, firm, corporation, or other entity desiring an informal hearing on a proceeding other than a contested case shall file a written request to that effect with the board. The written request should describe concisely the matters or proposals on which the informal hearing is requested. [Statutory Authority: RCW 19.28.123 and 19.28.590. 84-18-009 (Order 84-16), § 296-13-050, filed 8/27/84; § IV, filed 10/15/65.]

WAC 296-13-052 Hearing before administrative law judge or a board member. An administrative law judge or a board member to whom the board has delegated the authority to preside over a hearing in a contested case may exercise all powers the board could exercise in the course of the hearing. After the hearing, the administrative law judge or a board member shall serve on each party and file with the board a proposed decision. [Statutory Authority: RCW 19.28.123 and 19.28.590. 84-18-009 (Order 84-16), § 296-13-052, filed 8/27/84.]

WAC 296-13-053 Appeal of proposed decision to board. A party to a contested case may appeal a proposed decision to the full board within thirty days after a copy of the proposed decision is served upon that party. The appeal shall be filed with the board as provided in WAC 296-13-057. If no appeal is filed, the proposed decision becomes final with no further action on the part of the board.

The notice of appeal must specify the contentions of the appealing party, and must specify to which conclusions of law and findings of fact the party takes exception.

The appeal shall be based on the record of the hearing. The board shall not grant a hearing de novo. [Statutory Authority: RCW 19.28.123 and 19.28.590. 84-18-009 (Order 84-16), § 296-13-053, filed 8/27/84.]

WAC 296-13-055 Quorum. A majority of the board constitutes a quorum for purposes of making a decision in a contested case. If a majority does not attend a hearing on a contested case, the board may either continue the hearing to a date certain or may hear the testimony and arguments. If the board hears the testimony and arguments, the members of the board who are absent may make their decisions after hearing the tape recording or reading the transcript, of the hearing. [Statutory Authority: RCW 19.28.123 and 19.28.590.]

84-18-009 (Order 84-16), § 296-13-055, filed 8/27/84.]

WAC 296-13-057 Place and time of filing. A paper that must be filed with the board shall be filed only at the Office of the Administrator, Electrical Section, 300 W. Harrison, Seattle, WA 98119. The paper may be filed by ordinary mail, certified or registered mail, telegram, or by personal delivery. The date of filing is the date the paper is actually received in the office of the administrator. [Statutory Authority: RCW 19.28.123 and 19.28.590. 84-18-009 (Order 84-16), § 296-13-057, filed 8/27/84.]

WAC 296-13-060 Appearance and practice before board. No person may appear as a representative in a contested case before the board other than the following:

(1) Attorneys at law qualified to practice before the supreme court of the state of Washington.

(2) Attorneys at law qualified to practice before the highest court of record of another state, if the attorneys at law of the state of Washington are permitted to appear as representatives before administrative agencies of the other state, and if not otherwise prohibited by Washington law.

(3) An owner, officer, partner, or full-time employee of a firm, association, organization, partnership, or corporation who appears for the firm, association, organization, partnership, or corporation. [Statutory Authority: RCW 19.28.123 and 19.28.590. 84-18-009 (Order 84-16), § 296-13-060, filed 8/27/84; § V, filed 10/15/65.]

WAC 296-13-070 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-13-080 Standards of ethical conduct. All persons appearing in proceedings or contested cases before the board as a representative shall conform to the standards of ethical conduct required of attorneys before the courts of Washington. If a person does not conform to these standards, the board may decline to permit the person to appear as a representative in any proceeding or contested case before the board. [Statutory Authority: RCW 19.28.123 and 19.28.590. 84-18-009 (Order 84-16), § 296-13-080, filed 8/27/84; § VII, filed 10/15/65.]

WAC 296-13-090 Appearance by former employee. No former employee of the board, the department, or the attorney general's staff may at any time after severing his or her employment with the board, the department, or the attorney general appear as a representative for another party in any proceeding or contested case in which he or she previously took an active part as a representative of the board or the department. [Statutory Authority: RCW 19.28.123 and 19.28.590. 84-18-009 (Order 84-16), § 296-13-090, filed 8/27/84; § VIII, filed 10/15/65.]

WAC 296-13-100 Former employee as expert witness. Except with the written permission of the board, no

former employee of the board or the department shall appear, after severing his or her employment with the board or the department, as an expert witness for another party in any proceeding or contested case in which he or she previously took an active part in the investigation as a representative of the board or the department. [Statutory Authority: RCW 19.28.123 and 19.28.590. 84-18-009 (Order 84-16), § 296-13-100, filed 8/27/84; § IX, filed 10/15/65.]

WAC 296-13-110 Computation of time. In computing any period of time prescribed or allowed by any applicable statute or rule, the day of the act, event, or default after which the designated period of time begins to run is not to be included. The last day of the period so computed is to be included, unless it is a Saturday, Sunday, or legal holiday, in which case the period runs until the next day that is not a Saturday, Sunday, or holiday. [Statutory Authority: RCW 19.28.123 and 19.28.590. 84-18-009 (Order 84-16), § 296-13-110, filed 8/27/84; § X, filed 10/15/65.]

WAC 296-13-120 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-13-130 Notice and opportunity for hearing. (1) In any contested case the board shall serve all parties with a notice and opportunity for hearing not less than twenty days before the date set for hearing. The notice shall state the time and place of the hearing and the issues involved, as required by RCW 34.04.090.

(2) In any other proceeding before the board, the board shall give reasonable notice and an opportunity to be heard by mail or by telephone not less than two days before the date set for the informal hearing. [Statutory Authority: RCW 19.28.123 and 19.28.590. 84-18-009 (Order 84-16), § 296-13-130, filed 8/27/84.]

WAC 296-13-140 Service of process--By whom served. The board shall cause to be served all orders, notices, and other papers it issues that pertain to a contested case, together with any other papers it is required by law to serve. Every other paper that must be served shall be served by the party that files it. [Statutory Authority: RCW 19.28.123 and 19.28.590. 84-18-009 (Order 84-16), § 296-13-140, filed 8/27/84.]

WAC 296-13-150 Service of process--Upon whom served. All papers served by either the board or a party shall be served upon all counsel of record at the time the paper is served and upon parties not represented by counsel or upon their representatives designated by them or by law. Any counsel that enters an appearance after the beginning of the contested case shall notify all other counsel then of record and all parties not represented by counsel of his or her appearance. [Statutory Authority: RCW 19.28.123 and 19.28.590. 84-18-009 (Order 84-16), § 296-13-150, filed 8/27/84.]

WAC 296-13-160 Service of process upon parties. The final order, and any other paper the board must serve upon a party, shall be served upon each party or

upon his or her representative. If the board serves a paper on a party personally, the board shall furnish a copy to the representative of record of the party. Service on the counsel or other representative representing a party constitutes service on the party. [Statutory Authority: RCW 19.28.123 and 19.28.590. 84-18-009 (Order 84-16), § 296-13-160, filed 8/27/84.]

WAC 296-13-170 Method of service of process. Papers shall be served personally, by registered or certified mail, or by telegraph. [Statutory Authority: RCW 19.28.123 and 19.28.590. 84-18-009 (Order 84-16), § 296-13-170, filed 8/27/84.]

WAC 296-13-180 When service of process is complete. Service upon a party shall be regarded as complete: By mail, upon deposit in the United States mail properly stamped and addressed; by telegraph, when deposited with a telegraph company properly addressed and with charges prepaid. [Statutory Authority: RCW 19.28.123 and 19.28.590. 84-18-009 (Order 84-16), § 296-13-180, filed 8/27/84.]

WAC 296-13-190 Subpoenas. (1) In a contested case, upon application of a party or a representative, the board shall issue to the party subpoenas requiring the attendance and testimony of witnesses or the production of evidence in the contested case. The board may condition the issuance of the subpoenas upon a showing of the general relevance and reasonable scope of the testimony or evidence sought. An attorney of a party in a contested case may issue subpoenas under his or her own authority.

(2) Every subpoena shall state the name of the board and the title of the proceeding, and shall command the person to whom it is directed to attend at a specified time and place and give testimony or to produce designated books, documents, or things under his or her control.

(3) Attendance of witnesses and production of evidence may be required from any place in the state of Washington, at any designated place of hearing. [Statutory Authority: RCW 19.28.123 and 19.28.590. 84-18-009 (Order 84-16), § 296-13-190, filed 8/27/84.]

WAC 296-13-200 Subpoenas--Service and fees. (1) Unless the service of a subpoena is acknowledged on its face by the person subpoenaed, service shall be made by delivering a copy of the subpoena to the person and by tendering him or her on demand the fees for one day's attendance and the mileage allowed by law.

(2) Witnesses summoned before the agency shall be paid, by the party at whose instance they appear, the same fees and mileage that are paid to witnesses in the superior courts of the state of Washington.

(3) The person serving the subpoena shall make proof of service by filing the subpoena and the required return, affidavit, or acknowledgement of service with the board.

Failure to make proof of service does not affect the validity of the service. [Statutory Authority: RCW 19.28.123 and 19.28.590. 84-18-009 (Order 84-16), § 296-13-200, filed 8/27/84.]

WAC 296-13-210 Quashing of subpoenas. Upon motion made at or before the time specified in the subpoena for compliance, by the person to whom the subpoena is directed and upon notice to the party to whom the subpoena was issued, the board may (1) quash or modify the subpoena if it is unreasonable or requires evidence not relevant to any matter in issue, or (2) condition denial of the motion upon just and reasonable conditions. [Statutory Authority: RCW 19.28.123 and 19.28.590. 84-18-009 (Order 84-16), § 296-13-210, filed 8/27/84.]

WAC 296-13-220 Enforcement of subpoenas. Upon application and for good cause shown a party may seek judicial enforcement of subpoenas that have been issued and that have not been quashed. [Statutory Authority: RCW 19.28.123 and 19.28.590. 84-18-009 (Order 84-16), § 296-13-220, filed 8/27/84.]

WAC 296-13-230 Right to take depositions and interrogatories in contested cases. (1) A party may take the testimony of any person, including a party, by deposition upon oral examination or written interrogatories for use as evidence in a contested case, except that leave of the deponent must be obtained if a proponent serves notice of the deposition or interrogatories on the deponent within twenty days after the filing of an appeal. The attendance of the deponent may be compelled by the use of a subpoena. Depositions shall be taken only in accordance with this rule and the rule on subpoenas.

(2) Unless the board otherwise orders, the deponent may be examined regarding any matter that is relevant to the subject matter involved in the contested case and is not privileged. [Statutory Authority: RCW 19.28.123 and 19.28.590. 84-18-009 (Order 84-16), § 296-13-230, filed 8/27/84.]

WAC 296-13-240 Officer before whom depositions are taken. Within the United States, or within a territory or insular possession subject to the dominion of the United States, depositions shall be taken before an officer authorized to administer oaths by the laws of the state of Washington or of the place where the examination is held. Within a foreign country, depositions shall be taken before a secretary of an embassy or legation, consul general, vice consul or consular agent of the United States, or before a person designated by the board or agreed upon by the parties by stipulation in writing filed with the board. Except by stipulation, no deposition shall be taken before a person who is a party or the privy of a party, or a privy of any counsel of a party, or who is financially interested in the contested case. [Statutory Authority: RCW 19.28.123 and 19.28.590. 84-18-009 (Order 84-16), § 296-13-240, filed 8/27/84.]

WAC 296-13-250 Notice of depositions. A party that desires to take the deposition of any person upon oral examination shall give reasonable notice of not less than three days in writing to the board and all parties. The notice shall state the time and place for taking the deposition and the name and address of each person to be examined, if known. If the name is not known, the notice shall contain a general description sufficient to identify him or her or the particular class or group to which he or she belongs. On motion of a party upon whom the notice is served, the board may, for cause shown, enlarge or shorten the time. If the parties so stipulate in writing, depositions may be taken before any person, at any time or place, upon any notice, and in any manner. [Statutory Authority: RCW 19.28.123 and 19.28.590. 84-18-009 (Order 84-16), § 296-13-250, filed 8/27/84.]

WAC 296-13-260 Depositions and interrogatories in contested cases--Protection of parties and deponents. After notice is served for taking a deposition or of written interrogatories, upon the board's own motion or upon motion made by any party or by the deponent and upon notice and for good cause shown, the board may order that: (1) The deposition or interrogatories shall not be taken, (2) the deposition may be taken only at some designated place other than that stated in the notice, (3) the deposition may be taken only on written interrogatories, (4) the examination shall be limited to certain matters, (5) the examination shall be held with no one present except the parties to the action and their officers or counsel, (6) after being sealed, a deposition shall be opened only by order of the board, (7) business secrets or secret processes, developments, or research need not be disclosed, or (8) the parties shall simultaneously file specified documents, or information enclosed in sealed envelopes to be opened as directed by the board. The board may make any other order that justice requires to protect the party or witness from annoyance, embarrassment, or oppression. At any time during the taking of a deposition, on motion of any party or of the deponent and upon a showing that the examination is being conducted in bad faith or in a manner as unreasonably to annoy, embarrass, or oppress the deponent or party, the board may order the officer conducting the examination to cease taking the deposition, or may limit the scope and manner of the taking of the deposition as provided in subsections (1) through (8) of this section. If the order ends the examination, it shall be resumed thereafter only upon the order of the board. Upon demand of the objecting party or deponent, the taking of the deposition shall be suspended for the time necessary to move for an order. [Statutory Authority: RCW 19.28.123 and 19.28.590. 84-18-009 (Order 84-16), § 296-13-260, filed 8/27/84.]

WAC 296-13-270 Oral examination and cross-examination in depositions. Examination and cross-examination during oral examination shall proceed as at an oral hearing. In lieu of participating in the oral examination, a party may transmit written interrogatories to

the person taking the disposition who, without previously disclosing them to any person, and after the direct testimony is complete, shall propound them seriatim to the deponent and record the answers verbatim. [Statutory Authority: RCW 19.28.123 and 19.28.590. 84-18-009 (Order 84-16), § 296-13-270, filed 8/27/84.]

WAC 296-13-280 Recording of depositions. The person before whom the deposition is to be taken shall put the deponent on oath and shall personally, or by someone acting under his or her direction and in his or her presence, record the testimony. Objections to the notice, the qualifications of the person taking the deposition, the manner of taking the deposition, to the evidence presented, or to the conduct of the person taking the deposition or of any party, shall be noted in the record. All objections by any party not made are waived. [Statutory Authority: RCW 19.28.123 and 19.28.590. 84-18-009 (Order 84-16), § 296-13-280, filed 8/27/84.]

WAC 296-13-290 Depositions in contested cases--Signing attestation and return. (1) When the testimony of a deposition is fully transcribed, the deposition shall be submitted to the deponent for examination and shall be read to or by him or her, unless the examination and reading are waived by the deponent and by the parties. Any changes in form or substance that the deponent desires to make shall be entered upon the deposition by the person taking the deposition with a statement of the reasons given by the deponent for making them. The deposition shall then be signed by the deponent, unless the parties by stipulation waive the signing or the deponent is ill or cannot be found or refuses to sign. If the deponent does not sign the deposition, the person taking the deposition shall sign it and state on the record whether the deponent did not sign because of a waiver, an illness or absence, or a refusal to sign together with the reason, if any, given for a refusal. The deposition may then be used as fully as though signed, unless on a motion to suppress, the board holds that the reasons given for the refusal to sign require rejection of the deposition in whole or in part.

(2) The person taking the deposition shall certify on the deposition that the deponent was duly sworn by him or her and that the deposition is a true record of the testimony given by the witness. He shall then securely seal the deposition in an envelope indorsed with the title of proceeding and marked "Deposition of (here insert name of witness)" and shall promptly send it by registered or certified mail to the board, for filing. The party taking the deposition shall give prompt notice of its filing to all other parties. [Statutory Authority: RCW 19.28.123 and 19.28.590. 84-18-009 (Order 84-16), § 296-13-290, filed 8/27/84.]

WAC 296-13-300 Use and effect of depositions. Subject to rulings by the board upon objections, a deposition taken and filed as provided in WAC 296-13-290 will not become a part of the record in the proceeding until received in evidence by the board upon its own

motion or the motion of a party. Except by agreement of the parties or ruling of the board, a deposition will be received only in its entirety. A party does not make a party, or the privy of a party, or any hostile witness its witness by taking his or her deposition. A party may rebut any relevant evidence contained in a deposition whether introduced by him or her or by any other party. [Statutory Authority: RCW 19.28.123 and 19.28.590. 84-18-009 (Order 84-16), § 296-13-300, filed 8/27/84.]

WAC 296-13-310 Fees of deponents. Deponents are entitled to the same fees as are paid for similar services in the superior courts of the state of Washington. The fees shall be paid by the party at whose instance the depositions are taken. [Statutory Authority: RCW 19.28.123 and 19.28.590. 84-18-009 (Order 84-16), § 296-13-310, filed 8/27/84.]

WAC 296-13-320 Submission of interrogatories. If a deposition is taken upon written interrogatories, the party offering the testimony shall consecutively number each interrogatory, file them with the board, and serve them on all parties and the person who is to answer them with a notice stating the name and address of the person who is to answer them. [Statutory Authority: RCW 19.28.123 and 19.28.590. 84-18-009 (Order 84-16), § 296-13-320, filed 8/27/84.]

WAC 296-13-330 Attestation and return of interrogatories. The person before whom the interrogatories are answered shall (1) certify under his or her official signature and seal that the deponent was duly sworn by him or her, that the interrogatories and answers are a true record of the deponent's testimony, and (2) promptly file the original copy of the deposition and exhibits with his or her attestation to the board, serve one copy on the counsel who submitted the interrogatories, and serve a copy on the deponent and on each other party. [Statutory Authority: RCW 19.28.123 and 19.28.590. 84-18-009 (Order 84-16), § 296-13-330, filed 8/27/84.]

WAC 296-13-340 Official notice—Matters of law. The board, upon request made before or during a hearing, will officially notice:

(1) **Federal law.** The constitution; congressional acts, resolutions, records, journals, and committee reports; decisions of federal courts and administrative agencies; executive orders and proclamations; and all rules, orders, and notices published in the Federal Register;

(2) **State law.** The constitution of the state of Washington, acts of the legislature, resolutions, records, journals, and committee reports; decisions of administrative agencies of the state of Washington, and executive orders and proclamations by the governor; and all rules, orders, and notices published in the Washington State Register.

(3) **Governmental organization.** The organization, territorial limitations, officers, departments, and general administration of the governments of the state of

Washington, the United States, the several states, and foreign nations. [Statutory Authority: RCW 19.28.123 and 19.28.590. 84-18-009 (Order 84-16), § 296-13-340, filed 8/27/84.]

WAC 296-13-350 Official notice—Material facts. (1) In the absence of controverting evidence, the board, upon request made before or during a hearing, may officially notice:

(a) The pendency of, the issues and position of the parties in, and the disposition of any proceeding then pending before or previously concluded by the board.

(b) General customs and practices followed in the transaction of business;

(c) Facts so generally and widely known to all well-informed persons as not to be subject to reasonable dispute, or specific facts that are capable of immediate and accurate demonstration by resort to accessible sources of generally accepted authority, including facts stated in any publication authorized or permitted by law to be made by any federal or state officer, department, or agency; and

(d) Matters within the technical knowledge of the board as a body of experts, or within the scope of its statutory duties, responsibilities, or jurisdiction.

(2) At any prehearing conference, or a hearing, or argument, a party may request, or the board may suggest, that official notice be taken of a material fact, which shall be stated on the record. A party or the board may also make such a request or suggestion by written notice, or in any pleading, motion, memorandum, or brief, served upon all parties, at any time before a final decision.

(3) If an initial or final decision of the board rests in whole or in part upon official notice of a material fact, the fact shall be clearly stated in the decision. In determining whether to take official notice of material facts, the board may consult any source of pertinent information, whether or not it is admissible under the rules of evidence.

(4) A party may controvert a request or a suggestion that official notice of a material fact be taken. If a decision is stated to rest in whole or in part upon official notice of a material fact that a party has not had a prior opportunity to controvert, the party may controvert the fact by exception if the decision is a proposed decision, or by a petition for reconsideration if the decision is a final decision. The controversion shall concisely and clearly set forth the sources, authority, and other data relied upon to show the existence or nonexistence of the material fact assumed or denied in the decision.

(5) Nothing herein shall be construed to preclude the board from using its experience, technical competence, and specialized knowledge in evaluating the evidence presented to them. [Statutory Authority: RCW 19.28.123 and 19.28.590. 84-18-009 (Order 84-16), § 296-13-350, filed 8/27/84.]

WAC 296-13-360 Presumptions. Upon proof of the predicate facts specified in this section by clear and convincing evidence, and without substantial dispute, the

board, with or without prior request or notice, may make the following presumptions, where consistent with all surrounding facts and circumstances:

(1) That a fact of a continuous nature, proved to exist at a particular time, continues to exist as of the date of the presumption, if the fact is one that usually exists for at least that period of time;

(2) That persons or objects of the same name and description are identical;

(3) That mail matter, communications, express, or freight that are properly addressed, marked, billed, and delivered as appropriate to the post office, telegraph, cable or radio company, or authorized common carrier of property, and for which with all postage, tolls, or charges are properly prepaid, is or has been delivered to the addressee or consignee in the ordinary course of business;

(4) That a fact exists or does not exist, upon proof of the existence or nonexistence of another fact that, in the ordinary and usual course of affairs, usually and regularly coexists with the fact presumed;

(5) That a person for whom an act is done or to whom a transfer is made has, does, or will accept the act or transfer where it is clearly in his or her own self-interest so to do;

(6) That evidence, with respect to a material fact which in bad faith is destroyed, eligned, suppressed, or withheld by a party in control of the fact, would, if produced, corroborate the evidence of the adversary party with respect to the fact. [Statutory Authority: RCW 19.28.123 and 19.28.590. 84-18-009 (Order 84-16), § 296-13-360, filed 8/27/84.]

WAC 296-13-370 Stipulations and admissions of record. The existence or nonexistence of a fact, as made or agreed in a stipulation or in an admission of record, will be conclusively presumed against any party bound by the stipulation or admission, and no other evidence with respect to the fact will be received upon behalf of the party.

The stipulation or admission is binding upon the parties by whom it is made and their privies, and upon all other parties to the proceeding who do not expressly deny the existence or nonexistence of the fact, upon the making thereof, if made on the record at a prehearing conference, oral hearing, or oral argument, or by a writing filed and served upon all parties within five days after a copy of the stipulation or admission has been served upon them.

A party bound by a stipulation or admission of record at any time before the final decision may be permitted to withdraw it in whole or in part by showing to the satisfaction of the hearing officer of the agency that the stipulation or admission was made inadvertently or under a bona fide mistake of fact and that its withdrawal at the time proposed will not unjustly prejudice the rights of other parties to the proceeding. [Statutory Authority: RCW 19.28.123 and 19.28.590. 84-18-009 (Order 84-16), § 296-13-370, filed 8/27/84.]

WAC 296-13-380 Form and content of board decisions in contested cases. (1) Every proposed and final decision and order in a contested case shall:

(a) Contain the correct names of the board and the case;

(b) Name all parties and counsel in the case;

(c) State concisely the nature and background of the case; and

(d) Contain numbered findings of fact and conclusions of law.

(2) Whenever practical, (a) the conclusions of law shall include the reasons for and precedents supporting the particular order or remedy afforded; and (b) the conclusions and order shall refer to the appropriate laws and rules. [Statutory Authority: RCW 19.28.123 and 19.28.590. 84-18-009 (Order 84-16), § 296-13-380, filed 8/27/84.]

WAC 296-13-390 Definition of issues before hearing. In all contested cases the issues to be adjudicated shall be made as precise as possible, in order that the board may proceed promptly to conduct the hearing on relevant and material matter only. [Statutory Authority: RCW 19.28.123 and 19.28.590. 84-18-009 (Order 84-16), § 296-13-390, filed 8/27/84.]

WAC 296-13-400 Prehearing conference. (1) In a contested case the board, upon its own motion or the motion of one of the parties, may direct the parties to appear at a specified time and place for a conference to consider:

(a) The settlement or simplification of issues;

(b) The necessity of amendments to the pleadings;

(c) The possibility of obtaining stipulations, or admissions of facts and of documents;

(d) The limitation of the number of expert witnesses;

or

(e) Other matters that may help dispose of the proceeding.

(2) The board shall make an order that recites the action taken at a prehearing conference and the agreements made by the parties as to any of the matters considered and that limits the issues for hearing to those not disposed of by admission or agreement. The order shall control the subsequent course of the contested case unless modified for good cause by a later order. [Statutory Authority: RCW 19.28.123 and 19.28.590. 84-18-009 (Order 84-16), § 296-13-400, filed 8/27/84.]

WAC 296-13-410 Submission of documentary evidence in advance. Where practicable the board may require that:

(1) All documentary evidence that is to be offered during a hearing, deposition, or prehearing conference be submitted to the board and to the other parties sufficiently in advance of the taking of evidence to permit study and preparation of cross-examination and rebuttal evidence;

(2) Documentary evidence not submitted in advance, as required by subsection (1) of this section, be not received in evidence in the absence of a clear showing that

the offering party had good cause for its failure to produce the evidence sooner;

(3) The authenticity of all documents submitted in advance, as required by subsection (1) of this section, be deemed admitted unless a written objection to admission is filed before the time for taking the evidence. A party will be permitted to challenge the authenticity at a later time upon a clear showing of good cause for failure to have filed a written objection. [Statutory Authority: RCW 19.28.123 and 19.28.590. 84-18-009 (Order 84-16), § 296-13-410, filed 8/27/84.]

WAC 296-13-420 Continuances. A party who wants a continuance shall, immediately upon receipt of notice of a hearing, prehearing conference, or deposition, or as soon thereafter as facts requiring a continuance come to his or her knowledge, notify the board of his or her desire, stating in detail the reasons why a continuance is necessary. A formal motion is not required. The board, in ruling on a request for continuance, shall consider whether the request was timely made. For good cause shown, the board may grant a continuance and may at any time order a continuance upon its own motion. During a hearing, if it appears in the public interest or in the interest of justice that further testimony or argument should be received, the board may continue the hearing. Oral notice of a continuance, given at a hearing, shall constitute final notice of the continuance. [Statutory Authority: RCW 19.28.123 and 19.28.590. 84-18-009 (Order 84-16), § 296-13-420, filed 8/27/84.]

WAC 296-13-430 Rules of evidence--Admissibility criteria. Subject to the other provisions of this chapter, all relevant evidence is admissible that, in the opinion of the board, is the best evidence reasonably obtainable, having due regard for its necessity, availability, and trustworthiness. In passing upon the admissibility of evidence, the board shall consider, but need not follow, the rules of evidence governing civil proceedings in the superior court of the state of Washington. [Statutory Authority: RCW 19.28.123 and 19.28.590. 84-18-009 (Order 84-16), § 296-13-430, filed 8/27/84.]

WAC 296-13-440 Rules of evidence--Tentative admission--Exclusion--Discontinuance--Objections. When a party objects to the admissibility of evidence, the evidence may be received subject to a later ruling. The board may, either with or without objection, exclude inadmissible evidence or order cumulative evidence discontinued. A party that objects to the introduction of evidence shall state the precise grounds of the objection at the time the evidence is offered. [Statutory Authority: RCW 19.28.123 and 19.28.590. 84-18-009 (Order 84-16), § 296-13-440, filed 8/27/84.]

Chapter 296-14 WAC

INDUSTRIAL INSURANCE--RECIPROCAL AGREEMENT

WAC

296-14-010 Reciprocal agreements--Industrial insurance.

WAC 296-14-010 Reciprocal agreements--Industrial insurance. (1) In accordance with the authority contained in RCW 51.12.120, the director of the department of labor and industries has heretofore or may hereafter enter into certain reciprocal agreements with other states and provinces of Canada and the agencies of such states or provinces which administer workers' compensation laws with respect to conflicts of jurisdiction and the assumption of jurisdiction in cases where the contract of employment arises in one state or province and the injury occurs in another.

(2) Consistent with the provisions of RCW 51.12.120 and chapter 34.04 RCW, the director of the department of labor and industries has entered into reciprocal agreements with other states and provinces which are in full force and effect on the subject matter as set forth in subsection (1) which states and provinces are:

- (a) Colorado
- (b) Idaho
- (c) Montana
- (d) North Dakota
- (e) Nevada
- (f) Oregon
- (g) Wyoming
- (h) South Dakota
- (i) New Mexico

(3) The reciprocal agreements as listed above in subsection (2) are hereby promulgated and adopted as regulations of the department in accordance with the provisions of RCW 51.12.120 and such reciprocal agreements shall be kept on file in the office of the director of the department of labor and industries and available for public inspection and review during the regular business hours of such office. [Statutory Authority: RCW 51.04.020(1). 84-06-018 (Order 84-3), § 296-14-010, filed 2/29/84; Order 74-29, § 296-14-010, filed 5/29/74, effective 7/1/74.]

Chapter 296-15 WAC

WORKMEN'S COMPENSATION SELF-INSURANCE RULES AND REGULATIONS

WAC

296-15-02601 Group self-insurers admission of new members, termination of individual members.
 296-15-030 Posting of security.
 296-15-050 Reinsurance.
 296-15-21001 Repealed.
 296-15-215 Cash, bond or assignment of account alternative for death or permanent total disability.
 296-15-230 Third party actions.

DISPOSITION OF SECTIONS FORMERLY CODIFIED IN THIS CHAPTER

296-15-21001 Form—SIF #3—Self-insured employer's notice of acceptance of claim. [Order 71-15, Form SIF #3 (codified as WAC 296-15-21001), filed 12/1/71.] Repealed by 84-06-031 (Order 83-38), filed 3/1/84, effective 4/1/84. Statutory Authority: RCW 51.04.020(1).

WAC 296-15-02601 Group self-insurers admission of new members, termination of individual members. (1) After the inception date of the trust fund, prospective new members of the trust fund shall submit an application for membership to the board of trustees, or its administrator, on a form provided by the department. The trustees or administrator may approve the application for membership pursuant to the bylaws of the group self-insurers' trust fund. The application for membership shall then be filed with the department. Membership shall take effect the first day of the calendar quarter after reporting the approval to the department.

(2) Individual members may elect to terminate their participation in a group self-insurer's program or be subject to cancellation by the group trust fund pursuant to the bylaws of the group. Such termination or cancellation shall be effective at the end of the calendar quarter during which it was reported to the department.

(3) Contributions to the trust fund for purposes of meeting the requirements of WAC 296-15-02605 shall be paid under a schedule of dates and amounts specified by the group's board of trustees, subject to the following requirement: At no time during any coverage period shall the amount collected by the trust fund to apply to costs and/or reserves for that coverage period be less than the result obtained by multiplying the fraction of the coverage period which has elapsed by the total contribution expected to be necessary to satisfy requirements of WAC 296-15-02605 for the entire coverage period. [Statutory Authority: RCW 51.04.020(1), 84-06-031 (Order 83-38), § 296-15-02601, filed 3/1/84, effective 4/1/84; 83-24-027 (Order 83-22), § 296-15-02601, filed 12/1/83, effective 1/1/84. Statutory Authority: RCW 51.14.150 and 51.14.160, 83-01-076 (Order 82-43), § 296-15-02601, filed 12/17/82.]

WAC 296-15-030 Posting of security. Subsections (1), (2), (3), and (4) of this section shall apply only to individual self-insurers who are not participating in a group self-insurance program. Group self-insurance programs are subject to reserve requirements set forth in WAC 296-15-02601(3) and 296-15-02605, in lieu of application of this section.

(1) Upon receiving a completed application for certification to self-insure, the director shall review the matter and notify the employer of the amount of security which must be deposited to secure the payment of compensation and assessments, pursuant to RCW 51.14.020 as now or hereafter amended. This amount as so established may be satisfied by the employer's supplying of money, corporate or governmental securities approved by the director, or a surety bond, written by a company admitted to transact surety business in this state, in favor

of the department. All such securities of a self-insurer shall be deposited with an escrow agent appointed by the director and administered pursuant to a written agreement between the department, the self-insurer and the escrow agent. Securities shall be registered in the name of the escrow agent on behalf of the self-insurer. The original of all surety bonds submitted by self-insurers following approval by the director and the attorney general will be kept on file in the Olympia office of the division of industrial insurance of the department.

(2) On or after July 1, 1985, the minimum amount of security deposit required for initial certification as a self-insurer shall be the projected average cost of a permanent total pension claim for an injury occurring during the first year after the employer's self-insuring, including medical, time-loss and any other miscellaneous claim costs paid prior to award of the pension. This average cost shall be calculated by the department on an annual basis.

The security deposit required for initial certification as a self-insurer on or after July 1, 1985, may be greater than the minimum amount described above. In establishing such surety deposit requirements, the department shall estimate the following amounts:

(a) The estimated amount of accident and medical aid fund premium that the self-insurer would have paid to the state fund during the first year of self-insurance, if it had remained in the state fund.

(b) The estimated amount of incurred benefits for the first year of self-insurance, based on past experience with the state fund, adjusted for intervening changes in benefit schedules and exposure.

If either or both of the above amounts exceed the minimum security deposit described in this section, the department may require the larger of (a) or (b) of this subsection as a security deposit for initial certification as a self-insurer on or after July 1, 1985.

The security deposit required in accordance with the above procedures may be adjusted by the department if there are other known conditions which may alter the self-insurer's potential claim costs and/or its ability to pay them.

(3) The amount of security required of each self-insurer shall be reviewed periodically by the director to determine if there is need for any increase or decrease thereof. To facilitate this review a self-insurer's annual report (SIF #7) shall be required in the form prescribed by the director and supplied to all self-insurers.

Security requirements in effect on, or initially established after, July 1, 1985, shall not be increased unless and until one or more of the following conditions are met:

(a) An estimate of the self-insurer's outstanding claim liabilities, made by either the self-insured employer or the department, exceeds the amount of security in force; or

(b) The projected average cost of a permanent total pension claim for an injury in the current year, including medical, time-loss and any other miscellaneous claim

costs paid prior to award of the pension, exceeds the security in force for the employer by one hundred thousand dollars or more.

(4) The following procedure shall apply for purposes of updating security requirements:

(a) On July 1, 1985, the security requirement for each self-insurer shall be the larger of the following two amounts:

(i) The existing security in force for the self-insurer; or

(ii) The self-insurer's stated estimate of outstanding claim liabilities as shown on the 1984 self-insurer's annual report (SIF #7).

(b) On July 1, 1986, the security requirement for each self-insurer shall be the larger of the following two amounts:

(i) The existing security in force for the self-insurer; or

(ii) The average of the self-insurer's stated estimate of outstanding claim liabilities as shown on the 1985 self-insurer's annual report (SIF #7) and the department's estimate of the self-insurer's outstanding claim liabilities as of December 31, 1985, made in accordance with provisions of (e) of this subsection.

(c) On July 1, 1987, the security requirement for each self-insurer shall be the larger of the following two amounts:

(i) The existing security in force for the self-insurer; or

(ii) The department's estimate of the self-insurer's outstanding claim liabilities as of December 31, 1986, made in accordance with provisions of (e) of this subsection.

(d) After July 1, 1987, the security requirement for each self-insurer will be subject to review and increased or decreased at such times as the director deems necessary to maintain the adequacy of those requirements. Such review and adjustment, when made, shall be performed in accordance with provisions of (e) of this subsection.

(e) In establishing or adjusting security requirements for a self-insurer, the department may perform a runoff test of the adequacy of the employer's estimates of liabilities, by tracking the subsequent cost of claims (subsequent payments plus the employer's updated estimates of remaining liabilities). If the subsequent costs do not exceed original liability estimates, the employer's most recent estimates of claim liabilities shall be considered adequate for purposes of setting current security requirements for the employer.

If the runoff test shows that subsequent costs of claims exceed the employer's original estimates of outstanding liabilities, the department may apply a loss development factor to the employer's most recent estimates of claim liabilities to compensate for anticipated repetition of inadequate estimates. The loss development factor shall be based on the self-insured employer's experience.

The following special considerations shall apply in establishing or adjusting security requirements for a self-insurer:

(i) Pension claims – Reserve amounts attributable to death or permanent total disability claims independently secured by means of a surety bond or assignment of account, and which are included in estimates of outstanding claim liabilities as shown on the self-insurer's annual report (SIF #7), shall be deducted from estimates of outstanding claim liabilities made in accordance with other provisions of this section.

(ii) Reinsurance – Anticipated recoveries under reinsurance policies held by a self-insurer must be documented by the self-insurer and reported to the department to qualify for consideration in establishing security requirements. Such anticipated recoveries shall be applied to either the self-insurer's estimate of outstanding claim liabilities as shown on the most current self-insurer's annual report (SIF #7) or the department's estimate of the self-insurer's outstanding liabilities made in accordance with (e) of this subsection, whichever is greater. If the resulting estimate of claim liabilities net of reinsurance recoveries is less than the security requirements imposed by this section without adjustment for reinsurance, the security requirement shall be reduced accordingly; provided, that security requirements imposed upon initial certification of a self-insurer or based upon the projected average cost of a permanent total pension claim may be retained by the department regardless of other estimates of claim liabilities for the self-insurer.

(iii) Strict application of loss development factors based upon the runoff test presumes a consistency of reserving methodology and results for the self-insurer. If the department determines that an employer has changed its reserving methodology in such a way as to invalidate loss development factors based upon past experience, then the department shall make such adjustments to the procedure as it may deem appropriate under the circumstances.

(iv) The department will give full consideration to any evaluation of the self-insured employer's outstanding claim liabilities made by an independent qualified actuary. Such independent actuarial evaluations are optional and not required by this rule.

(f) Any changes to existing bonds and/or adjustments to bond amounts made by or required of a self-insurer on or after July 1, 1985, shall provide adequate security for all self-insured workers' compensation liabilities of the employer, regardless of when the claims giving rise to those liabilities were incurred. Changes contemplated by this subsection include, but are not limited to, designation of a new surety carrier, issuance of a replacement bond by a current surety carrier, and/or revision of the face amount of any bond whether by endorsement or issuance of a replacement bond. If a new surety carrier does not assume full responsibility for all past self-insured liabilities regardless of when incurred, the department may require that such liabilities be secured by other means.

(5) A self-insurer's annual report (SIF #7) shall be required of group self-insurance plans, in the form prescribed by the director and supplied to all group self-insurance plans. [Statutory Authority: RCW 51.04.020.

85-06-031 (Order 85-6), § 296-15-030, filed 3/1/85; Order 77-19, § 296-15-030, filed 9/26/77; Order 72-4, § 296-15-030, filed 4/25/72; Order 71-15, § 296-15-030, filed 12/1/71.]

WAC 296-15-050 Reinsurance. (1) A self-insurer who desires to reinsure a portion of his liability, pursuant to RCW 51.14.020(5) as now or hereafter amended, shall notify the department of the name of the insurance carrier which will carry such reinsurance policy, and full details as to the extent and period of coverage of such policy. The director may periodically require information from all self-insurers as to their reinsurance program, if any, in order to determine that there is continued compliance with RCW 51.14.020(5).

(2) All copies of any insurance policy in force shall be submitted to the department, together with any modification or renewal provisions thereto which the employer has acquired for the purposes authorized in RCW 51.14.020(5) of reinsuring a portion of the employer's liability: *Provided*, That the supervisor upon request and for good cause may accept a certificate of insurance in lieu of the self-insured employer's policy of reinsurance which certifies to the monetary limits, all conditions and exceptions pertaining to payments under the self-insured employer's policy of reinsurance and in addition contains a certification that the company providing reinsurance and its personnel do not participate in the administration of the responsibilities of the self-insurer under Title 51 RCW and that such policy of reinsurance does not provide for payments in excess of eighty percent of the self-insured employer's liabilities under the provisions of Title 51 RCW.

(3) Each such policy of insurance issued or renewed on or after July 1, 1975 shall contain a provision which in substance states: That such policy is not intended to provide for the payment of any of the costs, benefits or compensation which the self-insured employer may be obligated to pay pursuant to the provisions of Title 51 RCW, in excess of eighty percent of any such liabilities as required by RCW 51.14.020(5). [Statutory Authority: RCW 51.04.020. 85-06-031 (Order 85-6), § 296-15-050, filed 3/1/85; Order 77-19, § 296-15-050, filed 9/26/77; Order 71-15, § 296-15-050, filed 12/1/71.]

WAC 296-15-21001 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-15-215 Cash, bond or assignment of account alternative for death or permanent total disability. An "assignment of account" as used in this rule means a legal instrument executed by a self-insurer and a federally or state chartered commercial banking institution authorized to conduct business in the state of Washington, for the benefit of the department of labor and industries, which accomplishes the following: (1) Identifies an existing account on deposit with the banking institution in the name of the self-insurer, which account contains an amount no less than the amount deemed by the department to be sufficient to insure the payment of pension benefits required by law for the

claim on which the assignment of account is made, above and beyond any and all other existing assignments on that account.

(2) Binds the self-insurer to maintain a balance in that account at least equal to the current present cash value of the pension benefits provided by law on the claim for which the assignment of account is made, above and beyond all other assignments on that account, for the life of the claim. Present cash values shall be revised annually by the department in conjunction with the insurance commissioner's report as prescribed in RCW 51.44.140. Quarterly payments of pension, if made from the assigned account, shall not reduce the account balance below the present cash value last established by the department on the claim.

(3) Authorizes the department of labor and industries, upon default of the self-insurer, in any payment of any obligation on the claim for which the assignment of account has been made, to immediately without notice withdraw from the account without obligation of reimbursement of any amount, up to and including the entire amount specified in the assignment of account document, necessary to implement the cash alternative prescribed in RCW 51.44.070(1).

Upon establishment of a death or permanent total disability obligation, the self-insured employer may elect to pursue the bond or assignment of account alternative outlined in RCW 51.44.070(2). In all such cases, cash, bond or assignment of account, the department shall commence to pay benefits immediately upon issuance of an order establishing such obligation. In the event there is a retroactive payment of benefits in the establishment of such obligation, and the self-insured employer elects to pursue RCW 51.44.070(2), this payment shall be made at the time the employer submits the required cash deposit. All further obligations paid by the department from the pension reserve fund shall be reimbursed to the department by the self-insured through the quarterly report system in accordance with RCW 51.44.070(2). Upon election of RCW 51.44.070(2) the self-insured employer shall submit a bond or assignment of account in the amount deemed by the insurance commissioner to be reasonably sufficient to insure payment of the pension benefits provided by law. Such bond or assignment of account and required cash deposit shall be filed with the self-insurance section no later than sixty days after establishment of the death or permanent total disability obligation. The bond or assignment of account alternative as prescribed by RCW 51.44.070(2) shall be allowed only once on any given claim elected at the time of the establishment of such obligation. In the event the amount of the bond is subsequently deemed insufficient and the self-insurer is unable to secure the required bond obligation the employer shall deposit cash into the reserve fund, pursuant to RCW 51.44.070(1), to replace the bond obligation. In the event the amount of the assignment of account is subsequently deemed insufficient and the self-insurer is unable to provide the required assignment of account, the employer shall deposit cash into the reserve fund, pursuant to RCW 51.44.070(1), to replace the assignment of account. Funds available

within the existing assignment of account shall, in this instance, be withdrawn by the department, deposited in the reserve fund, and credited toward the employer's obligation for the claim pursuant to RCW 51.44.070(1).

A separate assignment of account shall be established for each pension and, in case of failure of a banking institution carrying an assignment of account, the employer is responsible for the total amount of the obligation. Upon such failure of a banking institution, the self-insured employer shall, within thirty days, 1) establish a new assignment of account pursuant to this rule, or 2) deposit cash into the reserve fund to replace the obligation. If an employer terminates its self-insured status, the assignment of account will be placed with the department. The required reserve will be determined by the insurance commissioner and any excess will be returned to the employer. [Statutory Authority: RCW 51.04.020. 85-06-031 (Order 85-6), § 296-15-215, filed 3/1/85. Statutory Authority: RCW 51.04.020(1). 83-24-027 (Order 83-22), § 296-15-215, filed 12/1/83, effective 1/1/84. Statutory Authority: RCW 51.04.020 and Title 51 RCW. 81-23-047 (Order 81-27), § 296-15-215, filed 11/18/81.]

WAC 296-15-230 Third party actions. When the injury to a worker is due to the negligence or wrong of a third person not in the same employ, the injured worker or beneficiary or the self-insured employer may elect to seek damages from the third party as provided by RCW 51.24.020.

(1) When such a third party action is undertaken, the self-insured employer shall report to the department of labor and industries:

(a) The name and claim number of the injured worker;

(b) A written indication of election taken by the injured worker or beneficiary.

(2) When third party action is completed, the self-insured employer shall provide the department the following:

(a) The date the judgment was rendered in the case, and a copy of the court order establishing the total amount of the final judgment and the amount of attorney fees and costs involved, or:

(b) The date of any agreement of parties to settle the action, and a copy of any agreement of parties to settle the case, including the total amount of the agreed settlement.

(c) A statement of the total amount of attorney fees and costs involved, and;

(d) A statement of the employer's total costs, including temporary total disability, permanent partial disability and medical costs. [Statutory Authority: RCW 51.04.020. 85-06-031 (Order 85-6), § 296-15-230, filed 3/1/85. Statutory Authority: RCW 51.04.020(1). 83-24-027 (Order 83-22), § 296-15-230, filed 12/1/83, effective 1/1/84; Order 77-19, § 296-15-230, filed 9/26/77.]

Chapter 296-15A WAC

INDUSTRIAL INSURANCE DISCRIMINATION

WAC

296-15A-010 Definitions.

296-15A-020 Filing a complaint of discrimination.

WAC 296-15A-010 Definitions. For the purposes of this chapter, the following words shall have these meanings: (1) "Director" shall mean the director of the department of labor and industries of the state of Washington.

(2) "Employee" shall have the same meaning as that defined in [RCW] 51.08.180 and 51.08.185.

(3) "Employer" shall have the same meaning as defined in RCW 51.08.070. [Statutory Authority: 1985 c 347 § 8 and RCW 51.04.020. 86-01-016 (Order 85-35), § 296-15A-010, filed 12/9/85.]

WAC 296-15A-020 Filing a complaint of discrimination. (1) Any employee who believes that he or she has been discharged or otherwise discriminated against by an employer in violation of this section may file a complaint with the director alleging discrimination within ninety days of the date of the alleged violation. Upon receipt of such complaint, the director shall cause an investigation to be made as the director deems appropriate. Within ninety days of the receipt of the complaint filed under this section, the director shall notify the complainant of his or her determination. If upon investigation, it is determined that this section has been violated, the director shall bring an action in the superior court of the county in which the violation is alleged to have occurred.

(2) Who may file. A complaint of discrimination may be filed by the employee.

(3) Nature of filing. A complaint must be filed in writing; however, no particular form of complaint is required.

(4) Place of filing. The complaint should be filed with the director of the department of labor and industries. The complaint should be sent to the Director of the Department of Labor and Industries, Olympia, Washington 98504. [Statutory Authority: 1985 c 347 § 8 and RCW 51.04.020. 86-01-016 (Order 85-35), § 296-15A-020, filed 12/9/85.]

Chapter 296-16 WAC

EMPLOYER--WORKER REEMPLOYMENT INCENTIVES

WAC

296-16-010 Premium waived for employment of preferred worker.

WAC 296-16-010 Premium waived for employment of preferred worker. In order to implement the provisions of RCW 51.16.120(3) by way of encouraging employment of injured workers who are not reemployed by the employer at the time of injury, the following provisions are adopted:

Any employer who employs a "preferred worker" as defined in these rules shall be excused from the payment of industrial insurance premiums and/or accident costs under the circumstances and conditions herein provided:

(1) A "preferred worker" may be classified as such by the department when the supervisor or his or her designee shall determine, in his or her discretion, that such person has sustained an industrial injury or occupational disease under our state Industrial Insurance Act which prevents the worker from returning to work with the former employer and that such injury or occupational disease is substantially impairing the likelihood of such worker's reemployment with other employers.

(2) Any state fund employer, other than the employer at the time of injury or exposure, who employs a "preferred worker" shall be excused, during the period of employment of such worker but not to exceed thirty-six calendar months, from the payment of any accident fund premiums and medical aid premiums which would otherwise be due based upon such employment.

(3) In the event that a further injury or occupational disease is sustained by a reemployed "preferred worker" during the first thirty-six months subsequent to the hiring of such "preferred worker," while in the employ of the accepting employer, such employer, whether insured by the state fund or self-insured, shall not be charged with the costs of any such claim which would otherwise be charged to or paid by such employer. Such costs shall be charged against the second injury fund.

The provisions of subsections (2) and (3) of this section shall apply only if the department acknowledges the application of such rules in writing. [Statutory Authority: RCW 51.04.020(1) and 51.16.120(3). 85-13-027 (Order 85-12), § 296-16-010, filed 6/11/85. Statutory Authority: RCW 51.04.020(4), 51.04.030 and 51.16.120(3). 80-18-033 (Order 80-24), § 296-16-010, filed 12/1/80, effective 1/1/81.]

Chapter 296-17 WAC

MANUAL OF RULES, CLASSIFICATIONS, RATES, AND RATING SYSTEM FOR WASHINGTON WORKERS' COMPENSATION INSURANCE

WAC

296-17-310	General rules and instructions.
296-17-320	General definitions.
296-17-330	Officers or members of a corporate employer.
296-17-340	Sole proprietors and partners.
296-17-345	Professional and semiprofessional athletic teams.
296-17-350	Minimum premiums—Assumed worker hours.
296-17-35101	Employer's surety bond in lieu of a cash deposit.
296-17-352	Audits.
296-17-360	Assignment of classification by analogy.
296-17-370	Governing classification.
296-17-375	Repealed.
296-17-380	Single enterprise.
296-17-390	Multiple enterprises.
296-17-410	Division of single employee's worker hours.
296-17-411	Classification for employees supporting separate operations.
296-17-420	General inclusions.
296-17-430	General exclusions.
296-17-440	Standard exceptions.

296-17-44001	Business described by a standard exception classification.
296-17-441	Special exceptions.
296-17-450	Special agricultural classification interpretations.
296-17-455	Special temporary help classification interpretation.
296-17-501	Classification 0101.
296-17-502	Classification 0102.
296-17-503	Classification 0103.
296-17-504	Classification 0104.
296-17-505	Classification 0105.
296-17-506	Classification 0106.
296-17-50601	Classification 0107.
296-17-50602	Classification 0108.
296-17-507	Classification 0109.
296-17-508	Classification 0201.
296-17-509	Classification 0202.
296-17-50904	Classification 0206.
296-17-510	Classification 0301.
296-17-511	Classification 0302.
296-17-512	Classification 0306.
296-17-513	Classification 0307.
296-17-514	Classification 0401.
296-17-515	Classification 0402.
296-17-516	Classification 0403.
296-17-517	Classification 0502.
296-17-518	Classification 0503.
296-17-519	Classification 0504.
296-17-520	Classification 0505.
296-17-52001	Classification 0506.
296-17-52002	Classification 0507.
296-17-521	Classification 0508.
296-17-52101	Classification 0509.
296-17-52102	Classification 0510.
296-17-522	Classification 0601.
296-17-523	Classification 0602.
296-17-524	Classification 0603.
296-17-525	Classification 0604.
296-17-526	Classification 0606.
296-17-527	Classification 0607.
296-17-52701	Classification 0608.
296-17-528	Classification 0701.
296-17-529	Classification 0803.
296-17-530	Classification 0804.
296-17-532	Classification 0901.
296-17-534	Classification 1002.
296-17-535	Classification 1003.
296-17-53501	Classification 1004.
296-17-53502	Classification 1005.
296-17-53504	Classification 1007.
296-17-536	Classification 1101.
296-17-537	Classification 1102.
296-17-538	Classification 1103.
296-17-53801	Classification 1104.
296-17-53803	Classification 1106.
296-17-53805	Classification 1108.
296-17-53806	Classification 1109.
296-17-539	Classification 1301.
296-17-540	Classification 1303.
296-17-541	Classification 1304.
296-17-54101	Classification 1305.
296-17-542	Classification 1401.
296-17-544	Classification 1404.
296-17-545	Classification 1501.
296-17-546	Classification 1507.
296-17-548	Classification 1701.
296-17-549	Classification 1702.
296-17-550	Classification 1703.
296-17-551	Classification 1704.
296-17-552	Classification 1801.
296-17-555	Classification 2002.
296-17-556	Classification 2003.
296-17-557	Classification 2004.
296-17-558	Classification 2005.
296-17-560	Classification 2007.
296-17-561	Classification 2008.
296-17-562	Classification 2101.

296-17-563	Classification 2102.	296-17-649	Classification 4808.
296-17-564	Classification 2104.	296-17-64901	Classification 4809.
296-17-56401	Classification 2105.	296-17-64902	Classification 4810.
296-17-565	Classification 2201.	296-17-64903	Classification 4811.
296-17-566	Classification 2202.	296-17-64904	Classification 4812.
296-17-567	Classification 2401.	296-17-650	Classification 4901.
296-17-568	Classification 2903.	296-17-651	Classification 4902.
296-17-569	Classification 2904.	296-17-652	Classification 4903.
296-17-570	Classification 2906.	296-17-653	Classification 4904.
296-17-57002	Classification 2908.	296-17-654	Classification 4905.
296-17-571	Classification 3101.	296-17-655	Classification 4906.
296-17-572	Classification 3102.	296-17-656	Classification 4907.
296-17-573	Classification 3103.	296-17-657	Classification 4908.
296-17-574	Classification 3104.	296-17-658	Classification 4909.
296-17-575	Classification 3105.	296-17-659	Classification 5001.
296-17-576	Classification 3301.	296-17-660	Classification 5002.
296-17-57601	Classification 3302.	296-17-66001	Classification 5003.
296-17-57602	Classification 3303.	296-17-66002	Classification 5004.
296-17-578	Classification 3309.	296-17-661	Classification 5101.
296-17-579	Classification 3401.	296-17-662	Classification 5102.
296-17-580	Classification 3402.	296-17-663	Classification 5103.
296-17-581	Classification 3403.	296-17-666	Classification 5106.
296-17-582	Classification 3404.	296-17-668	Classification 5108.
296-17-58201	Classification 3405.	296-17-669	Classification 5109.
296-17-583	Classification 3406.	296-17-670	Classification 5201.
296-17-584	Classification 3407.	296-17-673	Classification 5204.
296-17-585	Classification 3408.	296-17-675	Classification 5206.
296-17-58501	Classification 3409.	296-17-676	Classification 5207.
296-17-586	Classification 3501.	296-17-67601	Classification 5208.
296-17-587	Classification 3503.	296-17-67602	Classification 5209.
296-17-590	Classification 3506.	296-17-677	Classification 5301.
296-17-592	Classification 3508.	296-17-678	Classification 5305.
296-17-594	Classification 3602.	296-17-679	Classification 5306.
296-17-595	Classification 3603.	296-17-67901	Classification 5307.
296-17-596	Classification 3604.	296-17-680	Classification 6103.
296-17-597	Classification 3605.	296-17-681	Classification 6104.
296-17-598	Classification 3606.	296-17-682	Classification 6105.
296-17-599	Classification 3701.	296-17-684	Classification 6107.
296-17-600	Classification 3702.	296-17-685	Classification 6108.
296-17-601	Repealed.	296-17-686	Classification 6109.
296-17-603	Classification 3707.	296-17-687	Classification 6201.
296-17-604	Classification 3708.	296-17-688	Classification 6202.
296-17-605	Classification 3801.	296-17-689	Classification 6203.
296-17-606	Classification 3802.	296-17-690	Classification 6204.
296-17-612	Classification 3808.	296-17-691	Classification 6205.
296-17-614	Classification 3901.	296-17-692	Classification 6206.
296-17-615	Classification 3902.	296-17-693	Classification 6207.
296-17-616	Classification 3903.	296-17-694	Classification 6208.
296-17-618	Classification 3905.	296-17-695	Classification 6209.
296-17-61801	Classification 3906.	296-17-696	Classification 6301.
296-17-61804	Classification 3909.	296-17-697	Classification 6302.
296-17-619	Classification 4002.	296-17-698	Classification 6303.
296-17-620	Classification 4101.	296-17-699	Classification 6304.
296-17-622	Classification 4103.	296-17-700	Classification 6305.
296-17-626	Classification 4107.	296-17-701	Classification 6306.
296-17-627	Classification 4108.	296-17-703	Classification 6308.
296-17-628	Classification 4109.	296-17-704	Classification 6309.
296-17-629	Classification 4201.	296-17-706	Classification 6402.
296-17-630	Classification 4301.	296-17-707	Classification 6403.
296-17-631	Classification 4302.	296-17-708	Classification 6404.
296-17-632	Classification 4303.	296-17-709	Classification 6405.
296-17-633	Classification 4304.	296-17-710	Classification 6406.
296-17-634	Classification 4305.	296-17-711	Classification 6407.
296-17-635	Classification 4401.	296-17-712	Classification 6408.
296-17-63501	Classification 4402.	296-17-713	Classification 6409.
296-17-636	Classification 4404.	296-17-714	Classification 6501.
296-17-637	Classification 4501.	296-17-715	Classification 6502.
296-17-638	Classification 4502.	296-17-716	Classification 6503.
296-17-640	Classification 4504.	296-17-717	Classification 6504.
296-17-641	Classification 4601.	296-17-718	Classification 6505.
296-17-643	Classification 4802.	296-17-719	Classification 6506.
296-17-644	Classification 4803.	296-17-721	Classification 6508.
296-17-645	Classification 4804.	296-17-722	Classification 6509.
296-17-646	Classification 4805.	296-17-723	Classification 6601.
296-17-647	Classification 4806.	296-17-724	Classification 6602.
296-17-648	Repealed.	296-17-725	Classification 6603.

296-17-726	Classification 6604.	
296-17-727	Classification 6605.	
296-17-729	Classification 6607.	
296-17-730	Classification 6608.	
296-17-731	Classification 6609.	296-17-601
296-17-735	Classification 6704.	
296-17-736	Classification 6705.	
296-17-737	Classification 6706.	
296-17-738	Classification 6707.	
296-17-739	Classification 6708.	296-17-648
296-17-740	Classification 6709.	
296-17-741	Classification 6801.	
296-17-742	Classification 6802.	
296-17-743	Classification 6803.	
296-17-744	Classification 6804.	
296-17-745	Classification 6809.	
296-17-746	Classification 6901.	
296-17-747	Classification 6902.	
296-17-748	Classification 6903.	
296-17-749	Classification 6904.	
296-17-750	Classification 6905.	
296-17-751	Classification 6906.	
296-17-752	Classification 6907.	
296-17-753	Classification 6908.	
296-17-75301	Classification 6909.	
296-17-754	Classification 7101.	
296-17-755	Classification 7102.	
296-17-756	Classification 7103.	
296-17-757	Classification 7104.	
296-17-758	Classification 7105.	
296-17-759	Classification 7106.	
296-17-760	Classification 7107.	
296-17-761	Classification 7108.	
296-17-762	Classification 7109.	
296-17-763	Classification 7201.	
296-17-764	Classification 7202.	
296-17-765	Classification 7203.	
296-17-766	Classification 7204.	
296-17-772	Classification 7301.	
296-17-773	Classification 7302.	
296-17-777	Classification 7307.	
296-17-778	Classification 7308.	
296-17-779	Classification 7309.	
296-17-850	Experience rating plan—Eligibility and experience period.	
296-17-855	Experience modification.	
296-17-875	Table I.	
296-17-880	Table II.	
296-17-885	Table III.	
296-17-890	Table IV.	
296-17-895	Industrial insurance accident fund base rates and medical aid rates by class of industry.	
296-17-904	Definitions.	
296-17-905	Dividends.	
296-17-910	Qualifications for employer groups for workers' compensation insurance.	
296-17-911	Group dividends.	
296-17-913	Qualifications for employer participation in a retrospective rating plan.	
296-17-914	Retrospective rating formula.	
296-17-915	Evaluation of incurred losses dividend and retrospective rating plans.	
296-17-916	Retrospective premium adjustments—Due and payable.	
296-17-917	Qualifications for employer group participation in retrospective rating plan.	
296-17-918	Limitation of liability indemnification.	
296-17-919	Table I.	
296-17-91901	Table II.	
296-17-91902	Table III.	

DISPOSITION OF SECTIONS FORMERLY CODIFIED IN THIS CHAPTER

296-17-375	Work done by contract. [Statutory Authority: RCW 51.16.035. 83-24-017 (Order 83-36), § 296-17-375,
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filed 11/30/83, effective 1/1/84.] Repealed by 85-12-024 (Order 85-11), filed 5/31/85. Statutory Authority: RCW 51.16.035.

Classification 37-3. [Order 73-22, § 296-17-601, filed 11/9/73, effective 1/1/74.]. Repealed by 82-24-047 (Order 32-38), filed 11/29/82, effective 1/1/83. Repealed by 85-06-026 (Order 85-7), filed 2/28/85, effective 4/1/85. Statutory Authority: RCW 51.16.035.

Classification 48-7. [Statutory Authority: RCW 51.16.035. 83-24-017 (Order 83-36), § 296-17-648, filed 11/30/83, effective 1/1/84; Order 75-38, § 296-17-648, filed 11/24/75, effective 1/1/76; Order 73-22, § 296-17-648, filed 11/9/73, effective 1/1/74.]. Repealed by 85-06-026 (Order 85-7), filed 2/28/85, effective 4/1/85. Statutory Authority: RCW 51.16.035.

WAC 296-17-310 General rules and instructions.

This section constitutes general rules and instructions for chapter 296-17 WAC.

(1) **Purposes.** This chapter of the Washington Administrative Code, including classifications of risk, premium rates, the experience rating plan, and all other rules contained herein governing the use thereof, is herein referred to as the manual. This manual is promulgated by the department of labor and industries pursuant to RCW 51.16.035. This manual contains a formulation of the rules and regulations providing for basic classifications, rates of premium, method of premium calculation and collection, and a rating system, consistent with recognized principles of workers' compensation insurance. This manual governs the department's underwriting of workers' compensation insurance and assessment of other monetary obligations, under the industrial insurance law of the state of Washington, Title 51 RCW.

(2) **Premium payments - quarterly reports.** Each employer shall, upon such forms as prescribed by the department, prior to the last day of January, April, July and October of each year, pay to the department for the preceding calendar quarter, for the accident fund, and for the medical aid fund, a certain number of cents for each worker hour or fraction thereof worked by the worker in their employ except when the rules of this manual provide for a different method of premium computation. Provided, that in the event an employer has no employment subject to coverage under Title 51 RCW during a calendar quarter the employer shall submit to the department, according to the schedule described above, a quarterly report indicating "no payroll" or be subject to the penalties provided for in WAC 296-17-480. The director may promulgate, change and revise such rates at such times as necessary, according to the condition of the accident and medical aid funds, and assign rates as appropriate to employers who voluntarily seek coverage under the elective adoption provisions of the law.

(3) **Determining accident fund premium.** The amounts to be paid into the accident fund shall be determined as follows: The department shall determine a manual premium rate for each classification which shall not be inadequate, excessive or unfairly discriminatory, taking into consideration past and prospective costs in each

classification and the financial condition of the accident fund as a whole.

Every employer shall pay into the accident fund at the manual premium rate unless such employer meets the requirements for the experience rating plan provided elsewhere in this manual, in which event such employer's premium rate for the accident fund shall be paid according to their experience modification as determined under the experience rating plan.

(4) **Basis for determining medical aid premium.** The amounts to be paid into the medical aid fund shall be determined as follows: The department shall determine a basic medical aid rate for each classification which shall not be inadequate, excessive or unfairly discriminatory, taking into consideration past and prospective costs in each classification and the financial condition of the medical aid fund as a whole.

Every employer shall pay into the medical aid fund at the basic premium rate only, and the experience rating plan shall not apply to medical aid rates.

(5) All section captions or titles or catch lines used in this manual, chapter 296-17 WAC, do not constitute any part of these rules.

(6) **Assignment of classifications.** The classifications in this manual are all basic classifications other than the standard exception classifications which are defined in WAC 296-17-440. Basic classifications are used to implement the object of the classification system, which is to assign the one basic classification which best describes the business of the employer within this state. Each basic classification includes all the various types of labor found in a business unless it is specifically excluded by language contained within the classification or covered by a separate rule found elsewhere in this chapter, such as "standard exceptions" or "general exclusions." The classification procedure used within this state is intended to classify the business undertaking of the employer and not the separate employments, occupations, or operations of individuals within a business.

(7) **All operations.** Each basic classification in this manual, other than classifications 4806, 4904, 5206, 6301, 6302, 6303, 7101, or the temporary help classifications 7104 through 7109, include all the operations normally associated with the business undertaking without regard to the location(s) of such operation(s) unless an operation is specifically excluded from the manual language of the basic classification. [Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-310, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-310, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-310, filed 11/30/83, effective 1/1/84; Order 77-27, § 296-17-310, filed 11/30/77, effective 1/1/78; Order 75-28, § 296-17-310, filed 8/29/75, effective 10/1/75; Order 74-40, § 296-17-310, filed 11/27/74, effective 1/1/75; Order 73-22, § 296-17-310, filed 11/9/73, effective 1/1/74.]

WAC 296-17-320 General definitions. For the purpose of interpretation of this manual, chapter 296-17

WAC, the following terms shall have the meanings given below:

(1) "Workers' compensation" means the obligation imposed upon an employer by the industrial insurance laws of the state of Washington, to insure the payment of benefits prescribed by such laws.

(2) "Risk" means and includes all insured operations of one employer within the state of Washington.

(3) "Classification" means a grouping of businesses or industries having common or similar exposures without regard to the the separate employments, occupations, or operations comprising the employer's work force.

(4) "Basic classification" shall be understood to have the same meaning as classification defined in subsection (3) of this section.

(5) "Exposure" means worker hours, worker days, payroll or other measure of the extent to which an employer's workers have been exposed to the hazards of a particular classification of employment.

(6) "Rate" means the amount of premium for each unit of exposure. All rates are rates per worker hour except where specifically provided otherwise in this manual.

(7) "Premium" means the sum derived from the application of the rates to the exposures in each classification, after application of any duly authorized experience modification, except where the rules of this manual indicate otherwise.

(8) Unless the context indicates otherwise, the words used in this manual shall have the meanings given in Title 51 RCW. [Statutory Authority: RCW 51.16.035. 85-06-026 (Order 85-7), § 296-17-320, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-320, filed 11/30/83, effective 1/1/84; Order 73-22, § 296-17-320, filed 11/9/73, effective 1/1/74.]

WAC 296-17-330 Officers or members of a corporate employer. As used in this manual, the terms "member" and "officer" are synonymous and mean any executive officer elected and empowered in accordance with the articles of incorporation or bylaws of a corporation and who is also a director and shareholder of the corporation.

All such regularly constituted executive officers who have not voluntarily elected to withdraw from coverage or who have been included for coverage in accordance with RCW 51.12.020 and 51.12.110 shall be included in the corporation's statement of payroll (on a form prescribed by the department) and premium shall be charged thereon. Any such regularly constituted executive officer who is compensated by means of a wage or a salary for work performed for the corporation shall be regarded as an employee. For the purpose of this rule, wages or salary shall be construed as meaning earnings of any kind, actual or anticipated. Each executive officer electing coverage pursuant to RCW 51.12.110 shall report and pay premiums based on one hundred sixty hours per month until such time as elective adoption coverage is cancelled. This will apply to all executive officers electing coverage regardless of the method of compensation.

The statement of payroll so developed of each executive officer shall be assigned to classification 7101, WAC 296-17-754: *Provided, however,* That the statement of payroll of each executive officer who performs such duties as are ordinarily undertaken by a superintendent, foreman, or worker, shall be assigned as provided in this manual of an individual employee who is not an executive officer: *Provided further,* That no executive officer will be assigned the "clerical office" classification: *Provided further,* In case the employer's business is subject to a classification which specifically includes clerical office or salesmen, and the corporate officer's duties are primarily in connection with such business, the classification assigned to the business shall apply with respect to any such executive officer. [Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-330, filed 11/27/85, effective 1/1/86; 84-24-016 (Order 84-23), § 296-17-330, filed 11/28/84, effective 1/1/85. Statutory Authority: RCW 51.04.030 and 51.16.035. 79-12-086 (Order 79-18), § 296-17-330, filed 11/30/79, effective 1/1/80. Statutory Authority: RCW 51.04.020(1) and 51.16.035. 78-12-043 (Order 78-23), § 296-17-330, filed 11/27/78, effective 1/1/79; Order 75-28, § 296-17-330, filed 8/29/75, effective 10/1/75; Order 74-40, § 296-17-330, filed 11/27/74, effective 1/1/75; Order 73-22, § 296-17-330, filed 11/9/73, effective 1/1/74.]

WAC 296-17-340 Sole proprietors and partners.

Any individual employer (sole proprietor or partner) desiring to obtain coverage (under the authority of RCW 51.32.030, as now or hereafter amended) shall give notice in writing on a form prescribed by the department. Any such employer so covered shall be assigned without division to the governing classification; provided, in case of the employer conducting a separate enterprise, the "multiple enterprise" rule as set forth in this manual shall apply.

In case of the employer conducting any aircraft operations, the hours of the sole proprietor or partner who is a pilot or member of the crew on any aircraft used in the employer's business, shall be assigned to the appropriate aviation class and where an "aircraft operation" classification applies, the entire number of hours of the employer shall be assigned to this classification unless the records of the employer indicate the hours in which flying is performed by such employer; in such event, only the hours such employer is engaged in flying shall be assigned to the aircraft operation classification. The hours in which no flying was done shall be assigned to the governing classification. If "aircraft operations, N.O.C.," as defined in this manual, is the governing classification, the hours in which no flying was done shall be assigned to the aircraft operations, N.O.C., ground crew classification.

Each sole proprietor or partner who has elected coverage pursuant to RCW 51.32.030 shall report and pay premiums based on one hundred sixty hours per month until such time as elective coverage is cancelled. This will apply to all sole proprietors and partners who have

elected coverage regardless of the method of compensation. [Statutory Authority: RCW 51.16.035. 84-24-016 (Order 84-23), § 296-17-340, filed 11/28/84, effective 1/1/85; Order 75-28, § 296-17-340, filed 8/29/75, effective 10/1/75; Order 74-40, § 296-17-340, filed 11/27/74, effective 1/1/75; Order 73-22, § 296-17-340, filed 11/9/73, effective 1/1/74.]

WAC 296-17-345 Professional and semiprofessional athletic teams. Athletes assigned to a Washington-domiciled sports team are mandatorily covered by Washington industrial insurance: *Provided,* That a professional athlete who is under contract with a parent team domiciled outside of the state of Washington while assigned to a team domiciled within Washington is subject to mandatory coverage by Washington industrial insurance unless the player and employer (parent team) have agreed in writing as to which state shall provide coverage in accordance with RCW 51.12.120(5).

The following rules shall apply to the written agreement:

(1) Agreement must be in writing and signed by the employer and the individual athlete.

(2) Agreement must specify the state that is to provide coverage. The state agreed upon to provide coverage must be a state in which the player's team, during the course of the season, will engage in an athletic event. For example, if the Washington-based team is a part of a league with teams in only Washington, Oregon, and Idaho, the player and the employer can agree to any of those three states to provide coverage. However, they could not agree to have California provide the coverage as this would not qualify as a state in which the player regularly performs assigned duties.

(3) The state agreed upon accepts responsibility for providing coverage and acknowledges such to the department by certified mail.

(4) Agreement and certification by the other state must be received by this department's underwriting section prior to any injury incurred by the athlete.

(5) Agreement will be for one season only commencing with the assigning of the player to a particular team. A separate agreement and certification must be on file for each additional season.

Failure to meet all of these requirements will result in the athlete being considered a Washington worker for premium and benefit purposes until such time as all requirements have been met.

Professional sports teams who are domiciled outside the state of Washington and who participate in sporting events with Washington-domiciled teams are not subject to Washington industrial insurance for their team members while in this state. These out-of-state teams are not considered employers subject to Title 51 on the basis that they are not conducting a business within this state. [Statutory Authority: RCW 51.04.020(1). 84-19-024 (Order 84-19), § 296-17-345, filed 9/13/84.]

WAC 296-17-350 Minimum premiums—Assumed worker hours. A minimum premium is the lowest amount of premium to be paid by an employer and is

also the basis for determining premium computation for workers for whom an assumed number of worker hours must be, and hereby, is established:

(1) **Minimum premium.** Except as otherwise provided in this chapter, every employer shall be liable for a premium not less than ten dollars for any calendar quarter regardless of number of worker hours reported.

(2) **Minimum premium for elective adoption.** Any employer having in their employ any person exempt from mandatory coverage whose application for coverage under the elective adoption provisions of RCW 51.12.110 is accepted by the director, shall have a minimum premium rate for such employer's applicable class based upon not less than 40 worker hours for each month, until such time as elective adoption coverage is cancelled: *Provided*, That the minimum premium rate as specified above shall not apply to sole proprietors, partnerships, or executive officers obtaining coverage subject to other provisions of this chapter.

(3) Resident managers, caretakers, or similar employments that are employed for irregular periods and whose compensation is for a stipulated sum in money or a substitute for money shall be reported for the purpose of premium calculation as provided in subsection (6) of this section.

(4) **Commission personnel.** Commission personnel are persons whose compensation is based upon a percentage of the amount charged for the commodity or service rendered. Commission personnel are to be reported for premium purposes at a minimum of assumed worker hours of not less than eight worker hours a day for part-time employment, or not less than 40 worker hours per week for full-time employment: *Provided*, That the assumed eight worker hours daily for part-time employment will apply only if the employer's books and records are maintained so as to show separately such person's actual record of employment.

(5) **Salaried personnel.** Salaried personnel for the purposes of this chapter means persons whose compensation is not governed by the number of hours devoted to employment for their employer. Employers having salaried personnel in their employ shall for the purpose of premium calculation report assumed worker hours based upon one hundred sixty worker hours for each month in which the employee is on salary: *Provided*, That if the employer maintains complete and accurate records, supported by original time cards or timebook entries, the employer may report and pay premium on the actual hours worked by salaried personnel. All salaried personnel must be reported in the same manner: *Provided further*, That the department may, at its discretion, authorize some other method in assuming workers hours for premium calculating purposes in the case of contract personnel employed by schools and/or school districts.

(6) **Piece workers.** Employees whose compensation is based upon the accomplishment of a number of individual tasks whether computed on the number of pounds, items, pieces, or otherwise, the employer shall for the purpose of premium calculation assume each two dollars of earnings of each employee as representing one worker hour: *Provided*, That if the average rate of compensation

for the applicable classification is at least \$3.00 but less than \$3.50 per worker hour the assumed amount shall be \$3.00 of earnings as representing one worker hour, and on a progressive basis, if the average compensation is at least \$3.50 but less than \$4.00 the assumed amount shall be \$3.50 of earnings as representing one worker hour, and so forth. The records of the department as compiled for the preceding fiscal year ending June 30, shall be the basis for determining the average rate of compensation for each classification: *Provided further*, That if the employer maintains books and records to show separately the hours employed for each worker in their employ engaged in piece work then such actual worker hours shall be reported for the purpose of premium calculation. Notwithstanding any other provisions of this section, workers employed in a work activity center pursuant to WAC 296-17-779 shall be reported on the basis of the piece worker rule.

(7) **Noncontact sports teams.** All employers having personnel in their employ as defined under WAC 296-17-745 shall for the purpose of premium calculations, report assumed worker hours based upon 40 worker hours for each week in which any duties are performed.

(8) All employers having personnel in their employ as defined under WAC 296-17-739 shall, for the purpose of premium calculations, report assumed worker hours based upon ten hours for each mount in each horse race; professional drivers shall report worker hours based upon ten hours for each heat or race of any racing event: *Provided*, That any day such personnel do not ride or drive in a race, the premium calculation shall be made by assuming ten worker hours for any day in which duties are performed.

(9) Pilots and flight crew members having flight duties during a work shift including preflight time shall have premium calculated by utilizing daily readings logged per federal requirements of the aircraft tachometer time: *Provided*, That if the total tachometer time for any day includes a fraction of an hour, the reportable time will be increased to the next full hour: *Provided further*, That pilots and flight crew members who assume nonflying duties during a work shift will have premium calculated in accordance with the appropriate rules and classifications applicable to nonflight duties. [Statutory Authority: RCW 51.16.035. 85-06-026 (Order 85-7), § 296-17-350, filed 2/28/85, effective 4/1/85; 84-24-016 (Order 84-23), § 296-17-350, filed 11/28/84, effective 1/1/85. Statutory Authority: RCW 51.04.020(1). 84-11-034 (Order 84-11), § 296-17-350, filed 5/15/84. Statutory Authority: RCW 51.16.035. 83-24-017 (Order 83-36), § 296-17-350, filed 11/30/83, effective 1/1/84; 81-24-042 (Order 81-30), § 296-17-350, filed 11/30/81, effective 1/1/82. Statutory Authority: RCW 51.04.020(1) and 51.16.035. 78-12-043 (Order 78-23), § 296-17-350, filed 11/27/78, effective 1/1/79; Order 77-27, § 296-17-350, filed 11/30/77, effective 1/1/78; Order 77-10, § 296-17-350, filed 5/31/77; Order 76-18, § 296-17-350, filed 5/28/76, effective 7/1/76; Order 75-28, § 296-17-350, filed 8/29/75, effective 10/1/75; Order 74-40, § 296-

17-350, filed 11/27/74, effective 1/1/75; Order 73-22, § 296-17-350, filed 11/9/73, effective 1/1/74.]

WAC 296-17-35101 Employer's surety bond in lieu of a cash deposit. The department may, in its discretion, accept an employer's surety bond to the state of Washington in lieu of a cash deposit as provided for in RCW 51.16.110. Such employer's surety bond must be on the prescribed forms authorized by the department. Such employer's surety bond shall be in \$1,000.00 increments and based on estimated premiums covering three full calendar months of operations. The dollar value of the surety bond will be calculated such that the amount of the surety is rounded to the highest \$1,000 increment. Provided further, that any employer securing a surety bond in lieu of a cash deposit will maintain such bonds for a minimum of three full calendar years representing twelve full reporting quarters in accordance with WAC 296-17-351 unless such an employer ceases to be an employer subject to this title. [Statutory Authority: RCW 51.04.020(1), 84-06-018 (Order 84-3), § 296-17-35101, filed 2/29/84.]

WAC 296-17-352 Audits. An audit of the employer's books, records and payrolls performed pursuant to the authority contained in RCW 51.48.040 may include but will not be limited to:

(1) An audit to determine whether an employer engaged in a business or trade has employment subject to the Industrial Insurance Laws.

(2) A visual inspection of the employer's workplace or places for the purpose of determining appropriate classifications in accordance with the industrial insurance laws and rules as set forth in chapter 296-17 WAC.

(3) Audits containing a complete and detailed examination of the employer's books and records for a specific period to establish the reporting of the employer's payroll in accordance with the industrial insurance laws and the rules as set forth in chapter 296-17 WAC, and as well, chapter 296-15 WAC in the event the employer has been certified a self-insurer.

Except as otherwise provided in this rule any audit time period may be less than, but will not exceed, three years of the due dates of any payments from any employer where the department has requested submission of the employer's books, or three years of the due dates of any payments where the employer makes claim for adjustment, recomputation or alteration of any such payment: *Provided*, That an employer certified to self-insure pursuant to the authority contained in chapter 51.14 RCW, shall be subject to such audit as deemed necessary to guarantee its compliance with the industrial insurance laws and rules and regulations for self-insurers: *Provided further*, That an employer who fails to make any books and records, or certified copies thereof, available for audit in the state of Washington, will be charged for all costs incurred by the department in auditing any books and records maintained at other places: *Provided further*, That in any instance where fraud may

be indicated with respect to underpayment or nonpayment of premiums the audit time period may be extended beyond that previously set forth. [Statutory Authority: RCW 51.16.035, 85-06-026 (Order 85-7), § 296-17-352, filed 2/28/85, effective 4/1/85. Statutory Authority: RCW 51.04.020(1) and 51.16.035, 78-12-043 (Order 78-23), § 296-17-352, filed 11/27/78, effective 1/1/79; Order 76-36, § 296-17-352, filed 11/30/76; Order 76-18, § 296-17-352, filed 5/28/76, effective 7/1/76.]

WAC 296-17-360 Assignment of classification by analogy. The classification section of this manual contains a listing of basic classifications covering most businesses and industries.

Any enterprise or operation which is not described by such classifications shall be assigned to the basic classification(s) most analogous from the standpoint of process and hazard.

The alphabetical index section of the manual includes a number of businesses and industries that are not contained in the rule part of this manual. When such a listing is identified by the letter "A" standing for analogy, it is the intended purpose of this symbol and listing of such operations in the index to be included in the same manner as if such operations were contained in the rule part of this manual.

The limitations and conditions of the basic classification(s) so assigned and all manual rules pertaining thereto shall be applicable: *Provided*, That when a basic classification carries the phraseology of N.O.C. and the business undertaking of the employer to be classified is not specifically described by a basic manual classification or listed in the alpha index but the classification containing the phraseology of N.O.C. contains common or similar businesses or industries it is intended that the operation be classified into the N.O.C. Code. [Statutory Authority: RCW 51.16.035, 85-06-026 (Order 85-7), § 296-17-360, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-360, filed 11/30/83, effective 1/1/84; Order 73-22, § 296-17-360, filed 11/9/73, effective 1/1/74.]

WAC 296-17-370 Governing classification. The governing classification of a risk is defined as that classification, other than classifications 4806, 4904, 5206, 6301, 6302, 6303, 7101 or temporary help classifications 7104 through 7109, which carries the largest number of worker hours. *Provided*, that this rule is only applicable when multiple basic classifications are to be assigned to an employer's business undertakings. [Statutory Authority: RCW 51.16.035, 85-24-032 (Order 85-33), § 296-17-370, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-370, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-370, filed 11/30/83, effective 1/1/84; Order 73-22, § 296-17-370, filed 11/9/73, effective 1/1/74.]

WAC 296-17-375 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-17-380 Single enterprise. If the employer's business, conducted at one or more locations, consists of a single operation or a number of separate operations which normally prevail in the business described by a single basic classification, that single classification which most accurately describes the entire enterprise shall be applied. Division of worker hours shall be made as provided hereinafter in respect to standard exceptions, general exclusions and special exceptions. No division of worker hours shall be permitted in respect to any other operation even though such operation may be specifically described by some other classification, unless the applicable classification phraseology or other manual provision specifically provides for such division of worker hours. [Statutory Authority: RCW 51.16.035. 85-06-026 (Order 85-7), § 296-17-380, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-380, filed 11/30/83, effective 1/1/84; Order 73-22, § 296-17-380, filed 11/9/73, effective 1/1/74.]

WAC 296-17-390 Multiple enterprises. If an employer operates a secondary business within this state, an additional basic classification shall be assigned only if the following conditions exist:

- (1) The secondary business does not normally prevail in the principal business undertaking of the employer.
- (2) The secondary business is conducted as a separate undertaking or enterprise. This condition does not apply if the classification wording requires the assignment of an additional classification for specified employees or operations.
- (3) Separate and distinct payroll records are maintained for each business undertaking.
- (4) Each business is physically separated by structural partitions and is conducted without an interchange of labor.
- (5) The assignment of the separate classification is not prohibited by the wording of the classification governing the principle business undertaking of the employer or any other classification assigned to the employer.

If all of the above conditions do not exist:

- (a) All employees shall be assigned to the classification applicable to the principle business if the classification for the principle business carries a rate which is the same or higher than that for the classification of the secondary business.
- (b) The secondary business shall be assigned to the classification which describes that business if such classification carries a rate higher than that applicable to the principal business.
- (c) The principle business is the business with the greatest number of worker hours, excluding standard exception or general exclusion operations.
- (6) Employers with more than one classification may have employees working in connection with several classifications. Payroll assignment for such employees is subject to WAC 296-17-410 "division of single employee's worker hours." [Statutory Authority: RCW 51.16.035. 85-06-026 (Order 85-7), § 296-17-390, filed

2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-390, filed 11/30/83, effective 1/1/84; Order 73-22, § 296-17-390, filed 11/9/73, effective 1/1/74.]

WAC 296-17-410 Division of single employee's worker hours. The worker hours of any one employee may be divided between two or more classifications, provided the employer has maintained complete and accurate records supported by original time cards or time book entries which show separately both by individual employee and in summary by operations performed the worker hours of such employees, except such division SHALL NOT BE ALLOWED:

- (1) Between a basic classification and standard exception classification unless specifically provided for in other rules.
- (2) Between two standard exception classifications.
- (3) If the division is contrary to the classification phraseology.

If the employer fails to keep complete and accurate records as provided in this rule, the entire number of worker hours of the employee shall be assigned to the highest rated classification representing any part of their work. Division of worker hours by means of percentages, averages, estimates, or any basis other than specific time records, shall not be accepted by the department. [Statutory Authority: RCW 51.16.035. 85-06-026 (Order 85-7), § 296-17-410, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-410, filed 11/30/83, effective 1/1/84; Order 75-28, § 296-17-410, filed 8/29/75, effective 10/1/75; Order 73-22, § 296-17-410, filed 11/9/73, effective 1/1/74.]

WAC 296-17-411 Classification for employees supporting separate operations. Employees who perform duties which support separate operations which are subject to different basic classifications are to be reported in accordance with the language of that classification, applicable to the operations supported, which carries the largest number of worker hours for the employer. For purposes of this rule, "duties which support separate operations" shall mean duties which remain the same and are performed at the same location(s) regardless of the operation being supported. [Statutory Authority: RCW 51.16.035. 85-06-026 (Order 85-7), § 296-17-411, filed 2/28/85, effective 4/1/85. Statutory Authority: RCW 51.04.020(1). 83-05-019 (Order 83-5), § 296-17-411, filed 2/9/83.]

WAC 296-17-420 General inclusions. All of the basic classifications in this manual, other than standard exceptions, include certain operations which would be classified separately if they were run as separate business undertakings. These operations are referred to as general inclusions and are included in the scope of each basic classification. The following operations are included in all basic classifications unless they are specifically excluded by the language of the basic classification.

- (1) Aircraft travel by employees, other than members of the flying crew.

(2) Commissaries and restaurants for the employers' employees. Provided that such operations conducted in connection with construction, erection, lumbering, or mining operations shall be assigned to Code 39-5 "restaurants."

(3) Manufacture of containers, such as bags, barrels, bottles, boxes, cans, cartons, wooden pallets, or packing cases by the employers for use in their operations.

(4) Hospitals, medical facilities, or dispensaries operated by the employers for their employees.

(5) Printing, lithography, or similar operations of the employers when used exclusively for their own products.

(6) Maintenance or ordinary repair of the employer's building or equipment when performed by employees of the employer.

(7) Pick up and delivery when done by employees of the employer in connection with the business of the employer.

(8) Sales of all goods or products being manufactured by the employer.

(9) Warehousing, handling, packing, and shipping when done by an employee of the employer and done in connection with the business of the employer. [Statutory Authority: RCW 51.16.035, 85-06-026 (Order 85-7), § 296-17-420, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-420, filed 11/30/83, effective 1/1/84; Order 73-22, § 296-17-420, filed 11/9/73, effective 1/1/74.]

WAC 296-17-430 General exclusions. Some operations are so exceptional or unusual that they are excluded from the scope of all basic classifications. Such operations are referred to as general exclusions and are subject to the division of worker hours rules in all classifications including the standard exception classifications. The following operations are excluded from all basic classifications including the standard exception classifications unless they are specifically included.

(1) Aircraft operation - All operations of the flying and ground crews.

(2) Racing operations - All operations of the drivers and pit crews.

In addition to the above two listed exclusions, the following operations are similarly excluded from all basic classifications, provided that no division of these operations shall be permitted between the basic classifications assigned to cover these operations and any standard exception classifications.

(a) New construction or alterations by employees of the employer.

(b) Musicians and entertainers. [Statutory Authority: RCW 51.16.035, 85-06-026 (Order 85-7), § 296-17-430, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-430, filed 11/30/83, effective 1/1/84; Order 74-40, § 296-17-430, filed 11/27/74, effective 1/1/75; Order 73-22, § 296-17-430, filed 11/9/73, effective 1/1/74.]

WAC 296-17-440 Standard exceptions. The following employments referred to as standard exceptions are

to be separately rated unless these employments are specifically included within the scope of a basic classification by use of words such as "including clerical office and outside sales." (Use of the words "clerical office" will also include draftsmen and use of the words "sales personnel" will also include collectors and messengers.) Provided that a division of a single employee's worker hours shall not be permitted between a standard exception classification and a basic business classification except as provided in the general exclusion rules of this manual.

The standard exceptions are defined below:

(1) Clerical office employees are defined as those employees whose duties are confined to keeping the books or records of the employer, or conducting correspondence or who are engaged wholly in office work where such books or records are kept or where such correspondence is conducted, having no other duty of any nature in or about the employer's premises. If any clerical office employee is exposed to any operative hazard of the business, their entire worker hours shall be assigned to the highest rated classification of work to which they are exposed. The clerical office classification shall be applied only to persons as herein described who are employed exclusively in separate buildings or on separate floors of buildings or in departments on such floors which are physically separated from all other work areas of the employer by structural partitions and within which no work is performed other than clerical office duties as defined in this paragraph.

(2) Draftsmen will be considered to be clerical office employees when their duties are limited to office work only and who are engaged strictly as draftsmen in such a manner that they are not exposed to the operative hazard of the business. If any draftsman is exposed to any operative hazard of this business, their entire worker hours shall be assigned to the highest rated classification of work to which they are exposed.

(3) "Sales personnel - outside" are defined as those employees engaged in such duties away from the premises of the employer who sell or solicit new accounts or customers for the employer or who service existing accounts or customers for the employer. Provided that no employee shall be assigned to a sales classification code if their duties include delivery, even though they may also solicit or collect. Employees having delivery duties, even if they walk or use public transportation, shall be assigned to the governing classification of the employer.

(4) Messengers will be considered sales employees, provided the following conditions are met:

(a) The messenger is used solely by the employer in connection with the employer's business operation.

(b) The operation is not provided to the public as a general delivery service.

(c) The employer's basic classification does not include the standard exception classification designations.

(d) The employer's other assigned basic classifications are not that of a commercial or general delivery service, or similar business undertaking.

If all the above conditions do not exist, any employee assigned such duties shall be assigned to the governing

classification of the employer when multiple basic classifications are assigned or to the basic classification in the event an employer has only a single basic classification assigned.

(5) Executive officers as defined in WAC 296-17-330.

With the exceptions of occupations falling within any classification that specifically includes clerical office, inside draftsmen or sales personnel, the following designated occupational classifications shall apply.

Classification 4904 clerical office employees including inside draftsmen.

Classification 6303 sales personnel, outside or away from the employers premises including collectors and messengers.

Classification 6301 automobile, truck, camper, trailer, mobile home, motorcycle and pleasure craft sales personnel.

Classification 6302 all door to door sales personnel.

Classification 7101 executive officers. [Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-440, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-440, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-440, filed 11/30/83, effective 1/1/84; Order 73-22, § 296-17-440, filed 11/9/73, effective 1/1/74.]

WAC 296-17-44001 Business described by a standard exception classification. If the principle business undertaking of an employer is described by a standard exception classification, the operations of all employees not included in the definition of the standard exception classification shall be assigned to the separate basic classification which most accurately describes their operations. [Statutory Authority: RCW 51.16.035. 85-06-026 (Order 85-7), § 296-17-44001, filed 2/28/85, effective 4/1/85.]

WAC 296-17-441 Special exceptions. The following operations referred to as special exceptions are subject to division of worker hours in connection with all other classifications regardless of directional phrases beginning with "all employees" or "all operations," but only under the specific circumstances as shall be described by the following special exceptions:

(1) Security guards shall be subject to classification 6601 (WAC 296-17-723): *Provided*, The security guard is an employee of an employer engaged in logging or construction: *Provided further*, The security guard is for the purpose of guarding the employer's logging or construction sites: *And provided further*, The security guard is employed at the site only during those hours that the employer is not conducting any other operations at the site and provided any person employed as a security guard will have no other duties.

(2) Janitors shall be subject to classification 6602 (WAC 296-17-724): *Provided*, The janitorial services are performed solely within the employer's office: *Provided further*, The employer's other office employment is subject to classification 4904 (WAC 296-17-653) and

provided the person employed to perform janitorial services is not otherwise regularly employed by the employer with clerical office duties that are subject to reporting under classification 4904.

(3) Logging truck drivers employed by logging companies shall be subject to classification 5003 (WAC 296-17-66001), provided this classification shall not apply to any logging truck driver for any work shift during which the driver has duties that would otherwise be subject to classification 5001 (WAC 296-17-659).

(4) Construction or erection contractors permanent yard or shop employees shall be subject to classification 5206 (WAC 296-17-675), provided that this classification shall not apply to any yard or shop employee during any work shift in which the yard or shop employee has duties subject to another classification, or if the classification assigned to the employer requires a separate treatment for shop operations. [Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-441, filed 11/27/85, effective 1/1/86; 80-17-016 (Order 80-23), § 296-17-441, filed 11/13/80, effective 1/1/81.]

WAC 296-17-450 Special agricultural classification interpretations. Farming in classifications 4802 through 4806, 4808, 4809, 4810, 4811, 7301, 7302, and 7307 will include farm labor by contractors and farm machinery operations by contractors.

To qualify for a separate rating of ground hand-picking or any other separation of agricultural classifications, separate and distinct payroll records of such operations will be required.

If a single establishment or work comprises more than one of classifications 4802 through 4806, 4808, 4809, 4810, 4811, 7301, 7302, and 7307 the premiums shall be computed according to the payroll for operations of each classification. The department in its discretion may assess a single rate of premium for an agricultural establishment when a substantial portion of the operation falls within one classification, and in such cases, the entire operation will be required to be reported in such largest classification: *Provided*, That under no circumstances will the hand-picking classification (4806) apply for the purpose of single rating of an entire establishment engaged in other phases of agricultural activities. *Provided further*, that farm labor contractors shall be assigned the classification(s) applicable to the agricultural establishment for whom they are providing services. [Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-450, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-450, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-450, filed 11/30/83, effective 1/1/84; 82-24-047 (Order 82-38), § 296-17-450, filed 11/29/82, effective 1/1/83. Statutory Authority: RCW 51.04.020(1) and 51.16.035. 78-12-043 (Order 78-23), § 296-17-450, filed 11/27/78, effective 1/1/79; Order 74-40, § 296-17-450, filed 11/27/74, effective 1/1/75; Order 74-29, § 296-17-450, filed 5/29/74, effective 7/1/74; Order 73-22, § 296-17-450, filed 11/9/73, effective 1/1/74.]

WAC 296-17-455 Special temporary help classification interpretation. For the purposes of administering the temporary help classifications 7104 through 7109, the term "temporary help" shall be given the same meaning as temporary service contractors defined in RCW 19.31.020(2) and shall mean any person, firm, association or corporation conducting a business which consists of employing individuals directly for the purpose of furnishing such individuals on a part-time or temporary help basis to others. [Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-455, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-455, filed 2/28/85, effective 4/1/85.]

WAC 296-17-501 Classification 0101.

Airports, landing strips, runways and taxi ways, construction and repair
 Alley and parking lot construction
 Diking, N.O.C. including oil spill clean-up involving diking and/or ditching work
 Excavation, N.O.C.
 Grading, N.O.C. – including land leveling and grading of farm lands by contractor
 Highway, street and road construction, N.O.C., includes operations such as grading, grubbing, clearing, surfacing, striping, guard rails, highway dividers, highway lighting and highway signs installation
 Humus or peat digging – including humus or peat dealers
 Land clearing, N.O.C. including slope grooming and forest trail construction, firefighting, and slash burning, N.O.C.
 Parking lot striping
 Pit, crusher and bunker operations in connection with road, street and highway construction
 Railroads, construction, maintenance and repair, N.O.C., including dismantling
 Retaining walls with road, street and highway construction, N.O.C.
 Sand or gravel, or shale digging
 Tunnels and approaches including lining, cofferdam work, shaft sinking, and well digging with caisson
 This classification excludes bridge construction which is to be separately rated under risk classification 0201 (WAC 296-17-508) although such a structure may be constructed as a part of a highway, street or road construction project. This classification further excludes logging road construction rated under risk classification 6902 (WAC 296-17-747); railroad bridge construction rated under risk classification 0201 (WAC 296-17-508) "bridge construction"; log railroad construction rated under risk classification 6902 (WAC 296-17-747); and tunnels and approaches including lining, cofferdam work, shaft sinking and well digging with caisson done in connection with dam construction rated under risk classification 0701 (WAC 296-17-528).

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-501, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-501, filed

2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-501, filed 11/30/83, effective 1/1/84. Statutory Authority: RCW 51.04.030 and 51.16.035. 79-12-086 (Order 79-18), § 296-17-501, filed 11/30/79, effective 1/1/80; Order 76-36, § 296-17-501, filed 11/30/76; Order 75-38, § 296-17-501, filed 11/24/75, effective 1/1/76; Order 74-40, § 296-17-501, filed 11/27/74, effective 1/1/75; Order 73-22, § 296-17-501, filed 11/9/73, effective 1/1/74.]

WAC 296-17-502 Classification 0102.

Concrete and asphalt construction, N.O.C. – including concrete sawing, drilling and pumping
 Concrete culverts or other types with span of 12 feet or less
 This classification will include house foundations and flatwork such as sidewalks and residential driveways but excludes concrete construction not residential in nature which will be rated under risk classification 0206 (WAC 296-17-50904) provided that concrete building construction will be rated under risk classification 0505 (WAC 296-17-520).

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-502, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-502, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-502, filed 11/30/83, effective 1/1/84; 82-24-047 (Order 82-38), § 296-17-502, filed 11/29/82, effective 1/1/83; Order 76-36, § 296-17-502, filed 11/30/76; Order 73-22, § 296-17-502, filed 11/9/73, effective 1/1/74.]

WAC 296-17-503 Classification 0103.

Drilling, N.O.C.
 Geophysical exploration, seismic detection of the mechanical properties of the earth
 See construction classification applicable to work being done, for drilling done in connection with construction work.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-503, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-503, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-503, filed 11/30/83, effective 1/1/84; Order 74-40, § 296-17-503, filed 11/27/74, effective 1/1/75; Order 73-22, § 296-17-503, filed 11/9/73, effective 1/1/74.]

WAC 296-17-504 Classification 0104.

Dredging, N.O.C.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-504, filed 11/27/85, effective 1/1/86; 83-24-017 (Order 83-36), § 296-17-504, filed 11/30/83, effective 1/1/84; Order 73-22, § 296-17-504, filed 11/9/73, effective 1/1/74.]

WAC 296-17-505 Classification 0105.

Parking meter installation

Fence, all types, erection and repair – including wire mesh installation for slope protection.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-505, filed 11/27/85, effective 1/1/86; 83-24-017 (Order 83-36), § 296-17-505, filed 11/30/83, effective 1/1/84; 82-24-047 (Order 82-38), § 296-17-505, filed 11/29/82, effective 1/1/83; Order 73-22, § 296-17-505, filed 11/9/73, effective 1/1/74.]

WAC 296-17-506 Classification 0106.

Tree topping and pruning, N.O.C., includes spraying or fumigating in connection with tree topping, repairing or trimming.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-506, filed 11/27/85, effective 1/1/86; 83-24-017 (Order 83-36), § 296-17-506, filed 11/30/83, effective 1/1/84; 82-24-047 (Order 82-38), § 296-17-506, filed 11/29/82, effective 1/1/83; Order 73-22, § 296-17-506, filed 11/9/73, effective 1/1/74.]

WAC 296-17-50601 Classification 0107.

Coaxial cable and conduit underground construction, maintenance and repair – including use of automatic cable laying equipment and including television cable, N.O.C.

Pipelaying, N.O.C.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-50601, filed 11/27/85, effective 1/1/86; 83-24-017 (Order 83-36), § 296-17-50601, filed 11/30/83, effective 1/1/84; 80-17-016 (Order 80-23), § 296-17-50601, filed 11/13/80, effective 1/1/81. Statutory Authority: RCW 51.04.030 and 51.16.035. 79-12-086 (Order 79-18), § 296-17-50601, filed 11/30/79, effective 1/1/80.]

WAC 296-17-50602 Classification 0108.

Ditches and canals, N.O.C.

Sewer construction.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-50602, filed 11/27/85, effective 1/1/86; 83-24-017 (Order 83-36), § 296-17-50602, filed 11/30/83, effective 1/1/84; 82-24-047 (Order 82-38), § 296-17-50602, filed 11/29/82, effective 1/1/83; 80-17-016 (Order 80-23), § 296-17-50602, filed 11/13/80, effective 1/1/81. Statutory Authority: RCW 51.04.030 and 51.16.035. 79-12-086 (Order 79-18), § 296-17-50602, filed 11/30/79, effective 1/1/80.]

WAC 296-17-507 Classification 0109.

Reinforcing steel installation – placing for concrete construction

Reinforcing steel installation in connection with the construction of tunnels, cofferdams, caissons, dams, bridges, and steel erection shall be assigned to the classification describing the construction with which such reinforcing steel installation is connected.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-507, filed 11/27/85, effective 1/1/86; 83-24-017 (Order 83-36), § 296-17-507, filed 11/30/83, effective 1/1/84; 82-24-047 (Order 82-38), § 296-17-507, filed 11/29/82, effective 1/1/83; Order 73-22, § 296-17-507, filed 11/9/73, effective 1/1/74.]

WAC 296-17-508 Classification 0201.

Bridge, trestle, overhead crossing, viaducts, construction, maintenance and repair including the foundations and approaches

Breakwater, jetty, levee, construction, maintenance and repair

Bulkhead retaining walls, construction, maintenance and repair, riprapping – all water hazard

Concrete culverts or other types over 12 feet

Undercrossings and approaches – including lining

Debris removal and other work with water hazard, N.O.C., will be rated under bulkhead construction with water hazard.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-508, filed 11/27/85, effective 1/1/86; 83-24-017 (Order 83-36), § 296-17-508, filed 11/30/83, effective 1/1/84; Order 73-22, § 296-17-508, filed 11/9/73, effective 1/1/74.]

WAC 296-17-509 Classification 0202.

Diving operations and subaqueous work, N.O.C.

Pile driving, concrete piles, N.O.C.

Wharf, pier, dock and marine railway, construction, maintenance and repair, N.O.C.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-509, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-509, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-509, filed 11/30/83, effective 1/1/84; Order 76-36, § 296-17-509, filed 11/30/76; Order 73-22, § 296-17-509, filed 11/9/73, effective 1/1/74.]

WAC 296-17-50904 Classification 0206.

Commercial concrete construction such as sewage disposal, swimming pool, fish hatchery, water purification plant construction, and similar concrete projects

This classification will be used to report concrete construction projects other than concrete building construction rated in risk classification 0505 (WAC 296-17-520); concrete projects residential in nature which are rated in risk classification 0102 (WAC 296-17-502); highway, street, and road construction projects rated in risk classification 0101 (WAC 296-17-501); and bridge construction projects rated in risk classification 0201 (WAC 296-17-508).

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-50904, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-50904, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-50904, filed 11/30/83, effective 1/1/84; 82-24-047 (Order 82-38), § 296-17-50904, filed 11/29/82, effective 1/1/83.]

WAC 296-17-510 Classification 0301.

Agricultural irrigation pipe installation, service or repair
Agricultural sprinkler system installation, service or repair

Chemical spraying and fumigating

Landscape gardening

Landscaping and lawn yard care

Lawn-type sprinkler systems installation, service or repair

This classification includes sodding, seeding, planting, and related landscape work for the beautification of median strips and roadsides but excludes crop dusting by aircraft rated under risk classification 6903 (WAC 296-17-748) and ditches and canals rated under risk classification 0108 (WAC 296-17-50602).

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-510, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-510, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-510, filed 11/30/83, effective 1/1/84. Statutory Authority: RCW 51.04.030 and 51.16.035. 79-12-086 (Order 79-18), § 296-17-510, filed 11/30/79, effective 1/1/80; Order 76-36, § 296-17-510, filed 11/30/76; Order 73-22, § 296-17-510, filed 11/9/73, effective 1/1/74.]

WAC 296-17-511 Classification 0302.

Brick and slate work, N.O.C.

Masonry, N.O.C., including chimney and fireplace construction

Plastering and stuccoing work - outside, N.O.C.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-511, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-511, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-511, filed 11/30/83, effective 1/1/84; 82-24-047 (Order 82-38), § 296-17-511, filed 11/29/82, effective 1/1/83; Order 75-38, § 296-17-511, filed 11/24/75, effective 1/1/76; Order 74-40, § 296-17-511, filed 11/27/74, effective 1/1/75; Order 73-22, § 296-17-511, filed 11/9/73, effective 1/1/74.]

WAC 296-17-512 Classification 0306.

Boilers, N.O.C., installation, service or repair including boiler scaling and tank erection within buildings

Plumbing, N.O.C.

Pump installation, service or repair, N.O.C.

Sewer pipe cleaning, including Roto rooter or similar service providers

Side sewer installation (street to house hook ups) including service or repair

Sprinkler installation - automatic

Steam pipe, boiler, etc., covering insulation.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-512, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-512, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-512, filed 11/30/83, effective 1/1/84; 82-24-

047 (Order 82-38), § 296-17-512, filed 11/29/82, effective 1/1/83. Statutory Authority: RCW 51.04.030 and 51.16.035. 79-12-086 (Order 79-18), § 296-17-512, filed 11/30/79, effective 1/1/80; Order 74-40, § 296-17-512, filed 11/27/74, effective 1/1/75; Order 73-22, § 296-17-512, filed 11/9/73, effective 1/1/74.]

WAC 296-17-513 Classification 0307.

Ventilating, air conditioning and refrigeration systems, installation, service and repair, N.O.C.

Furnaces, installation, service and repair including duct work cleaning

Heating systems, installation, service and repair including solar heating systems

Wood stove installation excluding masonry work rated under risk classification 0302 (WAC 296-17-511)

See risk classification 3404 (WAC 296-17-582) for sheet metal shop work.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-513, filed 11/27/85, effective 1/1/86; 83-24-017 (Order 83-36), § 296-17-513, filed 11/30/83, effective 1/1/84; Order 73-22, § 296-17-513, filed 11/9/73, effective 1/1/74.]

WAC 296-17-514 Classification 0401.

Cleaning, washing, sand blasting buildings, including shop operations

This classification excludes portable washing and cleaning operations rated under risk classification 6602 (WAC 296-17-724).

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-514, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-514, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-514, filed 11/30/83, effective 1/1/84; 82-24-047 (Order 82-38), § 296-17-514, filed 11/29/82, effective 1/1/83; 81-24-042 (Order 81-30), § 296-17-514, filed 11/30/81, effective 1/1/82; Order 73-22, § 296-17-514, filed 11/9/73, effective 1/1/74.]

WAC 296-17-515 Classification 0402.

Window cleaning

This classification excludes domestics, janitors and handymen regularly employed for other purposes, but will include the actual time of all workers employed by contract janitorial service companies while engaged in window washing.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-515, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-515, filed 2/28/85, effective 4/1/85; Order 73-22, § 296-17-515, filed 11/9/73, effective 1/1/74.]

WAC 296-17-516 Classification 0403.

Sign erection, painting, repair and maintenance or removal, including shop operations

Sign painting or lettering outside buildings or structures, N.O.C., including shop operations

Street and building decorating, hanging flags or bunting.
 [Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-516, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-516, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-516, filed 11/30/83, effective 1/1/84; Order 74-40, § 296-17-516, filed 11/27/74, effective 1/1/75; Order 73-22, § 296-17-516, filed 11/9/73, effective 1/1/74.]

WAC 296-17-517 Classification 0502.

Rug, linoleum, tile and other types of floor or drain-board covering installation excluding hardwood floor installation rated under risk classification 0505 (WAC 296-17-520).

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-517, filed 11/27/85, effective 1/1/86; 83-24-017 (Order 83-36), § 296-17-517, filed 11/30/83, effective 1/1/84; Order 75-38, § 296-17-517, filed 11/24/75, effective 1/1/76; Order 73-22, § 296-17-517, filed 11/9/73, effective 1/1/74.]

WAC 296-17-518 Classification 0503.

Chimney cleaning – residential/commercial.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-518, filed 11/27/85, effective 1/1/86; 83-24-017 (Order 83-36), § 296-17-518, filed 11/30/83, effective 1/1/84; 82-24-047 (Order 82-38), § 296-17-518, filed 11/29/82, effective 1/1/83; Order 73-22, § 296-17-518, filed 11/9/73, effective 1/1/74.]

WAC 296-17-519 Classification 0504.

Wallboard taping and texturing, excluding wallboard installation rated under risk classification 0505 (WAC 296-17-520)

Painting bridges, including incidental preparation work
 Painting, decorating or paperhanging, N.O.C., including incidental preparation, including shop

Waterproofing, N.O.C. excludes roofing or subaqueous work

Painting, coating or cleaning oil or gas storage tanks and beer vats

Painting towers, smokestacks and steel or iron structures.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-519, filed 11/27/85, effective 1/1/86; 83-24-017 (Order 83-36), § 296-17-519, filed 11/30/83, effective 1/1/84; 82-24-047 (Order 82-38), § 296-17-519, filed 11/29/82, effective 1/1/83; Order 76-36, § 296-17-519, filed 11/30/76; Order 73-22, § 296-17-519, filed 11/9/73, effective 1/1/74.]

WAC 296-17-520 Classification 0505.

Construction, erection, alteration or repair of buildings, N.O.C.

Gutters – installation, service or repair – on structures

Glass installation away from shop

Wallboard installation, plastering, stuccoing and lathing

Insulation or soundproofing materials installation, N.O.C.

Fixtures – cabinets, counters, drainboards, mantels, etc. installation

Weather strip installation

Hardwood floor installation and refinishing

Door, door frame, sash, overhead door, siding installation framing and carpentry, N.O.C.

Elevator door bucks – installation

Mobile home set up including installation of skirting and awnings by contractor. Excludes mobile home set up by mobile home dealer rated under risk classification 3401 (WAC 296-17-579)

Fire escapes and awnings – installation, erection, repair and removal outside buildings

Decorative metal shutters – installation, erection and removal – no buntings

Scaffolds, hod hoists, concrete and cement distributing towers, sidewalk bridges and construction elevators, installation or removal

Debris cleaning and removal and building clean-up after construction.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-520, filed 11/27/85, effective 1/1/86; 85-12-024 (Order 85-11), § 296-17-520, filed 5/31/85; 83-24-017 (Order 83-36), § 296-17-520, filed 11/30/83, effective 1/1/84; 82-24-047 (Order 82-38), § 296-17-520, filed 11/29/82, effective 1/1/83; Order 76-36, § 296-17-520, filed 11/30/76; Order 75-38, § 296-17-520, filed 11/24/75, effective 1/1/76; Order 74-40, § 296-17-520, filed 11/27/74, effective 1/1/75; Order 73-22, § 296-17-520, filed 11/9/73, effective 1/1/74.]

WAC 296-17-52001 Classification 0506.

Building raising or moving and underpinning
 Wrecking or demolition of buildings.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-52001, filed 11/27/85, effective 1/1/86; 83-24-017 (Order 83-36), § 296-17-52001, filed 11/30/83, effective 1/1/84; 82-24-047 (Order 82-38), § 296-17-52001, filed 11/29/82, effective 1/1/83.]

WAC 296-17-52002 Classification 0507.

Roofwork, all types, construction and repair

This classification excludes roof cleaning and moss removal rated under risk classification 6602 (WAC 296-17-724) not incidental to or part of a roofing contract.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-52002, filed 11/27/85, effective 1/1/86; 83-24-017 (Order 83-36), § 296-17-52002, filed 11/30/83, effective 1/1/84; 82-24-047 (Order 82-38), § 296-17-52002, filed 11/29/82, effective 1/1/83.]

WAC 296-17-521 Classification 0508.

Blast furnace and metal burners construction

Crane or derrick installation

Elevated railway, tram, lift, etc., construction, maintenance and repair
 Erection, maintenance and repair radio, television, water towers, poles and towers, N.O.C.
 Exterior tanks – all types – erection
 Oil still or refinery construction. Excludes plant maintenance by contractor rated under risk classification 0603 (WAC 296-17-524)
 Smokestacks, structural iron or steel framework, erection, maintenance and repair
 Windmills, all types, erection, maintenance and repair, silo erection
 This classification includes erection of skeletons for pillars, posts and like columns, all excavations, foundation work, and dismantling and repairing of above types of structures.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-521, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-521, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-521, filed 11/30/83, effective 1/1/84; 82-24-047 (Order 82-38), § 296-17-521, filed 11/29/82, effective 1/1/83; Order 76-36, § 296-17-521, filed 11/30/76; Order 75-38, § 296-17-521, filed 11/24/75, effective 1/1/76; Order 74-40, § 296-17-521, filed 11/27/74, effective 1/1/75; Order 73-22, § 296-17-521, filed 11/9/73, effective 1/1/74.]

WAC 296-17-52101 Classification 0509.

Overhead transmission, telephone, telegraph, and cable television lines, new construction or extension of lines, including poles or towers, erection, maintenance, repair by contractor.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-52101, filed 11/27/85, effective 1/1/86; 83-24-017 (Order 83-36), § 296-17-52101, filed 11/30/83, effective 1/1/84; 82-24-047 (Order 82-38), § 296-17-52101, filed 11/29/82, effective 1/1/83.]

WAC 296-17-52102 Classification 0510.

Wood frame construction, erection, alteration, or repair – private residences, including dwellings up to four-plexes.

Wood frame construction, N.O.C.

This classification includes installation of fixtures, counters, drainboards, mantels, cabinets, and hardwood floors and placement of roof trusses; sheathing roofs, framing, siding, remodeling, and glazing where performed by speciality contractors in connection with projects subject to this classification.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-52102, filed 11/27/85, effective 1/1/86.]

WAC 296-17-522 Classification 0601.

Electrical machinery and auxiliary apparatus installation and repair – including incidental wiring
 Electrical wiring in buildings, and electrical wiring, N.O.C.

Erection of temporary floodlights – search light operation mounted on and generated by truck
 Permanent flood lighting stadiums and parks
 Television cable installation in buildings by contractor including drop line connection (pole to house hook-up).

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-522, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-522, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-522, filed 11/30/83, effective 1/1/84; 82-24-047 (Order 82-38), § 296-17-522, filed 11/29/82, effective 1/1/83; Order 75-38, § 296-17-522, filed 11/24/75, effective 1/1/76; Order 74-40, § 296-17-522, filed 11/27/74, effective 1/1/75; Order 73-22, § 296-17-522, filed 11/9/73, effective 1/1/74.]

WAC 296-17-523 Classification 0602.

Elevator, freight or passenger, installation, service and repair.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-523, filed 11/27/85, effective 1/1/86; Order 73-22, § 296-17-523, filed 11/9/73, effective 1/1/74.]

WAC 296-17-524 Classification 0603.

Dynamos, installation, service and repair including electrical generators and turbines
 Engines and gas machines installation and belts, erection of shafting
 Machinery installation, service and repair and millwright work, including installation and repair of escalator and conveyor systems, and commercial laundry equipment N.O.C.

This classification includes the dismantling of all the above types of machinery and will also include plant maintenance by contractor which will be rated as millwright work.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-524, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-524, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-524, filed 11/30/83, effective 1/1/84; 82-24-047 (Order 82-38), § 296-17-524, filed 11/29/82, effective 1/1/83; Order 75-38, § 296-17-524, filed 11/24/75, effective 1/1/76; Order 73-22, § 296-17-524, filed 11/9/73, effective 1/1/74.]

WAC 296-17-525 Classification 0604.

Battery salvaging
 Iron or steel scrap dealers
 Junk dealers
 Metal scrap dealers – collect, sort and reduction of scrap metal.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-525, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-525, filed

2/28/85, effective 4/1/85; Order 73-22, § 296-17-525, filed 11/9/73, effective 1/1/74.]

WAC 296-17-526 Classification 0606.

Operation and maintenance amusement devices, N.O.C., fire extinguisher sales and service

Vending or coin-operated machines, operation, installation maintenance and service, includes product preparation by vending company

This classification excludes honor snack food services which will be rated under risk classification 1101 (WAC 296-17-536) driver delivery sales, provided that in the event such an operation is conducted as a part of and in connection with an operation rated in this classification (0606), risk classification 0606 will be assigned to cover both operations.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-526, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-526, filed 2/28/85, effective 4/1/85; Order 73-22, § 296-17-526, filed 11/9/73, effective 1/1/74.]

WAC 296-17-527 Classification 0607.

Advertising display service for stores within buildings

Drapes or curtain installation

Household appliances electrical installation, service and repair

Meat slicer or grinder installation, service and repair

Safes and vaults, installation and removal

Television antenna or satellite disc installation and repair

Venetian blinds and shades, installation

This classification will include installation, service and repair of radio and television receiving sets, two-way radio, car stereo systems and radio-television repair.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-527, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-527, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-527, filed 11/30/83, effective 1/1/84; 82-24-047 (Order 82-38), § 296-17-527, filed 11/29/82, effective 1/1/83; Order 73-22, § 296-17-527, filed 11/9/73, effective 1/1/74.]

WAC 296-17-52701 Classification 0608.

Business machine systems including computer mini and mainframe systems

Electrical alarm systems including smoke alarms

Intercom or audio call box

Telecommunication and PBX or similar equipment

Telephone service prewire by contractor

This classification includes installation, service or repair of the above types of equipment and includes all shop or yard operations.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-52701, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-52701, filed 2/28/85, effective 4/1/85.]

WAC 296-17-528 Classification 0701.

Dam construction, all operations in dams site area.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-528, filed 11/27/85, effective 1/1/86; Order 76-36, § 296-17-528, filed 11/30/76; Order 73-22, § 296-17-528, filed 11/9/73, effective 1/1/74.]

WAC 296-17-529 Classification 0803.

Cities and towns, excluding municipal power and transit systems, law enforcement officers and fire fighters

This classification excludes clerical office, sales personnel and white collar employees rated under risk classification 5305 (WAC 296-17-678).

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-529, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-529, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-529, filed 11/30/83, effective 1/1/84; Order 77-27, § 296-17-529, filed 11/30/77, effective 1/1/78; Emergency Order 77-25, § 296-17-529, filed 12/1/77; Order 75-38, § 296-17-529, filed 11/24/75, effective 1/1/76; Order 73-22, § 296-17-529, filed 11/9/73, effective 1/1/74.]

WAC 296-17-530 Classification 0804.

Commercial production of sand, gravel and processing clay and stone products including rock crushing.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-530, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-530, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-530, filed 11/30/83, effective 1/1/84; Order 73-22, § 296-17-530, filed 11/9/73, effective 1/1/74.]

WAC 296-17-532 Classification 0901.

Commercial boat or ship building or repair, all types, including dismantling of boat or ship hulls

This classification includes all ship and yard operations See risk classification 3606 (WAC 296-17-598) for pleasure craft/recreational boat building.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-532, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-532, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-532, filed 11/30/83, effective 1/1/84; Order 73-22, § 296-17-532, filed 11/9/73, effective 1/1/74.]

WAC 296-17-534 Classification 1002.

Sawmills, operation and maintenance

This classification excludes operations conducted in the woods rated under risk classification 5001 (WAC 296-17-659) logging, N.O.C.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-534, filed 11/27/85, effective 1/1/86; 83-24-017 (Order 83-36), § 296-17-534, filed 11/30/83, effective 1/1/84; 82-24-047 (Order 82-38),

§ 296-17-534, filed 11/29/82, effective 1/1/83; 81-24-042 (Order 81-30), § 296-17-534, filed 11/30/81, effective 1/1/82; 80-17-016 (Order 80-23), § 296-17-534, filed 11/13/80, effective 1/1/81; Order 77-27, § 296-17-534, filed 11/30/77, effective 1/1/78; Order 76-36, § 296-17-534, filed 11/30/76; Order 73-22, § 296-17-534, filed 11/9/73, effective 1/1/74.]

WAC 296-17-535 Classification 1003.

Creosote works, pile and pole treating – yard operations only

Pole yard

Masts and spars yards.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-535, filed 11/27/85, effective 1/1/86; 83-24-017 (Order 83-36), § 296-17-535, filed 11/30/83, effective 1/1/84; Order 77-27, § 296-17-535, filed 11/30/77, effective 1/1/78; Order 74-40, § 296-17-535, filed 11/27/74, effective 1/1/75; Order 73-22, § 296-17-535, filed 11/9/73, effective 1/1/74.]

WAC 296-17-53501 Classification 1004.

Log storage and log sorting yards independent from logging operations rated under risk classification 5001 (WAC 296-17-659)

This classification does not include any log trucking operations that are outside of the log storage and log sorting yards.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-53501, filed 11/27/85, effective 1/1/86; 83-24-017 (Order 83-36), § 296-17-53501, filed 11/30/83, effective 1/1/84; 80-17-016 (Order 80-23), § 296-17-53501, filed 11/13/80, effective 1/1/81.]

WAC 296-17-53502 Classification 1005.

Shingle mills, operations and maintenance

Shake mills, operations and maintenance

This classification excludes operations conducted in the woods rated under risk classification 5001 (WAC 296-17-659) logging, N.O.C.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-53502, filed 11/27/85, effective 1/1/86; 83-24-017 (Order 83-36), § 296-17-53502, filed 11/30/83, effective 1/1/84; 81-24-042 (Order 81-30), § 296-17-53502, filed 11/30/81, effective 1/1/82.]

WAC 296-17-53504 Classification 1007.

Lumber inspectors

Foresters, forest rangers, timber cruisers and surveyors

Log scaling and grading bureaus

Shingle and shake inspection and grading bureaus

Inspection and grading bureaus, N.O.C.

Geophysical exploration, N.O.C., no core drilling

Weather stations

Testing and inspecting of pipe lines – radiographers

Weigh scale attendants

Prospectors

[1985 WAC Supp—page 1164]

X-raying by contractor at industrial plants or construction sites

Rainmaking – not by aircraft.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-53504, filed 11/27/85, effective 1/1/86; 83-24-017 (Order 83-36), § 296-17-53504, filed 11/30/83, effective 1/1/84; 82-24-047 (Order 82-38), § 296-17-53504, filed 11/29/82, effective 1/1/83.]

WAC 296-17-536 Classification 1101.

Anhydrous ammonia delivery

Armoured car service

Automobile delivery drive away, automobile repossessing

Computer tape/accounting records delivery service

Delivery by retail, wholesale, combined wholesale and retail stores and distributors, N.O.C.

Delivery companies, deliver parcels and packages, no bulk merchandise

Distribution of sample merchandise by vehicle

Driver delivery sales, N.O.C.

Drivers of sound trucks

News agents or distributors of magazines, periodicals and telephone books, no retail dealer

Septic tank and cesspool cleaning, excludes installation or repair

Street sweeping, parking lot sweeping, portable chemical toilets servicing

Street vending vehicles, route food services.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-536, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-536, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-536, filed 11/30/83, effective 1/1/84; 81-24-042 (Order 81-30), § 296-17-536, filed 11/30/81, effective 1/1/82; Order 77-27, § 296-17-536, filed 11/30/77, effective 1/1/78; Order 75-38, § 296-17-536, filed 11/24/75, effective 1/1/76; Order 74-40, § 296-17-536, filed 11/27/74, effective 1/1/75; Order 73-22, § 296-17-536, filed 11/9/73, effective 1/1/74.]

WAC 296-17-537 Classification 1102.

Interstate and intrastate trucking including transport companies, express companies, freight hauling and trucking, N.O.C.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-537, filed 11/27/85, effective 1/1/86; 83-24-017 (Order 83-36), § 296-17-537, filed 11/30/83, effective 1/1/84; Order 74-40, § 296-17-537, filed 11/27/74, effective 1/1/75; Order 73-22, § 296-17-537, filed 11/9/73, effective 1/1/74.]

WAC 296-17-538 Classification 1103.

Coal merchants, solid fuel yards, firewood dealers, excludes operations subject to risk classification 1004 (WAC 296-17-53501), risk classification 1702 (WAC 296-17-549), risk classification 1703 (WAC 296-17-550), risk classification 5001 (WAC 296-17-659)

Lumber yards, building material dealers, not done in connection with or incidental to a manufacturing or processing plant operation also excluding yard operations rated under risk classification 1002 (WAC 296-17-534)

Monument dealers, N.O.C.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-538, filed 11/27/85, effective 1/1/86; 83-24-017 (Order 83-36), § 296-17-538, filed 11/30/83, effective 1/1/84; 82-24-047 (Order 82-38), § 296-17-538, filed 11/29/82, effective 1/1/83; Order 73-22, § 296-17-538, filed 11/9/73, effective 1/1/74.]

WAC 296-17-53801 Classification 1104.

Automobile or truck wrecking or dismantling

This classification includes over the counter sales of new or used parts and tow truck operations.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-53801, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-53801, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-53801, filed 11/30/83, effective 1/1/84; 82-24-047 (Order 82-38), § 296-17-53801, filed 11/29/82, effective 1/1/83.]

WAC 296-17-53803 Classification 1106.

Rental stores N.O.C.

This classification includes clerical office and sales personnel.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-53803, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-53803, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-53803, filed 11/30/83, effective 1/1/84; 82-24-047 (Order 82-38), § 296-17-53803, filed 11/29/82, effective 1/1/83.]

WAC 296-17-53805 Classification 1108.

Auto glass merchants

Glass merchants - including bending, grinding, beveling, silvering or tempering of plate or sheet glass

This classification excludes installation of glass, mirrors, aluminum or wood window sashes or similar products away from the shop which are rated subject to risk classification 0505 (WAC 296-17-520).

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-53805, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-53805, filed 2/28/85, effective 4/1/85; 82-24-047 (Order 82-38), § 296-17-53805, filed 11/29/82, effective 1/1/83.]

WAC 296-17-53806 Classification 1109.

Auto/truck towing companies.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-53806, filed 11/27/85, effective 1/1/86.]

WAC 296-17-539 Classification 1301.

Bridge tenders, electrically operated bridges, vehicular tunnels operation

Electric light and power cooperatives

Electric light and power plants, cities, towns and counties

Electric light and power public utility districts

Electric systems, N.O.C.

Steam heat and power plants

This classification includes extension of lines and meter readers when done by employees of employers having operations subject to this classification

This classification excludes contractors engaged in underground line construction, maintenance or repair subject to risk classification 0107 (WAC 296-17-50601); contractors engaged in overhead line construction, maintenance or repair subject to risk classification 0509 (WAC 296-17-52101); and contractors engaged in wiring within buildings subject to risk classification 0601 (WAC 296-17-522).

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-539, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-539, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-539, filed 11/30/83, effective 1/1/84; Order 73-22, § 296-17-539, filed 11/9/73, effective 1/1/74.]

WAC 296-17-540 Classification 1303.

Telegraph companies, all other employees, operation and maintenance, extension of lines

Telephone companies, all other employees, operation and maintenance, extension of lines

This classification includes new construction and extension of lines when done by employees of employers having operations subject to this classification

This classification excludes contractors engaged in underground line construction, maintenance or repair subject to risk classification 0107 (WAC 296-17-50601); contractors engaged in overhead line construction, maintenance or repair subject to risk classification 0509 (WAC 296-17-52101); and contractors engaged in wiring within buildings subject to risk classification 0608 (WAC 296-17-52701).

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-540, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-540, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-540, filed 11/30/83, effective 1/1/84; 82-24-047 (Order 82-38), § 296-17-540, filed 11/29/82, effective 1/1/83; Order 73-22, § 296-17-540, filed 11/9/73, effective 1/1/74.]

WAC 296-17-541 Classification 1304.

Telephone companies, exchange operators, clerical office and sales personnel

Telegraph companies, clerical office and sales personnel.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-541, filed 11/27/85, effective

1/1/86; 83-24-017 (Order 83-36), § 296-17-541, filed 11/30/83, effective 1/1/84; Order 73-22, § 296-17-541, filed 11/9/73, effective 1/1/74.]

WAC 296-17-54101 Classification 1305.

Television cable companies, operation and maintenance, extension of lines all outside employments

This classification includes new construction and extension of lines when done by employees of employers having operations subject to this classification

This classification excludes contractors engaged in underground line construction, maintenance or repair subject to risk classification 0107 (WAC 296-17-50601); contractors engaged in overhead line construction, maintenance or repair subject to risk classification 0509 (WAC 296-17-52101); and contractors engaged in wiring within buildings and telecable hookups within buildings subject to risk classification 0601 (WAC 296-17-522).

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-54101, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-54101, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-54101, filed 11/30/83, effective 1/1/84; 82-24-047 (Order 82-38), § 296-17-54101, filed 11/29/82, effective 1/1/83.]

WAC 296-17-542 Classification 1401.

Ambulance services including mobile medic and patient transport services

Taxicab companies

Chauffeurs, N.O.C. - commercial

Pilot cars

Escort service.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-542, filed 11/27/85, effective 1/1/86; 83-24-017 (Order 83-36), § 296-17-542, filed 11/30/83, effective 1/1/84; 82-24-047 (Order 82-38), § 296-17-542, filed 11/29/82, effective 1/1/83; Order 73-22, § 296-17-542, filed 11/9/73, effective 1/1/74.]

WAC 296-17-544 Classification 1404.

Bus or limousine companies, transit systems, contract bus driving

Vessels, ferries, tugs and steamboats operation, N.O.C. including dock employees, not maritime.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-544, filed 11/27/85, effective 1/1/86; 83-24-017 (Order 83-36), § 296-17-544, filed 11/30/83, effective 1/1/84; 82-24-047 (Order 82-38), § 296-17-544, filed 11/29/82, effective 1/1/83; Order 73-22, § 296-17-544, filed 11/9/73, effective 1/1/74.]

WAC 296-17-545 Classification 1501.

Counties and taxing districts, N.O.C., all other employees

Housing authorities, local public, all other employees including meter readers

[1985 WAC Supp—page 1166]

Indian tribal councils, all other employees

This classification excludes hospital districts subject to risk classification 6105 (WAC 296-17-682); library districts,

museum districts and school districts subject to risk classifications 6103 (WAC 296-17-680) and 6104 (WAC 296-17-681); port districts subject to risk classification 4201 (WAC 296-17-629); public utility districts subject to risk classification 1301 (WAC 296-17-539) and 1507 (WAC 296-17-546); law enforcement officers subject to risk classification 6905 (WAC 296-17-750); and fire fighters subject to risk classification 6904 (WAC 296-17-749)

This classification also excludes clerical office and white collar employees.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-545, filed 11/27/85, effective 1/1/86; 83-24-017 (Order 83-36), § 296-17-545, filed 11/30/83, effective 1/1/84; 80-17-016 (Order 80-23), § 296-17-545, filed 11/13/80, effective 1/1/81; Order 77-27, § 296-17-545, filed 11/30/77, effective 1/1/78; Emergency Order 77-25, § 296-17-545, filed 12/1/77; Order 73-22, § 296-17-545, filed 11/9/73, effective 1/1/74.]

WAC 296-17-546 Classification 1507.

Irrigation ditches, operation, repair and maintenance when done by employees of firms subject to this classification

Waterworks including extension of lines and meter readers when done by employees of employers having operations subject to this classification

This classification excludes contractors engaged in waterline construction, maintenance or repair subject to risk classification 0107 (WAC 296-17-50601); and contractors engaged in ditch or canal construction, maintenance or repair subject to risk classification 0108 (WAC 296-17-50602).

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-546, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-546, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-546, filed 11/30/83, effective 1/1/84; Order 74-40, § 296-17-546, filed 11/27/74, effective 1/1/75; Order 73-22, § 296-17-546, filed 11/9/73, effective 1/1/74.]

WAC 296-17-548 Classification 1701.

Ore reduction, by wet or dry process without application of heat at mine.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-548, filed 11/27/85, effective 1/1/86; Order 73-22, § 296-17-548, filed 11/9/73, effective 1/1/74.]

WAC 296-17-549 Classification 1702.

Coal mines, underground

Coke ovens

Mines, N.O.C., underground.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-549, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-549, filed 2/28/85, effective 4/1/85; Order 75-38, § 296-17-549, filed 11/24/75, effective 1/1/76; Order 74-40, § 296-17-549, filed 11/27/74, effective 1/1/75; Order 73-22, § 296-17-549, filed 11/9/73, effective 1/1/74.]

WAC 296-17-550 Classification 1703.

Open cut mining, all types
Placer or hydraulic mining.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-550, filed 11/27/85, effective 1/1/86; Order 75-38, § 296-17-550, filed 11/24/75, effective 1/1/76; Order 73-22, § 296-17-550, filed 11/9/73, effective 1/1/74.]

WAC 296-17-551 Classification 1704.

Quarries, N.O.C., includes stone crushing at quarry site
Stone cutting, quarry hazard.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-551, filed 11/27/85, effective 1/1/86; Order 73-22, § 296-17-551, filed 11/9/73, effective 1/1/74.]

WAC 296-17-552 Classification 1801.

Smelting, sintering or refining lead, manufacturing calcium carbide
Blast furnace operation
Rolling mills steel or iron, rolling mills, N.O.C.
Lead works - sheet, tinfoil manufacturing
Lead manufacturing - red or white
Smelting, sintering or refining ores, N.O.C.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-552, filed 11/27/85, effective 1/1/86; Order 73-22, § 296-17-552, filed 11/9/73, effective 1/1/74.]

WAC 296-17-555 Classification 2002.

Freight handlers - packing, handling or shipping merchandise N.O.C.

Refrigeration car, loading, unloading or icing
This classification also includes employees engaged in repackaging of goods from damaged containers. This classification also includes sky caps, red caps and baggage handlers employed by a contractor operating a railroad, bus or airline terminal.

This classification excludes drivers which are to be separately rated under risk classification 1102 (WAC 296-17-537).

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-555, filed 11/27/85, effective 1/1/86; 83-24-017 (Order 83-36), § 296-17-555, filed 11/30/83, effective 1/1/84; Order 75-38, § 296-17-555, filed 11/24/75, effective 1/1/76; Order 73-22, § 296-17-555, filed 11/9/73, effective 1/1/74.]

WAC 296-17-556 Classification 2003.

Hide or leather dealers.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-556, filed 11/27/85, effective 1/1/86; Order 73-22, § 296-17-556, filed 11/9/73, effective 1/1/74.]

WAC 296-17-557 Classification 2004.

Iron or steel merchants, not junk or scrap dealers
This classification also includes wire rope and cable dealers.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-557, filed 11/27/85, effective 1/1/86; 83-24-017 (Order 83-36), § 296-17-557, filed 11/30/83, effective 1/1/84; Order 73-22, § 296-17-557, filed 11/9/73, effective 1/1/74.]

WAC 296-17-558 Classification 2005.

Plumber and pipe supply dealers, wholesale or retail, gas, steam or hot water equipment.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-558, filed 11/27/85, effective 1/1/86; 83-24-017 (Order 83-36), § 296-17-558, filed 11/30/83, effective 1/1/84; Order 73-22, § 296-17-558, filed 11/9/73, effective 1/1/74.]

WAC 296-17-560 Classification 2007.

Grain elevator or warehouse
Bean or pea elevator or warehouse.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-560, filed 11/27/85, effective 1/1/86; Order 75-38, § 296-17-560, filed 11/24/75, effective 1/1/76; 73-22, § 296-17-560, filed 11/9/73, effective 1/1/74.]

WAC 296-17-561 Classification 2008.

Warehouses-field bonded, including clerical office at such location
This classification excludes drivers which are to be separately rated under risk classification 1102 (WAC 296-17-537).

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-561, filed 11/27/85, effective 1/1/86; 83-24-017 (Order 83-36), § 296-17-561, filed 11/30/83, effective 1/1/84; Order 73-22, § 296-17-561, filed 11/9/73, effective 1/1/74.]

WAC 296-17-562 Classification 2101.

Grain milling, feed mills, feed manufacture, including preparation of cereal or compound feeds for livestock
Hay, grain or feed dealers
Seed merchants including operation of seed sorting machinery.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-562, filed 11/27/85, effective

1/1/86; Order 73-22, § 296-17-562, filed 11/9/73, effective 1/1/74.]

WAC 296-17-563 Classification 2102.

Anhydrous ammonia, fertilizer and agricultural chemical dealers. Drivers will be separately rated under risk classification 1101 (WAC 296-17-536) anhydrous ammonia delivery

Grocery, fruit or produce distributors, wholesale or combined wholesale and retail. Drivers will be separately rated under risk classification 1101 (WAC 296-17-536) delivery by combined wholesale and retail stores

Recycle, collection and receiving stations, and dealers of rags, bottles, paper and metal containers, N.O.C., no junk dealers. Drivers will be separately rated under risk classification 1102 (WAC 296-17-537) trucking, N.O.C.

Warehouses - general merchandise. Wholesale dealers to be separately rated. Drivers will be separately rated under risk classification 1102 (WAC 296-17-537) trucking, N.O.C.

Wool or cotton merchants. Drivers will be separately rated under risk classification 1102 (WAC 296-17-537) trucking, N.O.C.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-563, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-563, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-563, filed 11/30/83, effective 1/1/84; 81-24-042 (Order 81-30), § 296-17-563, filed 11/30/81, effective 1/1/82; 80-17-016 (Order 80-23), § 296-17-563, filed 11/13/80, effective 1/1/81; Order 77-27, § 296-17-563, filed 11/30/77, effective 1/1/78; Order 75-38, § 296-17-563, filed 11/24/75, effective 1/1/76; Order 74-40, § 296-17-563, filed 11/27/74, effective 1/1/75; Order 73-22, § 296-17-563, filed 11/9/73, effective 1/1/74.]

WAC 296-17-564 Classification 2104.

Fruit packing - fresh

Vegetable packing - fresh

This classification includes cold storage operations if it is conducted as a part of packing operations; if a separate distinct operation or business exists, it is to be separately rated

This classification excludes all canning or freezing operations.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-564, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-564, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-564, filed 11/30/83, effective 1/1/84; Order 73-22, § 296-17-564, filed 11/9/73, effective 1/1/74.]

WAC 296-17-56401 Classification 2105.

Beer, ale, wine or soft drink importers, exporters and distributors, wholesale or combined wholesale and retail

This classification is not to be assigned if a business operation is already assigned to report operations subject to risk classification 3702 (WAC 296-17-600).

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-56401, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-56401, filed 2/28/85, effective 4/1/85; 81-24-042 (Order 81-30), § 296-17-56401, filed 11/30/81, effective 1/1/82.]

WAC 296-17-565 Classification 2201.

Laundries and dry cleaning establishments all operations including drop off stations operated by such establishments

Cleaning and dyeing

Use of this classification will be limited to establishments providing services primarily to retail walk in customers.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-565, filed 11/27/85, effective 1/1/86; 83-24-017 (Order 83-36), § 296-17-565, filed 11/30/83, effective 1/1/84; Order 73-22, § 296-17-565, filed 11/9/73, effective 1/1/74.]

WAC 296-17-566 Classification 2202.

Carpet, rug and upholstery cleaning, shop or outside
Laundries - commercial or industrial, N.O.C., including linen, uniform and diaper service.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-566, filed 11/27/85, effective 1/1/86; 83-24-017 (Order 83-36), § 296-17-566, filed 11/30/83, effective 1/1/84; Order 73-22, § 296-17-566, filed 11/9/73, effective 1/1/74.]

WAC 296-17-567 Classification 2401.

Paper or pulp manufacturing, wood fibre manufacturing
Corrugated and fibre board container manufacturing, including corrugating and laminating of paper
Paper coating, corrugating, laminating or oiling
Paper goods, N.O.C., manufacturing
Building and roofing paper or felt preparation, no manufacturing felt.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-567, filed 11/27/85, effective 1/1/86. Statutory Authority: RCW 51.04.030 and 51.16.035. 79-12-086 (Order 79-18), § 296-17-567, filed 11/30/79, effective 1/1/80; Order 77-27, § 296-17-567, filed 11/30/77, effective 1/1/78; Order 73-22, § 296-17-567, filed 11/9/73, effective 1/1/74.]

WAC 296-17-568 Classification 2903.

Assembly of other wood products from manufactured parts, N.O.C.

Box or shoo, pallet, lath manufacturing, wood

Cabinet shop, barrel stock manufacturing and assembly

Coffin or casket manufacturing or assembly - wood

Counter tops manufacturing other than metal

Door, door frames or sash manufacturing - wood covered with metal

Excelsior, kindling wood, hog fuel, particle board, lumber remanufacturing including planing and molding operations

Fibre ware manufacturing, N.O.C.

Fishing pole manufacturing, wood, rattan or willow ware manufacturing

Furniture manufacturing, wood – including assembly

Pencil or furniture stock manufacturing

Pipe or tube manufacturing, wood only

Sash, door or assembled millwork manufacturing

Sawmill operations to be separately rated under risk classification 1002 (WAC 296-17-534). Veneer manufacture to be separately rated under risk classification 2904 (WAC 296-17-569)

Veneer products manufacturing

Wooden gun stock manufacturing, woodenware manufacturing, N.O.C.

Wood products manufacturing and assembly, N.O.C.

Physically separated upholstery departments of firms engaged in furniture, coffin or casket manufacturing, assembly, or finishing, may be separately rated under risk classification 3808 (WAC 296-17-612), and in accordance with WAC 296-17-410

This is a shop or plant only classification but does contemplate work being performed in an adjacent yard when operated by an employer having operations subject to this classification. This classification excludes all activities away from the shop or plant.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-568, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-568, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-568, filed 11/30/83, effective 1/1/84; 82-24-047 (Order 82-38), § 296-17-568, filed 11/29/82, effective 1/1/83; 81-24-042 (Order 81-30), § 296-17-568, filed 11/30/81, effective 1/1/82; Order 76-36, § 296-17-568, filed 11/30/76; Order 75-38, § 296-17-568, filed 11/24/75, effective 1/1/76; Order 75-28, § 296-17-568, filed 8/29/75, effective 10/1/75; Order 73-22, § 296-17-568, filed 11/9/73, effective 1/1/74.]

WAC 296-17-569 Classification 2904.

Plywood manufacturing

Veneer, commercial production

This classification includes all types of veneer production.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-569, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-569, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-569, filed 11/30/83, effective 1/1/84; Order 73-22, § 296-17-569, filed 11/9/73, effective 1/1/74.]

WAC 296-17-570 Classification 2906.

Pattern or model manufacturing, metal, plastic or wood

Piano or musical instrument manufacturing, not metal.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-570, filed 11/27/85, effective

1/1/86; Order 73-22, § 296-17-570, filed 11/9/73, effective 1/1/74.]

WAC 296-17-57002 Classification 2908.

Truck canopy manufacturing – shop only

Housing, residential, factory-built, shop only

Mobile homes, campers and travel trailers manufacturing – shop only.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-57002, filed 11/27/85, effective 1/1/86; 83-24-017 (Order 83-36), § 296-17-57002, filed 11/30/83, effective 1/1/84; 82-24-047 (Order 82-38), § 296-17-57002, filed 11/29/82, effective 1/1/83.]

WAC 296-17-571 Classification 3101.

Ready mix concrete dealers

This classification to include any miscellaneous operations made up of tools, equipment and building materials sales which is less than twenty-five percent of the dollar volume of ready mix concrete sales.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-571, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-571, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-571, filed 11/30/83, effective 1/1/84; 82-24-047 (Order 82-38), § 296-17-571, filed 11/29/82, effective 1/1/83; Order 75-38, § 296-17-571, filed 11/24/75, effective 1/1/76; Order 73-22, § 296-17-571, filed 11/9/73, effective 1/1/74.]

WAC 296-17-572 Classification 3102.

Rock wool manufacturing, digging or quarrying to be separately rated.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-572, filed 11/27/85, effective 1/1/86; Order 73-22, § 296-17-572, filed 11/9/73, effective 1/1/74.]

WAC 296-17-573 Classification 3103.

Cement manufacturing, lime manufacturing

Lightweight aggregate building or insulation material manufacturing

Perlite, pozzolan, magnesite or expanded shale aggregate manufacturing

Digging or quarrying to be separately rated.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-573, filed 11/27/85, effective 1/1/86; Order 73-22, § 296-17-573, filed 11/9/73, effective 1/1/74.]

WAC 296-17-574 Classification 3104.

Plaster mills and whiting manufacturing, quarrying to be separately rated

Talc mills and emery works

Asbestos products manufacturing, including spinning or weaving, mica goods manufacturing

Soapstone or soapstone products manufacturing, marble cutting and polishing, slate milling
 Stone cutting or polishing, N.O.C., away from quarry
 Plasterboard or plaster block manufacturing
 Asphalt works, grinding, pulverizing or mixing asphalt
 Coating of building materials, N.O.C. – shop operations
 Monument dealers who do stonecutting, engraving or sandblasting.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-574, filed 11/27/85, effective 1/1/86; 82-24-047 (Order 82-38), § 296-17-574, filed 11/29/82, effective 1/1/83; Order 76-36, § 296-17-574, filed 11/30/76; Order 73-22, § 296-17-574, filed 11/9/73, effective 1/1/74.]

WAC 296-17-575 Classification 3105.

Concrete blocks, bricks, poles, piles, tile and beam manufacturing
 Concrete sewer and irrigation pipes, concrete septic tanks and concrete products, N.O.C. manufacturing.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-575, filed 11/27/85, effective 1/1/86; 83-24-017 (Order 83-36), § 296-17-575, filed 11/30/83, effective 1/1/84; Order 73-22, § 296-17-575, filed 11/9/73, effective 1/1/74.]

WAC 296-17-576 Classification 3301.

Fish canneries, fish freezing and processing, fish curing
 Fish oil manufacturing
 Marine life, nonedible, processing
 Oyster, crab, clam, canning or cold packing
 Sea foods products, N.O.C., canning or manufacturing
 This classification excludes diving operations which will be separately rated under risk classification 0202 (WAC 296-17-509).

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-576, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-576, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-576, filed 11/30/83, effective 1/1/84; 81-24-042 (Order 81-30), § 296-17-576, filed 11/30/81, effective 1/1/82. Statutory Authority: RCW 51.04.020(1) and 51.16.035. 78-12-043 (Order 78-23), § 296-17-576, filed 11/27/78, effective 1/1/79; Order 75-38, § 296-17-576, filed 11/24/75, effective 1/1/76; Order 73-22, § 296-17-576, filed 11/9/73, effective 1/1/74.]

WAC 296-17-57601 Classification 3302.

Meat, fish and poultry dealers, wholesale or combined wholesale/retail
 Use of this classification is limited to employers engaged in selling fresh meat, fish and poultry who are not engaged in slaughter or packing house operation which are rated subject to risk classification 4301 (WAC 296-17-630).

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-57601, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-57601,

filed 2/28/85, effective 4/1/85. Statutory Authority: RCW 51.04.020(1) and 51.16.035. 78-12-043 (Order 78-23), § 296-17-57601, filed 11/27/78, effective 1/1/79.]

WAC 296-17-57602 Classification 3303.

Meat, fish and poultry dealers, retail
 Use of this classification is limited to employers engaged in selling fresh meats, fish and poultry over the counter, by the pound to a retail consumer and who maintain show cases displaying fresh cuts of meat, fish and poultry available for sale by the pound to such consumers

This classification excludes custom meat cutting facilities licensed under chapter 16.49 RCW who are prohibited by law from selling fresh meat, fish and poultry by the pound to a retail customer which are subject to risk classification 4302 (WAC 296-17-631).

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-57602, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-57602, filed 2/28/85, effective 4/1/85. Statutory Authority: RCW 51.04.020(1) and 51.16.035. 78-12-043 (Order 78-23), § 296-17-57602, filed 11/27/78, effective 1/1/79.]

WAC 296-17-578 Classification 3309.

Motorcycle sales or rental agency, including repair
 Pleasurecraft sales or rental agency, N.O.C., including repair.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-578, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-578, filed 2/28/85, effective 4/1/85; Order 73-22, § 296-17-578, filed 11/9/73, effective 1/1/74.]

WAC 296-17-579 Classification 3401.

Automobile, truck, body and fender repair shops, including painting and incidental upholstery and glass repair

Automobile, truck, mobile home, camper, canopy, and trailer sales and/or rental agency, including repair shops

Automobile, truck, repair shops or garages

Automobile, truck service specialty shops including sales, installation and repair of air conditioning systems, electrical systems, cruise controls, mufflers, and sun roofs

Boat dealers, including repair shops

Marinas and boat house operations, including repair shops

This classification will include mobile home delivery and set up when done by employees of the mobile home sales agency. Contractors doing set up and delivery of mobile homes who are not employees of the mobile home sales agency will be rated under risk classification 0505 (WAC 296-17-520).

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-579, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-579, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-579, filed 11/30/83, effective 1/1/84; 82-24-047 (Order 82-38), § 296-17-579, filed 11/29/82, effective 1/1/83; Order 75-38, § 296-17-579, filed 11/24/75, effective 1/1/76; Order 73-22, § 296-17-579, filed 11/9/73, effective 1/1/74.]

WAC 296-17-580 Classification 3402.

Abrasive wheel manufacturing
 Air compressor manufacturing or assembly, elevator manufacturing, gear grinding or manufacturing
 Automobile, truck, tractor radiator and heater core manufacturing and repair shops
 Auto body manufacturing - truck, trailer, bus body manufacturing, travel trailer body repair
 Auto or motorcycle manufacturing or assembly
 Auto or truck engine manufacturing, aircraft engine manufacturing or rebuild, N.O.C.
 Auto or truck parts, machining or rebuild not in vehicle
 Battery manufacturing or assembly including repair
 Bed spring or wire mattress manufacturing
 Confectioners machinery manufacturing or assembly, food processing machinery manufacturing or assembly, precision machined parts, N.O.C., manufacturing
 Coppersmithing, shop
 Furnace, heater or radiator manufacturing
 Heat treating metal
 Lead burning, metal spraying - copper
 Machinery manufacturing or assembly, N.O.C.
 Machine shops, N.O.C., including mobile shops, tool sharpening and marine engine repair
 Nut, bolt, screw, nail, tack, rivet, eyelet, spike and needle manufacturing, N.O.C.
 Office machinery manufacturing or assembly, N.O.C., cash register and sewing machine manufacturing or assembly
 Photo processing machinery manufacturing or assembly
 Power saw, lawn and garden equipment and small motor repair, N.O.C.
 Printing or bookbinding machinery manufacturing or assembly
 Pump manufacturing or assembly, safe manufacturing or assembly, scale manufacturing or assembly including repair, auto jack manufacturing or assembly, water meter manufacturing or assembly including repair
 Saw manufacturing or assembly
 Sewing machine, commercial - repair and rebuild
 Shoe machinery manufacturing or assembly, sprinkler head manufacturing or assembly, textile machinery manufacturing or assembly
 Small arms, speedometer and carburetor manufacturing or assembly including rebuild
 Tool manufacturing, machine finishing
 Tool manufacturing, not hot forming or stamping, die manufacturing - ferrous
 Valve manufacturing
 Welding or cutting, N.O.C. including mobile operations

This is a shop or plant only classification but does contemplate work being performed in an adjacent yard when operated by an employer having operations subject to this classification. Unless outside activities are specifically provided for they are to be separately rated

This classification includes the repair of items being manufactured or assembled when done by employees of an employer having operations rated within this classification when the repair is done as a part of and in connection with the manufacturing or assembly operation.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-580, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-580, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-580, filed 11/30/83, effective 1/1/84; 82-24-047 (Order 82-38), § 296-17-580, filed 11/29/82, effective 1/1/83; 81-24-042 (Order 81-30), § 296-17-580, filed 11/30/81, effective 1/1/82. Statutory Authority: RCW 51.04.030 and 51.16.035. 79-12-086 (Order 79-18), § 296-17-580, filed 11/30/79, effective 1/1/80; Order 76-36, § 296-17-580, filed 11/30/76; Order 75-38, § 296-17-580, filed 11/24/75, effective 1/1/76; Order 73-22, § 296-17-580, filed 11/9/73, effective 1/1/74.]

WAC 296-17-581 Classification 3403.

Aircraft manufacturing

For the purposes of this rule aircraft manufacturing means the original manufacture of such aircraft as distinguished from rebuilding, modifying, or converting existing aircraft and only applies to the production of units when completed that are capable of in air flight as distinguished from aircraft kits to be assembled by the purchaser and are not capable of air flight when sold

This classification includes clerical office and sales personnel and aircraft operations incidental to the manufacture such as test flights.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-581, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-581, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-581, filed 11/30/83, effective 1/1/84. Statutory Authority: RCW 51.04.020(1) and 51.16.035. 78-12-043 (Order 78-23), § 296-17-581, filed 11/27/78, effective 1/1/79; Order 73-22, § 296-17-581, filed 11/9/73, effective 1/1/74.]

WAC 296-17-582 Classification 3404.

Aluminum ware manufacturing - from sheet aluminum
 Auto parts manufacturing or assembly N.O.C. - miscellaneous stamped parts
 Awning manufacturing or assembly - metal
 Brass or copper goods manufacturing
 Cans manufacturing - aluminum or galvanized
 Coffin-casket manufacturing or assembly, other than wood

Electric or gas lighting fixtures, lampshades or lantern manufacturing or assembly – metal
 Furniture, bedstead, shower-door, showcases – not wood – manufacturing or assembly
 Galvanized iron works, manufacturing – not structural
 Hardware manufacturing, N.O.C.
 Metal goods manufacturing, N.O.C., from material lighter than 9 gauge
 Metal stamping, including plating and polishing
 Sign manufacturing – metal
 Ski manufacturing and toboggan manufacturing other than wood
 Stove manufacturing, excluding wood stove manufacturing and other stoves made from material 9 gauge or heavier rated under risk classification 5209 (WAC 296-17-67602)
 Water heater manufacturing or assembly
 Window, sash or door manufacturing or assembly – aluminum
 Physically separate upholstery departments of firms engaged in furniture, coffin or casket manufacturing, assembly, or finishing may be separately rated under risk classification 3808 (WAC 296-17-612), and in accordance with WAC 296-17-410

This is a shop or plant only classification but does contemplate work being performed in an adjacent yard when operated by an employer having operations subject to this classification. Unless outside activities are specifically provided for they are to be separately rated

This classification includes the repair of items being manufactured or assembled when done by employees of an employer having operations rated in this classification when the repair is done as a part of and in connection with the manufacturing or assembly operation.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-582, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-582, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-582, filed 11/30/83, effective 1/1/84; 81-24-042 (Order 81-30), § 296-17-582, filed 11/30/81, effective 1/1/82; 80-17-016 (Order 80-23), § 296-17-582, filed 11/13/80, effective 1/1/81; Order 75-38, § 296-17-582, filed 11/24/75, effective 1/1/76; Order 73-22, § 296-17-582, filed 11/9/73, effective 1/1/74.]

WAC 296-17-58201 Classification 3405.

Aircraft parts manufacturing, N.O.C.
 For the purpose of this rule; aircraft parts means the component parts making the aircraft operative and becoming part of the aircraft when being manufactured by the aircraft manufacturing company
 Provided that this classification will not be assigned to an employer who has operations rated in risk classification 3402 (WAC 296-17-580); risk classification 3404 (WAC 296-17-582); risk classification 3508 (WAC 296-17-592); or risk classification 5201

(WAC 296-17-670) unless such operations are conducted as a distinct and separate business undertaking and rated in accordance with WAC 296-17-390
 This is a shop or plant only classification but does contemplate work being performed in an adjacent yard when operated by an employer having operations subject to this classification.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-58201, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-58201, filed 2/28/85, effective 4/1/85; 81-24-042 (Order 81-30), § 296-17-58201, filed 11/30/81, effective 1/1/82. Statutory Authority: RCW 51.04.020(1) and 51.16.035. 78-12-043 (Order 78-23), § 296-17-58201, filed 11/27/78, effective 1/1/79.]

WAC 296-17-583 Classification 3406.

Automobile or truck car washes
 Automobile or truck gas service stations, N.O.C.
 Automobile or truck storage garages – no repair
 This classification includes cashiers who receive payments from customers and excludes portable automobile or truck car washes subject to risk classification 6602 (WAC 296-17-724).

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-583, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-583, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-583, filed 11/30/83, effective 1/1/84; 82-24-047 (Order 82-38), § 296-17-583, filed 11/29/82, effective 1/1/83; 81-24-042 (Order 81-30), § 296-17-583, filed 11/30/81, effective 1/1/82. Statutory Authority: RCW 51.04.030 and 51.16.035. 79-12-086 (Order 79-18), § 296-17-583, filed 11/30/79, effective 1/1/80; Order 73-22, § 296-17-583, filed 11/9/73, effective 1/1/74.]

WAC 296-17-584 Classification 3407.

Gas or oil dealers, wholesale or retail, including fuel oil, propane or butane
 Asphalt, bitumen dealers
 Oil refining-petroleum, including manufacturing of products obtained therefrom
 Gasahol distilling or refining
 Asphalt or tar, distilling or refining
 Oil wells operation – oil or gas lease operators
 Oil or gas wells – cementing
 Oil or gas wells – specialty tool operation, N.O.C., by contractor
 Oil or gas wells – installation or recovery of casing
 Gas dealers, liquified petroleum gas, gas works, all operations
 Oil or gas lease work, N.O.C. – by contractors-not lease operation
 Oil or gas pipe line operation
 Synthetic rubber manufacturing
 Gasoline recovery from casing head or natural gas.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-584, filed 11/27/85, effective

1/1/86; 83-24-017 (Order 83-36), § 296-17-584, filed 11/30/83, effective 1/1/84; Order 73-22, § 296-17-584, filed 11/9/73, effective 1/1/74.]

WAC 296-17-585 Classification 3408.

Gas companies – natural gas including clerical office and sales personnel

This classification includes new construction and extension of lines when done by employees of employers having operations subject to this classification

This classification excludes contractors engaged in gas line construction, maintenance or repair subject to risk classification 0107 (WAC 296-17-50601).

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-585, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-585, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-585, filed 11/30/83, effective 1/1/84; Order 73-22, § 296-17-585, filed 11/9/73, effective 1/1/74.]

WAC 296-17-58501 Classification 3409.

Self service gas stations

This classification applies to service stations that are completely self service with no employees performing a direct service of any kind to customer's vehicle. Service stations providing direct services of any kind to a customer's vehicle will be rated under risk classification 3406 (WAC 296-17-583) even though such establishments may also have self service gas facilities.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-58501, filed 11/27/85, effective 1/1/86; 83-24-017 (Order 83-36), § 296-17-58501, filed 11/30/83, effective 1/1/84. Statutory Authority: RCW 51.04.030 and 51.16.035. 79-12-086 (Order 79-18), § 296-17-58501, filed 11/30/79, effective 1/1/80.]

WAC 296-17-586 Classification 3501.

Brick or clay products manufacturing, N.O.C.

Refractory products, fireproofing tile, flue lining and roofing tile manufacturing

Sewer tile, drainage tile and tile, N.O.C., manufacturing

Fireclay products manufacturing, foundry crucible

Briquettes manufacturing, peat fuel manufacturing

This classification does not apply to the production of raw materials for use in the manufacture of the above articles.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-586, filed 11/27/85, effective 1/1/86; 83-24-017 (Order 83-36), § 296-17-586, filed 11/30/83, effective 1/1/84; 82-24-047 (Order 82-38), § 296-17-586, filed 11/29/82, effective 1/1/83; Order 73-22, § 296-17-586, filed 11/9/73, effective 1/1/74.]

WAC 296-17-587 Classification 3503.

Potteries, glazed or porcelain, earthenware manufacturing

Chinaware, tableware, decorative or architectural terracotta manufacturing

Decorative tile, clay tobacco pipes, manufacturing

Glassware manufacturing, N.O.C. including stained or leaded glassware manufacturing

Glass manufacturing, N.O.C.

Plastic feather or flower manufacturing

Agate or enamel ware manufacturing

Plaster statuary or ornament manufacturing – relief map manufacturing

Phonograph record manufacturing

Mirror, glass sign manufacturing, etching or frosting glass

This classification does not apply to the production of raw materials for use in the manufacturing of the above articles.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-587, filed 11/27/85, effective 1/1/86; 83-24-017 (Order 83-36), § 296-17-587, filed 11/30/83, effective 1/1/84; 82-24-047 (Order 82-38), § 296-17-587, filed 11/29/82, effective 1/1/83; Order 73-22, § 296-17-587, filed 11/9/73, effective 1/1/74.]

WAC 296-17-590 Classification 3506.

Crane, hoisting service and rigging contractors. This classification excludes operations incidental to risk classifications 0201 (WAC 296-17-508), 0202 (WAC 296-17-509), 0505 (WAC 296-17-520), 0506 (WAC 296-17-52001), 0507 (WAC 296-17-52002), 0508 (WAC 296-17-521), 0509 (WAC 296-17-52101), 0510 (WAC 296-17-52102), 0604 (WAC 296-17-525), 0701 (WAC 296-17-528) and 5001 (WAC 296-17-659).

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-590, filed 11/27/85, effective 1/1/86; 83-24-017 (Order 83-36), § 296-17-590, filed 11/30/83, effective 1/1/84; Order 73-22, § 296-17-590, filed 11/9/73, effective 1/1/74.]

WAC 296-17-592 Classification 3508.

Plastic goods manufacturing, N.O.C.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-592, filed 11/27/85, effective 1/1/86; Order 73-22, § 296-17-592, filed 11/9/73, effective 1/1/74.]

WAC 296-17-594 Classification 3602.

Camera manufacturing or assembly including repair in shop

Dental laboratories

Electrical cordset radio and ignition assembly

Electronic circuit board assembly, N.O.C.

Electronic products manufacturing; resistors, capacitors, chip and relays manufacturing

Fishing tackle manufacturing, N.O.C., including assembly

Incandescent lamp manufacturing, electric tube or transistor manufacturing

Instrument manufacturing, scientific, medical or professional

Jewelry manufacturing or engraving

Magnetic tape manufacturing
 Motion picture projectors manufacturing or assembly including repair in shop
 Silverware manufacturing, watch case manufacturing
 Sound recording equipment, thermometer and steam gauge manufacturing
 Stereo components manufacturing or assembly
 Tag, button, zipper or fastener manufacturing, bottle cap manufacturing
 Telegraph or radio apparatus manufacturing, N.O.C.
 Telephone set manufacturing or repair, N.O.C.
 Trophy engraving
 Watch manufacturing

This is a shop or plant only classification although the classification allows for repair work when specified it is contemplated that such repairs are limited to those brought into the shop by the customer or sent through a common carrier. This classification excludes all outside repair work

This classification does not apply to the production of raw material for use in the manufacturing of the above articles.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-594, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-594, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-594, filed 11/30/83, effective 1/1/84; 82-24-047 (Order 82-38), § 296-17-594, filed 11/29/82, effective 1/1/83; 81-24-042 (Order 81-30), § 296-17-594, filed 11/30/81, effective 1/1/82; 80-17-016 (Order 80-23), § 296-17-594, filed 11/13/80, effective 1/1/81. Statutory Authority: RCW 51.04.030 and 51.16.035. 79-12-086 (Order 79-18), § 296-17-594, filed 11/30/79, effective 1/1/80; Order 75-38, § 296-17-594, filed 11/24/75, effective 1/1/76; Order 73-22, § 296-17-594, filed 11/9/73, effective 1/1/74.]

WAC 296-17-595 Classification 3603.

Furniture stripping and refinishing
 Metal plating or polishing, rustproofing - acid bath, N.O.C.
 Painting in shop, N.O.C.
 Electroplating and detinning, N.O.C.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-595, filed 11/27/85, effective 1/1/86; 83-24-017 (Order 83-36), § 296-17-595, filed 11/30/83, effective 1/1/84; 81-24-042 (Order 81-30), § 296-17-595, filed 11/30/81, effective 1/1/82; Order 73-22, § 296-17-595, filed 11/9/73, effective 1/1/74.]

WAC 296-17-596 Classification 3604.

Galvanizing or tinning - not electrolytic, N.O.C.
 Retinning, rustproofing - galvanizing or hot bath, N.O.C.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-596, filed 11/27/85, effective 1/1/86; 81-24-042 (Order 81-30), § 296-17-596, filed 11/30/81, effective 1/1/82; Order 73-22, § 296-17-596, filed 11/9/73, effective 1/1/74.]

WAC 296-17-597 Classification 3605.

Truck manufacturing or assembling.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-597, filed 11/27/85, effective 1/1/86; Order 73-22, § 296-17-597, filed 11/9/73, effective 1/1/74.]

WAC 296-17-598 Classification 3606.

Pleasure craft/recreational boat building or repair, all types, N.O.C.

This classification excludes boat building or repair rated under risk classification 0901 (WAC 296-17-532).

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-598, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-598, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-598, filed 11/30/83, effective 1/1/84; Order 73-22, § 296-17-598, filed 11/9/73, effective 1/1/74.]

WAC 296-17-599 Classification 3701.

Ammonia, nitrogen and ammonium nitrate manufacturing

Nitrate recovery from x-ray and photo films

Manufacturing dye and chemicals for tinting candles

Chemical manufacturing, N.O.C., by nitration, alkylation, oxidation, etc. process. This classification includes the manufacturing of chemicals involving, but not limited to, the following chemical processes: Nitration, alkylation, distillation, reduction, oxidation, sulphonation, compression of gasses, halogenation and amidation

Chemical mixing, blending and repackaging only - no manufacturing of ingredients

Cosmetics manufacturing, no manufacturing of ingredients

Drug, medicine or pharmaceutical preparation manufacturing, no manufacturing of ingredients

Oxygen or hydrogen manufacturing, acetylene gas or carbonic acid gas manufacturing

Alcohol manufacturing, distilling, N.O.C.

Polish, dressing, ink or mucilage manufacturing

Extract manufacturing, including distillation of essential oils

Perfumery manufacturing, including distillation of essential oils

Flavoring manufacturing, including distillation of essential oils

Mint distilling

Salt, borax or potash producing or refining

Serum, anti-toxin or virus manufacturing

Paint, varnish or lacquer manufacturing

Putty manufacturing, synthetic resin manufacturing

Acid manufacturing

Candle, crayon and paste manufacturing.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-599, filed 11/27/85, effective 1/1/86; 83-24-017 (Order 83-36), § 296-17-599, filed 11/30/83, effective 1/1/84; 82-24-047 (Order 82-38),

§ 296-17-599, filed 11/29/82, effective 1/1/83. Statutory Authority: RCW 51.04.020(1) and 51.16.035. 78-12-043 (Order 78-23), § 296-17-599, filed 11/27/78, effective 1/1/79; Order 74-40, § 296-17-599, filed 11/27/74, effective 1/1/75; Order 73-22, § 296-17-599, filed 11/9/73, effective 1/1/74.]

WAC 296-17-600 Classification 3702.

Breweries or malt houses
Bottling - beverages, N.O.C.
Spiritous liquor manufacturing
Wine making

This classification includes tour guides and tasting room employees.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-600, filed 11/27/85, effective 1/1/86; 83-24-017 (Order 83-36), § 296-17-600, filed 11/30/83, effective 1/1/84; Order 73-22, § 296-17-600, filed 11/9/73, effective 1/1/74.]

WAC 296-17-601 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-17-603 Classification 3707.

Rubber boot manufacturing, rubber goods manufacturing, N.O.C.
Waterproofing cloth - rubber.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-603, filed 11/27/85, effective 1/1/86; Order 75-38, § 296-17-603, filed 11/24/75, effective 1/1/76; Order 73-22, § 296-17-603, filed 11/9/73, effective 1/1/74.]

WAC 296-17-604 Classification 3708.

Linoleum, oil cloth or imitation leather manufacturing
Broom and brush manufacturing, or assembly
Cordage, rope or twine manufacturing
Match manufacturing
Cotton cord or cotton twine manufacturing
Textile manufacturing, N.O.C.
Taxidermists and hide pelting
Parachutes, suspenders, fur goods and bandages manufacturing
Nylon or synthetic goods manufacturing, N.O.C.
Life preservers and canvas goods manufacturing, N.O.C.
Braid, net, plush and velvet, thread, webbing and yarn manufacturing
Spinning or weaving - natural or synthetic fibres, N.O.C.
Pillow, quilt or cushion manufacturing including stuffed animal or doll manufacturing
Mattress or box springs manufacturing - no manufacturing wire springs or excelsior
Abrasive cloth preparation
Bag or sack manufacturing or renovating - cotton, bur-lap, gunny, nylon, or textile
Carpet or rug manufacturing
Fire hose manufacturing from linen thread
Cotton batting, wadding or waste manufacturing

Felting manufacturing, shoddy manufacturing
Wool combing or scouring
Fishing rod wrappings, manufacturing
Awning, tent, sail, flags, wind socks or sleeping bag manufacturing.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-604, filed 11/27/85, effective 1/1/86; 83-24-017 (Order 83-36), § 296-17-604, filed 11/30/83, effective 1/1/84; 82-24-047 (Order 82-38), § 296-17-604, filed 11/29/82, effective 1/1/83; Order 73-22, § 296-17-604, filed 11/9/73, effective 1/1/74.]

WAC 296-17-605 Classification 3801.

Glove manufacturing, leather, belting manufacturing, leather
Leather goods manufacturing, N.O.C.
Boot or shoe manufacturing or repair, N.O.C.
Leather embossing
Shoe stock manufacturing, gasket manufacturing - not metal or asbestos.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-605, filed 11/27/85, effective 1/1/86; 82-24-047 (Order 82-38), § 296-17-605, filed 11/29/82, effective 1/1/83; Order 75-38, § 296-17-605, filed 11/24/75, effective 1/1/76; Order 73-22, § 296-17-605, filed 11/9/73, effective 1/1/74.]

WAC 296-17-606 Classification 3802.

Lace, embroidery, cloth hats, umbrella and draperies manufacturing
Clothing or cloth goods manufacturing, N.O.C.
Gloves manufacturing, N.O.C.
Millinery manufacturing, artificial feather or flower manufacturing, N.O.C.
Wig making
Hosiery manufacturing
Fabric coating, impregnating or waterproofing, N.O.C., textiles bleaching, dyeing or finishing, new goods, not garments
Cloth printing
Dressmaking or tailoring.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-606, filed 11/27/85, effective 1/1/86; 83-24-017 (Order 83-36), § 296-17-606, filed 11/30/83, effective 1/1/84; 82-24-047 (Order 82-38), § 296-17-606, filed 11/29/82, effective 1/1/83; Order 75-38, § 296-17-606, filed 11/24/75, effective 1/1/76; Order 73-22, § 296-17-606, filed 11/9/73, effective 1/1/74.]

WAC 296-17-612 Classification 3808.

Upholstery - furniture, auto or boat.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-612, filed 11/27/85, effective 1/1/86. Statutory Authority: RCW 51.04.020(1). 83-05-019 (Order 83-5), § 296-17-612, filed 2/9/83; Order 75-28, § 296-17-612, filed 8/29/75, effective

10/1/75; Order 73-22, § 296-17-612, filed 11/9/73, effective 1/1/74.]

WAC 296-17-614 Classification 3901.

Bakeries – retail

This classification applies only to those bakeries that sell products at retail primarily on the premises of the bakery and contemplates minimal delivery of products off premise such as delivery of wedding cakes.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-614, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-614, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-614, filed 11/30/83, effective 1/1/84. Statutory Authority: RCW 51.04.030 and 51.16.035. 79-12-086 (Order 79-18), § 296-17-614, filed 11/30/79, effective 1/1/80; Order 73-22, § 296-17-614, filed 11/9/73, effective 1/1/74.]

WAC 296-17-615 Classification 3902.

Fruit and vegetable cannery and freezer operations
 Fruit and vegetable evaporating, preserving or dehydrating
 Fruit syrup manufacturing, fruit juice manufacturing, jam or jelly manufacturing, cider manufacturing
 Pea vining
 Corn products, chocolate and cocoa manufacturing
 Baking powder, dextrine, glucose, starch and yeast manufacturing
 Nut shelling, egg breaking, coconut shredding and peanut handling
 Food sundries manufacturing and food processing, N.O.C.
 Peanut butter, honey, mayonnaise and instant potato manufacturing
 Pickle manufacturing, sauerkraut manufacturing
 Pet food manufacturing
 Butter substitutes manufacturing
 Breakfast food manufacturing
 Poultry canning and canneries, N.O.C.
 Vegetable oil manufacturing.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-615, filed 11/27/85, effective 1/1/86; 83-24-017 (Order 83-36), § 296-17-615, filed 11/30/83, effective 1/1/84; 82-24-047 (Order 82-38), § 296-17-615, filed 11/29/82, effective 1/1/83; Order 75-38, § 296-17-615, filed 11/24/75, effective 1/1/76; Order 74-40, § 296-17-615, filed 11/27/74, effective 1/1/75; Order 73-22, § 296-17-615, filed 11/9/73, effective 1/1/74.]

WAC 296-17-616 Classification 3903.

Sugar refining
 Molasses manufacturing, syrup manufacturing, N.O.C.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-616, filed 11/27/85, effective 1/1/86; Order 73-22, § 296-17-616, filed 11/9/73, effective 1/1/74.]

[1985 WAC Supp—page 1176]

WAC 296-17-618 Classification 3905.

Cocktail and soft drink lounges
 Commissaries and restaurants with construction, erection, logging or mine operations
 Eating establishments, N.O.C., such as public lunch counters in stores, ice cream parlors, popcorn stores or stands, and retail candy stores with on premise manufacturing
 Food, drink, candy, etc. concessionaires at parks, tracks and exhibitions including vending concessionaires dispensing food, drink, candy, etc. at ball parks, race tracks, theatres and exhibitions

Restaurants and taverns

This classification is not applicable to street vendors or route food services who shall be rated under class 1101 (WAC 296-17-536).

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-618, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-618, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-618, filed 11/30/83, effective 1/1/84; 82-24-047 (Order 82-38), § 296-17-618, filed 11/29/82, effective 1/1/83; Order 75-38, § 296-17-618, filed 11/24/75, effective 1/1/76; Order 74-40, § 296-17-618, filed 11/27/74, effective 1/1/75; Order 73-22, § 296-17-618, filed 11/9/73, effective 1/1/74.]

WAC 296-17-61801 Classification 3906.

Bakeries, cracker or potato chip manufacturing, N.O.C.
 Confectionery and chewing gum manufacturing
 Cough drop manufacturing
 Macaroni manufacturing
 Pizza manufacturing, N.O.C.
 Ravioli or tamale manufacturing.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-61801, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-61801, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-61801, filed 11/30/83, effective 1/1/84. Statutory Authority: RCW 51.04.030 and 51.16.035. 79-12-086 (Order 79-18), § 296-17-61801, filed 11/30/79, effective 1/1/80.]

WAC 296-17-61804 Classification 3909.

Caterers.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-61804, filed 11/27/85, effective 1/1/86; 82-24-047 (Order 82-38), § 296-17-61804, filed 11/29/82, effective 1/1/83.]

WAC 296-17-619 Classification 4002.

Butter, cheese, ice cream and ice cream mix manufacturing
 Condensed milk manufacturing
 Creameries and dairies, operation
 Dairy products manufacturing, N.O.C.
 This classification does not include dairy or farming operations subject to risk classification 7301 (WAC

296-17-644).

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-619, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-619, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-619, filed 11/30/83, effective 1/1/84; Order 73-22, § 296-17-619, filed 11/9/73, effective 1/1/74.]

WAC 296-17-620 Classification 4101.

Printing, lithography, engraving, map printing, and silk screening, N.O.C.

Rubber stamp manufacturing and assembling

Bookbinding

Photoengraving

Linotype or hand composition

Electrotyping.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-620, filed 11/27/85, effective 1/1/86; 83-24-017 (Order 83-36), § 296-17-620, filed 11/30/83, effective 1/1/84; 82-24-047 (Order 82-38), § 296-17-620, filed 11/29/82, effective 1/1/83; 81-24-042 (Order 81-30), § 296-17-620, filed 11/30/81, effective 1/1/82. Statutory Authority: RCW 51.04.030 and 51.16.035. 79-12-086 (Order 79-18), § 296-17-620, filed 11/30/79, effective 1/1/80; Order 75-38, § 296-17-620, filed 11/24/75, effective 1/1/76; Order 73-22, § 296-17-620, filed 11/9/73, effective 1/1/74.]

WAC 296-17-622 Classification 4103.

Newspaper publishing

This classification excludes:

Employees whose duties are limited to editing, designing, proofreading, photographic composition and clerical office will be rated under risk classification 4904 (WAC 296-17-653);

Outside reporters, advertising or circulation solicitors and photographers with no other duties will be rated under risk classification 6303 (WAC 296-17-698); and

Newspaper publishers with no printing operations will be governed by WAC 296-17-44001, business described by a standard exception classification.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-622, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-622, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-622, filed 11/30/83, effective 1/1/84; Order 75-38, § 296-17-622, filed 11/24/75, effective 1/1/76; Order 73-22, § 296-17-622, filed 11/9/73, effective 1/1/74.]

WAC 296-17-626 Classification 4107.

Business machine service, adjustment, or repair, N.O.C.

This classification includes the installation of typewriters, adding machines and reproduction machines, either electric or manual, micro/mini computer systems and x-ray equipment but excludes the installation service or repair of computer main frame systems

which will be rated under risk classification 0608 (WAC 296-17-52701)

Piano tuning.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-626, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-626, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-626, filed 11/30/83, effective 1/1/84; Order 73-22, § 296-17-626, filed 11/9/73, effective 1/1/74.]

WAC 296-17-627 Classification 4108.

Letter service shops and mailing or addressing companies

This classification includes clerical office employees and sales personnel.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-627, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-627, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-627, filed 11/30/83, effective 1/1/84; 81-24-042 (Order 81-30), § 296-17-627, filed 11/30/81, effective 1/1/82; Order 73-22, § 296-17-627, filed 11/9/73, effective 1/1/74.]

WAC 296-17-628 Classification 4109.

Sign painting in shop

Sign painting or lettering inside buildings

This classification does not include painting done in connection with sign manufacturing rated under risk classification 2903 (WAC 296-17-568); risk classification 3404 (WAC 296-17-582); risk classification 3503 (WAC 296-17-587); or risk classification 3508 (WAC 296-17-592) or painting done in connection with sign repair rated under risk classification 0403 (WAC 296-17-516). Sign erection outside will be rated under risk classification 0403 (WAC 296-17-516).

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-628, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-628, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-628, filed 11/30/83, effective 1/1/84; Order 73-22, § 296-17-628, filed 11/9/73, effective 1/1/74.]

WAC 296-17-629 Classification 4201.

Coal dock operation - by means of mechanical apparatus, including stevedoring

Longshoring and stevedoring

Port districts, including sales personnel

Stevedoring, by hand or hand truck exclusively, no hoisting of cargo

Stevedoring, loading and unloading ships designed for freight carrying containers

Stevedoring, N.O.C., supercargo checkers

Tallymen, checking clerks in connection with stevedoring work

Wharf and pier, operation

This classification includes employees engaged in mending and repacking of damaged containers in connection with stevedoring work.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-629, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-629, filed 2/28/85, effective 4/1/85; Order 73-22, § 296-17-629, filed 11/9/73, effective 1/1/74.]

WAC 296-17-630 Classification 4301.

Fertilizer manufacturing
 Glue manufacturing
 Lard making or refining
 Meat products manufacturing, including canning or dehydrating
 Packing house - including butchering and handling livestock
 Peat moss shredding and baling
 Rendering works, N.O.C.
 Sausage casings, wholesale dealer
 Sausage manufacturing
 Slaughter houses
 Tallow making
 Tanneries, fur manufacturing.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-630, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-630, filed 2/28/85, effective 4/1/85. Statutory Authority: RCW 51.04.020(1) and 51.16.035. 78-12-043 (Order 78-23), § 296-17-630, filed 11/27/78, effective 1/1/79; Order 76-36, § 296-17-630, filed 11/30/76; Order 75-38, § 296-17-630, filed 11/24/75, effective 1/1/76; Order 74-40, § 296-17-630, filed 11/27/74, effective 1/1/75; Order 73-22, § 296-17-630, filed 11/9/73, effective 1/1/74.]

WAC 296-17-631 Classification 4302.

Custom meat cutting facilities as licensed under chapter 16.49 RCW including farm kill operations.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-631, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-631, filed 2/28/85, effective 4/1/85; Order 76-36, § 296-17-631, filed 11/30/76; Order 73-22, § 296-17-631, filed 11/9/73, effective 1/1/74.]

WAC 296-17-632 Classification 4303.

Soap making, lard base or synthetic detergent.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-632, filed 11/27/85, effective 1/1/86; Order 73-22, § 296-17-632, filed 11/9/73, effective 1/1/74.]

WAC 296-17-633 Classification 4304.

Feed lots
 Stock yards, no slaughtering

Livestock auction and sales yards
 Livestock buyers.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-633, filed 11/27/85, effective 1/1/86; Order 75-38, § 296-17-633, filed 11/24/75, effective 1/1/76; Order 73-22, § 296-17-633, filed 11/9/73, effective 1/1/74.]

WAC 296-17-634 Classification 4305.

Garbage, refuse or ashes collecting
 Garbage works, landfill, reduction or incineration including cashiers collecting fees from customers
 Radioactive waste landfill.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-634, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-634, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-634, filed 11/30/83, effective 1/1/84; Order 75-38, § 296-17-634, filed 11/24/75, effective 1/1/76; Order 73-22, § 296-17-634, filed 11/9/73, effective 1/1/74.]

WAC 296-17-635 Classification 4401.

Cold storage plants, lockers operation.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-635, filed 11/27/85, effective 1/1/86; 82-24-047 (Order 82-38), § 296-17-635, filed 11/29/82, effective 1/1/83; Order 73-22, § 296-17-635, filed 11/9/73, effective 1/1/74.]

WAC 296-17-63501 Classification 4402.

Ice manufacturing, artificial
 Ice harvesting
 Ice dealers.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-63501, filed 11/27/85, effective 1/1/86; 82-24-047 (Order 82-38), § 296-17-63501, filed 11/29/82, effective 1/1/83.]

WAC 296-17-636 Classification 4404.

Storage warehouse, cold.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-636, filed 11/27/85, effective 1/1/86; Order 73-22, § 296-17-636, filed 11/9/73, effective 1/1/74.]

WAC 296-17-637 Classification 4501.

Radio or television broadcasting companies - transmitter or field employees outside, N.O.C.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-637, filed 11/27/85, effective 1/1/86; Order 75-38, § 296-17-637, filed 11/24/75, effective 1/1/76; Order 73-22, § 296-17-637, filed 11/9/73, effective 1/1/74.]

WAC 296-17-638 Classification 4502.

Radio broadcasting stations, all other employment including clerical office and sales personnel

Recording companies, studio including clerical office and sales personnel

Television broadcasting stations, all other employment including clerical office and sales personnel

Television cable companies, all other employment including clerical office and sales personnel

"All other employees" is limited to employees confined to the studio or office and includes control operators, announcers, players, entertainers or musicians.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-638, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-638, filed 2/28/85, effective 4/1/85; Order 73-22, § 296-17-638, filed 11/9/73, effective 1/1/74.]

WAC 296-17-640 Classification 4504.

Theatres all types

This classification includes managers, stage hands, box office employees, parking lot attendants, ushers, motion picture operators, snack bar employees, clerical office and sales personnel but excludes players, musicians or entertainers rated under risk classification 6605 (WAC 296-17-727).

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-640, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-640, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-640, filed 11/30/83, effective 1/1/84; 82-24-047 (Order 82-38), § 296-17-640, filed 11/29/82, effective 1/1/83; Order 73-22, § 296-17-640, filed 11/9/73, effective 1/1/74.]

WAC 296-17-641 Classification 4601.

Fireworks manufacturing

Powder works manufacturing

Combined chemicals and explosives manufacturing.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-641, filed 11/27/85, effective 1/1/86; Order 74-40, § 296-17-641, filed 11/27/74, effective 1/1/75; Order 73-22, § 296-17-641, filed 11/9/73, effective 1/1/74.]

WAC 296-17-643 Classification 4802.

Berry farms

Bulb raising

Flower seed growing including harvesting of seeds

Picking of forest products, N.O.C.

Vegetable crops, such as bush beans, peas, sweet corn, potatoes, and field carrots which are mechanically harvested.

Vineyards including harvesting of fruit

This classification excludes fresh fruit packing operations rated under risk classification 2104 (WAC 296-17-564); and fruit cannery or freezer operations rated under risk classification 3902 (WAC 296-17-615)

unless specifically included by manual language.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-643, filed 11/27/85, effective 1/1/86; 85-12-024 (Order 85-11), § 296-17-643, filed 5/31/85; 85-06-026 (Order 85-7), § 296-17-643, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-643, filed 11/30/83, effective 1/1/84; Order 77-27, § 296-17-643, filed 11/30/77, effective 1/1/78; Order 75-38, § 296-17-643, filed 11/24/75, effective 1/1/76; Order 74-40, § 296-17-643, filed 11/27/74, effective 1/1/75; Order 73-22, § 296-17-643, filed 11/9/73, effective 1/1/74.]

WAC 296-17-644 Classification 4803.

Farms, N.O.C.

Orchards - applies to all tree crops, deciduous and fruits, nuts, and shall include all acreage devoted to the raising of such crops

This classification includes operations incidental to the enterprises described above including harvesting of all crops. Provided that ground hand picking of prunes and nuts will be separately rated under risk classification 4806 (WAC 296-17-647) if the conditions stipulated in that risk classification are met

This classification excludes fresh fruit packing operations rated under risk classification 2104 (WAC 296-17-564); and fruit cannery or freezer operations or nut processing rated under risk classification 3902 (WAC 296-17-615).

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-644, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-644, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-644, filed 11/30/83, effective 1/1/84; 82-24-047 (Order 82-38), § 296-17-644, filed 11/29/82, effective 1/1/83; 81-24-042 (Order 81-30), § 296-17-644, filed 11/30/81, effective 1/1/82; Order 75-38, § 296-17-644, filed 11/24/75, effective 1/1/76; Order 74-40, § 296-17-644, filed 11/27/74, effective 1/1/75; Order 73-22, § 296-17-644, filed 11/9/73, effective 1/1/74.]

WAC 296-17-645 Classification 4804.

Poultry raising, egg production and hatcheries

Egg grading, candling and packing

Fur bearing animals and rabbit raising

This classification applies to acreage devoted to the raising of poultry, rabbits and fur bearing animals.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-645, filed 11/27/85, effective 1/1/86; 83-24-017 (Order 83-36), § 296-17-645, filed 11/30/83, effective 1/1/84; Order 74-40, § 296-17-645, filed 11/27/74, effective 1/1/75; Order 73-22, § 296-17-645, filed 11/9/73, effective 1/1/74.]

WAC 296-17-646 Classification 4805.

Nurseries, including greenhouse operations incidental thereto

This classification applies to all acreage devoted to nursery operations and including tree nurseries and sod growing.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-646, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-646, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-646, filed 11/30/83, effective 1/1/84. Statutory Authority: RCW 51.04.020(1) and 51.16.035. 78-12-043 (Order 78-23), § 296-17-646, filed 11/27/78, effective 1/1/79; Order 75-38, § 296-17-646, filed 11/24/75, effective 1/1/76; Order 73-22, § 296-17-646, filed 11/9/73, effective 1/1/74.]

WAC 296-17-647 Classification 4806.

Ground hand harvesting of berries, N.O.C.

For the purposes of this rule ground hand harvesting of berries means those crops which are harvested from the ground by hand by a worker either sitting, kneeling, bending, stooping or in a similar position or in the upright position when standing on the ground with no aid of ladders, stools or other climbing devices. This classification excludes all harvesting operations that employ or require the use of hand held cutting devices or tools or any mechanical picking or harvesting machinery including incidental pickers which may or may not follow behind such machinery and collect the harvested crops by hand.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-647, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-647, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-647, filed 11/30/83, effective 1/1/84; Order 76-36, § 296-17-647, filed 11/30/76; Order 75-38, § 296-17-647, filed 11/24/75, effective 1/1/76; Order 74-40, § 296-17-647, filed 11/27/74, effective 1/1/75; Order 73-22, § 296-17-647, filed 11/9/73, effective 1/1/74.]

WAC 296-17-648 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-17-649 Classification 4808.

Alfalfa and clover seed growing

Field crops, N.O.C., including raising of all hay, cereal grains, sugar beets

Potato sorting and storage, N.O.C.

This classification applies to all operations incidental to the enterprises described above

This classification excludes grain milling operations rated under risk classification 2101 (WAC 296-17-562); fresh vegetable packing operations rated under risk classification 2104 (WAC 296-17-564); and vegetable cannery or freezer operations rated under risk classification 3902 (WAC 296-17-615).

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-649, filed 11/27/85, effective 1/1/86; 85-12-024 (Order 85-11), § 296-17-649, filed

5/31/85; 85-06-026 (Order 85-7), § 296-17-649, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-649, filed 11/30/83, effective 1/1/84; Order 75-38, § 296-17-649, filed 11/24/75, effective 1/1/76; Order 74-40, § 296-17-649, filed 11/27/74, effective 1/1/75; Order 73-22, § 296-17-649, filed 11/9/73, effective 1/1/74.]

WAC 296-17-64901 Classification 4809.

Greenhouses, N.O.C.

Flowers - field growing, excluding bulb raising rated in risk classification 4802 (WAC 296-17-643)

Mushroom raising

Sprouts raising

This classification excludes fresh vegetable packing operations rated under risk classification 2104 (WAC 296-17-564); and vegetable cannery or freezer operations rated under risk classification 3902 (WAC 296-17-615).

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-64901, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-64901, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-64901, filed 11/30/83, effective 1/1/84; 82-24-047 (Order 82-38), § 296-17-64901, filed 11/29/82, effective 1/1/83. Statutory Authority: RCW 51.04.020(1) and 51.16.035. 78-12-043 (Order 78-23), § 296-17-64901, filed 11/27/78, effective 1/1/79.]

WAC 296-17-64902 Classification 4810.

Farms - vegetables, N.O.C. including truck gardening for fresh market. This classification includes all ground preparation, growing husbandry and hand harvesting with the aid of a hand held cutting device such as a paring or cutting knife used in the harvest of broccoli or cauliflower and by hand alone as in the case of cucumbers.

Separately rate vegetable crops such as bush beans, peas, sweet corn, potatoes and field carrots which are mechanically harvested in risk classification 4802 (WAC 296-17-649)

"Field crops, N.O.C."; fresh vegetable packing operations rated under risk classification 2104 (WAC 296-17-564); and vegetable cannery or freezer operations rated under risk classification 3902 (WAC 296-17-615).

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-64902, filed 11/27/85, effective 1/1/86.]

WAC 296-17-64903 Classification 4811.

Hop growing - including cultivating, picking, drying and baling hops and all other operations incidental to the enterprise described above.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-64903, filed 11/27/85, effective 1/1/86.]

WAC 296-17-64904 Classification 4812.

Fish and shellfish hatcheries including raising, egg production, grading, harvesting and shipping
This classification excludes fish and shellfish processing which is to be separately rated subject to risk classification 3301 (WAC 296-17-576).

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-64904, filed 11/27/85, effective 1/1/86.]

WAC 296-17-650 Classification 4901.

Consulting engineering and architectural firms, N.O.C.
Geologists, N.O.C.

Lease buyers performing work similar to oil geologists
Oil or gas geologists or scouts.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-650, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-650, filed 2/28/85, effective 4/1/85; 82-24-047 (Order 82-38), § 296-17-650, filed 11/29/82, effective 1/1/83; Order 75-38, § 296-17-650, filed 11/24/75, effective 1/1/76; Order 74-40, § 296-17-650, filed 11/27/74, effective 1/1/75; Order 73-22, § 296-17-650, filed 11/9/73, effective 1/1/74.]

WAC 296-17-651 Classification 4902.

State government - use of this classification is limited to clerical office, sales personnel and professional white collar employees that have no field exposure, law enforcement powers, or provide patient health care. For the purposes of this rule field exposure is defined as anything other than the normal travel to a work assignment such as a field auditor or social worker would encounter

This classification includes all departments, agencies, boards, commissions and committees of either the executive, legislative or judicial branches of state government. See risk classifications 4906 (WAC 296-17-655), 5307 (WAC 296-17-67901), 7103 (WAC 296-17-756) and 7201 (WAC 296-17-763) for other state government operations.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-651, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-651, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-651, filed 11/30/83, effective 1/1/84. Statutory Authority: RCW 51.04.030 and 51.16.035. 79-12-086 (Order 79-18), § 296-17-651, filed 11/30/79, effective 1/1/80; Order 73-22, § 296-17-651, filed 11/9/73, effective 1/1/74.]

WAC 296-17-652 Classification 4903.

Marine appraising
Boiler inspecting, N.O.C.
Elevator inspecting, no service
Inspection for insurance or valuation.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-652, filed 11/27/85, effective

1/1/86; 81-24-042 (Order 81-30), § 296-17-652, filed 11/30/81, effective 1/1/82; 80-17-016 (Order 80-23), § 296-17-652, filed 11/13/80, effective 1/1/81; Order 73-22, § 296-17-652, filed 11/9/73, effective 1/1/74.]

WAC 296-17-653 Classification 4904.

Clerical office, N.O.C.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-653, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-653, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-653, filed 11/30/83, effective 1/1/84; Order 73-22, § 296-17-653, filed 11/9/73, effective 1/1/74.]

WAC 296-17-654 Classification 4905.

Apartment houses
Building and property management
Hotels
Motels

This classification excludes restaurant and lounge employees rated under risk classification 3905 (WAC 296-17-618). Hotel and motel desk clerks with no other duties will be rated under risk classification 4904 (WAC 296-17-653) clerical office N.O.C.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-654, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-654, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-654, filed 11/30/83, effective 1/1/84; 81-24-042 (Order 81-30), § 296-17-654, filed 11/30/81, effective 1/1/82; Order 76-36, § 296-17-654, filed 11/30/76; Order 73-22, § 296-17-654, filed 11/9/73, effective 1/1/74.]

WAC 296-17-655 Classification 4906.

Academic and nonacademic employees of institutions of higher learning
This classification includes clerical office, sales personnel and white collar employees.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-655, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-655, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-655, filed 11/30/83, effective 1/1/84; Order 73-22, § 296-17-655, filed 11/9/73, effective 1/1/74.]

WAC 296-17-656 Classification 4907.

Inmates employed in prison industries.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-656, filed 11/27/85, effective 1/1/86; Order 73-22, § 296-17-656, filed 11/9/73, effective 1/1/74.]

WAC 296-17-657 Classification 4908.

Inmates of adult honor camps.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-657, filed 11/27/85, effective

1/1/86; Order 73-22, § 296-17-657, filed 11/9/73, effective 1/1/74.]

WAC 296-17-658 Classification 4909.

Inmates of juvenile forest camps.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-658, filed 11/27/85, effective 1/1/86; Order 73-22, § 296-17-658, filed 11/9/73, effective 1/1/74.]

WAC 296-17-659 Classification 5001.

Firewood cutting - all woods operations
Logging, N.O.C.

Sawmill operations conducted in the woods in connection with logging operations
Shake, shingle bolt and post cutting - all woods operations

For the purposes of this rule logging, N.O.C. shall be considered the complete operation, including such activities as falling and bucking, skidding, yarding, loading, and maintenance of equipment except as otherwise provided and aircraft operations incident thereto

See risk classification 5206 (WAC 296-17-675) for permanent yard operations.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-659, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-659, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-659, filed 11/30/83, effective 1/1/84; 80-17-016 (Order 80-23), § 296-17-659, filed 11/13/80, effective 1/1/81. Statutory Authority: RCW 51.04.020(1) and 51.16.035. 78-12-043 (Order 78-23), § 296-17-659, filed 11/27/78, effective 1/1/79; Order 77-27, § 296-17-659, filed 11/30/77, effective 1/1/78; Order 75-38, § 296-17-659, filed 11/24/75, effective 1/1/76; Order 73-22, § 296-17-659, filed 11/9/73, effective 1/1/74.]

WAC 296-17-660 Classification 5002.

Booming and rafting logs.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-660, filed 11/27/85, effective 1/1/86; Order 73-22, § 296-17-660, filed 11/9/73, effective 1/1/74.]

WAC 296-17-66001 Classification 5003.

Log hauling by contractor
Log truck drivers, N.O.C.

See risk classification 5206 (WAC 296-17-675) for permanent yard operations.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-66001, filed 11/27/85, effective 1/1/86; 83-24-017 (Order 83-36), § 296-17-66001, filed 11/30/83, effective 1/1/84; 80-17-016 (Order 80-23), § 296-17-66001, filed 11/13/80, effective 1/1/81. Statutory Authority: RCW 51.04.020(1) and 51.16.035.

78-12-043 (Order 78-23), § 296-17-66001, filed 11/27/78, effective 1/1/79.]

WAC 296-17-66002 Classification 5004.

Tree planting and precommercial tree thinning—forestry type operations

This classification excludes all operations subject to risk classification 5001 (WAC 296-17-659) logging, N.O.C.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-66002, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-66002, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-66002, filed 11/30/83, effective 1/1/84; 81-24-042 (Order 81-30), § 296-17-66002, filed 11/30/81, effective 1/1/82.]

WAC 296-17-661 Classification 5101.

Metal ejection molding

Pipe or tube manufacturing, iron or steel.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-661, filed 11/27/85, effective 1/1/86; 83-24-017 (Order 83-36), § 296-17-661, filed 11/30/83, effective 1/1/84; Order 73-22, § 296-17-661, filed 11/9/73, effective 1/1/74.]

WAC 296-17-662 Classification 5102.

Foundries iron, N.O.C., sandblasting shop
Furnace, radiator manufacturing, cast
Enameled iron ware manufacturing.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-662, filed 11/27/85, effective 1/1/86; Order 75-38, § 296-17-662, filed 11/24/75, effective 1/1/76; Order 73-22, § 296-17-662, filed 11/9/73, effective 1/1/74.]

WAC 296-17-663 Classification 5103.

Foundries, steel castings

Type foundries, die casting manufacturing, nonferrous

Foundries, magnesium.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-663, filed 11/27/85, effective 1/1/86; Order 73-22, § 296-17-663, filed 11/9/73, effective 1/1/74.]

WAC 296-17-666 Classification 5106.

Blacksmithing, spring manufacturing, not wire spring, auto bumper manufacturing

Tool forging, hot forming or stamping

Forging works, drop or machine

Chain manufacturing, forged.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-666, filed 11/27/85, effective 1/1/86; 82-24-047 (Order 82-38), § 296-17-666, filed 11/29/82, effective 1/1/83; Order 73-22, § 296-17-666, filed 11/9/73, effective 1/1/74.]

WAC 296-17-668 Classification 5108.

Cable or wire rope drawing and manufacturing
 Cable or wire rope manufacturing, no drawing
 Cable or wire insulation or covering.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-668, filed 11/27/85, effective 1/1/86; 82-24-047 (Order 82-38), § 296-17-668, filed 11/29/82, effective 1/1/83; Order 73-22, § 296-17-668, filed 11/9/73, effective 1/1/74.]

WAC 296-17-669 Classification 5109.

Heavy arms manufacturing or repair
 Heavy machinery and equipment manufacturing or repair.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-669, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-669, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-669, filed 11/30/83, effective 1/1/84; 80-17-016 (Order 80-23), § 296-17-669, filed 11/13/80, effective 1/1/81; Order 75-38, § 296-17-669, filed 11/24/75, effective 1/1/76; Order 73-22, § 296-17-669, filed 11/9/73, effective 1/1/74.]

WAC 296-17-670 Classification 5201.

Electric motors, generators, alternators, starters, converters, solenoids and servomotors manufacturing or assembly including repair
 Electric power or transmission equipment manufacturing or assembly
 Electrical toasters, frying pans, and wire harnesses manufacturing or assembly
 Vacuum cleaners and electrical appliances manufacturing or assembly, N.O.C.
 This classification contemplates the manufacturing or repair of transformers, switchboards, circuit breakers, switches or switchboard apparatus, power switching devices or systems, power invertors or similar equipment but excludes installation or service
 This is a shop or plant only classification, all outside activities are to be separately rated.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-670, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-670, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-670, filed 11/30/83, effective 1/1/84; 82-24-047 (Order 82-38), § 296-17-670, filed 11/29/82, effective 1/1/83; Order 73-22, § 296-17-670, filed 11/9/73, effective 1/1/74.]

WAC 296-17-673 Classification 5204.

Railroad car manufacturing or repair
 Railroad car wheel manufacturing or repair.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-673, filed 11/27/85, effective 1/1/86; Order 75-38, § 296-17-673, filed 11/24/75, effective 1/1/76; Order 73-22, § 296-17-673, filed 11/9/73, effective 1/1/74.]

WAC 296-17-675 Classification 5206.

Construction or erection contractors permanent yard or shop for maintenance or storage of firm's equipment or material

This classification is applicable only to a permanent yard or shop maintained by the employer for the storage of material, or the storage and maintenance of equipment. This classification is applicable only to those employees regularly assigned to the shop or yard, and whose duties are solely incidental to the storage, repair or maintenance of the employer's equipment or material. No employee having any other duties during their shift or work day will be rated in this classification.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-675, filed 11/27/85, effective 1/1/86; 83-24-017 (Order 83-36), § 296-17-675, filed 11/30/83, effective 1/1/84; 82-24-047 (Order 82-38), § 296-17-675, filed 11/29/82, effective 1/1/83; 80-17-016 (Order 80-23), § 296-17-675, filed 11/13/80, effective 1/1/81. Statutory Authority: RCW 51.04.020(1) and 51.16.035. 78-12-043 (Order 78-23), § 296-17-675, filed 11/27/78, effective 1/1/79; Order 76-36, § 296-17-675, filed 11/30/76; Order 73-22, § 296-17-675, filed 11/9/73, effective 1/1/74.]

WAC 296-17-676 Classification 5207.

Bowling alleys
 Skating rinks - ice or roller
 This classification includes food and beverage operations.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-676, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-676, filed 2/28/85, effective 4/1/85; 81-24-042 (Order 81-30), § 296-17-676, filed 11/30/81, effective 1/1/82; Order 73-22, § 296-17-676, filed 11/9/73, effective 1/1/74.]

WAC 296-17-67601 Classification 5208.

Brass, bronze, iron-ornamental - shop fabricating, assembly and manufacturing
 Iron or steel works, shop, fabricate or assemble structural iron or steel
 Iron works - shop - fabricate, assemble or manufacture nonstructural iron or steel
 Iron works - shop - manufacturing railings, staircases, fire escapes, etc.
 This is a shop or plant only classification but does contemplate work being performed in an adjacent yard when operated by an employer having operations subject to this classification
 Unless outside activities are specifically provided for they are to be separately rated.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-67601, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-67601, filed 2/28/85, effective 4/1/85; 82-24-047 (Order 82-38), § 296-17-67601, filed 11/29/82, effective 1/1/83.]

WAC 296-17-67602 Classification 5209.

Boilermaking, tank building (shop)
Metal goods manufacturing, N.O.C., from material 9
gauge or heavier

Wood stove manufacturing

This is a shop or plant only classification but does con-
template work being performed in an adjacent yard
when operated by an employer having operations sub-
ject to this classification

Unless outside activities are specifically provided for
they are to be separately rated.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Or-
der 85-33), § 296-17-67602, filed 11/27/85, effective
1/1/86; 85-06-026 (Order 85-7), § 296-17-67602,
filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-
36), § 296-17-67602, filed 11/30/83, effective 1/1/84;
82-24-047 (Order 82-38), § 296-17-67602, filed
11/29/82, effective 1/1/83.]

WAC 296-17-677 Classification 5301.

Accounting or bookkeeping firms
Computer software or word processing services
Court reporting firms
Credit bureaus
Employment agencies
Law firms
Management analyst or consulting firms, N.O.C.
Secretarial or telephone answering services
Temporary help agencies – administrative offices only
Travel agencies

This classification includes clerical office and sales
personnel

Use of this classification is limited employers engaged in
such services being provided to the general public.
This is a services only classification and does not in-
clude retailing or store operations, nor is this classifi-
cation to be assigned to employers setting up separate
business operation to manage other commonly owned
or operated business undertakings unless coinciden-
tally the other operations are also subject to this
classification.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Or-
der 85-33), § 296-17-677, filed 11/27/85, effective
1/1/86; 85-06-026 (Order 85-7), § 296-17-677, filed
2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), §
296-17-677, filed 11/30/83, effective 1/1/84; 82-24-
047 (Order 82-38), § 296-17-677, filed 11/29/82, ef-
fective 1/1/83. Statutory Authority: RCW 51.04.020(1)
and 51.16.035. 78-12-043 (Order 78-23), § 296-17-
677, filed 11/27/78, effective 1/1/79; Order 75-38, §
296-17-677, filed 11/24/75, effective 1/1/76; Order
73-22, § 296-17-677, filed 11/9/73, effective 1/1/74.]

WAC 296-17-678 Classification 5305.

Clerical office, sales personnel and white collar employ-
ees of cities and towns.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Or-
der 85-33), § 296-17-678, filed 11/27/85, effective

1/1/86; 85-06-026 (Order 85-7), § 296-17-678, filed
2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), §
296-17-678, filed 11/30/83, effective 1/1/84; Order
73-22, § 296-17-678, filed 11/9/73, effective 1/1/74.]

WAC 296-17-679 Classification 5306.

Clerical office, sales personnel and white collar employ-
ees of county and taxing districts, N.O.C.

Clerical office, sales personnel and white collar employ-
ees of Indian tribal councils.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Or-
der 85-33), § 296-17-679, filed 11/27/85, effective
1/1/86; 85-06-026 (Order 85-7), § 296-17-679, filed
2/28/85, effective 4/1/85; Order 73-22, § 296-17-679,
filed 11/9/73, effective 1/1/74.]

WAC 296-17-67901 Classification 5307.

State government, N.O.C.

For the purpose of this rule, this classification will in-
clude any state employee performing manual labor,
supervising a work crew performing manual labor
such as custodial or maintenance, construction, and
machinery or equipment operators or professional
white collar employments such as engineers, safety in-
spectors, biologists who have field exposures

This classification includes all departments, agencies,
boards, commissions and committees of either the ex-
ecutive, legislative or judicial branches of state
government

See risk classifications 4902 (WAC 296-17-651), 4906
(WAC 296-17-655), 7201 (WAC 296-17-763), and
7103 (WAC 296-17-756) for other state employees.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Or-
der 85-33), § 296-17-67901, filed 11/27/85, effective
1/1/86; 85-06-026 (Order 85-7), § 296-17-67901,
filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-
36), § 296-17-67901, filed 11/30/83, effective 1/1/84.
Statutory Authority: RCW 51.04.030 and 51.16.035.
79-12-086 (Order 79-18), § 296-17-67901, filed
11/30/79, effective 1/1/80.]

WAC 296-17-680 Classification 6103.

Churches

Day nurseries or child care centers – private

Day nurseries or child care centers – public

Libraries, N.O.C.

Museums, N.O.C.

Schools, N.O.C. including dance, modeling, music and
flight instructions classroom only

Schools, private – academic

Schools, public – academic

Schools, trade or vocational

Use of this classification is limited to clerical office,
sales personnel and white collar professional
employees

See risk classification 6104 (WAC 296-17-681) for
other operations.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Or-
der 85-33), § 296-17-680, filed 11/27/85, effective

1/1/86; 85-06-026 (Order 85-7), § 296-17-680, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-680, filed 11/30/83, effective 1/1/84; Order 73-22, § 296-17-680, filed 11/9/73, effective 1/1/74.]

WAC 296-17-681 Classification 6104.

Churches
 Day nurseries or child care centers – private
 Day nurseries or child care centers – public
 Libraries, N.O.C.
 Museums, N.O.C.
 Schools, N.O.C. including dance, modeling, music
 Schools, private – academic
 Schools, public – academic
 Schools, trade or vocational
 All other employments, N.O.C.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-681, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-681, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-681, filed 11/30/83, effective 1/1/84; Order 73-22, § 296-17-681, filed 11/9/73, effective 1/1/74.]

WAC 296-17-682 Classification 6105.

Home health services
 Hospitals – N.O.C. including hospital districts
 Hospitals – private proprietary
 Hospitals – religious, charitable or nonprofit
 Nursing care, N.O.C.
 This classification includes clerical office and sales personnel.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-682, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-682, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-682, filed 11/30/83, effective 1/1/84. Statutory Authority: RCW 51.04.020(1) and 51.16.035. 78-12-043 (Order 78-23), § 296-17-682, filed 11/27/78, effective 1/1/79; Order 73-22, § 296-17-682, filed 11/9/73, effective 1/1/74.]

WAC 296-17-684 Classification 6107.

Veterinary hospitals or clinics
 This classification includes clerical office and sales personnel.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-684, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-684, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-684, filed 11/30/83, effective 1/1/84; 81-24-042 (Order 81-30), § 296-17-684, filed 11/30/81, effective 1/1/82; Order 73-22, § 296-17-684, filed 11/9/73, effective 1/1/74.]

WAC 296-17-685 Classification 6108.

Convalescent or nursing homes
 Homes for the aged

Rest homes
 This classification includes nursing care for the residents.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-685, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-685, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-685, filed 11/30/83, effective 1/1/84; 82-24-047 (Order 82-38), § 296-17-685, filed 11/29/82, effective 1/1/83; 81-24-042 (Order 81-30), § 296-17-685, filed 11/30/81, effective 1/1/82; Order 75-38, § 296-17-685, filed 11/24/75, effective 1/1/76; Order 73-22, § 296-17-685, filed 11/9/73, effective 1/1/74.]

WAC 296-17-686 Classification 6109.

Child preparatory classes
 Chiropractors, N.O.C.
 Dental clinics, N.O.C.
 Dentists, N.O.C.
 Medical clinics, N.O.C.
 Naturopaths, N.O.C.
 Optometrists, N.O.C.
 Osteopaths, N.O.C.
 Physical therapists, N.O.C.
 Physicians and surgeons, N.O.C.
 Podiatrists, N.O.C.
 Psychologists and psychiatrists, N.O.C.
 This classification includes clerical office and sales personnel.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-686, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-686, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-686, filed 11/30/83, effective 1/1/84; 81-24-042 (Order 81-30), § 296-17-686, filed 11/30/81, effective 1/1/82; Order 73-22, § 296-17-686, filed 11/9/73, effective 1/1/74.]

WAC 296-17-687 Classification 6201.

Crematoriums
 Funeral directors – mortuaries
 This classification excludes cemetery operations rated under risk classification 6202 (WAC 296-17-688).

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-687, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-687, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-687, filed 11/30/83, effective 1/1/84; Order 73-22, § 296-17-687, filed 11/9/73, effective 1/1/74.]

WAC 296-17-688 Classification 6202.

Cemeteries.
 [Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-688, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-688, filed 2/28/85, effective 4/1/85; Order 73-22, § 296-17-688, filed 11/9/73, effective 1/1/74.]

WAC 296-17-689 Classification 6203.

Boys or girls clubs
 Excludes camp operations
 YMCA/YWCA institutions
 This classification includes clerical office and sales personnel.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-689, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-689, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-689, filed 11/30/83, effective 1/1/84; 81-24-042 (Order 81-30), § 296-17-689, filed 11/30/81, effective 1/1/82; Order 75-38, § 296-17-689, filed 11/24/75, effective 1/1/76; Order 73-22, § 296-17-689, filed 11/9/73, effective 1/1/74.]

WAC 296-17-690 Classification 6204.

Baths or saunas, N.O.C.
 Exercise or health institutes
 Gymnasiums
 Health clubs
 Massage parlors
 This classification includes clerical office and sales personnel.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-690, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-690, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-690, filed 11/30/83, effective 1/1/84; 81-24-042 (Order 81-30), § 296-17-690, filed 11/30/81, effective 1/1/82; Order 73-22, § 296-17-690, filed 11/9/73, effective 1/1/74.]

WAC 296-17-691 Classification 6205.

Beach clubs, N.O.C.
 Clubs, N.O.C.
 Fraternal clubs
 Social clubs
 Tennis clubs
 This classification includes food and beverage operations.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-691, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-691, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-691, filed 11/30/83, effective 1/1/84; Order 73-22, § 296-17-691, filed 11/9/73, effective 1/1/74.]

WAC 296-17-692 Classification 6206.

Country clubs
 Fishing clubs
 Golf clubs
 Golf courses, N.O.C., not miniature golf
 Ski clubs
 Swimming clubs – including swimming instructors
 Yachting clubs
 This classification includes food and beverage operations.

[1985 WAC Supp—page 1186]

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-692, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-692, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-692, filed 11/30/83, effective 1/1/84; Order 73-22, § 296-17-692, filed 11/9/73, effective 1/1/74.]

WAC 296-17-693 Classification 6207.

Amusement device operators – traveling
 Carnivals – traveling
 Circuses – traveling
 Fireworks exhibition
 Rodeos – arena employees
 This classification includes clerical office.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-693, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-693, filed 2/28/85, effective 4/1/85; Order 77-27, § 296-17-693, filed 11/30/77, effective 1/1/78; Order 73-22, § 296-17-693, filed 11/9/73, effective 1/1/74.]

WAC 296-17-694 Classification 6208.

Amusement parks
 Caves or caverns operation for exhibition purposes – including rides, ticket sellers, gate attendants
 Concessions – boats in parks
 Fairs
 Kiddie rides – permanent locations
 Miniature golf courses
 Race tracks, excluding parimutuel clerks and cashiers with no other duties which will be rated under risk classification 4904 (WAC 296-17-653) clerical office, N.O.C.
 Ranges – archery, ball, dart, golf
 Shooting galleries, air rifle – no firearms
 Shooting ranges – firearms
 Shows – animal
 Shows – flower, art
 This classification includes food and beverage operations and care, custody and maintenance of the above facilities.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-694, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-694, filed 2/28/85, effective 4/1/85; 81-24-042 (Order 81-30), § 296-17-694, filed 11/30/81, effective 1/1/82; Order 76-36, § 296-17-694, filed 11/30/76; Order 73-22, § 296-17-694, filed 11/9/73, effective 1/1/74.]

WAC 296-17-695 Classification 6209.

Bath houses – beach
 Boy/Girl Scout Council camp employees
 Camp operations, recreational or educational, N.O.C.
 Church camps
 Dude ranches – not cattle ranches
 Resorts or camp grounds
 Swimming pools – public
 Trailer/mobile home parks or camps
 YMCA/YWCA camp employees

This classification includes food and beverage operations, clerical office and sales personnel.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-695, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-695, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-695, filed 11/30/83, effective 1/1/84; 81-24-042 (Order 81-30), § 296-17-695, filed 11/30/81, effective 1/1/82; Order 76-36, § 296-17-695, filed 11/30/76; Order 73-22, § 296-17-695, filed 11/9/73, effective 1/1/74.]

WAC 296-17-696 Classification 6301.

Automobile sales personnel
Camper sales personnel
Driving school instructors
Motorcycle sales personnel
Pleasurecraft sales personnel - no aircraft
Trailer or mobile home sales personnel
Truck sales personnel.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-696, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-696, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-696, filed 11/30/83, effective 1/1/84; 82-24-047 (Order 82-38), § 296-17-696, filed 11/29/82, effective 1/1/83; Order 73-22, § 296-17-696, filed 11/9/73, effective 1/1/74.]

WAC 296-17-697 Classification 6302.

Book sales personnel
Coffee, tea, grocery sales personnel
Cosmetics sales personnel
Door to door sales personnel, N.O.C.
Household furnishings sales personnel
Magazine sales personnel
Vacuum cleaner sales personnel
Wearing apparel sales personnel
This classification is for door to door sales personnel.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-697, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-697, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-697, filed 11/30/83, effective 1/1/84; Order 73-22, § 296-17-697, filed 11/9/73, effective 1/1/74.]

WAC 296-17-698 Classification 6303.

Collectors, messengers, counsellors, N.O.C.
Farm machinery sales personnel - outside
Insurance sales personnel and claims adjustors - outside
Machinery sales personnel - outside - construction, mining, heavy equipment
Sales personnel, N.O.C. - outside.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-698, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-698, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-698, filed 11/30/83, effective 1/1/84. Statutory

Authority: RCW 51.04.030 and 51.16.035. 79-12-086 (Order 79-18), § 296-17-698, filed 11/30/79, effective 1/1/80; Order 76-36, § 296-17-698, filed 11/30/76; Order 73-22, § 296-17-698, filed 11/9/73, effective 1/1/74.]

WAC 296-17-699 Classification 6304.

Department stores

This classification includes clerical office and sales personnel and installation of household furnishings such as lamps, pictures, draperies or curtains etc.

This classification excludes automotive repair and service and other outside installation or construction.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-699, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-699, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-699, filed 11/30/83, effective 1/1/84; Order 73-22, § 296-17-699, filed 11/9/73, effective 1/1/74.]

WAC 296-17-700 Classification 6305.

Clothing stores - retail

Concessions for hat and coat checking

Dry goods stores - retail

Shoe stores - retail

This classification includes clerical office and sales personnel.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-700, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-700, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-700, filed 11/30/83, effective 1/1/84; 81-24-042 (Order 81-30), § 296-17-700, filed 11/30/81, effective 1/1/82; Order 73-22, § 296-17-700, filed 11/9/73, effective 1/1/74.]

WAC 296-17-701 Classification 6306.

Appliance stores wholesale/retail excluding second hand appliance stores which will be rated in risk classification 0607 (WAC 296-17-527) household appliances service and repair

Furniture rental stores

Furniture stores wholesale/retail

Office furniture stores - wholesale/retail

Piano or organ stores, N.O.C., wholesale/retail

This classification will include installation of household furnishings, household floor coverings, and household appliances including incidental service and repair of household appliances

This classification excludes contract installation which for the purposes of this rule shall mean the bidding and ultimate furnishing to a purchaser such items listed in this classification that are specially ordered from others (i.e., factories, manufacturers, brokers, etc.) to fulfill the terms of the contract.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-701, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-701, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), §

296-17-701, filed 11/30/83, effective 1/1/84; Order 76-36, § 296-17-701, filed 11/30/76; Order 75-38, § 296-17-701, filed 11/24/75, effective 1/1/76; Order 73-22, § 296-17-701, filed 11/9/73, effective 1/1/74.]

WAC 296-17-703 Classification 6308.

Clock and watch stores – wholesale/retail
Hearing-aid stores – wholesale/retail
Jewelry stores – wholesale/retail
Optical stores, no lens grinding – wholesale/retail
This classification includes clerical office and sales personnel.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-703, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-703, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-703, filed 11/30/83, effective 1/1/84; 81-24-042 (Order 81-30), § 296-17-703, filed 11/30/81, effective 1/1/82; Order 73-22, § 296-17-703, filed 11/9/73, effective 1/1/74.]

WAC 296-17-704 Classification 6309.

Automobile, truck, motorcycle accessory or replacement parts stores, wholesale/retail – excluding repairs
Bicycle stores – wholesale/retail, including repairs
Custom picture or u-frame stores – wholesale/retail, including repairs
Electrical hardware dealers – wholesale/retail, excluding repairs
Garden supply stores – wholesale/retail, excluding repairs
Gun stores – wholesale/retail, including repairs
Hardware stores – wholesale/retail, excluding repairs
Locksmiths, including repairs but excluding installation of dead bolt locks or similar activities which will be rated in risk classification 0505 (WAC 296-17-520) fixture installation
Stained art glass stores – wholesale/retail, excluding manufacturing
Wood stove and accessory stores – wholesale/retail excluding installations or repairs
This classification includes clerical office and sales personnel.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-704, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-704, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-704, filed 11/30/83, effective 1/1/84; 82-24-047 (Order 82-38), § 296-17-704, filed 11/29/82, effective 1/1/83; Order 76-36, § 296-17-704, filed 11/30/76; Order 75-38, § 296-17-704, filed 11/24/75, effective 1/1/76; Order 73-22, § 296-17-704, filed 11/9/73, effective 1/1/74.]

WAC 296-17-706 Classification 6402.

Grocery stores with fresh meat counters, combined – retail
This classification includes clerical office and sales personnel

Lunch counters and restaurant operations to be separately rated.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-706, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-706, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-706, filed 11/30/83, effective 1/1/84; 81-24-042 (Order 81-30), § 296-17-706, filed 11/30/81, effective 1/1/82; Order 73-22, § 296-17-706, filed 11/9/73, effective 1/1/74.]

WAC 296-17-707 Classification 6403.

Coffee, tea or spice stores – retail
Dairy products stores – retail
Delicatessens – retail, no fresh meat
Fruit or vegetable stores – retail
Grocery stores – retail, N.O.C.
This classification includes clerical office and sales personnel
Lunch counters and restaurant operations to be separately rated.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-707, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-707, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-707, filed 11/30/83, effective 1/1/84; 81-24-042 (Order 81-30), § 296-17-707, filed 11/30/81, effective 1/1/82; Order 73-22, § 296-17-707, filed 11/9/73, effective 1/1/74.]

WAC 296-17-708 Classification 6404.

Florists stores wholesale/retail
Balloon arrangement stores wholesale/retail
Christmas tree sales – from lot retail only
This classification includes clerical office and sales personnel.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-708, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-708, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-708, filed 11/30/83, effective 1/1/84; 81-24-042 (Order 81-30), § 296-17-708, filed 11/30/81, effective 1/1/82; Order 73-22, § 296-17-708, filed 11/9/73, effective 1/1/74.]

WAC 296-17-709 Classification 6405.

Tire manufacturing, vulcanizing, rebuilding and/or recapping
Tire sales and service, wholesale and retail including incidental mechanical repair work to automobiles or trucks.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-709, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-709, filed 2/28/85, effective 4/1/85; Order 75-38, § 296-17-709, filed 11/24/75, effective 1/1/76; Order 73-22, § 296-17-709, filed 11/9/73, effective 1/1/74.]

WAC 296-17-710 Classification 6406.

Book, record, video stores – retail
 Camera/photo supplies stores – retail
 Candy, cigarette and tobacco stores – retail
 Coin and stamp stores – retail
 Coin operated arcades, excluding repair rated under risk classification 0606 (WAC 296-17-526)
 Drug stores – retail
 Dry cleaning – coin operated self service
 Fabric and yardage stores, yarn and needle work stores – retail
 Floor covering stores, carpet sample stores, retail – excluding installation which will be rated in risk classification 0502 (WAC 296-17-517)
 Laundromats, coin operated self service
 Microwave oven and stereo component stores – retail
 Musical instrument stores – retail, excluding pianos or organs stores which will be rated in risk classification 6306 (WAC 296-17-701)
 News butchers or news/magazine stands – retail
 Office stationery stores, and office machinery stores including microcomputer and copy machines excluding repair
 Paint/wallpaper stores – retail
 Pawn shops
 Pet shops – retail including incidental pet grooming
 Private mailbox, safety deposit box or computer tape storage facilities
 Retail stores, N.O.C.
 Sewing machine stores – retail
 Sporting goods stores – retail
 Telephone stores – retail
 Variety and five and ten cent stores – retail
 Wine stores and retail liquor agencies; soft drink stores
 This classification includes clerical office and sales personnel, but excludes all on premise manufacturing of any kind, delivery drivers, outside installation, lunch counters and restaurant operations which are to be separately rated.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-710, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-710, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-710, filed 11/30/83, effective 1/1/84; 80-17-016 (Order 80-23), § 296-17-710, filed 11/13/80, effective 1/1/81; Order 77-27, § 296-17-710, filed 11/30/77, effective 1/1/78; Order 75-38, § 296-17-710, filed 11/24/75, effective 1/1/76; Order 73-22, § 296-17-710, filed 11/9/73, effective 1/1/74.]

WAC 296-17-711 Classification 6407.

Barber and beauty supply houses
 Clothing, wearing apparel or dry goods stores – wholesale
 Drug stores wholesale
 Mill supply dealers
 Paint and wallpaper dealers – wholesale
 Stores, combined wholesale and retail, N.O.C.
 Welding supply dealers
 Wholesale stores, N.O.C.

This classification excludes drivers which are to be separately rated under risk classification 1101 (WAC 296-17-536), delivery by combined wholesale and retail stores.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-711, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-711, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-711, filed 11/30/83, effective 1/1/84; Order 73-22, § 296-17-711, filed 11/9/73, effective 1/1/74.]

WAC 296-17-712 Classification 6408.

Farm machinery/equipment dealers
 Farm machinery rental dealers
 This classification includes demonstration of machinery or equipment and repair without regard to location.
 All other operations to be separately rated.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-712, filed 11/27/85, effective 1/1/86; 83-24-017 (Order 83-36), § 296-17-712, filed 11/30/83, effective 1/1/84; Order 74-40, § 296-17-712, filed 11/27/74, effective 1/1/75; Order 73-22, § 296-17-712, filed 11/9/73, effective 1/1/74.]

WAC 296-17-713 Classification 6409.

Machinery/equipment dealers, N.O.C.
 Machinery rental dealers, N.O.C.
 Oil or gas well supplies or equipment dealers
 This classification includes demonstration of machinery or equipment and repair without regard to location.
 All other operations to be separately rated.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-713, filed 11/27/85, effective 1/1/86; 83-24-017 (Order 83-36), § 296-17-713, filed 11/30/83, effective 1/1/84; 80-17-016 (Order 80-23), § 296-17-713, filed 11/13/80, effective 1/1/81; Order 74-40, § 296-17-713, filed 11/27/74, effective 1/1/75; Order 73-22, § 296-17-713, filed 11/9/73, effective 1/1/74.]

WAC 296-17-714 Classification 6501.

Barber shops
 Beauty parlors
 Cosmetologists and electrolysis studios
 Sun tanning parlors
 This classification includes clerical office and sales personnel.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-714, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-714, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-714, filed 11/30/83, effective 1/1/84; Order 73-22, § 296-17-714, filed 11/9/73, effective 1/1/74.]

WAC 296-17-715 Classification 6502.

Banks
 Credit unions
 Financial institutions, N.O.C.

Investment companies
 Loan companies
 Mortgage companies
 Savings and loan associations
 Stock brokers and escrow companies
 This classification includes clerical office and sales personnel.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-715, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-715, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-715, filed 11/30/83, effective 1/1/84; Order 73-22, § 296-17-715, filed 11/9/73, effective 1/1/74.]

WAC 296-17-716 Classification 6503.

Labor unions or employee representative associations
 This classification includes all employees including any official representatives.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-716, filed 11/27/85, effective 1/1/86; 85-12-024 (Order 85-11), § 296-17-716, filed 5/31/85; 83-24-017 (Order 83-36), § 296-17-716, filed 11/30/83, effective 1/1/84; Order 75-38, § 296-17-716, filed 11/24/75, effective 1/1/76; Order 73-22, § 296-17-716, filed 11/9/73, effective 1/1/74.]

WAC 296-17-717 Classification 6504.

Stores - welfare - such as Goodwill or Salvation Army
 This classification includes clerical office and sales personnel and collecting, conditioning and resale of donated used household articles.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-717, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-717, filed 2/28/85, effective 4/1/85; 81-24-042 (Order 81-30), § 296-17-717, filed 11/30/81, effective 1/1/82; Order 73-22, § 296-17-717, filed 11/9/73, effective 1/1/74.]

WAC 296-17-718 Classification 6505.

Welfare special works program
 Use of this classification will be limited to nonprofit organizations that administer special training block grant moneys which are used to provide eligible unemployable candidates work experience. "Work experience" for the purpose of this rule shall mean activities performed under direct and close supervision for a limited period of time, usually less than six months, wages or remuneration for which is paid by the referring or sponsoring organization without reimbursement from the person or entity in whose workplace the activities are performed.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-718, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-718, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-718, filed 11/30/83, effective 1/1/84; Order 73-22, § 296-17-718, filed 11/9/73, effective 1/1/74.]

WAC 296-17-719 Classification 6506.

Film exchanges - commercial type movie theatre films excluding video cassettes which are to be separately rated

Film print shops including developing and printing
 Microfilming

Photograph studios including outside photographers
 This classification includes clerical office and sales personnel but excludes drivers which are to be separately rated under risk classification 1101 (WAC 296-17-536), delivery by combined wholesale and retail stores.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-719, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-719, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-719, filed 11/30/83, effective 1/1/84; 81-24-042 (Order 81-30), § 296-17-719, filed 11/30/81, effective 1/1/82; Order 73-22, § 296-17-719, filed 11/9/73, effective 1/1/74.]

WAC 296-17-721 Classification 6508.

Chore services
 Domestic servants employed in or outside private residences of homeowners.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-721, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-721, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-721, filed 11/30/83, effective 1/1/84; 81-24-042 (Order 81-30), § 296-17-721, filed 11/30/81, effective 1/1/82; Order 73-22, § 296-17-721, filed 11/9/73, effective 1/1/74.]

WAC 296-17-722 Classification 6509.

Boarding homes and centers, N.O.C.
 Boarding houses
 Foster homes
 Fraternity houses
 Orphanages
 Rooming houses
 Sorority houses.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-722, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-722, filed 2/28/85, effective 4/1/85; Order 73-22, § 296-17-722, filed 11/9/73, effective 1/1/74.]

WAC 296-17-723 Classification 6601.

Detective agencies
 Merchant police or patrol
 Security guard agencies
 Security guard at logging or construction sites as allowed for in WAC 296-17-441(1).

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-723, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-723, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), §

296-17-723, filed 11/30/83, effective 1/1/84; Order 77-27, § 296-17-723, filed 11/30/77, effective 1/1/78; Order 73-22, § 296-17-723, filed 11/9/73, effective 1/1/74.]

WAC 296-17-724 Classification 6602.

Janitorial service – excluding contract window cleaning
Janitors, N.O.C.

Kitchen exhaust, smoke hood cleaning

Pest control. This category applies to operations involved in the control and extermination of pests by the use of pesticides, rodenticides and fumigants

Portable cleaning and washing, N.O.C. – includes auto and truck washing, recreational vehicles and mobile homes. This category will include roof cleaning and washing of single story buildings, but only if the washing is not incidental to painting or roof repair

Swimming pool cleaning

Termite control. This category applies to operations involved in the control and extermination of termites and other wood-destroying pests or organisms by fumigation or spraying of poisonous insecticides. Does not include structural repair.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-724, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-724, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-724, filed 11/30/83, effective 1/1/84; 82-24-047 (Order 82-38), § 296-17-724, filed 11/29/82, effective 1/1/83; Order 73-22, § 296-17-724, filed 11/9/73, effective 1/1/74.]

WAC 296-17-725 Classification 6603.

Auction sales, all types, excluding livestock auctions and sales yards rated in risk classification 4304 (WAC 296-17-633)

This classification includes clerical office and sales personnel.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-725, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-725, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-725, filed 11/30/83, effective 1/1/84; Order 73-22, § 296-17-725, filed 11/9/73, effective 1/1/74.]

WAC 296-17-726 Classification 6604.

Lens manufacturing – ground and polished lenses

Optical goods manufacturing, N.O.C.

Telescope manufacturing – with lens grinding

This classification includes clerical office and sales personnel.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-726, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-726, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-726, filed 11/30/83, effective 1/1/84; Order 73-22, § 296-17-726, filed 11/9/73, effective 1/1/74.]

WAC 296-17-727 Classification 6605.

Dance halls – all employment

Entertainers, N.O.C.

Musician, N.O.C.

Players, entertainers and musicians hired by theatres, N.O.C.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-727, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-727, filed 2/28/85, effective 4/1/85; Order 77-27, § 296-17-727, filed 11/30/77, effective 1/1/78; Order 74-40, § 296-17-727, filed 11/27/74, effective 1/1/75; Order 73-22, § 296-17-727, filed 11/9/73, effective 1/1/74.]

WAC 296-17-729 Classification 6607.

Billiard halls

Card rooms and bingo parlors

Recreational, social and community centers, N.O.C.

This classification includes food and beverage operations.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-729, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-729, filed 2/28/85, effective 4/1/85; Order 73-22, § 296-17-729, filed 11/9/73, effective 1/1/74.]

WAC 296-17-730 Classification 6608.

Motion picture production

This classification includes clerical office and sales personnel.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-730, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-730, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-730, filed 11/30/83, effective 1/1/84; Order 73-22, § 296-17-730, filed 11/9/73, effective 1/1/74.]

WAC 296-17-731 Classification 6609.

Stables, stablemen and exercise boys

Riding academies or clubs

Jockeys, horseshoeing and horse training, N.O.C.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-731, filed 11/27/85, effective 1/1/86; 81-24-042 (Order 81-30), § 296-17-731, filed 11/30/81, effective 1/1/82; 80-17-016 (Order 80-23), § 296-17-731, filed 11/13/80, effective 1/1/81; Order 73-22, § 296-17-731, filed 11/9/73, effective 1/1/74.]

WAC 296-17-735 Classification 6704.

Parking lot operations including attendants or monitors.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-735, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-735, filed 2/28/85, effective 4/1/85; Order 73-22, § 296-17-735, filed 11/9/73, effective 1/1/74.]

WAC 296-17-736 Classification 6705.

Athletic officials for amateur sports, N.O.C., such as umpires, and referees

Excursions - outdoor recreational N.O.C., includes river rides, pack trains, hiking and mountaineering, and including camping operations incidental thereto

Ski tows, ski patrols and ski instructors - includes operations incidental to the operation of the skiing facility such as parking lots but excludes food service operations, hotel or motel operations, ski rental or ski sales shops

Wind sail board instructors.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-736, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-736, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-736, filed 11/30/83, effective 1/1/84; 82-24-047 (Order 82-38), § 296-17-736, filed 11/29/82, effective 1/1/83; 81-24-042 (Order 81-30), § 296-17-736, filed 11/30/81, effective 1/1/82; 80-17-016 (Order 80-23), § 296-17-736, filed 11/13/80, effective 1/1/81; Order 77-27, § 296-17-736, filed 11/30/77, effective 1/1/78; Order 74-40, § 296-17-736, filed 11/27/74, effective 1/1/75; Order 73-22, § 296-17-736, filed 11/9/73, effective 1/1/74.]

WAC 296-17-737 Classification 6706.

Athletic teams - operation of premises and care of teams

All employees other than players, umpires, coaches and managers.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-737, filed 11/27/85, effective 1/1/86; 83-24-017 (Order 83-36), § 296-17-737, filed 11/30/83, effective 1/1/84; Order 75-38, § 296-17-737, filed 11/24/75, effective 1/1/76; Order 74-40, § 296-17-737, filed 11/27/74, effective 1/1/75; Order 73-22, § 296-17-737, filed 11/9/73, effective 1/1/74.]

WAC 296-17-738 Classification 6707.

Football teams, N.O.C.

Hockey teams

Roller derbies

Contact sports, N.O.C.

This classification applies to professional contact sports and includes umpires, referees, coaches and managers.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-738, filed 11/27/85, effective 1/1/86; 83-24-017 (Order 83-36), § 296-17-738, filed 11/30/83, effective 1/1/84. Statutory Authority: RCW 51.04.030 and 51.16.035. 79-12-086 (Order 79-18), § 296-17-738, filed 11/30/79, effective 1/1/80; Order 74-40, § 296-17-738, filed 11/27/74, effective 1/1/75; Order 73-22, § 296-17-738, filed 11/9/73, effective 1/1/74.]

WAC 296-17-739 Classification 6708.

Jockeys, racing

[1985 WAC Supp—page 1192]

Professional racing drivers.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-739, filed 11/27/85, effective 1/1/86; Order 77-10, § 296-17-739, filed 5/31/77; Order 74-40, § 296-17-739, filed 11/27/74, effective 1/1/75; Order 73-22, § 296-17-739, filed 11/9/73, effective 1/1/74.]

WAC 296-17-740 Classification 6709.

Sheltered workshops

This classification includes clerical office and sales personnel.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-740, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-740, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-740, filed 11/30/83, effective 1/1/84; Order 73-22, § 296-17-740, filed 11/9/73, effective 1/1/74.]

WAC 296-17-741 Classification 6801.

Airlines, scheduled

All members of flying crew.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-741, filed 11/27/85, effective 1/1/86; Order 73-22, § 296-17-741, filed 11/9/73, effective 1/1/74.]

WAC 296-17-742 Classification 6802.

Airlines, scheduled

All ground crew operations including ticket sellers who handle baggage.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-742, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-742, filed 2/28/85, effective 4/1/85; Order 73-22, § 296-17-742, filed 11/9/73, effective 1/1/74.]

WAC 296-17-743 Classification 6803.

Aircraft operations, N.O.C. - all members of flying crew

Flight instruction

Private aircraft - transportation of personnel in conduct of employer's business. The rule governing standard exceptions does not apply here

Nonscheduled airlines - flight crew members.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-743, filed 11/27/85, effective 1/1/86; Order 76-36, § 296-17-743, filed 11/30/76; Order 73-22, § 296-17-743, filed 11/9/73, effective 1/1/74.]

WAC 296-17-744 Classification 6804.

Aircraft companies, sales or service agencies - including aircraft sales personnel

Aircraft ground crew operations, N.O.C.

Airport operations

Aircraft remanufacturing and/or rebuilding including modifications, conversions and repairs by firms not engaged in the original manufacturing of such aircraft
 Nonscheduled airlines – ground crew operations including ticket sellers who handle baggage.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-744, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-744, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-744, filed 11/30/83, effective 1/1/84; Order 75-38, § 296-17-744, filed 11/24/75, effective 1/1/76; 73-22, § 296-17-744, filed 11/9/73, effective 1/1/74.]

WAC 296-17-745 Classification 6809.

Baseball teams
 Basketball teams
 Soccer teams

Noncontact sports, N.O.C.

This classification applies to professional noncontact sports and includes umpires, referees, coaches and managers.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-745, filed 11/27/85, effective 1/1/86; 83-24-017 (Order 83-36), § 296-17-745, filed 11/30/83, effective 1/1/84; Order 77-10, § 296-17-745, filed 5/31/77; Order 74-40, § 296-17-745, filed 11/27/74, effective 1/1/75; Order 73-22, § 296-17-745, filed 11/9/73, effective 1/1/74.]

WAC 296-17-746 Classification 6901.

Volunteers

This classification includes all volunteers performing services for any state agency, municipal corporation, political subdivision, or private nonprofit charitable organization

This classification excludes volunteer law enforcement officers which are to be separately rated.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-746, filed 11/27/85, effective 1/1/86; 83-24-017 (Order 83-36), § 296-17-746, filed 11/30/83, effective 1/1/84; Order 77-27, § 296-17-746, filed 11/30/77, effective 1/1/78; Emergency Order 77-25, § 296-17-746, filed 12/1/77; Order 75-28, § 296-17-746, filed 8/29/75, effective 10/1/75.]

WAC 296-17-747 Classification 6902.

Logging railroad construction or maintenance
 Logging road construction or maintenance

For the purposes of this rule logging roads are roads for which the primary or initial usage is for the transporting of logs by truck or rail and includes roads constructed on public lands in connection with timber sales or logging, such as roads being constructed in accordance with the state department of natural resources or the United States Forest Service timber sales

This classification includes grading, grubbing, clearing of right-of-way and including culverts and bridges, but excludes falling, bucking of right-of-way timber

or any of the other logging activities as enumerated under risk classification 5001 (WAC 296-17-659)
 See risk classification 5206 (WAC 296-17-675) for permanent yard operations.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-747, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-747, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-747, filed 11/30/83, effective 1/1/84; Order 75-38, § 296-17-747, filed 11/24/75, effective 1/1/76.]

WAC 296-17-748 Classification 6903.

Aerial spraying, seeding, crop dusting, firefighting.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-748, filed 11/27/85, effective 1/1/86; Order 76-36, § 296-17-748, filed 11/30/76.]

WAC 296-17-749 Classification 6904.

Fire fighters – salaried fire fighters of municipal fire departments.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-749, filed 11/27/85, effective 1/1/86; Order 77-27, § 296-17-749, filed 11/30/77, effective 1/1/78; Emergency Order 77-25, § 296-17-749, filed 12/1/77.]

WAC 296-17-750 Classification 6905.

Law enforcement officers – law enforcement officers of cities, towns, counties or Indian tribal councils

This classification includes volunteer law enforcement officers, N.O.C.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-750, filed 11/27/85, effective 1/1/86; 83-24-017 (Order 83-36), § 296-17-750, filed 11/30/83, effective 1/1/84; Order 77-27, § 296-17-750, filed 11/30/77, effective 1/1/78; Emergency Order 77-25, § 296-17-750, filed 12/1/77.]

WAC 296-17-751 Classification 6906.

Volunteer law enforcement officers

This classification includes volunteer law enforcement officers in accordance with RCW 51.12.035.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-751, filed 11/27/85, effective 1/1/86; 83-24-017 (Order 83-36), § 296-17-751, filed 11/30/83, effective 1/1/84; Order 77-27, § 296-17-751, filed 11/30/77, effective 1/1/78; Emergency Order 77-25, § 296-17-751, filed 12/1/77.]

WAC 296-17-752 Classification 6907.

Household furnishings moving and storage.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-752, filed 11/27/85, effective 1/1/86; Order 77-27, § 296-17-752, filed 11/30/77, effective 1/1/78.]

WAC 296-17-753 Classification 6908.

Carbon paper, crepe paper and typewriter ribbon manufacturing
 Envelope or stationery manufacturing
 Paper box manufacturing, folding paper boxes
 Paper box manufacturing, solid paper boxes
 Paper or plastic bag, abrasive paper and wallpaper manufacturing.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-753, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-753, filed 2/28/85, effective 4/1/85. Statutory Authority: RCW 51.04.030 and 51.16.035. 79-12-086 (Order 79-18), § 296-17-753, filed 11/30/79, effective 1/1/80; Order 77-27, § 296-17-753, filed 11/30/77, effective 1/1/78.]

WAC 296-17-75301 Classification 6909.

Medical laboratories
 Blood banks
 Assaying laboratories
 Laboratories—Analytical, testing, or quality control for others, including outside operations, excluding outside x-raying and drilling.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-75301, filed 11/27/85, effective 1/1/86. Statutory Authority: RCW 51.04.020(1) and 51.16.035. 78-12-043 (Order 78-23), § 296-17-75301, filed 11/27/78, effective 1/1/79.]

WAC 296-17-754 Classification 7101.

Executive officers, N.O.C.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-754, filed 11/27/85, effective 1/1/86. Statutory Authority: RCW 51.04.020(1) and 51.16.035. 78-12-043 (Order 78-23), § 296-17-754, filed 11/27/78, effective 1/1/79.]

WAC 296-17-755 Classification 7102.

Football teams
 This classification applies to football teams which are participants in the National Football League and includes umpires, referees, coaches, and managers.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-755, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-755, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-755, filed 11/30/83, effective 1/1/84. Statutory Authority: RCW 51.04.030 and 51.16.035. 79-12-086 (Order 79-18), § 296-17-755, filed 11/30/79, effective 1/1/80.]

WAC 296-17-756 Classification 7103.

State government, this classification is to be used to report all workers who have law enforcement powers although such workers are professional white collar employees

This classification includes all departments, agencies, boards, commissions and committees of either the executive, legislative or judicial branches of state government, including employees having arrest powers or such other powers common to law enforcement, such as state patrol, wildlife agents, guards or correctional officers of inmates, fishery patrol officers, lottery officers

See risk classifications 4902 (WAC 296-17-651), 5307 (WAC 296-17-67901), and 7201 (WAC 296-17-763) for other state government operations.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-756, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-756, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-756, filed 11/30/83, effective 1/1/84. Statutory Authority: RCW 51.04.030 and 51.16.035. 79-12-086 (Order 79-18), § 296-17-756, filed 11/30/79, effective 1/1/80.]

WAC 296-17-757 Classification 7104.

Temporary help companies

This classification applies to employees of temporary help companies, N.O.C., that are referred on a temporary basis to its customers. This classification applies if the customer's business is by nature enumerated in this manual as being subject to any of the following risk classifications: 1304 (WAC 296-17-541), 4901 (WAC 296-17-650), 4902 (WAC 296-17-651), 4903 (WAC 296-17-652), 4904 (WAC 296-17-653), 4906 (WAC 296-17-655), 5301 (WAC 296-17-677), 5305 (WAC 296-17-678), 5306 (WAC 296-17-679), 6103 (WAC 296-17-680), 6109 (WAC 296-17-686), 6303 (WAC 296-17-698), 6501 (WAC 296-17-714), 6502 (WAC 296-17-715), 6506 (WAC 296-17-719), 7202 (WAC 296-17-764).

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-757, filed 11/27/85, effective 1/1/86; 83-24-017 (Order 83-36), § 296-17-757, filed 11/30/83, effective 1/1/84. Statutory Authority: RCW 51.04.030 and 51.16.035. 79-12-086 (Order 79-18), § 296-17-757, filed 11/30/79, effective 1/1/80.]

WAC 296-17-758 Classification 7105.

Temporary help companies

This classification applies to employees of temporary help companies, N.O.C., that are referred on a temporary basis to its customers. This classification applies if the customer's business is by nature enumerated in this manual as being subject to any of the following risk classifications: 1007 (WAC 296-17-53504), 1106 (WAC 296-17-53803), 1303 (WAC 296-17-540), 2201 (WAC 296-17-565), 2202 (WAC 296-17-566), 3403 (WAC 296-17-581), 3405 (WAC 296-17-58201), 3406 (WAC 296-17-583), 3409 (WAC 296-17-58501), 3408 (WAC 296-17-585), 3602 (WAC 296-17-594), 3701 (WAC 296-17-599), 3707 (WAC 296-17-603), 3708 (WAC 296-17-604), 3801 (WAC 296-17-605), 3802 (WAC 296-17-606),

3808 (WAC 296-17-612), 3905 (WAC 296-17-618), 3909 (WAC 296-17-61804), 4101 (WAC 296-17-620), 4103 (WAC 296-17-622), 4107 (WAC 296-17-626), 4108 (WAC 296-17-627), 4109 (WAC 296-17-628), 4501 (WAC 296-17-637), 4502 (WAC 296-17-638), 4503 (WAC 296-17-639), 4504 (WAC 296-17-640), 4905 (WAC 296-17-654), 5207 (WAC 296-17-676), 6105 (WAC 296-17-682), 6107 (WAC 296-17-684), 6201 (WAC 296-17-687), 6203 (WAC 296-17-689), 6204 (WAC 296-17-690), 6205 (WAC 296-17-691), 6206 (WAC 296-17-692), 6209 (WAC 296-17-695), 6301 (WAC 296-17-696), 6302 (WAC 296-17-697), 6304 (WAC 296-17-699), 6305 (WAC 296-17-700), 6306 (WAC 296-17-701), 6308 (WAC 296-17-703), 6309 (WAC 296-17-704), 6402 (WAC 296-17-706), 6403 (WAC 296-17-707), 6404 (WAC 296-17-708), 6405 (WAC 296-17-709), 6406 (WAC 296-17-710), 6407 (WAC 296-17-711), 6503 (WAC 296-17-716), 6504 (WAC 296-17-717), 6505 (WAC 296-17-718), 6508 (WAC 296-17-721), 6509 (WAC 296-17-722), 6601 (WAC 296-17-723), 6603 (WAC 296-17-725), 6604 (WAC 296-17-726), 6605 (WAC 296-17-727), 6607 (WAC 296-17-729), 6704 (WAC 296-17-735), 6709 (WAC 296-17-740), 6909 (WAC 296-17-75301), 7308 (WAC 296-17-778).

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-758, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-758, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-758, filed 11/30/83, effective 1/1/84; 82-24-047 (Order 82-38), § 296-17-758, filed 11/29/82, effective 1/1/83; 81-24-042 (Order 81-30), § 296-17-758, filed 11/30/81, effective 1/1/82; 80-17-016 (Order 80-23), § 296-17-758, filed 11/13/80, effective 1/1/81. Statutory Authority: RCW 51.04.030 and 51.16.035. 79-12-086 (Order 79-18), § 296-17-758, filed 11/30/79, effective 1/1/80.]

WAC 296-17-759 Classification 7106.

Temporary help companies

This classification applies to employees of temporary help companies, N.O.C., that are referred on a temporary basis to its customers. This classification applies if the customer's business is by nature enumerated in this manual as being subject to any of the following risk classifications: 0301 (WAC 296-17-510), 0803 (WAC 296-17-529), 1103 (WAC 296-17-538), 1104 (WAC 296-17-53801), 1301 (WAC 296-17-539), 1404 (WAC 296-17-544), 1501 (WAC 296-17-545), 1507 (WAC 296-17-546), 2002 (WAC 296-17-555), 2003 (WAC 296-17-556), 2004 (WAC 296-17-557), 2005 (WAC 296-17-558), 2007 (WAC 296-17-560), 2008 (WAC 296-17-561), 2101 (WAC 296-17-562), 2102 (WAC 296-17-563), 2104 (WAC 296-17-564), 3309 (WAC 296-17-578), 3401 (WAC 296-17-579), 3407 (WAC 296-17-584), 3501 (WAC 296-17-586), 3503 (WAC 296-17-587), 3508 (WAC 296-17-592), 3702 (WAC 296-17-600), 3901 (WAC 296-17-614), 3906 (WAC 296-17-61801), 4401 (WAC 296-17-635), 4404 (WAC 296-17-636),

4802 (WAC 296-17-643), 4803 (WAC 296-17-644), 4804 (WAC 296-17-645), 4805 (WAC 296-17-646), 4806 (WAC 296-17-647), 4808 (WAC 296-17-649), 4809 (WAC 296-17-64901), 4810 (WAC 296-17-64902), 4811 (WAC 296-17-64903), 4812 (WAC 296-17-64904), 5307 (WAC 296-17-67901), 6104 (WAC 296-17-681), 6108 (WAC 296-17-685), 6202 (WAC 296-17-688), 6208 (WAC 296-17-694), 6408 (WAC 296-17-712), 6409 (WAC 296-17-713), 6602 (WAC 296-17-724), 6608 (WAC 296-17-730), 6706 (WAC 296-17-737), 6801 (WAC 296-17-741), 6802 (WAC 296-17-742), 6804 (WAC 296-17-744), 6908 (WAC 296-17-753), 7201 (WAC 296-17-763), 7301 (WAC 296-17-772), 7302 (WAC 296-17-773), 7307 (WAC 296-17-777).

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-759, filed 11/27/85, effective 1/1/86; 83-24-017 (Order 83-36), § 296-17-759, filed 11/30/83, effective 1/1/84; 82-24-047 (Order 82-38), § 296-17-759, filed 11/29/82, effective 1/1/83; 80-17-016 (Order 80-23), § 296-17-759, filed 11/13/80, effective 1/1/81. Statutory Authority: RCW 51.04.030 and 51.16.035. 79-12-086 (Order 79-18), § 296-17-759, filed 11/30/79, effective 1/1/80.]

WAC 296-17-760 Classification 7107.

Temporary help companies

This classification applies to employees of temporary help companies, N.O.C., that are referred on a temporary basis to its customers. This classification applies if the customer's business is by nature enumerated in this manual as being subject to any of the following risk classifications: 0306 (WAC 296-17-512), 0307 (WAC 296-17-513), 0503 (WAC 296-17-518), 0601 (WAC 296-17-522), 0602 (WAC 296-17-523), 0603 (WAC 296-17-524), 0606 (WAC 296-17-526), 0607 (WAC 296-17-527), 0608 (WAC 296-17-52701), 1108 (WAC 296-17-53805), 1401 (WAC 296-17-542), 1801 (WAC 296-17-552), 2401 (WAC 296-17-567), 2903 (WAC 296-17-568), 2904 (WAC 296-17-569), 2906 (WAC 296-17-570), 2908 (WAC 296-17-57002), 3101 (WAC 296-17-571), 3102 (WAC 296-17-572), 3103 (WAC 296-17-573), 3104 (WAC 296-17-574), 3105 (WAC 296-17-575), 3301 (WAC 296-17-576), 3302 (WAC 296-17-57601), 3303 (WAC 296-17-57602), 3402 (WAC 296-17-580), 3404 (WAC 296-17-582), 3603 (WAC 296-17-595), 3604 (WAC 296-17-596), 3605 (WAC 296-17-597), 3606 (WAC 296-17-598), 3902 (WAC 296-17-615), 3903 (WAC 296-17-616), 4002 (WAC 296-17-619), 4201 (WAC 296-17-629), 4301 (WAC 296-17-630), 4302 (WAC 296-17-631), 4303 (WAC 296-17-632), 4304 (WAC 296-17-633), 4402 (WAC 296-17-63501), 4601 (WAC 296-17-641), 5101 (WAC 296-17-661), 5102 (WAC 296-17-662), 5103 (WAC 296-17-663), 5105 (WAC 296-17-665), 5106 (WAC 296-17-666), 5107 (WAC 296-17-667), 5108 (WAC 296-17-668), 5109 (WAC 296-17-669), 5201 (WAC 296-17-670), 5202 (WAC 296-17-671), 5203 (WAC 296-17-672), 5204 (WAC 296-17-673), 5208

(WAC 296-17-67601), 5209 (WAC 296-17-67602), 6705 (WAC 296-17-736).

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-760, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-760, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-760, filed 11/30/83, effective 1/1/84; 82-24-047 (Order 82-38), § 296-17-760, filed 11/29/82, effective 1/1/83; 80-17-016 (Order 80-23), § 296-17-760, filed 11/13/80, effective 1/1/81. Statutory Authority: RCW 51.04.030 and 51.16.035. 79-12-086 (Order 79-18), § 296-17-760, filed 11/30/79, effective 1/1/80.]

WAC 296-17-761 Classification 7108.

Temporary help companies

This classification applies to employees of temporary help companies, N.O.C., that are referred on a temporary basis to its customers. This classification applies if the customer's business is by nature enumerated in this manual as being subject to any of the following risk classifications: 0101 (WAC 296-17-501), 0102 (WAC 296-17-502), 0103 (WAC 296-17-503), 0104 (WAC 296-17-504), 0105 (WAC 296-17-505), 0106 (WAC 296-17-506), 0107 (WAC 296-17-50601), 0108 (WAC 296-17-50602), 0109 (WAC 296-17-507), 0206 (WAC 296-17-675), 0302 (WAC 296-17-511), 0401 (WAC 296-17-514), 0402 (WAC 296-17-515), 0403 (WAC 296-17-516), 0502 (WAC 296-17-517), 0504 (WAC 296-17-519), 0505 (WAC 296-17-520), 0508 (WAC 296-17-521), 0509 (WAC 296-17-52101), 0510 (WAC 296-17-52102), 0604 (WAC 296-17-525), 0701 (WAC 296-17-528), 0804 (WAC 296-17-530), 0901 (WAC 296-17-532), 1002 (WAC 296-17-534), 1003 (WAC 296-17-535), 1004 (WAC 296-17-53501), 1101 (WAC 296-17-536), 1102 (WAC 296-17-537), 1109 (WAC 296-17-53806), 1703 (WAC 296-17-550), 1704 (WAC 296-17-551), 2105 (WAC 296-17-56401), 3506 (WAC 296-17-590), 4305 (WAC 296-17-634), 5206 (WAC 296-17-675), 6207 (WAC 296-17-693), 6609 (WAC 296-17-731), 6902 (WAC 296-17-747), 6904 (WAC 296-17-749), 6905 (WAC 296-17-750), 6907 (WAC 296-17-752), 7103 (WAC 296-17-756).

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-761, filed 11/27/85, effective 1/1/86; 83-24-017 (Order 83-36), § 296-17-761, filed 11/30/83, effective 1/1/84; 82-24-047 (Order 82-38), § 296-17-761, filed 11/29/82, effective 1/1/83; 81-24-042 (Order 81-30), § 296-17-761, filed 11/30/81, effective 1/1/82; 80-17-016 (Order 80-23), § 296-17-761, filed 11/13/80, effective 1/1/81. Statutory Authority: RCW 51.04.030 and 51.16.035. 79-12-086 (Order 79-18), § 296-17-761, filed 11/30/79, effective 1/1/80.]

WAC 296-17-762 Classification 7109.

Temporary help companies

[1985 WAC Supp—page 1196]

This classification applies to employees of temporary help companies, N.O.C., that are referred on a temporary basis to its customers. This classification applies if the customer's business is by nature enumerated in this manual as being subject to any of the following risk classifications: 0201 (WAC 296-17-508), 0202 (WAC 296-17-509), 0506 (WAC 296-17-52001), 0507 (WAC 296-17-52002), 1005 (WAC 296-17-53502), 1701 (WAC 296-17-548), 1702 (WAC 296-17-549), 5001 (WAC 296-17-659), 5002 (WAC 296-17-660), 5003 (WAC 296-17-66001), 5004 (WAC 296-17-66002), 6803 (WAC 296-17-743), 6903 (WAC 296-17-748).

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-762, filed 11/27/85, effective 1/1/86; 83-24-017 (Order 83-36), § 296-17-762, filed 11/30/83, effective 1/1/84; 82-24-047 (Order 82-38), § 296-17-762, filed 11/29/82, effective 1/1/83; 81-24-042 (Order 81-30), § 296-17-762, filed 11/30/81, effective 1/1/82. Statutory Authority: RCW 51.04.030 and 51.16.035. 79-12-086 (Order 79-18), § 296-17-762, filed 11/30/79, effective 1/1/80.]

WAC 296-17-763 Classification 7201.

State government – this classification is to be used to report all employments of workers assigned to work at state operated facilities that provide patient or health care of any type. Usage of this classification is not limited to state-operated hospitals as it is intended to also cover health care facilities at state schools, infirmaries at correctional institutions, travelling nurses and physicians, etc.

This classification excludes clerical office and white collar professional employments that are not engaged in providing or attending to patient care and all blue collar employments

See risk classifications 4902 (WAC 296-17-651), 5307 (WAC 296-17-67901) and 7103 (WAC 296-17-756) for other state government operations.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-763, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-763, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-763, filed 11/30/83, effective 1/1/84. Statutory Authority: RCW 51.04.030 and 51.16.035. 79-12-086 (Order 79-18), § 296-17-763, filed 11/30/79, effective 1/1/80.]

WAC 296-17-764 Classification 7202.

Real estate agencies

This classification includes clerical office and sales personnel but, excludes building management and/or property development.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-764, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-764, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-764, filed 11/30/83, effective 1/1/84. Statutory Authority: RCW 51.04.030 and 51.16.035. 79-12-086

(Order 79-18), § 296-17-764, filed 11/30/79, effective 1/1/80.]

WAC 296-17-765 Classification 7203.

Community service workers

This classification includes all community service workers performing work for counties, cities or towns pursuant to court order or under the provisions of chapter 13.40 RCW.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-765, filed 11/27/85, effective 1/1/86. Statutory Authority: RCW 51.04.020(1). 84-12-048 (Order 84-12), § 296-17-765, filed 6/1/84. Statutory Authority: RCW 51.16.035. 83-24-017 (Order 83-36), § 296-17-765, filed 11/30/83, effective 1/1/84; 81-24-042 (Order 81-30), § 296-17-765, filed 11/30/81, effective 1/1/82.]

WAC 296-17-766 Classification 7204.

Preferred workers

This classification includes all preferred workers in accordance with the provisions of RCW 51.16.120(3) and WAC 296-16-010.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-766, filed 11/27/85, effective 1/1/86; 83-24-017 (Order 83-36), § 296-17-766, filed 11/30/83, effective 1/1/84; 81-24-042 (Order 81-30), § 296-17-766, filed 11/30/81, effective 1/1/82.]

WAC 296-17-772 Classification 7301.

Dairy farms

This classification includes all farm operations related and incidental to the enterprise described and applies to all acreage devoted to the raising of these animals.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-772, filed 11/27/85, effective 1/1/86; 83-24-017 (Order 83-36), § 296-17-772, filed 11/30/83, effective 1/1/84; 82-24-047 (Order 82-38), § 296-17-772, filed 11/29/82, effective 1/1/83.]

WAC 296-17-773 Classification 7302.

Livestock farms

Sheep or goat raising

This classification includes all farm operations related and incidental to the enterprises described above and applies to all acreage devoted to the raising of these animals.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-773, filed 11/27/85, effective 1/1/86; 83-24-017 (Order 83-36), § 296-17-773, filed 11/30/83, effective 1/1/84; 82-24-047 (Order 82-38), § 296-17-773, filed 11/29/82, effective 1/1/83.]

WAC 296-17-777 Classification 7307.

Christmas tree planting, pruning and harvesting.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-777, filed 11/27/85, effective

1/1/86; 82-24-047 (Order 82-38), § 296-17-777, filed 11/29/82, effective 1/1/83.]

WAC 296-17-778 Classification 7308.

Animal shelters

Dog grooming parlors

Dog pounds

Humane societies

This classification includes clerical office and sales personnel.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-778, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-778, filed 2/28/85, effective 4/1/85; 83-24-017 (Order 83-36), § 296-17-778, filed 11/30/83, effective 1/1/84.]

WAC 296-17-779 Classification 7309.

Work activity centers

For the purpose of this rule "work activity center" will refer to such centers licensed through the department of social and health services and as defined in Title 29, Part 525.2(c) of the Code of Federal Regulations as published by United States Department of Labor, providing job training and learning skills to mentally and/or developmentally disabled workers and who are enrolled as clients of the center. Usage of this classification will be limited to mentally and/or developmentally disabled workers employed within a work activity center and excludes all other employments of mentally and/or developmentally disabled workers not employed in a work activity center which will be separately rated in risk classification 6709 (WAC 296-17-740). This classification further excludes professional, clerical, and other blue-collar employments which will be separately rated in risk classification 6709 (WAC 296-17-740) even though the only operation of the employer may be a work activity center.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-779, filed 11/27/85, effective 1/1/86. Statutory Authority: RCW 51.04.020(1). 84-11-034 (Order 84-11), § 296-17-779, filed 5/15/84.]

WAC 296-17-850 Experience rating plan—Eligibility and experience period. (1) **Eligibility.** Each employer who has reported experience during more than one fiscal year of the "experience period" shall have his base rates multiplied by an "experience modification" calculated in accordance with the rules of this manual. The development of the "experience modification" as set forth in WAC 296-17-855 shall include losses and exposure reported in all risk classes: *Provided*, That the "experience modification" determined in accordance with WAC 296-17-855 shall not apply to industrial insurance rates in the following classes: 0505 (WAC 296-17-520), 0506 (WAC 296-17-52001), 0507 (WAC 296-17-52002), and 0510 (WAC 296-17-52102). Employer premiums in the foregoing classes shall be computed at base industrial insurance rates as set forth in WAC 296-17-895.

(2) **Experience period.** The "experience period" shall be the oldest three of the four fiscal years preceding the effective date of premium rates as set forth in WAC 296-17-895. [Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-850, filed 11/27/85, effective 1/1/86; 85-13-046 (Order 85-13), § 296-17-850, filed 6/17/85; 82-24-047 (Order 82-38), § 296-17-850, filed 11/29/82, effective 1/1/83. Statutory Authority: RCW 51.04.030 and 51.16.035. 79-12-086 (Order 79-18), § 296-17-850, filed 11/30/79, effective 1/1/80; Order 76-18, § 296-17-850, filed 5/28/76, effective 7/1/76; Order 74-40, § 296-17-850, filed 11/27/74, effective 1/1/75; Order 73-22, § 296-17-850, filed 11/9/73, effective 1/1/74.]

WAC 296-17-855 Experience modification. The basis of the experience modification shall be a comparison of the actual losses charged to an employer during the experience period with the losses which would be expected for an average employer reporting the same exposures in each classification. The comparison shall contain actuarial refinements designed to mitigate the effects of losses which may be considered catastrophic or of doubtful statistical significance, due consideration being given to the volume of the employer's experience. Except for those employers who qualify for an adjusted experience modification as specified in WAC 296-17-860 or 296-17-865, the experience modification shall be calculated from the formula:

$$\text{MODIFICATION} = \frac{\text{Ap} + \text{WAe} + (1-\text{W}) \text{Ee} + \text{B}}{\text{E} + \text{B}}$$

The components Ap, WAe, and (1-W) Ee are values which shall be charged against an employer's experience record. The component, E, shall be the expected value of these charges for an average employer reporting the same exposures in each classification. The meaning and function of each symbol in the formula is specified below.

"Ap" signifies "primary actual losses." For each claim the primary actual loss is defined as that portion of the claim which is considered completely rateable for all employers and which is to enter the experience modification calculation at its full value. For each claim in excess of \$4,350 the primary actual loss shall be determined from the formula:

$$\text{Primary loss} = \frac{10,876}{\text{Total loss} + 6,526} \times \text{total loss}$$

Primary actual losses for selected claim values are shown in Table I. For each claim less than \$4,350 the full value of the claim shall be considered a primary loss.

"Ae" signifies "excess actual losses." For each claim the excess actual loss is defined as that portion of the claim which is not considered completely rateable for all employers. The excess actual loss for each claim shall be determined by subtracting the primary loss from the total loss.

"W" signifies "W value." For each employer, the W value determines the portion of the actual excess losses

which shall be included in the calculation of his experience modification, due consideration being given to the volume of his experience. This amount is represented by the symbol "WAe" in the experience modification formula. W values are set forth in Table II.

"E" signifies "expected losses." An employer's expected losses shall be determined by multiplying his reported exposure in each classification during the experience period by the classification expected loss rate. Expected loss rates are set forth in Table III.

"Ee" signifies "expected excess losses." Expected losses in each classification shall be multiplied by the classification "D-Ratio" to obtain "expected primary losses." Expected excess losses shall then be calculated by subtracting expected primary losses from expected total losses. Each employer shall have a statistical charge included in the calculation of his experience modification, said charge to be actuarially equivalent to the amount forgiven an average employer because of the exclusion of a portion of his excess actual losses. This charge is represented by "(1-W) Ee" in the experience modification formula. D-Ratios are set forth in Table III.

"B" signifies "B value" or "ballast." In order to limit the effect of a single severe accident on the modification of a small employer, a stabilizing element (B value) shall be added to both actual and expected losses. B values are set forth in Table II. [Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-855, filed 11/27/85, effective 1/1/86; 84-24-016 (Order 84-23), § 296-17-855, filed 11/28/84, effective 1/1/85; 83-24-017 (Order 83-36), § 296-17-855, filed 11/30/83, effective 1/1/84; 82-24-047 (Order 82-38), § 296-17-855, filed 11/29/82, effective 1/1/83; 81-24-042 (Order 81-30), § 296-17-855, filed 11/30/81, effective 1/1/82; 80-17-016 (Order 80-23), § 296-17-855, filed 11/13/80, effective 1/1/81. Statutory Authority: RCW 51.04.030 and 51.16.035. 79-12-086 (Order 79-18), § 296-17-855, filed 11/30/79, effective 1/1/80; Order 77-27, § 296-17-855, filed 11/30/77, effective 1/1/78; Order 74-40, § 296-17-855, filed 11/27/74, effective 1/1/75; Order 73-22, § 296-17-855, filed 11/9/73, effective 1/1/74.]

WAC 296-17-875 Table I.

Primary Losses for Selected Claim Values

Claim Value	Primary Loss
4,350	4,350
4,606	4,500
5,553	5000
8,030	6000
11,786	7000
18,153	8000
23,346	8,500
31,308	9,000
81,725*	10,072
108,760**	10,260

* Average death value

** Maximum claim value

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-875, filed 11/27/85, effective 1/1/86; 84-24-016 (Order 84-23), § 296-17-875, filed 11/28/84, effective 1/1/85; 83-24-017 (Order 83-36), § 296-17-875, filed 11/30/83, effective 1/1/84; 82-24-047 (Order 82-38), § 296-17-875, filed 11/29/82, effective 1/1/83; 81-24-042 (Order 81-30), § 296-17-875, filed 11/30/81, effective 1/1/82; 80-17-016 (Order 80-23), § 296-17-875, filed 11/13/80, effective 1/1/81. Statutory Authority: RCW 51.04.030 and 51.16.035. 79-12-086 (Order 79-18), § 296-17-875, filed 11/30/79, effective 1/1/80. Statutory Authority: RCW 51.04.020(1) and 51.16.035. 78-12-043 (Order 78-23), § 296-17-875, filed 11/27/78, effective 1/1/79; Order 77-27, § 296-17-875, filed 11/30/77, effective 1/1/78; Order 76-36, § 296-17-875, filed 11/30/76; Order 75-38, § 296-17-875, filed 11/24/75, effective 1/1/76; Order 74-40, § 296-17-875, filed 11/27/74, effective 1/1/75; Order 73-22, § 296-17-875, filed 11/9/73, effective 1/1/74.]

Expected Losses

B

W

90,399 - 94,337	14,364	.30
94,338 - 98,357	14,159	.31
98,358 - 102,460	13,954	.32
102,461 - 106,648	13,748	.33
106,649 - 110,925	13,543	.34
110,926 - 115,293	13,338	.35
115,294 - 119,756	13,133	.36
119,757 - 124,317	12,928	.37
124,318 - 128,979	12,722	.38
128,980 - 133,746	12,517	.39
133,747 - 138,621	12,312	.40
138,622 - 143,609	12,107	.41
143,610 - 148,715	11,902	.42
148,716 - 153,940	11,696	.43
153,941 - 159,291	11,491	.44
159,292 - 164,772	11,286	.45
164,773 - 170,389	11,081	.46
170,390 - 176,147	10,876	.47
176,148 - 182,050	10,670	.48
182,051 - 188,106	10,465	.49
188,107 - 194,319	10,260	.50
194,320 - 200,697	10,055	.51
200,698 - 207,247	9,850	.52
207,248 - 213,975	9,644	.53
213,976 - 220,890	9,439	.54
220,891 - 227,999	9,234	.55
228,000 - 235,311	9,029	.56
235,312 - 242,836	8,824	.57
242,837 - 250,582	8,618	.58
250,583 - 258,560	8,413	.59
258,561 - 266,781	8,208	.60
266,782 - 275,257	8,003	.61
275,258 - 284,000	7,798	.62
284,001 - 293,022	7,592	.63
293,023 - 302,338	7,387	.64
302,339 - 311,963	7,182	.65
311,964 - 321,912	6,977	.66
321,913 - 332,205	6,772	.67
332,206 - 342,857	6,566	.68
342,858 - 353,888	6,361	.69
353,889 - 365,321	6,156	.70
365,322 - 377,178	5,951	.71
377,179 - 389,483	5,746	.72
389,484 - 402,262	5,540	.73
402,263 - 415,544	5,335	.74
415,545 - 429,360	5,130	.75
429,361 - 443,743	4,925	.76
443,744 - 458,730	4,720	.77
458,731 - 474,358	4,514	.78
474,359 - 490,673	4,309	.79
490,674 - 507,719	4,104	.80
507,720 - 525,549	3,899	.81
525,550 - 544,219	3,694	.82
544,220 - 563,789	3,488	.83
563,790 - 584,327	3,283	.84
584,328 - 605,908	3,078	.85
605,909 - 628,614	2,873	.86
628,615 - 652,537	2,668	.87
652,538 - 677,777	2,462	.88

WAC 296-17-880 Table II.

"B" and "W" Values

Maximum Claim Value = \$108,760

Average Death Value = \$81,725

Expected Losses	B	W
2,355 & Under	20,520	0
2,356 - 4,747	20,315	.01
4,748 - 7,175	20,110	.02
7,176 - 9,639	19,904	.03
9,640 - 12,140	19,699	.04
12,141 - 14,681	19,494	.05
14,682 - 17,260	19,289	.06
17,261 - 19,882	19,084	.07
19,883 - 22,544	18,878	.08
22,545 - 25,248	18,673	.09
25,249 - 27,997	18,468	.10
27,998 - 30,791	18,263	.11
30,792 - 33,631	18,058	.12
33,632 - 36,519	17,852	.13
36,520 - 39,455	17,647	.14
39,456 - 42,441	17,442	.15
42,442 - 45,479	17,237	.16
45,480 - 48,570	17,032	.17
48,571 - 51,715	16,826	.18
51,716 - 54,916	16,621	.19
54,917 - 58,175	16,416	.20
58,176 - 61,493	16,211	.21
61,494 - 64,873	16,006	.22
64,874 - 68,315	15,800	.23
68,316 - 71,822	15,595	.24
71,823 - 75,395	15,390	.25
75,396 - 79,037	15,185	.26
79,038 - 82,751	14,980	.27
82,752 - 86,537	14,774	.28
86,538 - 90,398	14,569	.29

Expected Losses	B	W	Class	1982	1983	1984	D-Ratio
677,778 - 704,447	2,257	.89	0502	.4281	.4397	.4075	.377
704,448 - 732,674	2,052	.90	0503	.2681	.2754	.2560	.336
732,675 - 762,599	1,847	.91	0504	.4976	.5112	.4736	.377
762,600 - 794,383	1,642	.92	0505	.5598	.5751	.5326	.383
794,384 - 828,203	1,436	.93	0506	.7171	.7367	.6808	.407
828,204 - 864,265	1,231	.94	0507	.7346	.7546	.6992	.376
864,266 - 902,799	1,026	.95	0508	.7537	.7742	.7167	.387
902,800 - 944,071	821	.96	0509	.6496	.6674	.6227	.291
944,072 - 988,385	616	.97	0510	.5598	.5751	.5326	.383
988,386 - 1,036,092	410	.98	0601	.1863	.1914	.1769	.408
1,036,093 - 1,087,599	205	.99	0602	.1959	.2012	.1865	.377
1,087,600 & over	0	1.00	0603	.3351	.3442	.3190	.377
			0604	.5134	.5275	.4891	.366
			0606	.0945	.0970	.0898	.391
			0607	.1230	.1264	.1168	.404
			0608	.1863	.1914	.1769	.408
			0701	.5174	.5316	.4948	.319
			0803	.1761	.1809	.1674	.388
			0804	.2863	.2941	.2733	.335
			0901	.9565	.9827	.9121	.355
			0902	.2689	.2761	.2564	.355
			1002	.4664	.4792	.4433	.395
			1003	.2733	.2808	.2604	.368
			1004	.2733	.2808	.2604	.368
			1005	1.1533	1.1849	1.0983	.371
			1007	.0364	.0375	.0345	.468
			1101	.2042	.2098	.1933	.441
			1102	.4783	.4913	.4550	.383
			1103	.1580	.1624	.1500	.408
			1104	.2065	.2121	.1959	.415
			1106	.0449	.0461	.0424	.457
			1108	.2138	.2197	.2031	.399
			1109	.4783	.4913	.4550	.383
			1301	.1624	.1668	.1543	.392
			1303	.0871	.0895	.0827	.414
			1304	.0053	.0056	.0051	.395
			1305	.1008	.1035	.0955	.433
			1401	.3546	.3643	.3378	.367
			1404	.2115	.2172	.2013	.373
			1501	.1573	.1616	.1495	.393
			1507	.1309	.1344	.1244	.391
			1701	.9022	.9270	.8636	.307
			1702	.9022	.9270	.8636	.307
			1703	.2353	.2417	.2241	.368
			1704	.2576	.2646	.2448	.394
			1801	.3328	.3418	.3173	.357
			2002	.2716	.2790	.2579	.408
			2003	.1757	.1805	.1668	.411
			2004	.3034	.3117	.2894	.350
			2005	.1433	.1473	.1359	.420
			2007	.1741	.1788	.1662	.338
			2008	.1195	.1228	.1137	.382
			2101	.2000	.2055	.1902	.389
			2102	.1757	.1805	.1668	.411
			2104	.0768	.0790	.0725	.503
			2105	.3034	.3117	.2882	.403
			2201	.1072	.1101	.1014	.445
			2202	.1544	.1586	.1462	.436
			2401	.2557	.2627	.2427	.414

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-880, filed 11/27/85, effective 1/1/86; 84-24-016 (Order 84-23), § 296-17-880, filed 11/28/84, effective 1/1/85; 83-24-017 (Order 83-36), § 296-17-880, filed 11/30/83, effective 1/1/84; 82-24-047 (Order 82-38), § 296-17-880, filed 11/29/82, effective 1/1/83; 81-24-042 (Order 81-30), § 296-17-880, filed 11/30/81, effective 1/1/82; 80-17-016 (Order 80-23), § 296-17-880, filed 11/13/80, effective 1/1/81. Statutory Authority: RCW 51.04.030 and 51.16.035. 79-12-086 (Order 79-18), § 296-17-880, filed 11/30/79, effective 1/1/80. Statutory Authority: RCW 51.04.020(1) and 51.16.035. 78-12-043 (Order 78-23), § 296-17-880, filed 11/27/78, effective 1/1/79; Order 77-27, § 296-17-880, filed 11/30/77, effective 1/1/78; Order 76-36, § 296-17-880, filed 11/30/76; Order 75-38, § 296-17-880, filed 11/24/75, effective 1/1/76; Order 74-40, § 296-17-880, filed 11/27/74, effective 1/1/75; Order 73-22, § 296-17-880, filed 11/9/73, effective 1/1/74.]

WAC 296-17-885 Table III.

**Expected Loss Rates and D-Ratios
Expected Loss Rates in Dollars Per Workman Hour
for Indicated Fiscal Year**

Class	1982	1983	1984	D-Ratio
0101	.5199	.5341	.4957	.355
0102	.3492	.3587	.3325	.370
0103	.4312	.4429	.4095	.402
0104	.3579	.3676	.3421	.326
0105	.4377	.4498	.4176	.349
0106	.8370	.8599	.7974	.365
0107	.3769	.3872	.3589	.369
0108	.4134	.4247	.3928	.399
0109	.6829	.7016	.6531	.318
0201	.9545	.9807	.9110	.344
0202	1.0960	1.1261	1.0497	.302
0206	.4693	.4823	.4512	.256
0301	.2253	.2314	.2131	.455
0302	.6857	.7045	.6551	.332
0306	.2236	.2296	.2122	.406
0307	.2143	.2201	.2041	.371
0401	.8998	.9243	.8564	.376
0402	.5646	.5801	.5393	.336
0403	.6556	.6735	.6279	.301

Workers' Compensation Insurance

296-17-885

Class	1982	1983	1984	D-Ratio	Class	1982	1983	1984	D-Ratio
2903	.3062	.3145	.2901	.429	4201	.2166	.2225	.2062	.370
2904	.3921	.4029	.3741	.345	4301	.3314	.3405	.3133	.457
2906	.1951	.2005	.1849	.435	4302	.3264	.3352	.3093	.433
2908	.3142	.3227	.2995	.356	4303	.3541	.3638	.3360	.417
3101	.3278	.3369	.3137	.311	4304	.2798	.2875	.2657	.407
3102	.2352	.2417	.2243	.358	4305	.5217	.5359	.4952	.410
3103	.2352	.2417	.2243	.358	4401	.1853	.1903	.1759	.409
3104	.2584	.2655	.2466	.346	4402	.2445	.2512	.2334	.345
3105	.3538	.3634	.3362	.395	4404	.1757	.1805	.1668	.411
3301	.3373	.3464	.3190	.454	4501	.0526	.0541	.0502	.332
3302	.2442	.2508	.2315	.426	4502	.0217	.0222	.0206	.360
3303	.1313	.1350	.1245	.432	4503	.0265	.0272	.0251	.426
3309	.1709	.1756	.1624	.396	4504	.0265	.0272	.0251	.426
3401	.1649	.1694	.1565	.403	4601	.2097	.2154	.2009	.298
3402	.1736	.1783	.1649	.404	4802	.0986	.1013	.0935	.419
3403	.0546	.0561	.0519	.389	4803	.1158	.1190	.1093	.479
3404	.2059	.2116	.1951	.434	4804	.2345	.2409	.2224	.421
3405	.0902	.0926	.0858	.380	4805	.1222	.1256	.1156	.450
3406	.0768	.0790	.0729	.429	4806	.0305	.0312	.0287	.453
3407	.1324	.1359	.1261	.366	4807	.5598	.5751	.5326	.383
3408	.0514	.0528	.0492	.327	4808	.1346	.1383	.1274	.446
3409	.0757	.0777	.0716	.440	4809	.0825	.0847	.0779	.460
3501	.1979	.2034	.1872	.454	4810	.0429	.0440	.0405	.447
3503	.1373	.1411	.1297	.472	4811	.1158	.1190	.1093	.479
3505	.2138	.2197	.2031	.399	4812	.0986	.1013	.0935	.419
3506	.2673	.2746	.2552	.340	4901	.0270	.0278	.0258	.351
3508	.1507	.1548	.1424	.463	4902	.0601	.0617	.0570	.426
3601	.0385	.0395	.0364	.439	4903	.0270	.0278	.0258	.351
3602	.0385	.0395	.0364	.439	4904	.0065	.0067	.0062	.467
3603	.2038	.2093	.1929	.444	4905	.1082	.1111	.1021	.487
3604	.3719	.3820	.3538	.382	4906	.0219	.0225	.0207	.439
3605	.1343	.1381	.1278	.389	4907	.0439	.0451	.0417	.387
3606	.2689	.2761	.2564	.355	4908	.0447	.0458	.0424	.399
3701	.0859	.0883	.0816	.388	4909	.0447	.0458	.0424	.399
3702	.2203	.2263	.2091	.412	5001	1.6308	1.6754	1.5557	.349
3706	.0859	.0883	.0816	.388	5002	.1680	.1726	.1593	.424
3707	.1592	.1635	.1509	.430	5003	.5372	.5519	.5124	.352
3708	.0890	.0915	.0843	.441	5004	.2850	.2927	.2705	.411
3801	.1174	.1206	.1118	.369	5101	.3543	.3640	.3364	.408
3802	.0707	.0727	.0669	.450	5102	.5656	.5810	.5374	.397
3803	.0707	.0727	.0669	.450	5103	.4873	.5005	.4640	.371
3805	.0707	.0727	.0669	.450	5104	.2450	.2517	.2330	.388
3806	.0707	.0727	.0669	.450	5106	.2450	.2517	.2330	.388
3808	.0793	.0814	.0752	.421	5107	.1704	.1750	.1618	.405
3809	.0890	.0915	.0843	.441	5108	.3172	.3258	.3021	.368
3901	.1391	.1429	.1321	.409	5109	.2364	.2428	.2245	.400
3902	.2667	.2740	.2534	.403	5201	.1704	.1750	.1618	.405
3903	.3760	.3863	.3574	.391	5204	.6525	.6702	.6173	.450
3904	.2667	.2740	.2534	.403	5205	.3172	.3258	.3021	.368
3905	.0561	.0576	.0528	.509	5206	.1847	.1897	.1760	.358
3906	.2022	.2076	.1920	.402	5207	.0557	.0572	.0527	.437
3909	.0717	.0736	.0676	.481	5208	.3023	.3105	.2879	.369
4002	.2970	.3051	.2828	.373	5209	.2324	.2387	.2209	.398
4101	.0556	.0571	.0526	.439	5301	.0071	.0073	.0067	.411
4103	.1034	.1062	.0980	.431	5305	.0120	.0123	.0114	.403
4104	.0556	.0571	.0526	.439	5306	.0141	.0145	.0134	.404
4107	.0295	.0303	.0280	.403	5307	.0871	.0894	.0825	.433
4108	.0556	.0571	.0526	.439	6103	.0136	.0139	.0128	.423
4109	.0556	.0571	.0526	.439	6104	.1560	.1602	.1484	.381

Class	1982	1983	1984	D-Ratio	Class	1982	1983	1984	D-Ratio
6105	.0909	.0934	.0862	.416	6801	.2817	.2894	.2668	.435
6106	.0909	.0934	.0862	.416	6802	.1580	.1623	.1497	.436
6107	.0680	.0698	.0649	.337	6803	1.4564	1.4967	1.4052	.213
6108	.1757	.1804	.1652	.518	6804	.0926	.0952	.0884	.359
6109	.0158	.0162	.0150	.465	6809	.7411	.7611	.6981	.500
6201	.0685	.0704	.0651	.401	6902	.4621	.4748	.4427	.296
6202	.2825	.2902	.2686	.389	6903	1.8297	1.8799	1.7510	.311
6203	.0520	.0534	.0495	.388	6904	.1408	.1447	.1340	.382
6204	.0570	.0586	.0539	.456	6905	.1408	.1447	.1340	.382
6205	.0570	.0586	.0539	.456	6907	.4885	.5018	.4651	.373
6206	.0570	.0586	.0539	.456	6908	.1965	.2019	.1864	.425
6207	.3226	.3314	.3058	.426	6909	.0339	.0347	.0322	.383
6208	.1121	.1152	.1070	.349	7101	.0182	.0187	.0173	.392
6209	.0792	.0813	.0749	.456	7102	5.36*	5.50*	5.06*	.458
6301	.0508	.0521	.0485	.339	7103	.0812	.0834	.0772	.388
6302	.0716	.0735	.0681	.392	7104	.0161	.0166	.0154	.397
6303	.0191	.0197	.0182	.402	7105	.1173	.1205	.1108	.473
6304	.0542	.0557	.0516	.356	7106	.2074	.2131	.1967	.414
6305	.0243	.0249	.0230	.421	7107	.2898	.2977	.2756	.387
6306	.0764	.0784	.0725	.419	7108	.7022	.7213	.6661	.418
6307	.0325	.0333	.0308	.455	7109	1.8997	1.9515	1.8054	.395
6308	.0169	.0173	.0160	.362	7201	.0855	.0878	.0806	.496
6309	.0404	.0415	.0381	.452	7202	.0221	.0228	.0211	.363
6401	.0325	.0333	.0308	.455	7203	—	—	.0139	.393
6402	.0991	.1017	.0939	.428	7301	.1626	.1671	.1541	.429
6403	.0591	.0607	.0558	.483	7302	.1613	.1656	.1524	.466
6404	.0209	.0215	.0200	.383	7307	.1588	.1631	.1496	.500
6405	.1762	.1810	.1669	.433	7308	.0781	.0803	.0743	.395
6406	.0325	.0333	.0308	.455	7309	—	—	.0480	.448
6407	.0767	.0788	.0726	.455					
6408	.1310	.1345	.1245	.397					
6409	.1958	.2012	.1867	.353					
6501	.0175	.0181	.0166	.444					
6502	.0062	.0063	.0059	.435					
6503	.0540	.0555	.0518	.253					
6504	.0706	.0726	.0666	.499					
6505	.0763	.0783	.0723	.418					
6506	.0187	.0192	.0177	.379					
6507	.1282	.1318	.1215	.429					
6508	.1282	.1318	.1215	.429					
6509	.0711	.0730	.0670	.486					
6601	.0998	.1025	.0947	.423					
6602	.1860	.1911	.1763	.422					
6603	.0972	.0999	.0920	.447					
6604	.0308	.0316	.0293	.384					
6605	.0812	.0835	.0770	.414					
6607	.0559	.0574	.0530	.410					
6608	.1268	.1304	.1206	.390					
6609	.6942	.7130	.6538	.506					
6704	.0725	.0745	.0689	.396					
6705	.2021	.2076	.1906	.486					
6706	.1142	.1173	.1087	.386					
6707	3.43*	3.52*	3.22*	.541					
6708	4.0644	4.1756	1.3131	.399					
6709	.0505	.0519	.0478	.475					

*Daily expected loss rate

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-885, filed 11/27/85, effective 1/1/86; 85-06-026 (Order 85-7), § 296-17-885, filed 2/28/85, effective 4/1/85; 84-24-016 (Order 84-23), § 296-17-885, filed 11/28/84, effective 1/1/85; 83-24-017 (Order 83-36), § 296-17-885, filed 11/30/83, effective 1/1/84; 82-24-047 (Order 82-38), § 296-17-885, filed 11/29/82, effective 1/1/83; 81-24-042 (Order 81-30), § 296-17-885, filed 11/30/81, effective 1/1/82; 80-17-016 (Order 80-23), § 296-17-885, filed 11/13/80, effective 1/1/81. Statutory Authority: RCW 51.04.030 and 51.16.035. 79-12-086 (Order 79-18), § 296-17-885, filed 11/30/79, effective 1/1/80. Statutory Authority: RCW 51.04.020(1) and 51.16.035. 78-12-043 (Order 78-23), § 296-17-885, filed 11/27/78, effective 1/1/79, effective 1/1/80. Order 77-27, § 296-17-885, filed 11/30/77, effective 1/1/78; Emergency Order 77-25, § 296-17-885, filed 12/1/77; Order 77-10, § 296-17-885, filed 5/31/77; Order 76-36, § 296-17-885, filed 11/30/76; Order 76-18, § 296-17-885, filed 5/28/76, effective 7/1/76; Order 75-38, § 296-17-885, filed 11/24/75, effective 1/1/76; Order 74-40, § 296-17-885, filed 11/27/74, effective 1/1/75; Order 73-22, § 296-17-885, filed 11/9/73, effective 1/1/74.]

WAC 296-17-890 Table IV.

Rates Effective
January 1, 1986Maximum experience modifications for firms with no
compensable accidents:

Expected Loss Range	Maximum Experience Modification	Class	Accident Fund Base Rate	Medical Aid Fund Rate
1-1,029	.90	0101	.9173	.5169
1,030-1,101	.89	0102	.6174	.4560
1,102-1,179	.88	0103	.7655	.6175
1,180-1,263	.87	0104	.6290	.3849
1,264-1,355	.86	0105	.7717	.6070
1,356-1,454	.85	0106	1.4788	.8458
1,455-1,562	.84	0107	.6661	.4174
1,563-1,679	.83	0108	.7336	.4215
1,680-1,807	.82	0109	1.1993	.8514
1,808-1,946	.81	0201	1.6817	.9508
1,947-2,098	.80	0202	1.9203	1.1604
2,099-2,264	.79	0206	.8173	.5813
2,265-2,445	.78	0301	.4026	.3279
2,446-2,644	.77	0302	1.2063	.5353
2,645-2,861	.76	0306	.3970	.3411
2,862-3,100	.75	0307	.3789	.3782
3,101-3,362	.74	0401	1.5919	1.0394
3,363-3,651	.73	0402	.9938	.9604
3,652-3,969	.72	0403	1.1485	.6861
3,970-4,319	.71	0502	.7586	.4606
4,320-4,706	.70	0503	.4718	.4490
4,707-5,135	.69	0504	.8805	.5379
5,136-5,609	.68	0505	.9137	.6347
5,610-6,136	.67	0506	1.1739	.8218
6,137-6,721	.66	0507	1.1977	.7983
6,722 and over	.65	0508	1.3353	.8480
		0509	1.1366	.7217
		0510	.9137	.6347
		0601	.3309	.2903
		0602	.3466	.2647
		0603	.5929	.3005
		0604	.9071	.7812
		0606	.1674	.1637
		0607	.2185	.1876
		0608	.3309	.2903
		0701	.9087	.7924
		0803	.3120	.2287
		0804	.5037	.5712
		0901	1.6875	.5428
		1002	.8273	.4490
		1003	.4832	.3049
		1004	.4832	.3049
		1005	2.0393	1.1156
		1007	.0653	.0798
		1101	.3643	.2959
		1102	.8469	.5299
		1103	.2808	.2331
		1104	.3672	.3199
		1106	.0801	.1050
		1108	.3794	.3178
		1109	.8469	.5299
		1301	.2879	.2486
		1303	.1549	.1802

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-890, filed 11/27/85, effective 1/1/86; 84-24-016 (Order 84-23), § 296-17-890, filed 11/28/84, effective 1/1/85; 83-24-017 (Order 83-36), § 296-17-890, filed 11/30/83, effective 1/1/84; 82-24-047 (Order 82-38), § 296-17-890, filed 11/29/82, effective 1/1/83; 81-24-042 (Order 81-30), § 296-17-890, filed 11/30/81, effective 1/1/82; 80-17-016 (Order 80-23), § 296-17-890, filed 11/13/80, effective 1/1/81. Statutory Authority: RCW 51.04.030 and 51.16.035. 79-12-086 (Order 79-18), § 296-17-890, filed 11/30/79, effective 1/1/80.]

WAC 296-17-895 Industrial insurance accident fund base rates and medical aid rates by class of industry. Industrial insurance accident fund base rates and medical aid rates by class of industry shall be as set forth below.

Rates Effective January 1, 1986			Rates Effective January 1, 1986		
Class	Accident Fund Base Rate	Medical Aid Fund Rate	Class	Accident Fund Base Rate	Medical Aid Fund Rate
1304	.0096	.0154	3605	.2381	.2224
1305	.1796	.2067	3606	.4743	.3868
1401	.6267	.6325	3701	.1522	.1652
1404	.3740	.2093	3702	.3916	.2700
1501	.2789	.2519	3707	.2836	.2349
1507	.2320	.1935	3708	.1589	.1483
1701	1.5819	.7030	3801	.2075	.1957
1702	1.5819	.7030	3802	.1264	.1179
1703	.4158	.2635	3808	.1411	.1315
1704	.4567	.3969	3901	.2471	.1790
1801	.5873	.5280	3902	.4736	.3360
2002	.4825	.3239	3903	.6666	.7020
2003	.3123	.2536	3905	.1009	.1278
2004	.5349	.5070	3906	.3588	.3079
2005	.2551	.2577	3909	.1286	.1593
2007	.3064	.2633	4002	.5252	.3237
2008	.2116	.1646	4101	.0990	.1090
2101	.3544	.3189	4103	.1843	.2054
2102	.3123	.2536	4107	.0524	.0633
2104	.1382	.1819	4108	.0990	.1090
2105	.5387	.4375	4109	.0990	.1090
2201	.1913	.1464	4201	.3828	.2498
2202	.2752	.1768	4301	.5925	.4942
2401	.4547	.3667	4302	.5817	.4964
2903	.5454	.4569	4303	.6299	.6048
2904	.6843	.4516	4304	.4970	.3650
2906	.3478	.3020	4305	.9271	.4991
2908	.5543	.4643	4401	.3292	.2498
3101	.5752	.3788	4402	.4308	.3295
3102	.4152	.2705	4404	.3123	.2536
3103	.4152	.2705	4501	.0926	.0847
3104	.4554	.2998	4502	.0382	.0293
3105	.6275	.5078	4504	.0472	.0703
3301	.6028	.4788	4601	.3673	.5125
3302	.4348	.3488	4802	.1754	.1470
3303	.2341	.2559	4803	.2077	.2489
3309	.3031	.3373	4804	.4172	.3323
3401	.2927	.2536	4805	.2184	.1961
3402	.3083	.3083	4806	.0544	.0586
3403	.0968	.0580	4808	.2403	.2794
3404	.3672	.3178	4809	.1475	.1328
3405	.1596	.1342	4810	.0765	.0748
3406	.1369	.2021	4811	.2077	.2489
3407	.2339	.2349	4812	.1754	.1470
3408	.0904	.0870	4901	.0476	.0620
3409	.1349	.1435	4902	.1069	.1003
3501	.3538	.3857	4903	.0476	.0620
3503	.2459	.2698	4904	.0118	.0134
3506	.4707	.2994	4905	.1942	.1628
3508	.2697	.2698	4906	.0391	.0410
3602	.0686	.0699	4907	.0777	.0630
3603	.3638	.3640	4908	.0793	.1411
3604	.6585	.4611	4909	.0793	.1411

Workers' Compensation Insurance

296-17-895

Rates Effective
January 1, 1986Rates Effective
January 1, 1986

Class	Rates Effective January 1, 1986		Class	Rates Effective January 1, 1986	
	Accident Fund Base Rate	Medical Aid Fund Rate		Accident Fund Base Rate	Medical Aid Fund Rate
5001	2.8752	1.6948	6503	.0939	.0432
5002	.2991	.3017	6504	.1270	.1743
5003	.9474	.4241	6505	.1357	.1181
5004	.5065	.5406	6506	.0331	.0338
5101	.6294	.4727	6508	.2285	.2158
5102	1.0034	.7765	6509	.1275	.1344
5103	.8614	.5999	6601	.1776	.1669
5106	.4341	.4392	6602	.3310	.2291
5108	.5605	.5122	6603	.1737	.1546
5109	.4195	.3078	6604	.0545	.0483
5201	.3026	.2468	6605	.1444	.1425
5204	1.1653	.4432	6607	.0992	.1058
5206	.3259	.2749	6608	.2249	.1427
5207	.0992	.1058	6609	1.2487	1.2925
5208	.5343	.5376	6704	.1286	.1338
5209	.4124	.4125	6705	.3627	.4622
5301	.0125	.0148	6706	.2024	.2026
5305	.0213	.0218	6707	6.20*	9.85*
5306	.0250	.0189	6708	1.4425	1.2045
5307	.1552	.1253	6709	.0906	.1154
6103	.0242	.0304	6801	.5022	.2792
6104	.2761	.2224	6802	.2817	.2995
6105	.1617	.1731	6803	2.5217	1.6950
6107	.1196	.1192	6804	.1636	.1729
6108	.3164	.2530	6809	1.3320	2.2747
6109	.0283	.0256	6901	-	.0617
6201	.1216	.1205	6902	.8090	.3933
6202	.5007	.3374	6903	3.2097	2.9630
6203	.0922	.0904	6904	.2495	.2183
6204	.1019	.1160	6905	.2495	.2183
6205	.1019	.1160	6906	-	.2183
6206	.1019	.1160	6907	.8637	.6291
6207	.5744	.8664	6908	.3499	.2356
6208	.1976	.1791	6909	.0600	.0597
6209	.1475	.2161	7101	.0323	.0281
6301	.0894	.0653	7102	9.58*	29.77*
6302	.1269	.0942	7103	.1438	.1215
6303	.0340	.0304	7104	.0287	.0229
6304	.0956	.0800	7105	.2103	.1597
6305	.0431	.0529	7106	.3687	.2943
6306	.1359	.1686	7107	.5135	.4510
6308	.0297	.0206	7108	1.2490	.8698
6309	.0721	.0937	7109	3.3693	2.4258
6402	.1764	.1341	7201	.1536	.1266
6403	.1061	.1122	7202	.0391	.0325
6404	.0371	.0425	7203	.0728	.0631
6405	.3140	.3086	7204	-	-
6406	.0581	.0597	7301	.2898	.3366
6407	.1371	.1333	7302	.2886	.3378
6408	.2324	.2582	7307	.2853	.3411
6409	.3454	.3746	7308	.1386	.1355
6501	.0313	.0281	7309	.0906	.1154
6502	.0110	.0135			

*Daily rate. The daily rate shall be paid in full on any person for any calendar day in which any duties are performed that are incidental to the profession of the worker.

[Statutory Authority: RCW 51.16.035. 85-24-032 (Order 85-33), § 296-17-895, filed 11/27/85, effective 1/1/86; 85-13-046 (Order 85-13), § 296-17-895, filed 6/17/85; 85-06-026 (Order 85-7), § 296-17-895, filed 2/28/85, effective 4/1/85; 84-24-016 (Order 84-23), § 296-17-895, filed 11/28/84, effective 1/1/85. Statutory Authority: RCW 51.04.020(1). 84-12-048 (Order 84-12), § 296-17-895, filed 6/1/84. Statutory Authority: RCW 51.16.035. 83-24-017 (Order 83-36), § 296-17-895, filed 11/30/83, effective 1/1/84; 82-24-047 (Order 82-38), § 296-17-895, filed 11/29/82, effective 1/1/83; 81-24-042 (Order 81-30), § 296-17-895, filed 11/30/81, effective 1/1/82; 81-04-024 (Order 81-02), § 296-17-895, filed 1/30/81; 80-17-016 (Order 80-23), § 296-17-895, filed 11/13/80, effective 1/1/81. Statutory Authority: RCW 51.04.030 and 51.16.035. 79-12-086 (Order 79-18), § 296-17-895, filed 11/30/79, effective 1/1/80. Statutory Authority: RCW 51.04.020(1) and 51.16.035. 78-12-043 (Order 78-23), § 296-17-895, filed 11/27/78, effective 1/1/79; Order 77-27, § 296-17-895, filed 11/30/77, effective 1/1/78; Emergency Order 77-25, § 296-17-895, filed 12/1/77; Order 77-10, § 296-17-895, filed 5/31/77; Order 76-36, § 296-17-895, filed 11/30/76; Order 76-18, § 296-17-895, filed 5/28/76, effective 7/1/76; Order 75-38, § 296-17-895, filed 11/24/75, effective 1/1/76; Order 75-28, § 296-17-895, filed 8/29/75, effective 10/1/75; Order 74-40, § 296-17-895, filed 11/27/74, effective 1/1/75; Order 73-22, § 296-17-895, filed 11/9/73, effective 1/1/74.]

WAC 296-17-904 Definitions. The definitions in this section shall apply throughout WAC 296-17-905 through 296-17-91902.

(1) "Coverage period" means the period beginning July 1 and ending June 30.

(2) "Group" means those members of an association who have elected to have a group dividend and/or retrospective premium calculated based on the combined premium and incurred loss data of the participants, and have satisfactorily complied with eligibility requirements for doing so.

(3) "Premium" means only that portion of the money collected from an employer for worker's compensation (not to include any money paid in penalties or security deposits), which is deposited in the accident fund.

(4) "Standard premium" for a particular coverage period means premium collected or due for insurance coverage provided during the period, prior to any adjustments under a dividend or retrospective rating plan.

(5) "Incurred losses" for a coverage period means the estimated ultimate cost to the accident fund of claims arising from incidents occurring during the coverage period, subject to the special evaluation methods prescribed in WAC 296-17-915.

(6) "Loss development factor" means an actuarially determined factor which is multiplied times individual

case basis estimates of claim costs to produce incurred losses for a firm or group of firms during a coverage period. Loss development factors allow for reopenings, aggravations, and any other individually unpredictable contingencies which may affect claim costs based on past experience of the accident fund as a whole.

(7) "Loss ratio" means incurred losses divided by standard premium.

(8) "Dividend" is a partial refund of standard premium based on a firm's standard premium and loss ratio for the coverage period.

(9) "Retrospective premium" is a premium determined after a coverage period has ended, based on a firm's standard premium, incurred losses, and other pre-selected parameters for the coverage period.

(10) "Retrospective premium adjustment" is an additional assessment or refund of premium owing to an employer's retrospective premium as of a given evaluation date being more or less than the premium previously paid for the coverage period.

(11) "Performance adjustment factor" means an actuarially determined factor which is multiplied times incurred losses prior to application of the retrospective rating formula, to produce "adjusted incurred losses." This adjustment will produce net retrospective premium credits for participating risks in the aggregate when they have combined experience which is more favorable than total state fund experience for the same coverage period. Conversely, this adjustment will produce net retrospective premium penalties for participating risks when their combined experience is more adverse than total state fund experience for the same coverage period. The purpose of the performance adjustment factor is to retain a consistent economic incentive for those employers to improve their accident cost experience while participating in these plans. [Statutory Authority: RCW 51.16.035. 85-06-025 (Order 85-8), § 296-17-904, filed 2/28/85, effective 7/1/85; 81-04-024 (Order 81-02), § 296-17-904, filed 1/30/81.]

WAC 296-17-905 Dividends. Periodically, the department shall determine the total liability existing against the accident fund. If, after such determination, the department finds the accident fund, aside from the reserves deemed actuarially necessary according to recognized insurance principles, contains a surplus, the director, in his/her discretion may declare a dividend to be paid to, or credited to the accounts of, employers who were insured with the department during all or part of the period for which the dividend is declared, according to a uniform formula to be promulgated by the department. Any dividends so declared shall give due consideration to the solvency of the accident fund, not be unfairly discriminatory, and not be promised in advance of such declaration. An employer in default when the dividend is declared shall not be eligible to receive payment as provided by this section but credit will be made towards reducing the employer's obligation to the department. [Statutory Authority: RCW 51.16.035. 84-06-024 (Order 84-2), § 296-17-905, filed 2/29/84, effective 7/1/84; 81-04-024 (Order 81-02), § 296-17-

905, filed 1/30/81; Order 73-22, § 296-17-905, filed 11/9/73, effective 1/1/74.]

WAC 296-17-910 Qualifications for employer groups for workers' compensation insurance. The department may insure the workers' compensation obligations of employers as a group, provided the following conditions are met:

(1) All the employers in the group are members of an organization that has been in existence for at least two years.

(2) The organization was formed for a purpose other than that of obtaining workers' compensation coverage.

(3) The business of the employers in the organization is substantially similar, taking into consideration the nature of the work being performed by workers of such employers such that the group comprises substantially homogeneous risks.

(4) The employers in the group constitute at least fifty percent of the total eligible employers in such organization. No groups with less than one hundred participating members will be formed unless the aggregate premium of those members is expected to exceed \$150,000 during the coverage period.

(5) The formation and operation of the group program in the organization will substantially improve accident prevention and claims handling for the employers in the group.

Each employer seeking to enroll in a group for workers' compensation insurance must have an industrial insurance account in good standing with the department such that at the time the agreement is processed no outstanding premiums, penalties or assessments are due and quarterly reporting of payroll has been made in accordance with WAC 296-17-310.

The above conditions do not pertain to groupings or combination of persons or risks by way of common ownership or common use and control for experience rating purposes. Combinations for experience rating are governed by WAC 296-17-873.

Final determination of group eligibility under this section rests with the department subject to review under chapter 51.52 RCW.

In providing employer group plans under this rule, the department may consider an employer group as a single employing entity for purposes of dividends or retrospective rating. No employer will be a member of more than one group for the purposes of insuring their workers' compensation obligations. [Statutory Authority: RCW 51.16.035, 85-06-025 (Order 85-8), § 296-17-910, filed 2/28/85, effective 7/1/85; 84-06-024 (Order 84-2), § 296-17-910, filed 2/29/84, effective 7/1/84; 82-05-019 (Order 82-5), § 296-17-910, filed 2/10/82; 81-04-024 (Order 81-02), § 296-17-910, filed 1/30/81; Order 73-22, § 296-17-910, filed 11/9/73, effective 1/1/74.]

WAC 296-17-911 Group dividends. Group dividends will be calculated provided:

(1) Employers qualify as a group as defined by WAC 296-17-910.

(2) Group submits a satisfactorily completed:

(a) Application for group dividend plan no later than April 30 for the coverage period beginning the following July 1;

(b) Employer's authorization for release of insurance data and group membership enrollment application for each employer account to be enrolled no later than June 15;

(c) Group dividend agreement no later than June 15.

(3) A dividend is declared under provisions of WAC 296-17-905.

Employers associated with the group at any time during the term of the group dividend agreement will remain parties to the group dividend agreement for the balance of its term.

Members of the organization or association which do not elect to participate in the group dividend at the inception of the agreement shall not become participating members in the group during the term of the agreement.

Each employer included as a group member in the group dividend agreement will maintain an individual account with the department and will continue to pay quarterly premiums based on assigned risk classification(s) and individual experience rating.

The department will withhold any member's pro rata share from the group's dividend and credit the employer's industrial insurance account when premiums, penalties, or assessments are owing the department.

Dividends will be calculated in accordance with WAC 296-17-905 and are subject to WAC 296-17-907 and 296-17-915.

The payment of the group dividend will be made by the department to the association and shall be distributed to the individual group members by the association. [Statutory Authority: RCW 51.16.035, 85-06-025 (Order 85-8), § 296-17-911, filed 2/28/85, effective 7/1/85; 84-06-024 (Order 84-2), § 296-17-911, filed 2/29/84, effective 7/1/84; 83-05-018 (Order 83-4), § 296-17-911, filed 2/9/83, effective 7/1/83; 82-05-019 (Order 82-5), § 296-17-911, filed 2/10/82; 81-04-024 (Order 81-02), § 296-17-911, filed 1/30/81.]

WAC 296-17-913 Qualifications for employer participation in a retrospective rating plan. The department may enroll interested employers in a retrospective rating plan as a means of insuring their workers' compensation obligations provided the following conditions are met:

(1) The employer submits a satisfactorily completed retrospective rating plan agreement for each employer account to be enrolled.

(2) The employer has an industrial insurance account in good standing with the department such that at the time the agreement is processed no outstanding premium, penalties or assessments are due and quarterly reporting of payroll has been made in accordance with WAC 296-17-310.

(3) The employer may be required to post a surety bond or other security deposit separate from the cash deposit required for establishing an industrial insurance account with the department:

(a) The employer's surety bond must be on the prescribed forms authorized by the department;

(b) The employer's surety bond shall be secured in one thousand dollar increments provided further that if the estimated maximum premium falls within two increment ranges, a surety bond at the higher level increment shall be obtained;

(c) The employer's surety bond shall remain in full force and effect for the period required retrospective premium calculations are made.

Such surety bond or security deposit would be sufficient to cover the difference between the employer's estimated standard premium and the maximum premium due under the retrospective rating plan. Past reporting data and current rate levels will be used to determine the estimated standard premium and maximum percentage retrospective premium due under the plan.

Final determination as to the employer's eligibility under this section and financial ability to assume the responsibilities under the retrospective rating plan rests with the department subject to review under chapter 51-.52 RCW. [Statutory Authority: RCW 51.16.035. 85-06-025 (Order 85-8), § 296-17-913, filed 2/28/85, effective 7/1/85; 84-06-024 (Order 84-2), § 296-17-913, filed 2/29/84, effective 7/1/84; 82-05-019 (Order 82-5), § 296-17-913, filed 2/10/82; 81-04-024 (Order 81-02), § 296-17-913, filed 1/30/81.]

WAC 296-17-914 Retrospective rating formula. Employers who elect to have their premium adjusted under a retrospective rating plan must submit an application on a form provided by the department no later than June 15 for the coverage period beginning the following July 1. The employer must preselect a "maximum premium ratio" from Plan A or Plan B.

The employer's retrospective premium shall be calculated from the formula:

Retrospective Premium =

(Basic Premium Ratio x Standard Premium)

+

(Loss Conversion Factor x Adjusted Incurred Losses)

In the above formula, the basic premium ratio and loss conversion factor are taken from PLAN A (WAC 296-17-91901) or PLAN B (WAC 296-17-91902) based on the employer's standard premium and preselected maximum premium ratio. Adjusted incurred losses equal incurred losses times the performance adjustment factor applicable to the coverage period. Evaluation of incurred losses will be done according to the methods prescribed in WAC 296-17-915. The maximum retrospective premium is the product of the maximum premium ratio times the employer's standard premium. In the event that the retrospective premium formula produces a value greater than the maximum premium, the retrospective premium shall be reduced to the maximum premium.

Under Plan A, a firm may elect to forego the protection of a maximum premium ratio if its financial condition is sufficiently strong and stable so that it could

qualify as a self-insurer under the department's guidelines for certification of self-insurers. The basic premium ratio effective for the coverage period beginning July 1, 1985, and ending June 30, 1986, will be .051 if the firm selects and qualifies for an unlimited maximum premium. [Statutory Authority: RCW 51.16.035. 85-06-025 (Order 85-8), § 296-17-914, filed 2/28/85, effective 7/1/85; 84-06-024 (Order 84-2), § 296-17-914, filed 2/29/84, effective 7/1/84; 83-05-018 (Order 83-4), § 296-17-914, filed 2/9/83, effective 7/1/83; 82-05-019 (Order 82-5), § 296-17-914, filed 2/10/82; 81-04-024 (Order 81-02), § 296-17-914, filed 1/30/81.]

WAC 296-17-915 Evaluation of incurred losses dividend and retrospective rating plans. The initial evaluation date for each claim arising from incidents occurring during the coverage period shall be approximately twelve months following the end of the coverage period. Each subsequent annual incurred loss evaluation under the retrospective rating plan shall be approximately twelve months following the preceding evaluation date.

The estimated cost of each claim shall include all payments made as of the valuation date and may also include a reserve for future payments consistent with the following evaluation methods applicable to experience rating:

(1) Retroactive adjustments - revision of losses between valuation dates

No claim value shall be revised between valuation dates and no retroactive adjustment of a retrospective premium adjustment shall be made because of dispute concerning the judgment of the claims examiner or because of subsequent developments except as specifically provided in the following cases:

(a) In cases where loss values are included or excluded through mistake other than error of judgment;

(b) In cases where a third party recovery is made;

(c) In cases where the claim qualifies as a second injury claim under the provisions of RCW 51.16.120;

(d) In cases where a claim is officially closed and is determined to be noncompensable.

(2) Third party recovery

In the event of a third party recovery on a claim, the employer shall be charged for a portion of the actual loss amount, gross of such recovery, established on the claim. This portion shall be calculated at the time the recovery is made, and shall be determined by taking the ratio of the total cost of the claim, including attorneys' fees, after recovery, to the total cost of the claim before recovery. If the claim is open at the time the recovery is made, then costs before and after recovery may include an allowance for future claim payments.

(3) Second injury claims

The value of any claim which becomes eligible for second injury relief under the provisions of RCW 51.16.120, as now or hereafter amended, shall be reduced by the percentage of relief granted.

The incurred losses for each employer shall be determined by multiplying the individual claim cost estimates by loss development factors, and adding the resulting

developed losses for all the employer's claims. The following special procedures will be used for making individual claim cost estimates:

Fatal claims – retrospective rating plan

Each fatal claim shall include all payments made as of the valuation date and a pension reserve, if any, based on the annuity value at the time the pension is awarded. Pension costs will not be reevaluated based on events after the pension has been awarded.

Fatal claims – dividend plan

Each fatal claim shall be assigned the "average death value," said value to be the average incurred cost for all fatal claims occurring during the coverage period.

Permanent total claims

Pension costs for permanent total injuries will be based on the annuity value at the time that the pension is awarded. Pension costs will not be reevaluated based on events after the pension has been awarded.

Occupational disease claims

The cost of any occupational disease claim paid from the accident fund and arising from exposure to the disease hazard under two or more employers, shall be prorated to each period of employment. Each employer's share of the claim cost shall be assigned to the coverage period during which the employer last employed the claimant under conditions of injurious exposure, provided the employer's share is at least ten percent of the total claim cost. [Statutory Authority: RCW 51.16.035. 85-06-025 (Order 85-8), § 296-17-915, filed 2/28/85, effective 7/1/85; 83-05-018 (Order 83-4), § 296-17-915, filed 2/9/83, effective 7/1/83; 82-05-019 (Order 82-5), § 296-17-915, filed 2/10/82; 81-04-024 (Order 81-02), § 296-17-915, filed 1/30/81.]

WAC 296-17-916 Retrospective premium adjustments—Due and payable. The initial retrospective premium adjustment will be calculated approximately twelve months from the close of the coverage period and annually thereafter for a period of four years. Provided a request is made within ninety days following promulgation of the fifth and final required retrospective premium adjustment by either the employer or department up to two subsequent annual retrospective premium adjustments on the coverage period will be made. The additional adjustments will be identified as the sixth and seventh adjustments and must be requested and made in succession.

Retrospective premium adjustments become due or payable within sixty days of notification of amount. Re-evaluation of incurred losses or premium audits will not delay retrospective premium adjustment payments. For employers participating on an individual retrospective rating plan, no retrospective premium adjustment refund check will be written for less than ten dollars. In lieu of refund checks, retrospective premium adjustments of less than ten dollars will be credited to the employer's industrial insurance account.

The department will withhold any member's pro rata share from the group's retrospective premium adjustment refund and credit the employer's industrial insurance account when premiums, penalties, or assessments

are owing the department. For employers participating in an individual retrospective rating plan, retrospective premium adjustment refunds will be credited to the employer's industrial insurance account when premiums, penalties, or assessments are owing the department. [Statutory Authority: RCW 51.16.035. 85-06-025 (Order 85-8), § 296-17-916, filed 2/28/85, effective 7/1/85; 84-06-024 (Order 84-2), § 296-17-916, filed 2/29/84, effective 7/1/84; 83-05-018 (Order 83-4), § 296-17-916, filed 2/9/83, effective 7/1/83; 81-04-024 (Order 81-02), § 296-17-916, filed 1/30/81.]

WAC 296-17-917 Qualifications for employer group participation in retrospective rating plan. The department may enroll interested groups in the retrospective rating plan provided:

(1) Employers qualify as a group as defined by WAC 296-17-910.

(2) Employers have industrial insurance accounts in good standing with the department such that at the time the agreement is processed no outstanding premium, penalties, or assessments are due and quarterly reporting of payroll has been made in accordance with WAC 296-17-310.

(3) Group submits a satisfactorily completed:

(a) Application for group retrospective rating plan no later than April 30 for the coverage period beginning the following July 1;

(b) Employer's authorization for release of insurance data and group membership enrollment application for each employer account to be enrolled by June 15;

(c) Group retrospective rating plan agreement by June 15.

(4) The group may be required to post a surety bond or other security deposit separate from the individual employer's cash deposits required for establishing industrial insurance accounts with the department:

(a) The group's surety bond must be on the prescribed forms authorized by the department;

(b) The group's surety bond shall be secured in one thousand dollar increments provided further that if the group's estimated maximum premium due falls within two increment ranges, a surety bond at the higher level increment shall be obtained;

(c) The group's surety bond shall remain in force and effect for the period required retrospective premium calculations are made.

The amount of such surety bond or other security deposit, if required, may be fixed by the department in any amount equal to or less than the difference between the group's estimated standard premium and the maximum premium due under the retrospective rating plan. Past reporting data and current rate levels will be used to determine the estimated standard premium and maximum percentage retrospective premium due under the plan.

Each employer included as a group member in the group retrospective rating plan agreement will maintain an individual account with the department and will continue to pay quarterly premiums based on assigned risk classification(s) and individual experience rating.

Employers associated with the group at any time during the term of the group retrospective rating plan agreement will remain parties to the agreement for the balance of its term.

Members of the organization or association which do not elect to participate in the group retrospective rating plan at the inception of the agreement shall not become participating members in the group during the term of the agreement.

Final determination of an employer's eligibility to participate in a group plan under this section rests with the department subject to review under chapter 51.52 RCW.

The payment of the group retrospective premium adjustment will be made to or collected from the association. The distribution to the individual group members or collection from the individual group members will be done by the association.

Group retrospective premium adjustment will be calculated according to WAC 296-17-914 and is subject to WAC 296-17-915 and 296-17-916. [Statutory Authority: RCW 51.16.035. 85-06-025 (Order 85-8), § 296-17-917, filed 2/28/85, effective 7/1/85; 84-06-024 (Order 84-2), § 296-17-917, filed 2/29/84, effective 7/1/84; 83-05-018 (Order 83-4), § 296-17-917, filed 2/9/83, effective 7/1/83; 82-05-019 (Order 82-5), § 296-17-917, filed 2/10/82; 81-04-024 (Order 81-02), § 296-17-917, filed 1/30/81.]

WAC 296-17-918 Limitation of liability indemnification. With the exception of the required authorization for release of insurance data and group membership enrollment application for each employer account to be enrolled, the department disclaims interest in contracts executed between employer groups and participating group members. The department neither approves nor disapproves of any language contained therein and shall be held harmless for misrepresentation of fact(s) or errors of omission or commission stated in the terms of said contract. The department is released and exempt from liability for any dispute or cause of action between an employer group and participating group members or amongst participating group members arising under the contract. [Statutory Authority: RCW 51.16.035. 84-06-024 (Order 84-2), § 296-17-918, filed 2/29/84, effective 7/1/84.]

WAC 296-17-919 Table I.

RETROSPECTIVE RATING PLANS A and B
STANDARD PREMIUM SIZE RANGES

Effective for the coverage period July 1, 1985, through June 30, 1986

Size Group Number	Standard Premium Range
84	\$ 3,230 - \$ 3,639
83	3,640 - 4,109
82	4,110 - 4,639
81	4,640 - 5,239

Size Group Number	Standard Premium Range
80	5,240 - 5,919
79	5,920 - 6,629
78	6,630 - 7,259
77	7,260 - 7,879
76	7,880 - 8,549
75	8,550 - 9,259
74	9,260 - 9,929
73	9,930 - 10,599
72	10,600 - 11,399
71	11,400 - 12,199
70	12,200 - 13,099
69	13,100 - 13,999
68	14,000 - 15,099
67	15,100 - 16,199
66	16,200 - 17,399
65	17,400 - 18,599
64	18,600 - 19,999
63	20,000 - 21,399
62	21,400 - 22,999
61	23,000 - 24,599
60	24,600 - 26,399
59	26,400 - 28,399
58	28,400 - 30,399
57	30,400 - 32,599
56	32,600 - 34,999
55	35,000 - 37,499
54	37,500 - 40,199
53	40,200 - 43,099
52	43,100 - 46,199
51	46,200 - 49,599
50	49,600 - 53,099
49	53,100 - 56,999
48	57,000 - 61,099
47	61,100 - 65,599
46	65,600 - 70,299
45	70,300 - 75,399
44	75,400 - 80,999
43	81,000 - 87,299
42	87,300 - 93,999
41	94,000 - 100,999
40	101,000 - 108,999
39	109,000 - 117,999
38	118,000 - 126,999
37	127,000 - 136,999
36	137,000 - 147,999
35	148,000 - 161,999
34	162,000 - 174,999
33	175,000 - 189,999
32	190,000 - 206,999
31	207,000 - 224,999
30	225,000 - 243,999
29	244,000 - 264,999
28	265,000 - 288,999
27	289,000 - 313,999
26	314,000 - 341,999
25	342,000 - 371,999
24	372,000 - 404,999

Workers' Compensation Insurance

296-17-91901

Size Group Number	Standard Premium Range	Size Group Number	Standard Premium Range
23	405,000 – 440,999	9	2,416,000 – 3,019,999
22	441,000 – 479,999	8	3,020,000 – 3,882,999
21	480,000 – 521,999	7	3,883,000 – 5,154,999
20	522,000 – 568,999	6	5,155,000 – 7,203,999
19	569,000 – 618,999	5	7,204,000 & over
18	619,000 – 674,999	[Statutory Authority: RCW 51.16.035. 85-06-025 (Order 85-8), § 296-17-919, filed 2/28/85, effective 7/1/85; 84-06-024 (Order 84-2), § 296-17-919, filed 2/29/84, effective 7/1/84; 83-05-018 (Order 83-4), § 296-17-919, filed 2/9/83, effective 7/1/83; 82-05-019 (Order 82-5), § 296-17-919, filed 2/10/82; 81-24-042 (Order 81-30), § 296-17-919, filed 11/30/81, effective 1/1/82; 81-04-024 (Order 81-02), § 296-17-919, filed 1/30/81.]	
17	675,000 – 734,999		
16	735,000 – 801,999		
15	802,000 – 909,999		
14	910,000 – 1,032,999		
13	1,033,000 – 1,170,999		
12	1,171,000 – 1,563,999		
11	1,564,000 – 1,976,999		
10	1,977,000 – 2,415,999		

WAC 296-17-91901 Table II.

RETROSPECTIVE RATING PLAN A
 BASIC PREMIUM RATIOS
 LOSS CONVERSION FACTOR = .560
 Effective for the coverage period beginning July 1, 1985, through June 30, 1986

Maximum Premium Ratio:	1.05	1.10	1.15	1.20	1.25	1.30	1.35	1.40	1.45	1.50	1.60	1.70	1.80	2.00
Size Group														
84	.975	.957	.942	.931	.918	.910	.901	.895	.887	.880	.869	.858	.848	.829
83	.973	.954	.938	.924	.912	.902	.894	.886	.879	.872	.860	.848	.838	.817
82	.972	.950	.932	.917	.906	.895	.886	.879	.870	.863	.850	.838	.826	.805
81	.967	.946	.925	.913	.898	.889	.878	.869	.861	.854	.840	.828	.816	.794
80	.966	.940	.921	.906	.891	.880	.870	.861	.853	.845	.830	.818	.805	.782
79	.964	.937	.915	.899	.886	.873	.863	.853	.843	.836	.821	.807	.794	.769
78	.962	.932	.911	.895	.879	.866	.856	.846	.836	.826	.811	.797	.783	.757
77	.957	.929	.905	.888	.873	.861	.848	.839	.829	.819	.802	.786	.772	.746
76	.955	.927	.902	.884	.867	.853	.840	.829	.820	.808	.792	.776	.760	.732
75	.953	.920	.896	.877	.860	.844	.830	.820	.808	.799	.781	.764	.749	.720
74	.948	.917	.892	.869	.852	.837	.824	.811	.802	.789	.771	.753	.737	.708
73	.946	.911	.885	.864	.847	.831	.816	.803	.792	.781	.761	.743	.726	.694
72	.944	.908	.881	.858	.840	.823	.808	.794	.783	.771	.751	.731	.714	.682
71	.938	.901	.874	.850	.831	.814	.799	.785	.773	.761	.739	.721	.701	.669
70	.936	.898	.867	.842	.823	.806	.790	.776	.764	.750	.729	.707	.690	.654
69	.935	.892	.862	.838	.815	.797	.782	.767	.754	.740	.717	.696	.677	.641
68	.928	.888	.855	.829	.806	.788	.771	.756	.744	.730	.707	.684	.664	.628
67	.925	.881	.847	.821	.797	.779	.763	.747	.731	.720	.695	.673	.652	.615
66	.918	.873	.839	.813	.791	.770	.752	.737	.721	.710	.682	.660	.639	.602
65	.916	.870	.835	.808	.783	.762	.744	.728	.712	.699	.671	.648	.626	.588
64	.910	.862	.826	.800	.775	.752	.734	.717	.701	.686	.660	.636	.614	.576
63	.907	.855	.819	.790	.766	.743	.724	.707	.691	.675	.649	.624	.602	.562
62	.899	.851	.810	.783	.756	.733	.714	.696	.680	.665	.637	.610	.588	.548
61	.898	.843	.806	.773	.748	.724	.704	.687	.670	.654	.624	.599	.575	.535
60	.890	.836	.798	.765	.738	.713	.694	.675	.659	.642	.612	.586	.563	.520
59	.888	.833	.790	.756	.730	.705	.684	.666	.646	.629	.600	.572	.548	.507
58	.880	.825	.781	.747	.719	.694	.674	.652	.635	.617	.586	.560	.536	.492
57	.879	.817	.772	.737	.710	.684	.660	.640	.623	.606	.574	.545	.522	.480
56	.871	.813	.763	.729	.700	.674	.650	.631	.611	.592	.563	.533	.508	.466
55	.868	.805	.758	.718	.690	.663	.638	.619	.598	.580	.547	.521	.496	.453
54	.860	.795	.749	.709	.679	.653	.628	.605	.586	.569	.536	.507	.482	.440
53	.851	.786	.739	.699	.669	.642	.617	.594	.574	.554	.524	.494	.470	.427
52	.842	.777	.725	.688	.658	.628	.602	.582	.561	.543	.509	.482	.458	.415
51	.833	.767	.715	.677	.644	.617	.591	.567	.548	.530	.497	.468	.443	.402
50	.830	.758	.706	.667	.633	.605	.580	.556	.536	.516	.483	.455	.431	.389
49	.822	.749	.695	.657	.622	.591	.564	.544	.522	.503	.470	.441	.416	.377
48	.813	.739	.685	.642	.611	.579	.553	.529	.509	.490	.458	.429	.404	.364

Maximum Premium Ratio:	1.05	1.10	1.15	1.20	1.25	1.30	1.35	1.40	1.45	1.50	1.60	1.70	1.80	2.00
Size Group														
47	.803	.729	.674	.631	.596	.567	.541	.517	.494	.476	.443	.416	.390	.351
46	.795	.719	.664	.619	.584	.552	.526	.505	.482	.464	.432	.403	.378	.340
45	.786	.709	.648	.604	.568	.540	.513	.489	.470	.449	.416	.391	.368	.330
44	.775	.693	.637	.593	.556	.524	.498	.477	.454	.436	.405	.379	.357	.320
43	.766	.682	.620	.581	.544	.511	.486	.462	.442	.425	.394	.368	.346	.310
42	.757	.672	.610	.564	.529	.500	.470	.450	.428	.411	.378	.354	.332	.299
41	.747	.661	.600	.554	.517	.485	.458	.434	.414	.397	.366	.341	.320	.284
40	.737	.645	.588	.538	.502	.472	.446	.422	.403	.382	.354	.327	.307	.273
39	.727	.635	.572	.526	.489	.456	.431	.410	.388	.370	.339	.315	.294	.261
38	.717	.624	.561	.514	.473	.445	.418	.394	.376	.358	.327	.302	.282	.250
37	.700	.607	.544	.498	.461	.429	.402	.381	.360	.342	.315	.289	.269	.238
36	.689	.596	.532	.481	.445	.416	.390	.366	.348	.331	.301	.278	.259	.227
35	.671	.578	.514	.469	.432	.399	.375	.354	.333	.316	.288	.265	.246	.216
34	.660	.560	.496	.451	.415	.387	.361	.339	.321	.304	.277	.255	.235	.207
33	.641	.547	.484	.433	.402	.370	.345	.325	.307	.291	.264	.242	.225	.197
32	.622	.528	.466	.421	.385	.358	.333	.311	.293	.278	.252	.231	.214	.188
31	.604	.510	.449	.404	.369	.341	.318	.299	.282	.266	.242	.221	.206	.180
30	.585	.492	.431	.391	.357	.329	.305	.286	.269	.254	.230	.211	.196	.172
29	.567	.474	.417	.374	.339	.313	.290	.272	.256	.244	.221	.202	.188	.166
28	.548	.456	.400	.357	.327	.301	.278	.260	.244	.229	.207	.191	.176	.153
27	.537	.444	.383	.344	.310	.284	.262	.244	.228	.215	.192	.174	.159	.137
26	.519	.427	.371	.328	.298	.268	.248	.229	.214	.200	.177	.160	.145	.123
25	.499	.408	.353	.310	.281	.255	.232	.214	.199	.187	.164	.146	.132	.112
24	.480	.390	.335	.297	.265	.240	.221	.204	.189	.177	.156	.140	.127	.107
23	.461	.370	.317	.280	.252	.228	.209	.193	.178	.168	.148	.134	.121	.103
22	.434	.351	.302	.263	.236	.215	.195	.183	.170	.159	.140	.126	.116	.099
21	.413	.332	.284	.250	.224	.202	.185	.172	.160	.151	.135	.121	.111	.096
20	.395	.313	.267	.237	.209	.190	.173	.162	.150	.140	.125	.113	.104	.090
19	.377	.301	.250	.221	.195	.177	.161	.148	.138	.130	.116	.104	.096	.083
18	.358	.283	.237	.204	.180	.162	.147	.136	.127	.118	.106	.097	.089	.078
17	.339	.265	.220	.191	.168	.151	.136	.126	.117	.109	.098	.089	.082	.073
16	.319	.246	.203	.175	.155	.138	.126	.116	.108	.101	.090	.082	.077	.068
15	.300	.228	.190	.163	.142	.129	.116	.107	.100	.094	.084	.079	.073	.065
14	.290	.216	.173	.153	.135	.122	.111	.102	.096	.090	.082	.077	.071	.064
13	.280	.199	.162	.143	.128	.116	.106	.098	.093	.087	.080	.075	.070	.063
12	.263	.181	.151	.135	.120	.110	.101	.096	.089	.085	.078	.072	.068	.062
11	.251	.161	.137	.125	.113	.104	.097	.091	.085	.082	.075	.070	.067	.061
10	.234	.143	.128	.116	.107	.098	.092	.087	.082	.079	.073	.068	.065	.060
9	.215	.132	.118	.108	.100	.093	.087	.082	.079	.076	.071	.067	.064	.060
8	.195	.121	.110	.101	.094	.087	.082	.079	.076	.073	.068	.065	.062	.059
7	.167	.111	.102	.094	.088	.083	.079	.075	.073	.070	.066	.062	.061	.058
6	.130	.100	.094	.087	.082	.078	.075	.072	.069	.067	.063	.061	.060	.057
5	.098	.092	.086	.080	.077	.074	.070	.068	.066	.064	.061	.060	.058	.056

[Statutory Authority: RCW 51.16.035. 85-06-025 (Order 85-8), § 296-17-91901, filed 2/28/85, effective 7/1/85; 84-06-024 (Order 84-2), § 296-17-91901, filed 2/29/84, effective 7/1/84; 83-05-018 (Order 83-4), § 296-17-91901, filed 2/9/83, effective 7/1/83; 82-05-019 (Order 82-5), § 296-17-91901, filed 2/10/82; 81-04-024 (Order 81-02), § 296-17-91901, filed 1/30/81.]

WAC 296-17-91902 Table III.

**RETROSPECTIVE RATING PLAN B
BASIC PREMIUM RATIOS
AND LOSS CONVERSION FACTORS**
Effective for the coverage period beginning July 1, 1985, through June 30, 1986

Maximum Premium Ratio:	1.05	1.10	1.15	1.20	1.25	1.30	1.35	1.40	1.45	1.50	1.60	1.70	1.80	2.00
Size Group														
84 Basic Premium Ratio	.998	.996	.993	.991	.989	.987	.984	.982	.980	.978	.973	.969	.964	.956
Loss Conversion Factor	.002	.004	.007	.009	.011	.013	.016	.018	.020	.022	.027	.031	.036	.044
83 Basic Premium Ratio	.998	.995	.993	.990	.988	.985	.983	.980	.978	.975	.970	.966	.961	.951

Workers' Compensation Insurance

296-17-91902

Maximum Premium Ratio:		1.05	1.10	1.15	1.20	1.25	1.30	1.35	1.40	1.45	1.50	1.60	1.70	1.80	2.00
Size Group	Loss Conversion Factor	.002	.005	.007	.010	.012	.015	.017	.020	.022	.025	.030	.034	.039	.049
	Basic Premium Ratio	.997	.995	.992	.989	.987	.984	.981	.978	.976	.973	.968	.962	.957	.946
82	Loss Conversion Factor	.003	.005	.008	.011	.013	.016	.019	.022	.024	.027	.032	.038	.043	.054
81	Basic Premium Ratio	.997	.994	.991	.988	.985	.982	.979	.976	.973	.970	.964	.959	.953	.941
	Loss Conversion Factor	.003	.006	.009	.012	.015	.018	.021	.024	.027	.030	.036	.041	.047	.059
80	Basic Premium Ratio	.997	.994	.990	.987	.984	.981	.977	.974	.971	.968	.961	.955	.948	.935
	Loss Conversion Factor	.003	.006	.010	.013	.016	.019	.023	.026	.029	.032	.039	.045	.052	.065
79	Basic Premium Ratio	.996	.993	.989	.986	.982	.979	.975	.972	.968	.965	.958	.951	.944	.930
	Loss Conversion Factor	.004	.007	.011	.014	.018	.021	.025	.028	.032	.035	.042	.049	.056	.070
78	Basic Premium Ratio	.996	.992	.988	.984	.980	.976	.973	.969	.965	.961	.953	.945	.937	.922
	Loss Conversion Factor	.004	.008	.012	.016	.020	.024	.027	.031	.035	.039	.047	.055	.063	.078
77	Basic Premium Ratio	.996	.991	.987	.982	.978	.973	.969	.964	.960	.955	.946	.937	.928	.910
	Loss Conversion Factor	.004	.009	.013	.018	.022	.027	.031	.036	.040	.045	.054	.063	.072	.090
76	Basic Premium Ratio	.995	.990	.986	.981	.976	.971	.966	.961	.957	.952	.942	.932	.923	.904
	Loss Conversion Factor	.005	.010	.014	.019	.024	.029	.034	.039	.043	.048	.058	.068	.077	.096
75	Basic Premium Ratio	.995	.990	.984	.979	.974	.969	.964	.958	.953	.948	.938	.927	.917	.896
	Loss Conversion Factor	.005	.010	.016	.021	.026	.031	.036	.042	.047	.052	.062	.073	.083	.104
74	Basic Premium Ratio	.994	.989	.983	.977	.971	.966	.960	.954	.948	.943	.931	.920	.908	.885
	Loss Conversion Factor	.006	.011	.017	.023	.029	.034	.040	.046	.052	.057	.069	.080	.092	.115
73	Basic Premium Ratio	.994	.987	.981	.974	.968	.962	.955	.949	.943	.936	.923	.911	.898	.872
	Loss Conversion Factor	.006	.013	.019	.026	.032	.038	.045	.051	.057	.064	.077	.089	.102	.128
72	Basic Premium Ratio	.993	.986	.979	.972	.965	.958	.951	.944	.936	.929	.915	.901	.887	.859
	Loss Conversion Factor	.007	.014	.021	.028	.035	.042	.049	.056	.064	.071	.085	.099	.113	.141
71	Basic Premium Ratio	.992	.984	.977	.969	.961	.953	.945	.938	.930	.922	.906	.891	.875	.844
	Loss Conversion Factor	.008	.016	.023	.031	.039	.047	.055	.062	.070	.078	.094	.109	.125	.156
70	Basic Premium Ratio	.991	.983	.974	.966	.957	.948	.940	.931	.922	.914	.897	.879	.862	.828
	Loss Conversion Factor	.009	.017	.026	.034	.043	.052	.060	.069	.078	.086	.103	.121	.138	.172
69	Basic Premium Ratio	.991	.981	.972	.962	.953	.944	.934	.925	.915	.906	.887	.869	.850	.812
	Loss Conversion Factor	.009	.019	.028	.038	.047	.056	.066	.075	.085	.094	.113	.131	.150	.188
68	Basic Premium Ratio	.990	.980	.970	.960	.950	.940	.930	.920	.910	.900	.880	.860	.840	.800
	Loss Conversion Factor	.010	.020	.030	.040	.050	.060	.070	.080	.090	.100	.120	.140	.160	.200
67	Basic Premium Ratio	.989	.979	.968	.957	.947	.936	.925	.915	.904	.893	.872	.851	.829	.787
	Loss Conversion Factor	.011	.021	.032	.043	.053	.064	.075	.085	.096	.107	.128	.149	.171	.213
66	Basic Premium Ratio	.988	.977	.965	.954	.942	.931	.919	.908	.896	.885	.862	.839	.816	.770
	Loss Conversion Factor	.012	.023	.035	.046	.058	.069	.081	.092	.104	.115	.138	.161	.184	.230
65	Basic Premium Ratio	.987	.975	.962	.950	.937	.925	.912	.900	.887	.875	.850	.825	.800	.750
	Loss Conversion Factor	.013	.025	.038	.050	.063	.075	.088	.100	.113	.125	.150	.175	.200	.250
64	Basic Premium Ratio	.987	.973	.960	.946	.933	.919	.906	.892	.879	.865	.838	.811	.784	.731
	Loss Conversion Factor	.013	.027	.040	.054	.067	.081	.094	.108	.121	.135	.162	.189	.216	.269
63	Basic Premium Ratio	.985	.971	.956	.942	.927	.913	.898	.884	.869	.855	.826	.797	.767	.709
	Loss Conversion Factor	.015	.029	.044	.058	.073	.087	.102	.116	.131	.145	.174	.203	.233	.291
62	Basic Premium Ratio	.984	.969	.953	.938	.922	.906	.891	.875	.860	.844	.813	.781	.750	.688
	Loss Conversion Factor	.016	.031	.047	.062	.078	.094	.109	.125	.140	.156	.187	.219	.250	.312
61	Basic Premium Ratio	.983	.966	.949	.932	.915	.898	.881	.864	.847	.830	.797	.763	.729	.661
	Loss Conversion Factor	.017	.034	.051	.068	.085	.102	.119	.136	.153	.170	.203	.237	.271	.339
60	Basic Premium Ratio	.982	.963	.945	.927	.908	.890	.872	.853	.835	.817	.780	.743	.707	.634
	Loss Conversion Factor	.018	.037	.055	.073	.092	.110	.128	.147	.165	.183	.220	.257	.293	.366
59	Basic Premium Ratio	.980	.960	.941	.921	.901	.881	.861	.842	.822	.802	.762	.723	.683	.604
	Loss Conversion Factor	.020	.040	.059	.079	.099	.119	.139	.158	.178	.198	.238	.277	.317	.396
58	Basic Premium Ratio	.979	.958	.936	.915	.894	.873	.851	.830	.809	.788	.745	.703	.660	.576
	Loss Conversion Factor	.021	.042	.064	.085	.106	.127	.149	.170	.191	.212	.255	.297	.340	.424
57	Basic Premium Ratio	.977	.954	.931	.909	.886	.863	.840	.817	.794	.771	.726	.680	.634	.543
	Loss Conversion Factor	.023	.046	.069	.091	.114	.137	.160	.183	.206	.229	.274	.320	.366	.457
56	Basic Premium Ratio	.976	.951	.927	.902	.878	.853	.829	.804	.780	.755	.706	.657	.608	.510
	Loss Conversion Factor	.024	.049	.073	.098	.122	.147	.171	.196	.220	.245	.294	.343	.392	.490

Maximum Premium Ratio:		1.05	1.10	1.15	1.20	1.25	1.30	1.35	1.40	1.45	1.50	1.60	1.70	1.80	2.00
Size Group															
55	Basic Premium Ratio	.974	.948	.922	.896	.869	.843	.817	.791	.765	.739	.687	.635	.582	.478
	Loss Conversion Factor	.026	.052	.078	.104	.131	.157	.183	.209	.235	.261	.313	.365	.418	.522
54	Basic Premium Ratio	.972	.944	.916	.888	.860	.831	.803	.775	.747	.719	.663	.607	.550	.438
	Loss Conversion Factor	.028	.056	.084	.112	.140	.169	.197	.225	.253	.281	.337	.393	.450	.562
53	Basic Premium Ratio	.970	.940	.910	.880	.850	.820	.790	.760	.730	.701	.641	.581	.521	.401
	Loss Conversion Factor	.030	.060	.090	.120	.150	.180	.210	.240	.270	.299	.359	.419	.479	.599
52	Basic Premium Ratio	.968	.936	.904	.872	.840	.808	.776	.743	.711	.679	.615	.551	.487	.359
	Loss Conversion Factor	.032	.064	.096	.128	.160	.192	.224	.257	.289	.321	.385	.449	.513	.641
51	Basic Premium Ratio	.965	.931	.896	.862	.827	.793	.758	.724	.689	.655	.586	.517	.448	.310
	Loss Conversion Factor	.035	.069	.104	.138	.173	.207	.242	.276	.311	.345	.414	.483	.552	.690
50	Basic Premium Ratio	.963	.926	.889	.852	.816	.779	.742	.705	.668	.631	.557	.484	.410	.262
	Loss Conversion Factor	.037	.074	.111	.148	.184	.221	.258	.295	.332	.369	.443	.516	.590	.738
49	Basic Premium Ratio	.960	.921	.881	.842	.802	.762	.723	.683	.644	.604	.525	.446	.366	.208
	Loss Conversion Factor	.040	.079	.119	.158	.198	.238	.277	.317	.356	.396	.475	.554	.634	.792
48	Basic Premium Ratio	.958	.915	.873	.830	.788	.745	.703	.660	.618	.576	.491	.406	.321	.151
	Loss Conversion Factor	.042	.085	.127	.170	.212	.255	.297	.340	.382	.424	.509	.594	.679	.849
47	Basic Premium Ratio	.954	.909	.863	.817	.771	.726	.680	.634	.588	.543	.451	.360	.268	.085
	Loss Conversion Factor	.046	.091	.137	.183	.229	.274	.320	.366	.412	.457	.549	.640	.732	.915
46	Basic Premium Ratio	.951	.902	.852	.803	.754	.705	.656	.607	.557	.508	.410	.312	.213	.017
	Loss Conversion Factor	.049	.098	.148	.197	.246	.295	.344	.393	.443	.492	.590	.688	.787	.983
45	Basic Premium Ratio	.947	.894	.841	.788	.735	.682	.629	.576	.523	.470	.364	.258	.152	.000
	Loss Conversion Factor	.053	.106	.159	.212	.265	.318	.371	.424	.477	.530	.636	.742	.848	.975
44	Basic Premium Ratio	.943	.886	.829	.772	.715	.657	.600	.543	.486	.429	.315	.201	.086	.000
	Loss Conversion Factor	.057	.114	.171	.228	.285	.343	.400	.457	.514	.571	.685	.799	.914	.944
43	Basic Premium Ratio	.939	.877	.816	.754	.693	.631	.570	.508	.447	.385	.262	.140	.017	.000
	Loss Conversion Factor	.061	.123	.184	.246	.307	.369	.430	.492	.553	.615	.738	.860	.983	.917
42	Basic Premium Ratio	.933	.867	.800	.734	.667	.601	.534	.468	.401	.335	.202	.068	.000	.000
	Loss Conversion Factor	.067	.133	.200	.266	.333	.399	.466	.532	.599	.665	.798	.932	.973	.892
41	Basic Premium Ratio	.928	.856	.784	.712	.640	.568	.496	.424	.352	.280	.137	.000	.000	.000
	Loss Conversion Factor	.072	.144	.216	.288	.360	.432	.504	.576	.648	.720	.863	.997	.942	.868
40	Basic Premium Ratio	.922	.845	.767	.689	.612	.534	.457	.379	.301	.224	.068	.000	.000	.000
	Loss Conversion Factor	.078	.155	.233	.311	.388	.466	.543	.621	.699	.776	.932	.964	.912	.843
39	Basic Premium Ratio	.916	.831	.747	.663	.579	.494	.410	.326	.241	.157	.000	.000	.000	.000
	Loss Conversion Factor	.084	.169	.253	.337	.421	.506	.590	.674	.759	.843	.993	.933	.886	.823
38	Basic Premium Ratio	.909	.817	.726	.634	.543	.451	.360	.268	.177	.085	.000	.000	.000	.000
	Loss Conversion Factor	.091	.183	.274	.366	.457	.549	.640	.732	.823	.915	.961	.903	.862	.803
37	Basic Premium Ratio	.901	.802	.703	.603	.504	.405	.306	.207	.108	.008	.000	.000	.000	.000
	Loss Conversion Factor	.099	.198	.297	.397	.496	.595	.694	.793	.892	.992	.930	.877	.838	.785
36	Basic Premium Ratio	.892	.783	.675	.567	.459	.350	.242	.134	.026	.000	.000	.000	.000	.000
	Loss Conversion Factor	.108	.217	.325	.433	.541	.650	.758	.866	.974	.967	.902	.854	.819	.768
35	Basic Premium Ratio	.882	.764	.646	.528	.410	.292	.174	.056	.000	.000	.000	.000	.000	.000
	Loss Conversion Factor	.118	.236	.354	.472	.590	.708	.826	.944	.971	.933	.874	.830	.798	.754
34	Basic Premium Ratio	.870	.741	.611	.481	.352	.222	.092	.000	.000	.000	.000	.000	.000	.000
	Loss Conversion Factor	.130	.259	.389	.519	.648	.778	.908	.984	.939	.901	.850	.810	.781	.741
33	Basic Premium Ratio	.856	.712	.568	.424	.280	.137	.000	.000	.000	.000	.000	.000	.000	.000
	Loss Conversion Factor	.144	.288	.432	.576	.720	.863	.998	.947	.907	.875	.825	.790	.764	.727
32	Basic Premium Ratio	.841	.681	.522	.362	.203	.043	.000	.000	.000	.000	.000	.000	.000	.000
	Loss Conversion Factor	.159	.319	.478	.638	.797	.957	.959	.914	.878	.850	.805	.774	.749	.715
31	Basic Premium Ratio	.824	.649	.473	.298	.122	.000	.000	.000	.000	.000	.000	.000	.000	.000
	Loss Conversion Factor	.176	.351	.527	.702	.878	.978	.926	.886	.855	.828	.786	.758	.736	.706
30	Basic Premium Ratio	.803	.607	.410	.213	.017	.000	.000	.000	.000	.000	.000	.000	.000	.000
	Loss Conversion Factor	.197	.393	.590	.787	.983	.944	.896	.860	.831	.807	.770	.743	.723	.696
29	Basic Premium Ratio	.780	.560	.340	.119	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	Loss Conversion Factor	.220	.440	.660	.881	.967	.913	.870	.835	.809	.788	.755	.732	.713	.688

Workers' Compensation Insurance

296-17-91902

Maximum Premium Ratio:		1.05	1.10	1.15	1.20	1.25	1.30	1.35	1.40	1.45	1.50	1.60	1.70	1.80	2.00
28	Basic Premium Ratio	.754	.508	.262	.017	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	Loss Conversion Factor	.246	.492	.738	.983	.933	.882	.843	.813	.790	.769	.739	.717	.700	.677
27	Basic Premium Ratio	.723	.447	.170	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	Loss Conversion Factor	.277	.553	.830	.971	.903	.856	.820	.792	.770	.751	.721	.701	.684	.662
26	Basic Premium Ratio	.689	.379	.068	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	Loss Conversion Factor	.311	.621	.932	.937	.875	.833	.798	.771	.750	.733	.705	.686	.670	.648
25	Basic Premium Ratio	.646	.292	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	Loss Conversion Factor	.354	.708	.983	.903	.848	.807	.776	.752	.733	.716	.691	.672	.658	.639
24	Basic Premium Ratio	.595	.190	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	Loss Conversion Factor	.405	.810	.943	.871	.820	.784	.758	.736	.719	.704	.681	.664	.652	.634
23	Basic Premium Ratio	.520	.040	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	Loss Conversion Factor	.480	.960	.905	.839	.797	.765	.740	.722	.706	.691	.672	.658	.647	.631
22	Basic Premium Ratio	.426	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	Loss Conversion Factor	.574	.960	.871	.814	.774	.747	.725	.707	.694	.682	.664	.651	.642	.628
21	Basic Premium Ratio	.262	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	Loss Conversion Factor	.738	.916	.839	.788	.754	.730	.711	.696	.682	.673	.657	.645	.637	.623
20	Basic Premium Ratio	.092	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	Loss Conversion Factor	.908	.882	.812	.769	.738	.714	.697	.683	.671	.663	.650	.638	.630	.619
19	Basic Premium Ratio	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	Loss Conversion Factor	.983	.854	.791	.748	.720	.698	.683	.671	.661	.652	.640	.631	.624	.614
18	Basic Premium Ratio	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	Loss Conversion Factor	.954	.829	.768	.731	.704	.685	.670	.660	.651	.643	.633	.624	.618	.610
17	Basic Premium Ratio	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	Loss Conversion Factor	.917	.804	.748	.713	.689	.673	.659	.649	.641	.635	.625	.618	.614	.605
16	Basic Premium Ratio	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	Loss Conversion Factor	.874	.778	.729	.698	.677	.661	.649	.640	.634	.628	.619	.613	.609	.603
15	Basic Premium Ratio	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	Loss Conversion Factor	.845	.757	.710	.683	.664	.651	.641	.633	.627	.622	.614	.611	.606	.601
14	Basic Premium Ratio	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	Loss Conversion Factor	.832	.742	.695	.671	.656	.645	.636	.630	.623	.619	.613	.608	.605	.600
13	Basic Premium Ratio	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	Loss Conversion Factor	.818	.727	.678	.661	.649	.639	.632	.626	.621	.617	.610	.606	.604	.599
12	Basic Premium Ratio	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	Loss Conversion Factor	.802	.709	.666	.653	.642	.634	.627	.622	.618	.614	.609	.604	.603	.598
11	Basic Premium Ratio	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	Loss Conversion Factor	.786	.689	.656	.645	.636	.629	.623	.619	.615	.612	.607	.603	.601	.597
10	Basic Premium Ratio	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	Loss Conversion Factor	.768	.671	.646	.638	.630	.625	.619	.616	.612	.609	.605	.602	.600	.597
9	Basic Premium Ratio	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	Loss Conversion Factor	.750	.648	.639	.632	.625	.620	.616	.613	.610	.607	.603	.601	.599	.596
8	Basic Premium Ratio	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	Loss Conversion Factor	.727	.639	.631	.626	.620	.616	.612	.610	.607	.605	.602	.600	.597	.595
7	Basic Premium Ratio	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	Loss Conversion Factor	.699	.630	.624	.619	.616	.612	.609	.607	.605	.603	.600	.598	.597	.595
6	Basic Premium Ratio	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	Loss Conversion Factor	.670	.623	.619	.614	.611	.608	.606	.604	.602	.601	.599	.597	.596	.594
5	Basic Premium Ratio	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	Loss Conversion Factor	.630	.617	.613	.610	.607	.605	.604	.601	.600	.599	.598	.596	.595	.594

[Statutory Authority: RCW 51.16.035, 85-06-025 (Order 85-8), § 296-17-91902, filed 2/28/85, effective 7/1/85; 84-06-024 (Order 84-2), § 296-17-91902, filed 2/29/84, effective 7/1/84; 83-05-018 (Order 83-4), § 296-17-91902, filed 2/9/83, effective 7/1/83; 82-05-019 (Order 82-5), § 296-17-91902, filed 2/10/82; 81-04-024 (Order 81-02), § 296-17-91902, filed 1/30/81.]

Chapter 296-18A WAC
REHABILITATION REVIEW

WAC

296-18A-010	Repealed.
296-18A-020	Repealed.
296-18A-040	Repealed.
296-18A-070	Repealed.
296-18A-080	Repealed.
296-18A-090	Repealed.
296-18A-100	Repealed.
296-18A-110	Repealed.
296-18A-120	Repealed.
296-18A-130	Repealed.
296-18A-140	Repealed.
296-18A-160	Repealed.
296-18A-170	Repealed.
296-18A-180	Repealed.
296-18A-190	Repealed.
296-18A-200	Repealed.
296-18A-210	Repealed.
296-18A-300	Repealed.
296-18A-310	Repealed.
296-18A-320	Repealed.
296-18A-330	Repealed.
296-18A-340	Repealed.
296-18A-350	Repealed.
296-18A-360	Repealed.
296-18A-370	Repealed.
296-18A-400	Repealed.
296-18A-420	Definitions.
296-18A-440	Reports.
296-18A-445	Self-insured reports.
296-18A-450	Vocational rehabilitation plan.
296-18A-460	Performance criteria.
296-18A-470	Disputes.
296-18A-480	Responsibilities.
296-18A-490	Billing for vocational services.
296-18A-500	Self-Insurers.
296-18A-510	Vocational rehabilitation counselor qualifications.
296-18A-520	Job modification assistance.

**DISPOSITION OF SECTIONS FORMERLY CODIFIED IN THIS
CHAPTER**

296-18A-010	General information. [Statutory Authority: RCW 51.41.030. 82-24-055 (Order 82-40), § 296-18-010 (codified as WAC 296-18A-010), filed 11/30/82.] Repealed by 85-17-022 (Order 85-20), filed 8/13/85. Statutory Authority: RCW 51.32.095.	296-18A-100	Rehabilitation plans. [Statutory Authority: RCW 51.41.030. 82-24-055 (Order 82-40), § 296-18-100 (codified as WAC 296-18A-100), filed 11/30/82.] Repealed by 85-17-022 (Order 85-20), filed 8/13/85. Statutory Authority: RCW 51.32.095.
296-18A-020	Vocational rehabilitation advisory committee. [Statutory Authority: RCW 51.41.030. 82-24-055 (Order 82-40), § 296-18-020 (codified as WAC 296-18A-020), filed 11/30/82.] Repealed by 85-17-022 (Order 85-20), filed 8/13/85. Statutory Authority: RCW 51.32.095.	296-18A-110	Modification to the rehabilitation plan. [Statutory Authority: RCW 51.41.030. 82-24-055 (Order 82-40), § 296-18-110 (codified as WAC 296-18A-110), filed 11/30/82.] Repealed by 85-17-022 (Order 85-20), filed 8/13/85. Statutory Authority: RCW 51.32.095.
296-18A-040	Definitions. [Statutory Authority: RCW 51.41.030. 82-24-055 (Order 82-40), § 296-18-040 (codified as WAC 296-18A-040), filed 11/30/82.] Repealed by 85-17-022 (Order 85-20), filed 8/13/85. Statutory Authority: RCW 51.32.095.	296-18A-120	Plan completion. [Statutory Authority: RCW 51.41.030. 82-24-055 (Order 82-40), § 296-18-120 (codified as WAC 296-18A-120), filed 11/30/82.] Repealed by 85-17-022 (Order 85-20), filed 8/13/85. Statutory Authority: RCW 51.32.095.
296-18A-070	Application of certain timetables. [Statutory Authority: RCW 51.41.030. 82-24-055 (Order 82-40), § 296-18-070 (codified as WAC 296-18A-070), filed 11/30/82.] Repealed by 85-17-022 (Order 85-20), filed 8/13/85. Statutory Authority: RCW 51.32.095.	296-18A-130	Application of certain timetables (self-insured claims). [Statutory Authority: RCW 51.41.030. 82-24-055 (Order 82-40), § 296-18-130 (codified as WAC 296-18A-130), filed 11/30/82.] Repealed by 85-17-022 (Order 85-20), filed 8/13/85. Statutory Authority: RCW 51.32.095.
296-18A-080	Referral and initial contact. [Statutory Authority: RCW 51.41.030. 82-24-055 (Order 82-40), § 296-18-080 (codified as WAC 296-18A-080), filed 11/30/82.] Repealed by 85-17-022 (Order 85-20), filed 8/13/85. Statutory Authority: RCW 51.32.095.	296-18A-140	Return to work summary report (self-insured claims). [Statutory Authority: RCW 51.41.030. 82-24-055 (Order 82-40), § 296-18-140 (codified as WAC 296-18A-140), filed 11/30/82.] Repealed by 85-17-022 (Order 85-20), filed 8/13/85. Statutory Authority: RCW 51.32.095.
296-18A-090	Initial evaluations. [Statutory Authority: RCW 51.41.030. 82-24-055 (Order 82-40), § 296-18-090 (codified as WAC 296-18A-090), filed 11/30/82.] Repealed by 85-17-022 (Order 85-20), filed 8/13/85. Statutory Authority: RCW 51.32.095.	296-18A-160	Progress reports (self-insured claims). [Statutory Authority: RCW 51.41.030. 82-24-055 (Order 82-40), § 296-18-160 (codified as WAC 296-18A-160), filed 11/30/82.] Repealed by 85-17-022 (Order 85-20), filed 8/13/85. Statutory Authority: RCW 51.32.095.
		296-18A-170	Return to work (self-insured claims). [Statutory Authority: RCW 51.41.030. 82-24-055 (Order 82-40), § 296-18-170 (codified as WAC 296-18A-170), filed 11/30/82.] Repealed by 85-17-022 (Order 85-20), filed 8/13/85. Statutory Authority: RCW 51.32.095.
		296-18A-180	Vocational rehabilitation plan. [Statutory Authority: RCW 51.41.030. 82-24-055 (Order 82-40), § 296-18-180 (codified as WAC 296-18A-180), filed 11/30/82.] Repealed by 85-17-022 (Order 85-20), filed 8/13/85. Statutory Authority: RCW 51.32.095.
		296-18A-190	Responsibility of the injured worker. [Statutory Authority: RCW 51.41.030. 82-24-055 (Order 82-40), § 296-18-190 (codified as WAC 296-18A-190), filed 11/30/82.] Repealed by 85-17-022 (Order 85-20), filed 8/13/85. Statutory Authority: RCW 51.32.095.
		296-18A-200	Failure to meet responsibilities. [Statutory Authority: RCW 51.41.030. 82-24-055 (Order 82-40), § 296-18-200 (codified as WAC 296-18A-200), filed 11/30/82.] Repealed by 85-17-022 (Order 85-20), filed 8/13/85. Statutory Authority: RCW 51.32.095.
		296-18A-210	Resolution of vocational rehabilitation disputes. [Statutory Authority: RCW 51.04.020, 51.41.020 and 51.41.060. 83-17-110 (Order 83-25), § 296-18-210, filed 8/24/83. Statutory Authority: RCW 51.41.030. 82-24-055 (Order 82-40), § 296-18-210 (codified as WAC 296-18A-210), filed 11/30/82.] Repealed by 85-17-022 (Order 85-20), filed 8/13/85. Statutory Authority: RCW 51.32.095.
		296-18A-300	Registration of vocational rehabilitation counselors. [Statutory Authority: RCW 51.41.030. 82-24-055 (Order 82-40), § 296-18-300 (codified as WAC 296-18A-300), filed 11/30/82.] Repealed by 85-17-022 (Order 85-20), filed 8/13/85. Statutory Authority: RCW 51.32.095.
		296-18A-310	Qualifications for registration of vocational rehabilitation counselors. [Statutory Authority: RCW 51.04.020, 51.41.010 and 51.41.030. 83-17-051 (Order 83-24), § 296-18-310, filed 8/16/83. Statutory Authority: RCW 51.41.030. 82-24-055 (Order 82-40), § 296-18-310 (codified as WAC 296-18A-310),

- filed 11/30/82.] Repealed by 85-17-022 (Order 85-20), filed 8/13/85. Statutory Authority: RCW 51.32.095.
- 296-18A-320 Qualifications for the registration of vocational rehabilitation firms. [Statutory Authority: RCW 51.41.030. 82-24-055 (Order 82-40), § 296-18-320 (codified as WAC 296-18A-320), filed 11/30/82.] Repealed by 85-17-022 (Order 85-20), filed 8/13/85. Statutory Authority: RCW 51.32.095.
- 296-18A-330 Availability of the register. [Statutory Authority: RCW 51.41.030. 82-24-055 (Order 82-40), § 296-18-330 (codified as WAC 296-18A-330), filed 11/30/82.] Repealed by 85-17-022 (Order 85-20), filed 8/13/85. Statutory Authority: RCW 51.32.095.
- 296-18A-340 Immediate deregistration. [Statutory Authority: RCW 51.41.030. 82-24-055 (Order 82-40), § 296-18-340 (codified as WAC 296-18A-340), filed 11/30/82.] Repealed by 85-17-022 (Order 85-20), filed 8/13/85. Statutory Authority: RCW 51.32.095.
- 296-18A-350 Performance evaluations and deregistration. [Statutory Authority: RCW 51.41.030. 82-24-055 (Order 82-40), § 296-18-350 (codified as WAC 296-18A-350), filed 11/30/82.] Repealed by 85-17-022 (Order 85-20), filed 8/13/85. Statutory Authority: RCW 51.32.095.
- 296-18A-360 Petition for reconsideration of the intent to remove. [Statutory Authority: RCW 51.41.030. 82-24-055 (Order 82-40), § 296-18-360 (codified as WAC 296-18A-360), filed 11/30/82.] Repealed by 85-17-022 (Order 85-20), filed 8/13/85. Statutory Authority: RCW 51.32.095.
- 296-18A-370 Period of deregistration. [Statutory Authority: RCW 51.41.030. 82-24-055 (Order 82-40), § 296-18-370 (codified as WAC 296-18A-370), filed 11/30/82.] Repealed by 85-17-022 (Order 85-20), filed 8/13/85. Statutory Authority: RCW 51.32.095.
- 296-18A-400 Job modification assistance. [Statutory Authority: RCW 51.41.030. 82-24-055 (Order 82-40), § 296-18-400 (codified as WAC 296-18A-400), filed 11/30/82.] Repealed by 85-17-022 (Order 85-20), filed 8/13/85. Statutory Authority: RCW 51.32.095.
- WAC 296-18A-010 Repealed.** See Disposition Table at beginning of this chapter.
- WAC 296-18A-020 Repealed.** See Disposition Table at beginning of this chapter.
- WAC 296-18A-040 Repealed.** See Disposition Table at beginning of this chapter.
- WAC 296-18A-070 Repealed.** See Disposition Table at beginning of this chapter.
- WAC 296-18A-080 Repealed.** See Disposition Table at beginning of this chapter.
- WAC 296-18A-090 Repealed.** See Disposition Table at beginning of this chapter.
- WAC 296-18A-100 Repealed.** See Disposition Table at beginning of this chapter.
- WAC 296-18A-110 Repealed.** See Disposition Table at beginning of this chapter.
- WAC 296-18A-120 Repealed.** See Disposition Table at beginning of this chapter.
- WAC 296-18A-130 Repealed.** See Disposition Table at beginning of this chapter.
- WAC 296-18A-140 Repealed.** See Disposition Table at beginning of this chapter.
- WAC 296-18A-160 Repealed.** See Disposition Table at beginning of this chapter.
- WAC 296-18A-170 Repealed.** See Disposition Table at beginning of this chapter.
- WAC 296-18A-180 Repealed.** See Disposition Table at beginning of this chapter.
- WAC 296-18A-190 Repealed.** See Disposition Table at beginning of this chapter.
- WAC 296-18A-200 Repealed.** See Disposition Table at beginning of this chapter.
- WAC 296-18A-210 Repealed.** See Disposition Table at beginning of this chapter.
- WAC 296-18A-300 Repealed.** See Disposition Table at beginning of this chapter.
- WAC 296-18A-310 Repealed.** See Disposition Table at beginning of this chapter.
- WAC 296-18A-320 Repealed.** See Disposition Table at beginning of this chapter.
- WAC 296-18A-330 Repealed.** See Disposition Table at beginning of this chapter.
- WAC 296-18A-340 Repealed.** See Disposition Table at beginning of this chapter.
- WAC 296-18A-350 Repealed.** See Disposition Table at beginning of this chapter.
- WAC 296-18A-360 Repealed.** See Disposition Table at beginning of this chapter.
- WAC 296-18A-370 Repealed.** See Disposition Table at beginning of this chapter.
- WAC 296-18A-400 Repealed.** See Disposition Table at beginning of this chapter.
- WAC 296-18A-420 Definitions.** (1) "Employable" means having the skills and training that are commonly and currently necessary in the labor market to be gainfully employed on a reasonably continuous basis when considering the worker's: Age, education, experience, and physical and mental capabilities due to the industrial injury or subsequent reopening.
- (2) "Gainful employment" means any occupation, not to exclude self-employment, which allows a worker to be compensated with wages or other earnings considering RCW 51.12.010.

(3) "Formal program" means an approved rehabilitation plan and the contents thereof as described in WAC 296-18A-450 that provides services necessary and likely to enable the injured worker to be employable at gainful employment.

(4) "Vocational rehabilitation counselor" means those persons determined by the department to have met the requirements of these rules regarding experience and training which qualify them to aid the injured workers to become employable at gainful employment.

(5) "Vocational rehabilitation provider" means any vocational rehabilitation counselor or firm that has a vendor number to bill for services the Washington department of labor and industries.

(6) "Vocational rehabilitation firm" means any entity comprised of vocational rehabilitation counselors that has a vendor number whether sole proprietorship, partnership, or corporation.

(7) "Vocational rehabilitation services" means services that are designed to enable the injured worker to become employable at gainful employment. The services may include, but not be limited to vocational evaluation, vocational counseling, job analysis, job modification, on-the-job training, or short-term training programs with job placement services provided.

(8) "Referral source" means either the state fund or self-insurer. [Statutory Authority: RCW 51.32.095. 85-17-022 (Order 85-20), § 296-18-420 (codified as WAC 296-18A-420), filed 8/13/85.]

WAC 296-18A-440 Reports. The following reports are required from the vocational rehabilitation provider for state fund referrals.

(1) Contact report. Contact with the injured worker shall be reported to the department within twenty-one calendar days of the date the referral was sent to the provider. Notification of contact shall be on a department provided form.

(2) Progress reports. A progress report will be made upon request from the referral source on a department approved format. The referral source is to be notified immediately of factors affecting plan completion or changes of status or changes in plan costs.

(3) Closing report. Upon completion of the formal program, a closing report to the referral source shall be submitted by the vocational rehabilitation provider. That report shall contain at least the following:

(a) Assessment of the injured worker's employability status at the time of completion of vocational services;

(b) Whether or not the injured worker has returned to work;

(c) Any remaining barriers to the injured worker becoming employable at gainful employment. [Statutory Authority: RCW 51.32.095. 85-17-022 (Order 85-20), § 296-18-440 (codified as WAC 296-18A-440), filed 8/13/85.]

WAC 296-18A-445 Self-insured reports. The following reports are required from the self-insurer to be sent to the self-insurance section.

(1) Self-insured rehabilitation referral. A form submitted no later than after paying ninety days of time loss after the initial filing or reopening of a claim. If more time is necessary, an extension may be requested on this form. The format for this form will be supplied by the department.

(2) Employability assessment report. If a vocational referral is not being made and an extension of time is not necessary, this form must be completed and submitted to the self-insured section no later than after paying ninety days of time loss after the initial filing or reopening of a claim. The format for this form will be supplied by the department.

(3) A vocational rehabilitation plan shall be submitted by the self-insurer after being signed by the injured worker, vocational rehabilitation provider and the employer.

(4) Rehabilitation outcome report. This form is to be submitted when all vocational rehabilitation services have been completed. The format for this form will be supplied by the department. [Statutory Authority: RCW 51.32.095. 85-17-022 (Order 85-20), § 296-18-445 (codified as WAC 296-18A-445), filed 8/13/85.]

WAC 296-18A-450 Vocational rehabilitation plan.

(1) A vocational rehabilitation plan shall be approved by the referral source prior to its implementation. The plan shall be sent to all individuals with responsibilities under it. The plan shall contain the following:

(a) Assessment of the skills and abilities, including the physical and mental capabilities of the injured worker;

(b) The services necessary to enable the injured worker to become employable at gainful employment;

(c) Labor market information indicating the employability of the injured worker at plan completion;

(d) An estimate of the cost and the time necessary for the completion of the plan;

(e) A direct comparison of the injured worker's skills with potential types of employment to demonstrate a likelihood of success;

(f) If necessary, a job analysis of the injured worker's previous occupation, including earnings, may be included; and

(g) Any other information that will significantly affect the plan.

(2) The following priorities shall be addressed and justification given to why each preceding priority was not used.

(a) Return to the previous job with the same employer;

(b) Modification of the previous job with the same employer including transitional return to work;

(c) A new job with the same employer in keeping with any limitations or restrictions;

(d) Modification of the previous job with a new employer;

(e) A new job with a new employer or self-employment based upon transferable skills;

(f) A new job with a new employer or self-employment involving on-the-job training; and

(g) Short-term retraining and job placement.

(3) Each plan shall be signed by the vocational rehabilitation counselor and the injured worker. In state fund cases, a copy will be sent to the employer, attending physician, department, injured worker and any parties with responsibilities within the plan by the vocational rehabilitation counselor. The following statement shall be printed above the signatures:

I have read the above plan and understand its contents. By signing this plan I agree to faithfully execute my responsibilities described in it.

(4) If the plan is interrupted for good cause this case will be returned to the referral source at the discretion of the referral source. At the end of such interruption, the referral source may return the referral to the original vocational provider to resume the plan or its preparation. [Statutory Authority: RCW 51.32.095. 85-17-022 (Order 85-20), § 296-18-450 (codified as WAC 296-18A-450), filed 8/13/85.]

WAC 296-18A-460 Performance criteria. (1) Vocational rehabilitation providers offering services under RCW 51.32.095 for state fund referrals shall be selected by the department, at the department's sole discretion, based upon providers' performance according to the following criteria.

(2) There shall be objective evaluation by the department's office of rehabilitation services, which shall address:

(a) Cost to medical aid fund including fees paid to vocational providers or other providers at the request of the vocational rehabilitation counselor;

(b) Cost to accident fund including time loss compensation, paid after vocational rehabilitation services begin less interruptions for medical instability, loss of earning power payments, and "training" costs pursuant to RCW 51.32.095(3);

(c) Cost to second injury fund due to approved job site modifications;

(d) Length of services provided, from time of referral to date of issuance of closing report;

(e) Ratio of referrals to completed plans;

(f) The outcome of the claim at the time of closure of vocational rehabilitation services which identifies the injured worker as (i) employable; (ii) returned to work; or (iii) other.

(3) The office of rehabilitation services shall also weigh the various objective criteria listed above by addressing the following subjective criteria:

(a) The case difficulty utilizing a screening tool developed by the office of rehabilitation services;

(b) The ability of the vocational rehabilitation counselor to comply with the rules contained in chapter 296-18A WAC and the law as contained in RCW 51.32.095;

(c) The adequacy of the vocational rehabilitation providers facilities shall also be considered.

(4) Audits. In order to ensure compliance with the above listed criteria, every vocational rehabilitation provider used by the department shall be subject to an audit of their facilities and files. Audits may be conducted

upon petition or upon the department's own initiative. Audits may be for cause or at random and may consist of, but not be limited to, an on-site evaluation of each provider's facilities, files and records, including the accuracy of the records and the accuracy of billing for services. The vocational rehabilitation provider shall receive written notice at least forty-eight hours in advance of such audit.

The audit of vocational rehabilitation providers at locations outside the state of Washington shall be at the expense of the provider and the expense incurred in making such audit shall be paid by the provider.

Such expenses shall be calculated at the usual and normal per diem and travel expense rates established by law and in effect at the time the expenses are incurred. [Statutory Authority: RCW 51.32.095. 85-17-022 (Order 85-20), § 296-18-460 (codified as WAC 296-18A-460), filed 8/13/85.]

WAC 296-18A-470 Disputes. (1) In order to avoid delay in the vocational rehabilitation process and to allow resolution of disputes between the injured workers, employers and the referral source, a dispute resolution process is provided. The time limits in this section may be extended by the office of rehabilitation services when good cause is shown.

(2) The director must receive a dispute of the employability determination or formal plan, in writing, within fifteen calendar days from receipt of notification to the worker or employer. The dispute must include reasons for the request. The director, at his or her sole discretion, may initiate an investigation to determine further action on the request. A copy of all disputes received shall be sent to all interested parties.

(3) If necessary, and at the discretion of the director, the office of rehabilitation services will communicate with the aggrieved parties to attempt to resolve the dispute. If the dispute is not resolved, the director in his or her sole discretion may take such other action that he or she considers appropriate to protect the rights of the parties. The director shall inform the aggrieved parties of what action, if any was taken within thirty calendar days of receipt of the dispute from the aggrieved party. [Statutory Authority: RCW 51.32.095. 85-17-022 (Order 85-20), § 296-18-470 (codified as WAC 296-18A-470), filed 8/13/85.]

WAC 296-18A-480 Responsibilities. All parties will have the following responsibilities in assisting the injured worker to become employable at gainful employment:

(1) The attending physician shall maintain open communication with the injured worker's assigned vocational rehabilitation counselor and the referral source. The attending physician shall respond to any requests for information in a timely fashion and will do all that is possible to expedite the vocational rehabilitation process, including a definitive appraisal of physical capacities. The attending physician may review the vocational plan, and if the attending physician feels that the injured worker is not physically capable of carrying out the plan

or the plan is unnecessary, based on current physical capacities, shall notify the referral source immediately of this opinion with the reasons for such opinion.

(2) The claims unit within the department shall:

(a) Notify the employer of the referral to a vocational rehabilitation provider;

(b) Send the employer a copy of the closing report; and

(c) Give written notice to an injured worker if a complaint of noncooperation has been made.

(3) The employer shall assist the vocational rehabilitation counselor in any way necessary to collect data regarding the former gainful employment of the injured worker. Further, the employer will assist the vocational rehabilitation counselor and attending physician to determine whether or not a modified job could be made available for employment of the injured worker.

(4) The injured worker shall cooperate with all reasonable requests from all responsible individuals in determining disability, developing and implementing the rehabilitation process. Should the injured worker fail to be cooperative, the sanctions as set out in RCW 51.32-.110 shall be applied.

(5) In assisting the injured worker to become employable at gainful employment, the provider is to follow the priorities as set out in RCW 51.32.095. Vocational rehabilitation providers actually assisting the injured worker shall have the burden of showing that they meet the qualifications to be a vocational rehabilitation counselor as set out in these rules. The vocational rehabilitation provider shall comply with all the rules in chapter 296-18A WAC and Title 51 RCW, whether the injured worker is referred by the department or a self-insurer under the following criteria:

(a) Develop a formal program to assist the eligible injured worker to become employable at gainful employment;

(b) Maintain accurate records that will be periodically reviewed by the office of rehabilitation services;

(c) Notify the referral source of noncooperative behavior on the part of the injured worker; and

(d) Keep all parties informed of the progress and development of the formal program. [Statutory Authority: RCW 51.32.095. 85-17-022 (Order 85-20), § 296-18-480 (codified as WAC 296-18A-480), filed 8/13/85.]

WAC 296-18A-490 Billing for vocational services.

(1) Vocational rehabilitation providers must comply with the rules contained in chapter 296-20 WAC as they pertain.

(2) Vocational rehabilitation providers must carry general liability insurance, automobile liability insurance, and errors and omission/malpractice insurance.

(3) All vocational services must be prior authorized by the referral source, except immediate job placement.

(4) Charges for the following are considered overhead and will not be paid:

(a) Typing of reports and copies of reports;

(b) Long distance phone call charges and unanswered phone calls;

(c) In-house staffing time;

(d) Postage.

(5) All bills must be itemized on referral source approved bill forms. The billed charges must be justified and consistent with written reports. Any exception to these rules must be thoroughly documented. If charges are not documented, or justified, or consistent, payment will be reduced or denied.

(6) Vocational services must be billed using the following procedure codes. Time units of service are to be stated in tenth of hour blocks or six minutes per time unit. Mileage units of service are to be stated in total miles for the round trip to the nearest mile. Unless otherwise specifically noted, reimbursement rates are achieved by multiplying the total units of service by the relative value unit for the procedure code and then multiplying the total by the current conversion factor for medicine (WAC 296-20-135).

CODE	DESCRIPTION	RELATIVE VALUE UNITS
VO205	Job modification consultant.	4.1
VO210	Consult with doctor, attorney, employer, persons other than the claimant.	4.1
VO212	Review case claim file.	4.1
VO222	Vocational exploration (services provided in conjunction with the injured worker).	4.1
VO223	Vocational counseling (i.e., plan development, placement, etc.).	4.1
VO225	Job analysis (on-site survey of a specific job).	4.1
VO226	Identify and analyze past work skills for transferability.	4.1
VO227	Labor market survey (determination of jobs available in geographic location).	4.1
VO228	Work evaluation - individual.	4.1
VO229	Work evaluation - group, up to a group of five persons.	1.8
VO231	Vocational test administration and scoring.	4.1
VO233	Interpretation of vocational testing and work evaluation.	4.1
VO238	Job placement/job development services to individual injured workers.	4.1
VO239	Job seeking skills instruction-groups (motivation and personal skills training to a group of injured workers) (2-10 workers, maximum 40 billing hours per worker).	1.8
VO242	Monitor, approved rehabilitation plan.	4.1
VO245	Coordinations of services with (specify) job station, work evaluation, vocational testing, ancillary service.	4.1
VO251	Report preparation: Initial contact report.	Flat fee \$5
VO252	Progress report.	Flat fee \$25
VO253	Report preparation for reports other than VO251, 252, 258 and 259.	4.1
VO258	Employability statement form with initial evaluation completed.	4.1 up to max. of \$150
VO259	Employability statement form without initial evaluation completed.	4.1 up to max. of \$450
VO260	Travel/wait time (waiting time is limited to one hour). If more than one client is being served in the area, travel time must be split among all clients.	1.8
VO261	Bridge and ferry tolls.	Reimbursement
VO262	Mileage per mile. If more than one client is being served in the area, mileage must be split among clients.	18¢ per mile
VO263	Provide and monitor a "job station"	4.1

CODE	DESCRIPTION	RELATIVE VALUE UNITS
	(a work activity program designed to evaluate or increase an individuals vocational abilities).	
VO264	Work behavior modification.	4.1
VO274	Conducting a job club - maximum 40 billable hours. (A structured search for work programs for groups of injured workers.)	1.8
VO280	Placement by evaluation (placement agencies only) maximum of two hours assessment of placement potential, includes report to department or VRC.	2.9
VO282	Placement made (employment agencies) flat fee paid on placement.	\$300 Fixed fee
RETRAINING SERVICE (Fees vary by specific plans)		
RO310	Tuition and training fee	
RO312	Training supplies	
RO315	Training equipment	
RO320	Examination and license fees	
RO330	Transportation/mileage	
RO332	Parking	Reimbursement
RO334	Bridge and ferry tolls	Reimbursement
RO336	Commercial fares	Reimbursement
RO340	Books	
RO350	Other	
RO360	Board	
RO370	Room	
RO380	Job modification	

The department or self-insurer will authorize child care as part of a department or self-insurer approved formal program. Payment for child care services will be made to licensed day care providers or family members other than the injured worker or his/her spouse.

RO390	Child care/licensed day center. Hourly rate per child six hours or less	1.1
RO392	Child care/licensed day center. Daily rate per child seven to nine hours	7.5
RO395	Child care/nonlicensed provider. Hourly rate per child six hours or less	0.9
RO397	Child care/nonlicensed provider. Daily rate per child seven to nine hours	6.4

[Statutory Authority: RCW 51.32.095. 85-17-022 (Order 85-20), § 296-18-490 (codified as WAC 296-18A-490), filed 8/13/85.]

WAC 296-18A-500 Self-Insurers. (1) No later than paying ninety days of time loss following the initial filing or reopening of a claim, the self-insurer shall notify the self-insurance section as to whether or not vocational rehabilitation services are necessary and likely to enable the injured worker to become employable at gainful employment. Each of these cases will be reviewed by the self-insurance section. The criteria to determine employability will be the same as for the state fund. If the injured worker is determined employable, the self-insurer will submit an employability assessment form which contains objective reasons why the injured worker is employable. Within twenty calendar days of receipt of an employability assessment form, the supervisor's designee within the self-insurance section will inform the self-insurer and the injured worker as to whether or not self-insurers determination of employability is approved. If an employability determination cannot be made due to medical instability, the self-insured shall request an extension by notifying the self-

insurance section of the injured worker's condition and when a determination can be made. If the request for extension is not approved, notice will be sent within fifteen calendar days of receipt.

(2) The supervisor's designee within the self-insurance section of the department will receive from the self-insurer the vocational rehabilitation plan signed by the injured worker and employer. A review of the vocational rehabilitation plan by the supervisor's designee will be initiated upon request by the employer or the injured worker. The supervisor's designee shall notify the parties within fifteen calendar days of receipt of the results of the review.

At the completion of each case, the self-insurer shall provide the self-insurance section and the office of rehabilitation services a rehabilitation outcome report on a form prescribed by the department. [Statutory Authority: RCW 51.32.095. 85-17-022 (Order 85-20), § 296-18-500 (codified as WAC 296-18A-500), filed 8/13/85.]

WAC 296-18A-510 Vocational rehabilitation counselor qualifications. (1) All vocational rehabilitation counselors who were registered by the department prior to May 16, 1985, will remain on the list and be eligible to receive referrals. The department is not obligated to make referrals to anyone on this list.

(2) When it is determined an injured worker is eligible for vocational rehabilitation services, the referral source shall authorize such services. Selection of the appropriate provider of vocational services is at the sole discretion of the referral source. Selected vocational rehabilitation counselors must meet one or more of the following categories of experience and education:

(a) A doctorate or masters degree in rehabilitation counseling, psychology, counseling and guidance, social work, or educational psychology; and a minimum of one year of experience in vocational counseling, job placement, vocational assessment, or other documented areas of vocational rehabilitation services with industrially injured workers;

(b) A masters degree with twenty-four credit hours in a combination of rehabilitation philosophy, rehabilitation history, rehabilitation ethics, medical aspects of disability, psychological aspects of disability, job placement, occupational information, counseling theory, personal and vocational adjustment, work evaluation, practicum in subjects listed in this subsection, or coursework relating to counseling and subjects listed in this subsection; and a minimum of two years of experience in vocational counseling, job placement, vocational assessment, or other documented areas of vocational rehabilitation services with industrially injured workers;

(c) A bachelors degree in rehabilitation counseling, psychology, counseling and guidance, social work, or educational psychology; and a minimum of two years of experience in vocational counseling, job placement, vocational assessment, or other documented areas of vocational rehabilitation services with industrially injured workers; or

(d) A bachelors degree with twenty-four credit hours in a combination of rehabilitation philosophy, rehabilitation history, rehabilitation ethics, medical aspects of disability, psychological aspects of disability, job placement, occupational information, counseling theory, personal and vocational adjustment, work evaluation, practicum in subjects listed in this subsection, or coursework relating to counseling and subjects listed in this subsection; and a minimum of three years of experience in vocational counseling, job placement, vocational assessment, or other documented areas of vocational rehabilitation services; with industrially injured workers;

(e) Has been a registered vocational counselor in Washington state.

(3) An intern is an individual who meets the minimum educational requirements as set forth in subsection (2)(a) through (e) of this section, but not the experience requirements. When the intern is employed, the vocational rehabilitation provider shall provide the name of the intern's supervisor. The intern supervisor will be responsible for all rehabilitation work done by the intern. The intern supervisor will co-sign all reports submitted by the intern. The intern must be designated as such on all reports. At the end of the time requirement the intern may apply for a vendor number as a vocational rehabilitation provider.

(4) In order to receive or maintain a provider account number, the provider shall submit certified copies of each counselor's college transcript showing the degree last obtained. A statement of each counselor's past experience in counseling of industrially injured workers must also be submitted. The statement must include the names of former and current vocational counselors and firms the individual was employed by.

(5) It is the responsibility of the vocational counselor to be familiar with the industrial insurance rules and laws of the state of Washington. The vocational counselor must act in a professional manner and comply with the code of professional ethics for vocational rehabilitation counselors. [Statutory Authority: RCW 51.32.095. 85-17-022 (Order 85-20), § 296-18-510 (codified as WAC 296-18A-510), filed 8/13/85.]

WAC 296-18A-520 Job modification assistance. (1) As provided for in section 13, chapter 63, Laws of 1982 (RCW 51.32.250), the supervisor in his or her discretion may pay job modification costs in an amount not to exceed five thousand dollars from the department per worker per job modification. This payment is intended to be a cooperative participation with the employer and funds shall be taken from the appropriate account within the second injury fund. The employer may add to this amount with their own contribution.

(2) An employer requesting job modification assistance must submit to the department a job modification assistance application.

(3) The job modification assistance application shall include, but not be limited to:

(a) A document supporting the need for job modification;

(b) A description of the job modification; and

(c) An itemized account of each expense to be incurred in the job modification. Job modification assistance applications shall be submitted on a form prescribed by the department.

(4) The supervisor shall accept, reject, or modify the job modification application within thirty days of receipt. Notification of the supervisor's acceptance, rejection, or modification shall be in writing. [Statutory Authority: RCW 51.32.095. 85-17-022 (Order 85-20), § 296-18-520 (codified as WAC 296-18A-520), filed 8/13/85.]

Chapter 296-19 WAC

CLASSIFICATION OF STATE EMPLOYEES

WAC

296-19-010 Repealed.

DISPOSITION OF SECTIONS FORMERLY CODIFIED IN THIS CHAPTER

296-19-010 General order. [Rule, filed 4/10/62; Rules, filed 12/2/60 and 3/6/61.] Repealed by 84-06-018 (Order 84-3), filed 2/29/84. Statutory Authority: RCW 51.04.020(1).

WAC 296-19-010 Repealed. See Disposition Table at beginning of this chapter.

Chapter 296-24 WAC

GENERAL SAFETY AND HEALTH STANDARDS

Reviser's note: To simplify the organization of this lengthy chapter and to assist the user in locating the desired subject matter, the agency has divided this chapter into subchapters. Only the names of such subchapters are shown in this chapter digest; for a full listing of sections within subchapters refer to the appropriate subchapter digest preceding the text of such sections.

Subchapters

- Part A-1 General, educational, medical and first-aid requirements. (WAC 296-24-001 through 296-24-073)
- Part C Machinery and machine guarding. (WAC 296-24-150 through 296-24-20533)
- Part D Materials handling and storage, including cranes, derricks, etc., and rigging. (WAC 296-24-215 through 296-24-29431)
- Part E Hazardous materials, flammable and combustible liquids, spray finishing, dip tanks. (WAC 296-24-295 through 296-24-450)
- Part F-1 Storage and handling of liquefied petroleum gases. (WAC 296-24-475 through 296-24-47517)

Part A-1

GENERAL, EDUCATIONAL, MEDICAL AND FIRST-AID REQUIREMENTS

WAC

296-24-073 Safe place standards.

WAC 296-24-073 Safe place standards. (1) Each employer shall furnish to each of his employees a place of employment free from recognized hazards that are causing or likely to cause serious injury or death to his employees.

(2) Every employer shall furnish and use safety devices and safeguards, and shall adopt and use practices, means, methods, operations, and processes which are reasonably adequate to render such employment and place of employment safe. Every employer shall do every other thing reasonably necessary to protect the life and safety of employees.

(3) No employer shall require any employee to go or be in any employment or place of employment which is not safe.

(4) No employer shall fail or neglect:

(a) To provide and use safety devices and safeguards.

(b) To adopt and use methods and processes reasonably adequate to render the employment and place of employment safe.

(c) To do every other thing reasonably necessary to protect the life and safety of employees.

(5) No employer, owner, or lessee of any real property shall construct or cause to be constructed any place of employment that is not safe.

(6) No person shall do any of the following:

(a) Remove, displace, damage, destroy or carry off any safety device, safeguard, notice, or warning, furnished for use in any employment or place of employment.

(b) Interfere in any way with the use thereof by any other person.

(c) Interfere with the use of any method or process adopted for the protection of any employee, including himself, in such employment, or place of employment.

(d) Fail or neglect to do every other thing reasonably necessary to protect the life and safety of employees.

(e) Intoxicating beverages and narcotics shall not be permitted in or around work sites except in industries and business engaged in the production, distribution, and sale of intoxicating beverages and drugs. Workers under the influence of alcohol or narcotics shall not be permitted on the work site. This rule does not apply to persons taking prescription drugs and narcotics as directed by a physician or dentist providing such use shall not endanger the worker or others. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-24-073, filed 12/11/84; Order 74-27, § 296-24-073, filed 5/7/74; Order 73-5, § 296-24-073, filed 5/9/73 and Order 73-4, § 296-24-073, filed 5/7/73.]

Part C

MACHINERY AND MACHINE GUARDING

WAC

296-24-19003 General requirements.

WAC 296-24-19003 General requirements. (1) New installations. All new installations after August 27, 1971, shall be in conformity with WAC 296-24-190 through 296-24-19015.

(2) Existing installations. All existing plant installations or equipment contracted for prior to the effective date of these standards, shall comply with WAC 296-24-190 through 296-24-19015.

(3) Auxiliary equipment. Mechanical and electrical equipment and auxiliaries shall be installed in accordance with this section and the state of Washington safety standards for installing electric wires and equipment, WAC 296-24-956 through 296-24-960.

(4) Mill roll heights. All new mill installations shall be installed so that the top of the operating rolls is not less than 50 inches above the level on which the operator stands, irrespective of the size of the mill. This distance shall apply to the actual working level, whether it be at the general floor level, in a pit, or on a platform. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-10-004 (Order 85-09), § 296-24-19003, filed 4/19/85; Order 76-6, § 296-24-19003, filed 3/1/76; Order 73-5, § 296-24-19003, filed 5/9/73 and Order 73-4, § 296-24-19003, filed 5/7/73.]

Part D

MATERIALS HANDLING AND STORAGE, INCLUDING CRANES, DERRICKS, ETC., AND RIGGING

WAC

296-24-217	Servicing multi-piece and single-piece wheels.
296-24-21701	Scope.
296-24-21703	Definitions.
296-24-21705	Employee training.
296-24-21707	Tire servicing equipment.
296-24-21709	Wheel component acceptability.
296-24-21711	Safe operating procedure—Multi-piece rim wheels.
296-24-21713	Safe operating procedure—Single-piece rim wheels.

WAC 296-24-217 Servicing multi-piece and single-piece [rim] wheels. [Statutory Authority: RCW 49.17-040 and 49.17.050. 84-17-099 (Order 84-18), § 296-24-217, filed 8/21/84. Statutory Authority: RCW 49.17.040, 49.17.050, 49.17.240, chapters 42.30 and 43.22 RCW. 80-17-014 (Order 80-20), § 296-24-217, filed 11/13/80.]

WAC 296-24-21701 Scope. (1) This section applies to the servicing of multi-piece and single-piece rim wheels used on large vehicles such as trucks, tractors, trailers, buses and off-road machines. It does not apply to the servicing of rim wheels used on automobiles, or on pickup trucks and vans utilizing automobile tires or truck tires designated "LT."

(2) This section does not apply to employers and places of employment regulated under the Construction safety standards, chapter 296-155 WAC; Agriculture standards, chapter 296-306 WAC; or the Maritime standards, chapter 296-56 WAC.

(3) All provisions of this section apply to the servicing of both single-piece rim wheels and multi-piece rim wheels unless designated otherwise. [Statutory Authority: RCW 49.17.040 and 49.17.050. 84-17-099 (Order 84-18), § 296-24-21701, filed 8/21/84. Statutory Authority: RCW 49.17.040, 49.17.050, 49.17.240, chapters 42.30 and 43.22 RCW. 80-17-014 (Order 80-20), § 296-24-21701, filed 11/13/80.]

WAC 296-24-21703 Definitions. (1) "Barrier" means a fence, wall or other structure or object placed

between a single-piece rim wheel and an employee during tire inflation, to contain the rim wheel components in the event of the sudden release of the contained air of the single-piece rim wheel.

(2) "Charts" means the United States Department of Transportation, National Highway Traffic Safety Administration (NHTSA) publications entitled *Safety Precautions for Mounting and Demounting Tube-Type Truck/Bus Tires* and *Multi-Piece Rim Wheel Matching Chart*, or any other publications such as rim manuals containing, at a minimum, the same instructions, safety precautions and other information contained on those charts that are applicable to the types of rim wheels being serviced.

(3) "Installing a rim wheel" means the transfer and attachment of an assembled rim wheel onto a vehicle axle hub. "Removing" means the opposite of installing.

(4) "Mounting a tire" means the assembly or putting together of the wheel and tire components to form a rim wheel, including inflation. "Demounting" means the opposite of mounting.

(5) "Multi-piece rim wheel" means the assemblage of a multi-piece wheel with the tire tube and other components.

(6) "Multi-piece wheel" means a vehicle wheel consisting of two or more parts, one of which is a side or locking ring designed to hold the tire on the wheel by interlocking components when the tire is inflated.

(7) "Restraining device" means an apparatus such as a cage, rack, assemblage of bars and other components that will constrain all rim wheel components during an explosive separation of a multi-piece rim wheel, or during the sudden release of the contained air of a single-piece rim wheel.

(8) "Rim manual" means a publication containing instructions from the manufacturer or other qualified organization for correct mounting, demounting, maintenance, and safety precautions peculiar to the type of wheel being serviced.

(9) "Rim wheel" means an assemblage of tire, tube and liner (where appropriate), and wheel components.

(10) "Service" or "servicing" means the mounting and demounting of rim wheels, and related activities such as inflating, deflating, installing, removing, and handling.

(11) "Service area" means that part of an employer's premises used for the servicing of rim wheels, or any other place where an employee services rim wheels.

(12) "Single-piece rim wheel" means the assemblage of single-piece rim wheel with the tire and other components.

(13) "Single-piece wheel" means a vehicle wheel consisting of one part, designed to hold the tire on the wheel when the tire is inflated.

(14) "Trajectory" means any potential path or route that a rim wheel component may travel during an explosive separation, or the sudden release of the pressurized air, or an area at which an airblast from a single-piece rim wheel may be released. The trajectory may

deviate from paths which are perpendicular to the assembled position of the rim wheel at the time of separation or explosion. (See Appendix A for examples of trajectories.)

(15) "Wheel" means that portion of a rim wheel which provides the method of attachment of the assembly to the axle of a vehicle and also provides the means to contain the inflated portion of the assembly (i.e., the tire and/or tube). [Statutory Authority: RCW 49.17.040 and 49.17.050. 84-17-099 (Order 84-18), § 296-24-21703, filed 8/21/84. Statutory Authority: RCW 49.17.040, 49.17.050, 49.17.240, chapters 42.30 and 43.22 RCW. 80-17-014 (Order 80-20), § 296-24-21703, filed 11/13/80.]

WAC 296-24-21705 Employee training. (1) The employer shall provide a program to train all employees who service rim wheels in the hazards involved in servicing those multi-piece rim wheels and the safety procedures to be followed.

(a) The employer shall assure that no employee services any rim wheel unless the employee has been trained and instructed in correct procedures of servicing the type of wheel being serviced, and in the safe operating procedures described in WAC 296-24-21711.

(b) Information to be used in the training program shall include, at a minimum, the applicable data contained in the charts (rim manuals) and the contents of this standard.

(c) Where an employer knows or has reason to believe that any of his employees is unable to read and understand the charts or rim manual, the employer shall assure that the employee is instructed concerning the contents of the charts and rim manual in a manner which the employee is able to understand.

(2) The employer shall assure that each employee demonstrates and maintains the ability to service rim wheels safely, including performance of the following tasks:

(a) Demounting of tires (including deflation);

(b) Inspection and identification of the rim wheel components;

(c) Mounting of tires (including inflation with a restraining device or other safeguard required by this section);

(d) Use of the restraining device or barrier, and other equipment required by this section;

(e) Handling of rim wheels;

(f) Inflation of the tire when a single-piece rim wheel is mounted on a vehicle;

(g) An understanding of the necessity of standing outside the trajectory both during inflation of the tire and during inspection of the rim wheel following inflation; and

(h) Installation and removal of wheels.

(3) The employer shall evaluate each employee's ability to perform these tasks and to service rim wheels safely and shall provide additional training as necessary to assure that each employee maintains his or her proficiency. [Statutory Authority: RCW 49.17.040 and 49.17.050. 84-17-099 (Order 84-18), § 296-24-21705,

filed 8/21/84. Statutory Authority: RCW 49.17.040, 49.17.050, 49.17.240, chapters 42.30 and 43.22 RCW. 80-17-014 (Order 80-20), § 296-24-21705, filed 11/13/80.]

WAC 296-24-21707 Tire servicing equipment. (1) The employer shall furnish a restraining device for inflating tires on multi-piece wheels.

(2) The employer shall provide a restraining device or barrier for inflating tires on single-piece wheels unless the rim wheel will be bolted onto a vehicle during inflation.

(3) Restraining devices and barriers shall comply with the following requirements:

(a) Each restraining device or barrier shall have the capacity to withstand the maximum force that would be transferred to it during a rim wheel separation occurring at one hundred fifty percent of maximum tire specification pressure for the type of rim wheel being serviced.

(b) Restraining devices and barriers shall be capable of preventing rim components from being thrown outside or beyond the device or barrier for any rim wheel position within or behind the device;

(c) Restraining devices and barriers shall be visually inspected prior to each day's use and after any separation of the rim wheel components or sudden release of contained air. Any restraining device or barrier exhibiting damage such as the following defects shall be immediately removed from service:

- (i) Cracks at welds;
- (ii) Cracked or broken components;
- (iii) Bent or sprung components caused by mishandling, abuse, tire explosion or rim wheel separation;
- (iv) Pitting of components due to excessive corrosion; or
- (v) Other structural damage which would decrease its effectiveness.

(d) Restraining devices removed from service shall not be returned to service until they are repaired and re-inspected. Restraining devices or barriers requiring structural repair such as component replacement or rewelding shall not be returned to service until they are certified either by the manufacturer or by a registered professional engineer as meeting the strength requirements of subsection (3)(a) of this section.

(4) The employer shall furnish and assure that an air line assembly consisting of the following components be used for inflating tires:

- (i) A clip-on chuck;
- (ii) An in-line valve with a pressure gauge or a presettable regulator; and
- (iii) A sufficient length of hose between the clip-on chuck and the in-line valve (if one is used) to allow the employee to stand outside the trajectory.

(5) Current charts (rim manuals) containing instructions for the types of wheels being serviced shall be available in the service area.

(6) A current rim manual containing instructions for the type of rims being serviced shall be available in the service area.

(7) The employer shall furnish and assure that only tools recommended in the rim manual for the type of wheel being serviced are used to service rim wheels. [Statutory Authority: RCW 49.17.040 and 49.17.050. 84-17-099 (Order 84-18), § 296-24-21707, filed 8/21/84. Statutory Authority: RCW 49.17.040, 49.17.050, 49.17.240, chapters 42.30 and 43.22 RCW. 80-17-014 (Order 80-20), § 296-24-21707, filed 11/13/80.]

WAC 296-24-21709 Wheel component acceptability. (1) Multi-piece wheel components shall not be interchanged except as provided in the charts, or in the applicable rim manual.

(2) Multi-piece wheel components and single-piece wheels shall be inspected prior to assembly. Any wheel or wheel component which is bent out of shape, pitted from corrosion, broken or cracked shall not be used and shall be marked or tagged unserviceable and removed from the service area. Damaged or leaky valves shall be replaced.

(3) Rim flanges, rim gutters, rings, bead seating surfaces and the bead areas of tires shall be free of any dirt, surface rust, scale or loose or flaked rubber build-up prior to mounting and inflation.

(4) The size (bead diameter and tire/wheel widths) and type of both the tire and the wheel shall be checked for compatibility prior to assembly of the rim wheel. [Statutory Authority: RCW 49.17.040 and 49.17.050. 84-17-099 (Order 84-18), § 296-24-21709, filed 8/21/84. Statutory Authority: RCW 49.17.040, 49.17.050, 49.17.240, chapters 42.30 and 43.22 RCW. 80-17-014 (Order 80-20), § 296-24-21709, filed 11/13/80.]

WAC 296-24-21711 Safe operating procedure--Multi-piece rim wheels. The employer shall establish a safe operating procedure for servicing multi-piece rim wheels and shall assure that employees are instructed in and follow that procedure. The procedure shall include at least the following elements:

(1) Tires shall be completely deflated before demounting by removal of the valve core.

(2) Tires shall be completely deflated by removing the valve core, before a rim wheel is removed from the axle in either of the following situations:

- (a) When the tire has been driven underinflated at eighty percent or less of its recommended pressure; or
- (b) When there is obvious or suspected damage to the tire or wheel components.

(3) Rubber lubricant shall be applied to bead and rim mating surfaces during assembly of the wheel and inflation of the tire, unless the tire or wheel manufacturer recommends against it.

(4) If a tire on a vehicle is underinflated but has more than eighty percent of the recommended pressure, the tire may be inflated while the rim wheel is on the vehicle provided remote control inflation equipment is used, and no employees remain in the trajectory during inflation.

(5) Tires shall be inflated outside a restraining device only to a pressure sufficient to force the tire bead onto the rim ledge and create an airtight seal with the tire and bead.

(6) Whenever a rim wheel is in a restraining device the employee shall not rest or lean any part of his body or equipment on or against the restraining device.

(7) After tire inflation, the tire and wheel components shall be inspected while still within the restraining device to make sure that they are properly seated and locked. If further adjustment to the tire or wheel components is necessary, the tire shall be deflated by removal of the valve core before the adjustment is made.

(8) No attempt shall be made to correct the seating of side and lock rings by hammering, striking or forcing the components while the tire is pressurized.

(9) Cracked, broken, bent or otherwise damaged rim components shall not be reworked, welded, brazed, or otherwise heated.

(10) Whenever multi-piece rim wheels are being handled, employees shall stay out of the trajectory unless the employer can demonstrate that performance of the servicing makes the employee's presence in the trajectory necessary.

(11) No heat shall be applied to a multi-piece wheel or wheel component. [Statutory Authority: RCW 49.17-.040 and 49.17.050. 84-17-099 (Order 84-18), § 296-24-21711, filed 8/21/84. Statutory Authority: RCW 49.17.040, 49.17.050, 49.17.240, chapters 42.30 and 43-.22 RCW. 80-17-014 (Order 80-20), § 296-24-21711, filed 11/13/80.]

WAC 296-24-21713 Safe operating procedure—Single-piece rim wheels. The employer shall establish a safe operating procedure for servicing single-piece rim wheels and shall assure that employees are instructed in and follow that procedure. The procedure shall include at least the following elements:

(1) Tires shall be completely deflated by removal of the valve core before demounting.

(2) Mounting and demounting of the tire shall be done only from the narrow ledge side of the wheel. Care shall be taken to avoid damaging the tire beads while mounting tires on wheels. Tires shall be mounted only on compatible wheels of matching bead diameter and width.

(3) Nonflammable rubber lubricant shall be applied to bead and wheel mating surfaces before assembly of the rim wheel, unless the tire or wheel manufacturer recommends against the use of any rubber lubricant.

(4) If a tire changing machine is used, the tire shall be inflated only to the minimum pressure necessary to force the tire bead onto the rim ledge while on the tire changing machine.

(5) If a bead expander is used, it shall be removed before the valve core is installed and as soon as the rim wheel becomes airtight (the tire bead slips onto the bead seat).

(6) Tires may be inflated only when contained within a restraining device, positioned behind a barrier or bolted on the vehicle with the lug nuts fully tightened.

(7) Tires shall not be inflated when any flat, solid surface is in the trajectory and within one foot of the sidewall.

(8) Employees shall stay out of the trajectory when inflating a tire.

(9) Tires shall not be inflated to more than the inflation pressure stamped in the sidewall unless a higher pressure is recommended by the manufacturer.

(10) Tires shall not be inflated above the maximum pressure recommended by the manufacturer to seat the tire bead firmly against the rim flange.

(11) No heat shall be applied to a single-piece wheel.

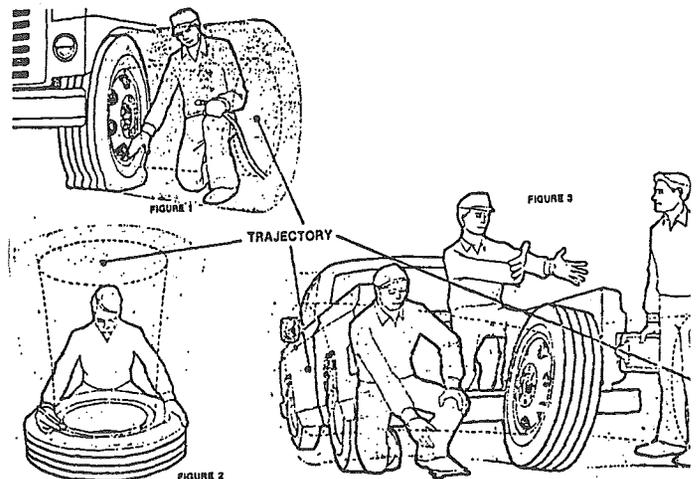
(12) Cracked, broken, bent, or otherwise damaged wheels shall not be reworked, welded, brazed, or otherwise heated.

APPENDIX A
TRAJECTORY

WARNING

STAY OUT OF
THE TRAJECTORY AS
INDICATED BY SHADED AREA

NOTE: Under some circumstances, the trajectory may deviate from its expected path.



Appendix B—Ordering Information for NHTSA charts

OSHA has reprinted the NHTSA charts as part of a continuing campaign to alert rim wheel serving personnel of the industry accepted procedures for servicing multi-piece rim wheels.

Reprints of the charts are available through the Occupational Safety and Health Administration (OSHA) area offices. The address and telephone number of the nearest OSHA area office can be obtained by looking in the local telephone directory under U.S. Government, U.S. Department of Labor, Occupational Safety and Health Administration. Single copies are available without charge.

Individuals, establishments and other organizations desiring multiple copies of these charts may order them from the Publications Office, U.S. Department of Labor, Room N4101, Washington, D.C. 20210. Telephone: (202) 523-9667. [Statutory Authority: RCW 49.17.040 and 49.17.050. 84-17-099 (Order 84-18), § 296-24-21713, filed 8/21/84.]

Part E

HAZARDOUS MATERIALS, FLAMMABLE AND COMBUSTIBLE LIQUIDS, SPRAY FINISHING, DIP TANKS

WAC

- 296-24-31503 Gaseous hydrogen systems.
- 296-24-31505 Liquefied hydrogen systems.
- 296-24-32003 Bulk oxygen systems.
- 296-24-33009 Container and portable tank storage.
- 296-24-33011 Industrial plants.
- 296-24-33013 Bulk plants.
- 296-24-33015 Service stations.
- 296-24-33017 Processing plants.
- 296-24-37005 Electrical and other sources of ignition.
- 296-24-37019 Drying, curing, or fusion apparatus.
- 296-24-37023 Powder coating.
- 296-24-40509 Electrical and other sources of ignition.

WAC 296-24-31503 Gaseous hydrogen systems. (1)

Design. (a) Containers. (i) Hydrogen containers shall comply with one of the following:

(A) Designed, constructed, and tested in accordance with appropriate requirements of ASME Boiler and Pressure Vessel Code, Section VIII—Unfired Pressure Vessels—1968.

(B) Designed, constructed, tested and maintained in accordance with U.S. Department of Transportation specifications and regulations.

(ii) Permanently installed containers shall be provided with substantial noncombustible supports on firm noncombustible foundations.

(iii) Each portable container shall be legibly marked with the name "hydrogen" in accordance with "marking compressed gas containers to identify the material contained" ANSI Z48.1-1954. Each manifolded hydrogen supply unit shall be legibly marked with the name hydrogen or a legend such as "this unit contains hydrogen."

(b) Safety relief devices. (i) Hydrogen containers shall be equipped with safety relief devices as required by the ASME Boiler and Pressure Vessel Code, Section VIII Unfired Pressure Vessels, 1968 or the DOT specifications and regulations under which the container is fabricated.

(ii) Safety relief devices shall be arranged to discharge upward and unobstructed to the open air in such a manner as to prevent any impingement of escaping gas upon the container, adjacent structure of personnel. This requirement does not apply to DOT specification containers having an internal volume of 2 cubic feet or less.

(iii) Safety relief devices or vent piping shall be designed or located so that moisture cannot collect and freeze in a manner which would interfere with proper operation of the device.

(c) Piping, tubing, and fittings. (i) Piping, tubing, and fittings shall be suitable for hydrogen service and for the pressures and temperatures involved. Case iron pipe and fittings shall not be used.

(ii) Piping and tubing shall conform to Section 2—"Industrial Gas and Air Piping"—Code for Pressure Piping, ANSI B31.1-1967 with addenda B31.1-1969.

(iii) Joints in piping and tubing may be made by welding or brazing or by use of flanged, threaded,

socket, or compression fittings. Gaskets and thread sealants shall be suitable for hydrogen service.

(d) Equipment assembly. (i) Valves, gauges, regulators, and other accessories shall be suitable for hydrogen service.

(ii) Installation of hydrogen systems shall be supervised by personnel familiar with proper practices with reference to their construction and use.

(iii) Storage containers, piping, valves, regulating equipment, and other accessories shall be readily accessible, and shall be protected against physical damage and against tampering.

(iv) Cabinets or housings containing hydrogen control or operating equipment shall be adequately ventilated.

(v) Each mobile hydrogen supply unit used as part of a hydrogen system shall be adequately secured to prevent movement.

(vi) Mobile hydrogen supply units shall be electrically bonded to the system before discharging hydrogen.

(e) Marking. The hydrogen storage location shall be permanently placarded as follows: "HYDROGEN—FLAMMABLE GAS—NO SMOKING—NO OPEN FLAMES," or equivalent.

(f) Testing. After installations, all piping, tubing, and fittings shall be tested and proved hydrogen gas tight at maximum operating pressure.

(2) Location. (a) General. (i) The system shall be located so that it is readily accessible to delivery equipment and to authorized personnel.

(ii) Systems shall be located above ground.

(iii) Systems shall not be located beneath electric power lines.

(iv) Systems shall not be located close to flammable liquid piping or piping of other flammable gases.

(v) Systems near aboveground flammable liquid storage shall be located on ground higher than the flammable liquid storage except when dikes, diversion curbs, grading, or separating solid walls are used to prevent accumulation of flammable liquids under the system.

(b) Specific requirements. (i) The location of a system, as determined by the maximum total contained volume of hydrogen, shall be in the order of preference as indicated by Roman numerals in Table H-1.

TABLE H-1

Nature of location	Size of hydrogen system		
	Less than 3,000 CF	3,000 CF to 15,000 CF	In excess of 15,000 CF
Outdoors	I	I	I
In a separate building	II	II	II
In a special room	III	III	Not permitted.

TABLE H-1

Nature of location	Size of hydrogen system		
	Less than 3,000 CF	3,000 CF to 15,000 CF	In excess of 15,000 CF
Inside buildings not in a special room and exposed to other occupancies	IV	Not permitted.	Not permitted.

(ii) The minimum distance in feet from a hydrogen system of indicated capacity located outdoors, in separate buildings or in special rooms to any specified outdoor exposure shall be in accordance with Table H-2.

(iii) The distances in Table H-2 Items 1, 14, and 3 to 10 inclusive do not apply where protective structures such as adequate fire walls are located between the system and the exposure.

(iv) Hydrogen systems of less than 3,000 CF when located inside buildings and exposed to other occupancies shall be situated in the building so that the system will be as follows:

(A) In an adequately ventilated area as in (3)(b)(ii) of this section.

(B) Twenty feet from stored flammable materials or oxidizing gases.

(C) Twenty-five feet from open flames, ordinary electrical equipment or other sources of ignition.

(D) Twenty-five feet from concentrations of people.

(E) Fifty feet from intakes of ventilation or air-conditioning equipment and air compressors.

(F) Fifty feet from other flammable gas storage.

(G) Protected against damage or injury due to falling objects or working activity in the area.

(H) More than one system of 3,000 CF or less may be installed in the same room, provided the systems are separated by at least 50 feet. Each such system shall meet all of the requirements of this section.

(3) Design consideration at specific locations. (a) Outdoor locations. (i) Where protective walls or roofs are provided, they shall be constructed of noncombustible materials.

(ii) Where the enclosing sides adjoin each other, the area shall be properly ventilated.

(iii) Electrical equipment shall meet the requirements for Class I, Division 2 hazardous locations of WAC 296-25-95613.

(b) Separate buildings. (i) Separate buildings shall be built of at least noncombustible construction. Windows

and doors shall be located so as to be readily accessible in case of emergency. Windows shall be of glass or plastic in metal frames.

(ii) Adequate ventilation to the outdoors shall be provided. Inlet openings shall be located near the floor in exterior walls only. Outlet openings shall be located at the high point of the room in exterior walls or roof. Inlet and outlet openings shall each have minimum total area of one square foot per 1,000 cubic feet of room volume. Discharge from outlet openings shall be directed or conducted to a safe location.

(iii) Explosion venting shall be provided in exterior walls or roof only. The venting area shall be equal to not less than 1 square foot per 30 cubic feet of room volume and may consist of any one or any combination of the following: Walls of light noncombustible material, preferably single thickness, single strength glass; lightly fastened hatch covers; lightly fastened swinging doors in exterior walls opening outward; lightly fastened walls or roof designed to relieve at a maximum pressure of 25 pounds per square foot.

(iv) There shall be no sources of ignition from open flames, electrical equipment, or heating equipment.

(v) Electrical equipment shall meet the requirements for Class I, Division 2 hazardous locations of WAC 296-24-95613.

(vi) Heating, if provided, shall be by steam, hot water, or other indirect means.

(c) Special rooms. (i) Floor, walls, and ceiling shall have a fire-resistance rating of at least 2 hours. Walls or partitions shall be continuous from floor to ceiling and shall be securely anchored. At least one wall shall be an exterior wall. Openings to other parts of the building shall not be permitted. Windows and doors shall be in exterior walls and shall be located so as to be readily accessible in case of emergency. Windows shall be of glass or plastic in metal frames.

(ii) Ventilation shall be as provided in (3)(b)(ii) of this section.

(iii) Explosion venting shall be as provided in (3)(b)(iii) of this section.

(iv) There shall be no sources of ignition from open flames, electrical equipment or heating equipment.

(v) Electrical equipment shall meet the requirements for Class I, Division 2 hazardous locations of WAC 296-24-95613.

(vi) Heating, if provided, shall be by steam, hot water, or indirect means.

(4) Operating instructions. For installations which require any operation of equipment by the user, legible instructions shall be maintained at operating locations.

(5) Maintenance. (a) The equipment and functioning of each charged gaseous hydrogen system shall be maintained in a safe operating condition in accordance with the requirements of this section. The area within 15 feet of any hydrogen container shall be kept free of dry vegetation and combustible material.

TABLE H-2

Type of outdoor exposure	Size of hydrogen system		
	Less than 3,000 CF	3,000 to 15,000 CF	In excess of 15,000 CF
1. Building or structure—			
Wood frame construction*	10	25	50
Heavy timber, non-combustible or ordinary construction*	0	10	**25
Fire-resistive construction*	0	0	0
2. Wall openings—			
Not above any part of a system	10	10	10
Above any part of a system	25	25	25
3. Flammable liquids above ground—			
0 to 1,000 gallons	10	25	25
In excess of 1,000 gallons	25	50	50
4. Flammable liquids below ground—0 to 1,000 gallons—			
Tank	10	10	10
Vent or fill opening of tank	25	25	25
5. Flammable liquids below ground—in excess of 1,000 gallons—			
Tank	20	20	20
Vent or fill opening of tank	25	25	25
6. Flammable gas storage, either high pressure or low pressure—			
0 to 15,000 CF capacity	10	25	25
In excess of 15,000 CF capacity	25	50	50
7. Oxygen storage			
12,000 CF or less	Refer to NFPA No. 51, gas systems for welding and cutting (1969).		
More than 12,000 CF	Refer to NFPA No. 566, bulk oxygen systems at consumer sites (1969).		
8. Fast burning solids such as ordinary lumber, excelsior or paper	50	50	25
9. Slow burning solids such as heavy timber or coal	25	25	25
10. Open flames and other sources of ignition	25	25	50
11. Air compressor intakes or inlets to ventilating or air-condition equipment	50	50	50
12. Concentration of people***	25	50	50

TABLE H-2

Type of outdoor exposure	Size of hydrogen system		
	Less than 3,000 CF	3,000 to 15,000 CF	In excess of 15,000 CF
13. Public sidewalks	15	15	15
14. Line of adjoining property which may be built upon	5	5	5

*Refer to NFPA No. 220 standard types of building construction for definitions of various types of construction. (1969 Ed.)

**But not less than one-half the height of adjacent side wall of the structure.

***In congested areas such as offices, lunchrooms, locker rooms, time-clock areas, and places of public assembly.

[Statutory Authority: RCW 49.17.040 and 49.17.050. 85-10-004 (Order 85-09), § 296-24-31503, filed 4/19/85; Order 76-6, § 296-24-31503, filed 3/1/76; Order 73-5, § 296-24-31503, filed 5/9/73 and Order 73-4, § 296-24-31503, filed 5/7/73.]

WAC 296-24-31505 Liquefied hydrogen systems.

(1) Design. (a) Containers. (i) Hydrogen containers shall comply with the following: Storage containers shall be designed, constructed, and tested in accordance with appropriate requirements of the ASME Boiler and Pressure Vessel Code, Section VIII—Unfired Pressure Vessels (1968) or applicable provisions of API Standard 620, Recommended Rules for Design and Construction of Large, Welded, Low-Pressure Storage Tanks, Second Edition (June 1963) and Appendix R (April 1965).

(ii) Portable containers shall be designed, constructed and tested in accordance with DOT specifications and regulations.

(b) Supports. Permanently installed containers shall be provided with substantial noncombustible supports securely anchored on firm noncombustible foundations. Steel supports in excess of 18 inches in height shall be protected with a protective coating having a 2-hour fire-resistance rating.

(c) Marking. Each container shall be legibly marked to indicate "LIQUEFIED HYDROGEN—FLAMMABLE GAS."

(d) Safety relief devices. (i) Stationary liquefied hydrogen containers shall be equipped with safety relief devices sized in accordance with CGA Pamphlet S-1-1966, Part 3, Safety Relief Device Standards for Compressed Gas Storage Containers.

(A) Portable liquefied hydrogen containers complying with the U.S. Department of Transportation regulations shall be equipped with safety relief devices as required in the U.S. Department of Transportation specifications and regulations. Safety relief devices shall be sized in accordance with the requirements of CGA Pamphlet S-1-1966, Safety Relief Device Standards, Part 1,

Compressed Gas Cylinders and Part 2, Cargo and Portable Tank Containers.

(ii) Safety relief devices shall be arranged to discharge unobstructed to the outdoors and in such a manner as to prevent impingement of escaping liquid or gas upon the container, adjacent structures or personnel. See (2)(a)(vi) of this section for venting of safety relief devices in special locations.

(iii) Safety relief devices or vent piping shall be designed or located so that moisture cannot collect and freeze in a manner which would interfere with proper operation of the device.

(iv) Safety relief devices shall be provided in piping wherever liquefied hydrogen could be trapped between closures

(e) Piping, tubing, and fittings. (i) Piping, tubing, and fittings and gasket and thread sealants shall be suitable for hydrogen service at the pressures and temperatures involved. Consideration shall be given to the thermal expansion and contraction of piping systems when exposed to temperature fluctuations of ambient to liquefied hydrogen temperatures.

(ii) Gaseous hydrogen piping and tubing (above—20°F) shall conform to the applicable sections of Pressure Piping Section 2—Industrial Gas and Air Piping, ANSI B31.1—1967 with addenda B31.1—1969. Design of liquefied hydrogen or cold (–20°F or below) gas piping shall use Petroleum Refinery Piping ANSI B31.3—1966 or Refrigeration Piping ANSI B31.5—1966 with addenda B31.5a—1968 as a guide.

(iii) Joints in piping and tubing shall preferably be made by welding or brazing; flanged, threaded, socket, or suitable compression fittings may be used.

(iv) Means shall be provided to minimize exposure of personnel to piping operating at low temperatures and to prevent air condensate from contacting piping, structural members, and surfaces not suitable for cryogenic temperatures. Only those insulating materials which are rated nonburning in accordance with ASTM Procedures D1692–68 may be used. Other protective means may be used to protect personnel. The insulation shall be designed to have a vapor-tight seal in the outer covering to prevent the condensation of air and subsequent oxygen enrichment within the insulation. The insulation material and outside shield shall also be of adequate design to prevent attrition of the insulation due to normal operating conditions.

(v) Uninsulated piping and equipment which operate at liquefied-hydrogen temperature shall not be installed above asphalt surfaces or other combustible materials in order to prevent contact of liquid air with such materials. Drip pans may be installed under uninsulated piping and equipment to retain and vaporize condensed liquid air.

(f) Equipment assembly. (i) Valves, gauges, regulators, and other accessories shall be suitable for liquefied hydrogen service and for the pressures and temperatures involved.

(ii) Installation of liquefied hydrogen systems shall be supervised by personnel familiar with proper practices and with reference to their construction and use.

(iii) Storage containers, piping, valves, regulating equipment, and other accessories shall be readily accessible and shall be protected against physical damage and against tampering. A shutoff valve shall be located in liquid product withdrawal lines as close to the container as practical. On containers of over 2,000 gallons capacity, this shutoff valve shall be of the remote control type with no connections, flanges, or other appurtenances (other than a welded manual shutoff valve) allowed in the piping between the shutoff valve and its connection to the inner container.

(iv) Cabinets or housings containing hydrogen control equipment shall be ventilated to prevent any accumulation of hydrogen gas.

(g) Testing. (i) After installation, all field-erected piping shall be tested and proved hydrogen gas-tight at operating pressure and temperature.

(ii) Containers if out of service in excess of 1 year shall be inspected and tested as outlined in (1) of this section. The safety relief devices shall be checked to determine if they are operable and properly set.

(h) Liquefied hydrogen vaporizers. (i) The vaporizer shall be anchored and its connecting piping shall be sufficiently flexible to provide for the effect of expansion and contraction due to temperature changes.

(ii) The vaporizer and its piping shall be adequately protected on the hydrogen and heating media sections with safety relief devices.

(iii) Heat used in a liquefied hydrogen vaporizer shall be indirectly supplied utilizing media such as air, steam, water, or water solutions.

(iv) A low temperature shutoff switch shall be provided in the vaporizer discharge piping to prevent flow of liquefied hydrogen in the event of the loss of the heat source.

(i) Electrical systems. (i) Electrical wiring and equipment located within 3 feet of a point where connections are regularly made and disconnected, shall meet the requirements of WAC 296-24-956 through 296-24-960 for Class I, Division 1 locations.

(ii) Except as provided in (1) of this section, electrical wiring, and equipment located within 25 feet of a point where connections are regularly made and disconnected or within 25 feet of a liquid hydrogen storage container, shall meet the requirements of WAC 296-24-956 through 296-24-960 for Class I, Division 2 locations. When equipment approved for Class I, environments is not commercially available, the equipment may be:

(A) Purged or ventilated in accordance with NFPA No. 496-1967, Standard for Purged Enclosures for Electrical Equipment in Hazardous Locations,

(B) Intrinsically safe, or

(C) Approved for Class I, Group C atmospheres. This requirement does not apply to electrical equipment which is installed on mobile supply trucks or tank cars from which the storage container is filled.

(j) Bonding and grounding. The liquefied hydrogen container and associated piping shall be electrically bonded and grounded.

(2) Location of liquefied hydrogen storage. (a) General requirements. (i) The storage containers shall be located so that they are readily accessible to mobile supply equipment at ground level and to authorized personnel.

(ii) The containers shall not be exposed by electric power lines, flammable liquid lines, flammable gas lines, or lines carrying oxidizing materials.

(iii) When locating liquefied hydrogen storage containers near above-ground flammable liquid storage or liquid oxygen storage, it is advisable to locate the liquefied hydrogen container on ground higher than flammable liquid storage or liquid oxygen storage.

(iv) Where it is necessary to locate the liquefied hydrogen container on ground that is level with or lower than adjacent flammable liquid storage or liquid oxygen storage, suitable protective means shall be taken (such as by diking, diversion, curbs, grading), with respect to the adjacent flammable liquid storage or liquid oxygen storage, to prevent accumulation of liquids within 50 feet of the liquefied hydrogen container.

(v) Storage sites shall be fenced and posted to prevent entrance by unauthorized personnel. Sites shall also be placarded as follows: "Liquefied hydrogen—Flammable gas—No smoking—No open flames."

(vi) If liquefied hydrogen is located in (as specified in Table H-3) a separate building, in a special room, or inside buildings when not in a special room and exposed to other occupancies, containers shall have the safety relief devices vented unobstructed to the outdoors at a minimum elevation of 25 feet above grade to a safe location as required in (I)(d)(ii) of this section.

(b) Specific requirements. (i) The location of liquefied hydrogen storage, as determined by the maximum total quantity of liquefied hydrogen, shall be in the order of preference as indicated by Roman numerals in the following Table H-3.

TABLE H-3

MAXIMUM TOTAL QUANTITY OF LIQUEFIED HYDROGEN STORAGE PERMITTED

Nature of location	Size of hydrogen storage (capacity in gallons)			
	39.63 (150 liters) to 50	51 to 300	301 to 600	In excess of 600
Outdoors	I	I	I	I
In a separate building	II	II	II	Not permitted.
In a special room	III	III	Not permitted	Not permitted.
Inside buildings not in a special room and exposed to other occupancies	IV	Not permitted	Not permitted	Not permitted.

NOTE: This table does not apply to the storage in dewars of the type generally used in laboratories for experimental purposes.

(ii) The minimum distance in feet from liquefied hydrogen systems of indicated storage capacity located outdoors, in a separate building, or in a special room to any specified exposure shall be in accordance with Table H-4.

TABLE H-4

MINIMUM DISTANCE (FEET) FROM LIQUEFIED HYDROGEN SYSTEMS TO EXPOSURE

Type of exposure	Liquefied hydrogen storage (capacity in gallons)		
	39.63 (150 liters) to 3,500	3,501 to 15,000	15,001 to 30,000
1. Fire-resistive building and fire walls*	5	5	5
2. Noncombustible building*	25	50	75
3. Other buildings*	50	75	100
4. Wall openings, air-compressor intakes, inlets for air-conditioning or ventilating equipment	75	75	75
5. Flammable liquids (above ground and vent or fill openings if below ground) (see 513 and 514)	50	75	100
6. Between stationary liquefied hydrogen containers	5	5	5
7. Flammable gas storage	50	75	100
8. Liquid oxygen storage and other oxidizers (see 513 and 514)	100	100	100
9. Combustible solids	50	75	100
10. Open flames, smoking, and welding	50	50	50
11. Concentrations of people**	75	75	75
12. Public ways, railroads, and property lines	25	50	75

*Refer to standard types of building construction, NFPA No. 220-1969 for definitions of various types of construction.

**In congested areas such as offices, lunchrooms, locker rooms, time-clock areas, and places of public assembly.

NOTE 1: The distance in Nos. 2, 3, 5, 7, 9, and 12 in Table H-4 may be reduced where protective structures, such as firewalls equal to height of top of the container, to safeguard the liquefied hydrogen storage system, are located between the liquefied hydrogen storage installation and the exposure.

NOTE 2: Where protective structures are provided, ventilation and confinement of product should be considered. The 5-foot distance in Nos. 1 and 6 facilitates maintenance and enhances ventilation.

(c) Handling of liquefied hydrogen inside buildings other than separate buildings and special rooms. Portable liquefied hydrogen containers of 50 gallons or less capacity as permitted in Table H-3 and in compliance

with (2)(a)(vi) of this section when housed inside buildings not located in a special room and exposed to other occupancies shall comply with the following minimum requirements:

(i) Be located 20 feet from flammable liquids and readily combustible materials such as excelsior or paper.

(ii) Be located 25 feet from ordinary electrical equipment and other sources of ignition including process or analytical equipment.

(iii) Be located 25 feet from concentrations of people.

(iv) Be located 50 feet from intakes of ventilation and air-conditioning equipment or intakes of compressors.

(v) Be located 50 feet from storage of other flammable-gases or storage of oxidizing gases.

(vi) Containers shall be protected against damage or injury due to falling objects or work activity in the area.

(vii) Containers shall be firmly secured and stored in an upright position.

(viii) Welding or cutting operations, and smoking shall be prohibited while hydrogen is in the room.

(ix) The area shall be adequately ventilated. Safety relief devices on the containers shall be vented directly outdoors or to a suitable hood. See (1)(d)(ii) of this section and (2)(a)(vi) of this section.

(3) Design considerations at specific locations. (a) Outdoor locations. (i) Outdoor location shall mean outside of any building or structure, and includes locations under a weather shelter or canopy provided such locations are not enclosed by more than two walls set at right angles and are provided with vent-space between the walls and vented roof or canopy.

(ii) Roadways and yard surfaces located below liquefied hydrogen piping, from which liquid air may drop, shall be constructed of noncombustible materials.

(iii) If protective walls are provided, they shall be constructed of noncombustible materials and in accordance with the provisions of (3)(a)(i) of this section as applicable.

(iv) Electrical wiring and equipment shall comply with (1)(i)(i) and (ii) of this section.

(v) Adequate lighting shall be provided for nighttime transfer operation.

(b) Separate buildings. (i) Separate buildings shall be of light noncombustible construction on a substantial frame. Walls and roofs shall be lightly fastened and designed to relieve at a maximum internal pressure of 25 pounds per square foot. Windows shall be of shatterproof glass or plastic in metal frames. Doors shall be located in such a manner that they will be readily accessible to personnel in an emergency.

(ii) Adequate ventilation to the outdoors shall be provided. Inlet openings shall be located near the floor level in exterior walls only. Outlet openings shall be located at the high point of the room in exterior walls or roof. Both the inlet and outlet vent openings shall have a minimum total area of 1 square foot per 1,000 cubic feet of room volume. Discharge from outlet openings shall be directed or conducted to a safe location.

(iii) There shall be no sources of ignition.

(iv) Electrical wiring and equipment shall comply with (1)(i)(i) and (ii) of this section except that the provisions of (1)(i)(ii) of this section shall apply to all electrical wiring and equipment in the separate building.

(v) Heating, if provided, shall be by steam, hot water, or other indirect means.

(c) Special rooms. (i) Floors, walls, and ceilings shall have a fire resistance rating of at least 2 hours. Walls or partitions shall be continuous from floor to ceiling and shall be securely anchored. At least one wall shall be an exterior wall. Openings to other parts of the building shall not be permitted. Windows and doors shall be in exterior walls and doors shall be located in such a manner that they will be accessible in an emergency. Windows shall be of shatterproof glass or plastic in metal frames.

(ii) Ventilation shall be as provided in (3)(b)(ii) of this section.

(iii) Explosion venting shall be provided in exterior walls or roof only. The venting area shall be equal to not less than 1 square foot per 30 cubic feet of room volume and may consist of any one or any combination of the following: Walls of light noncombustible material; lightly fastened hatch covers; lightly fastened swinging doors opening outward in exterior walls; lightly fastened walls or roofs designed to relieve at a maximum pressure of 25 pounds per square foot.

(iv) There shall be no sources of ignition.

(v) Electrical wiring and equipment shall comply with (1)(i)(i) and (ii) of this section except that the provisions of (1)(i)(ii) of this section shall apply to all electrical wiring and equipment in the special room.

(vi) Heating, if provided, shall be steam, hot water, or by other indirect means.

(4) Operating instructions. (a) Written instructions. For installation which require any operation of equipment by the user, legible instructions shall be maintained at operating locations.

(b) Attendant. A qualified person shall be in attendance at all times while the mobile hydrogen supply unit is being unloaded.

(c) Security. Each mobile liquefied hydrogen supply unit used as part of a hydrogen system shall be adequately secured to prevent movement.

(d) Grounding. The mobile liquefied hydrogen supply unit shall be grounded for static electricity.

(5) Maintenance. (a) The equipment and functioning of each charged liquefied hydrogen system shall be maintained in a safe operating condition in accordance with the requirements of this section. Weeds or similar combustibles shall not be permitted within 25 feet of any liquified hydrogen equipment. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-10-004 (Order 85-09), § 296-24-31505, filed 4/19/85; Order 76-6, § 296-24-31505, filed 3/1/76; Order 73-5, § 296-24-31505, filed 5/9/73 and Order 73-4, § 296-24-31505, filed 5/7/73.]

WAC 296-24-32003 Bulk oxygen systems. (1) Definitions. As used in this section: A bulk oxygen system is

an assembly of equipment, such as oxygen storage containers, pressure regulators, safety devices, vaporizers, manifolds, and interconnecting piping, which has storage capacity of more than 13,000 cubic feet of oxygen, normal temperature and pressure (NTP), connected in service or ready for service, or more than 25,000 cubic feet of oxygen (NTP) including unconnected reserves on hand at the cite. The bulk oxygen system terminates at the point where oxygen at service pressure first enters the supply line. The oxygen containers may be stationary or movable, and the oxygen may be stored as gas or liquid.

(2) Location. (a) General. Bulk oxygen storage systems shall be located above ground out of doors, or shall be installed in a building of noncombustible construction, adequately vented, and used for that purpose exclusively. The location selected shall be such that containers and associated equipment shall not be exposed by electric power lines, flammable or combustible liquid lines, or flammable gas lines.

(b) Accessibility. The system shall be located so that it is readily accessible to mobile supply equipment at ground level and to authorized personnel.

(c) Leakage. Where oxygen is stored as a liquid, non-combustible surfacing shall be provided in an area in which any leakage of liquid oxygen might fall during operation of the system and filling of a storage container. For purposes of these standards, asphaltic or bituminous paving is considered to be combustible.

(d) Elevation. When locating bulk oxygen systems near above ground flammable or combustible liquid storage which may be either indoors or outdoors, it is advisable to locate the system on ground higher than the flammable or combustible liquid storage.

(e) Dikes. Where it is necessary to locate a bulk oxygen system on ground lower than adjacent flammable or combustible liquid storage suitable means shall be taken (such as by diking, diversion curbs, or grading) with respect to the adjacent flammable or combustible liquid storage to prevent accumulation of liquids under the bulk oxygen system.

(3) Distance between systems and exposures. (a) General. The minimum distance from any bulk oxygen storage container to exposures, measured in the most direct line except as indicated in (3)(f) and (g) of this section shall be as indicated in (3)(b) to (r) of this section inclusive.

(b) Combustible structures. Fifty feet from any combustible structures.

(c) Fire resistive structures. Twenty-five feet from any structures with fire-resistive exterior walls or sprinklered buildings or other construction, but not less than one-half the height of adjacent side wall of the structure.

(d) Openings. At least 10 feet from any opening in adjacent walls of fire resistive structures. Spacing from such structures shall be adequate to permit maintenance, but shall not be less than 1 foot.

(e) Flammable liquid storage above ground.

Distance (feet)	Capacity (gallons)
50	0-1000
90	1001 or more

(f) Flammable liquid storage below ground.

Distance measured horizontally from oxygen storage container to flammable liquid tank (feet)	Distance from oxygen storage container to filling and vent connections or openings to flammable liquid tank (feet)	Capacity gallons
15	50	0-1000
30	50	1001 or more

(g) Combustible liquid storage above ground.

Distance (feet)	Capacity (gallons)
25	0-1000
50	1001 or more

(h) Combustible liquid storage below ground.

Distance measured horizontally from oxygen storage container to combustible liquid tank (feet)	Distance from oxygen storage container to filling and vent connections or openings to combustible liquid tank (feet)
15	40

(i) Flammable gas storage. (Such as compressed flammable gases, liquefied flammable gases and flammable gases in low pressure gas holders):

Distance (feet)	Capacity (cu. ft. NTP)
50	Less than 5000
90	5000 or more

(j) Highly combustible materials. Fifty feet from solid materials which burn rapidly, such as excelsior or paper.

(k) Slow-burning materials. Twenty-five feet from solid materials which burn slowly, such as coal and heavy timber.

(l) Ventilation. Seventy-five feet in one direction and 35 feet in approximately 90° direction from confining walls (not including firewalls less than 20 feet high) to provide adequate ventilation in courtyards and similar confining areas.

(m) Congested areas. Twenty-five feet from congested areas such as offices, lunchrooms, locker rooms, time clock areas, and similar locations where people may congregate.

(n) Public areas. Fifty feet from places of public assembly.

(o) Patients. Fifty feet from areas occupied by non-ambulatory patients.

(p) Sidewalks. Ten feet from any public sidewalk.

(q) Adjacent property. Five feet from any line of adjoining property.

(r) Exceptions. The distances in (3)(b), (c), (e) to (k) inclusive, and (p) and (q) of this section do not apply where protective structures such as firewalls of adequate height to safeguard the oxygen storage systems are located between the bulk oxygen storage installation and the exposure. In such cases, the bulk oxygen storage installation may be a minimum distance of 1 foot from the firewall.

(4) Storage containers. (a) Foundations and supports. Permanently installed containers shall be provided with substantial noncombustible supports on firm noncombustible foundations.

(b) Construction—Liquid. Liquid oxygen storage containers shall be fabricated from materials meeting the impact test requirements of paragraph UG-84 of ASME Boiler and Pressure Vessel Code, Section VIII—Unfired Pressure Vessels—1968. Containers operating at pressures above 15 pounds per square inch gage (p.s.i.g.) shall be designed, constructed, and tested in accordance with appropriate requirements of ASME Boiler and Pressure Vessel Code, Section VII—Unfired Pressure Vessels—1968. Insulation surrounding the liquid oxygen container shall be noncombustible.

(c) Construction—Gaseous. High-pressure gaseous oxygen containers shall comply with one of the following:

(i) Designed, constructed, and tested in accordance with appropriate requirements of ASME Boiler and Pressure Vessel Code, Section VIII—Unfired Pressure Vessels—1968.

(ii) Designed, constructed, tested, and maintained in accordance with DOT specifications and regulations.

(5) Piping, tubing, and fittings. (a) Selection. Piping, tubing, and fittings shall be suitable for oxygen service and for the pressures and temperatures involved.

(b) Specification. Piping and tubing shall conform to Section 2—Gas and Air Piping Systems of Code for Pressure Piping, ANSI, B31.1—1967 with addenda B31.10a—1969.

(c) Fabrication. Piping or tubing for operating temperatures below -20°F shall be fabricated from materials meeting the impact test requirements of paragraph UG-84 of ASME Boiler and Pressure Vessel Code, Section VIII—Unfired Pressure Vessels—1968, when tested at the minimum operating temperature to which the piping may be subjected in service.

(6) Safety relief devices. (a) General. Bulk oxygen storage containers, regardless of design pressure shall be equipped with safety relief devices as required by the ASME code or the DOT specifications and regulations.

(b) DOT containers. Bulk oxygen storage containers designed and constructed in accordance with DOT specification shall be equipped with safety relief devices as required thereby.

(c) ASME containers. Bulk oxygen storage containers designed and constructed in accordance with the ASME Boiler and Pressure Vessel Code, Section VIII—Unfired Pressure Vessel—1968 shall be equipped with safety relief devices meeting the provisions of the Compressed Gas Association Pamphlet "Safety Relief Device Standards for Compressed Gas Storage Containers," S-1, Part 3.

(d) Insulation. Insulation casings on liquid oxygen containers shall be equipped with suitable safety relief devices.

(e) Reliability. All safety relief devices shall be so designed or located that moisture cannot collect and freeze in a manner which would interfere with proper operation of the device.

(7) Liquid oxygen vaporizers. (a) Mounts and couplings. The vaporizer shall be anchored and its connecting piping be sufficiently flexible to provide for the effect of expansion and contraction due to temperature changes.

(b) Relief devices. The vaporizer and its piping shall be adequately protected on the oxygen and heating medium sections with safety relief devices.

(c) Heating. Heat used in an oxygen vaporizer shall be indirectly supplied only through media such as steam, air, water, or water solutions which do not react with oxygen.

(d) Grounding. If electric heaters are used to provide the primary source of heat, the vaporizing system shall be electrically grounded.

(8) Equipment assembly and installation. (a) Cleaning. Equipment making up a bulk oxygen system shall be cleaned in order to remove oil, grease or other readily oxidizable materials before placing the system in service.

(b) Joints. Joints in piping and tubing may be made by welding or by use of flanged, threaded, slip, or compression fittings. Gaskets or thread sealants shall be suitable for oxygen service.

(c) Accessories. Valves, gages, regulators, and other accessories shall be suitable for oxygen service.

(d) Installation. Installation of bulk oxygen systems shall be supervised by personnel familiar with proper practices with reference to their construction and use.

(e) Testing. After installation all field erected piping shall be tested and proved gas tight at maximum operating pressure. Any medium used for testing shall be oil free and nonflammable.

(f) Security. Storage containers, piping, valves, regulating equipment, and other accessories shall be protected against physical damage and against tampering.

(g) Venting. Any enclosure containing oxygen control or operating equipment shall be adequately vented.

(h) Placarding. The bulk oxygen storage location shall be permanently placarded to indicate: "OXYGEN—NO SMOKING—NO OPEN FLAMES," or an equivalent warning.

(i) Electrical wiring. Bulk oxygen installations are not hazardous locations as defined and covered by WAC 296-24-956 through 296-24-960. Therefore, general purpose or weatherproof types of electrical wiring and equipment are acceptable depending upon whether the installation is indoors or outdoors. Such equipment shall

be installed in accordance with the provisions of WAC 296-24-956 through 296-24-960.

(9) Operating instructions. For installations which require any operation of equipment by the user, legible instructions shall be maintained at operating locations.

(10) Maintenance. (a) The equipment and functioning of each charged bulk oxygen system shall be maintained in a safe operating condition in accordance with the requirements of this section. Wood and long dry grass shall be cut back within 15 feet of any bulk oxygen storage container. [Statutory Authority: RCW 49.17-.040 and 49.17.050. 85-10-004 (Order 85-09), § 296-24-32003, filed 4/19/85; Order 76-6, § 296-24-32003, filed 3/1/76; Order 73-5, § 296-24-32003, filed 5/9/73 and Order 73-4, § 296-24-32003, filed 5/7/73.]

WAC 296-24-33009 Container and portable tank storage. (1) Scope. (a) General. This section shall apply only to the storage of flammable or combustible liquids in drums or other containers (including flammable aerosols) not exceeding 60 gallons individual capacity and those portable tanks not exceeding 660 gallons individual capacity.

(b) Exceptions. This section shall not apply to the following:

(i) Storage of containers in bulk plants, service stations, refineries, chemical plants, and distilleries;

(ii) Class I or Class II liquids in the fuel tanks of a motor vehicle, aircraft, boat, or portable or stationary engine;

(iii) Flammable or combustible paints, oils, varnishes, and similar mixtures used for painting or maintenance when not kept for a period in excess of 30 days;

(iv) Beverages when packaged in individual containers not exceeding 1 gallon in size.

(2) Design, construction, and capacity of containers. (a) General. Only approved containers and portable tanks shall be used. Metal containers and portable tanks meeting the requirements of and containing products authorized by Chapter I, Title 49 of the Code of Federal Regulations - October 1, 1972, (regulations issued by the hazardous materials regulations board, department of transportation), shall be deemed to be acceptable.

(b) Emergency venting. Each portable tank shall be provided with one or more devices installed in the top with sufficient emergency venting capacity to limit internal pressure under fire exposure conditions to 10 p.s.i.g., or 30 percent of the bursting pressure of the tank, whichever is greater. The total venting capacity shall be not less than that specified in WAC 296-24-33005 (2)(e)(iii) or (v). At least one pressure-actuated vent having a minimum capacity of 6,000 cubic feet of free air (14.7 p.s.i.a. and 60°F) shall be used. It shall be set to open at not less than 5 p.s.i.g. If fusible vents are used, they shall be actuated by elements that operate at a temperature not exceeding 300°F.

TABLE H-12

MAXIMUM ALLOWABLE SIZE OF CONTAINERS AND PORTABLE TANKS

Container Type	Flammable liquids			Combustible Liquids	
	Class IA	Class IB	Class IC	Class II & III	
Glass or approved plastic	1 pt.	1 qu.	1 gal.	1 gal.	1 gal.
Metal (other than DOT drums)	1 gal.	5 gal.	5 gal.	5 gal.	5 gal.
Safety cans	2 gal.	5 gal.	5 gal.	5 gal.	5 gal.
Metal drums (DOT spec.)	60 gal.	60 gal.	60 gal.	60 gal.	60 gal.
Approved portable tanks	660 gal.	660 gal.	660 gal.	660 gal.	660 gal.

Container exemptions: (i) Medicines, beverages, food-stuffs, cosmetics and other common consumer items, when packaged according to commonly accepted practices, shall be exempt from the requirements of (4)(a) and (b) of this section.

(c) Size. Flammable and combustible liquid containers shall be in accordance with Table H-12, except that glass or plastic containers of no more than 1-gallon capacity may be used for a Class IA or IB flammable liquid if:

(i) Such liquid either would be rendered unfit for its intended use by contact with metal or would excessively corrode a metal container so as to create a leakage hazard; and

(ii) The user's process either would require more than 1 pint of Class IA liquid or more than 1 quart of a Class IB liquid of a single assay lot to be used at one time, or would require the maintenance of an analytical standard liquid of a quality which is not met by the specified standards of liquids available, and the quantity of the analytical standard liquid required to be used in any one control process exceeds one-sixteenth the capacity of the container allowed under Table H-12 for the class of liquid; or

(iii) The containers are intended for direct export outside the United States.

(3) Design, construction, and capacity of storage cabinets. (a) Maximum capacity. Not more than 60 gallons of Class I or Class II liquids, nor more than 120 gallons of Class III liquids may be stored in a storage cabinet.

(b) Fire resistance. Storage cabinets shall be designed and constructed to limit the internal temperature to not more than 325°F when subjected to a 10-minute fire test using the standard time-temperature curve as set forth in Standard Methods of Fire Tests of Building Construction and Materials, NFPA 251-1969. All joints and seams shall remain tight and the door shall remain securely closed during the fire test. Cabinets shall be labeled "Flammable—Keep fire away," to meet specifications set forth in WAC 296-24-140.

(i) Metal cabinets constructed in the following manner shall be deemed to be in compliance. The bottom, top, door, and sides of cabinet shall be at least No. 18

gage sheet iron and double walled with 1 1/2-inch air space. Joints shall be riveted, welded or made tight by some equally effective means. The door shall be provided with a three-point lock, and the door sill shall be raised at least 2 inches above the bottom of the cabinet.

(ii) Wooden cabinets constructed in the following manner shall be deemed in compliance. The bottom, sides, and top shall be constructed of an approved grade of plywood at least 1 inch in thickness, which shall not break down or delaminate under fire conditions. All joints shall be rabbetted and shall be fastened in two directions with flathead woodscrews. When more than one door is used, there shall be a rabbetted overlap of not less than 1 inch. Hinges shall be mounted in such a manner as not to lose their holding capacity due to loosening or burning out of the screws when subjected to the fire test.

(4) Design and construction of inside storage rooms.

(a) Construction. Inside storage rooms shall be constructed to meet the required fire-resistive rating for their use. Such construction shall comply with the test specifications set forth in Standard Methods of Fire Tests of Building Construction and Materials, NFPA 251-1969. Where an automatic sprinkler system is provided, the system shall be designed and installed in an acceptable manner. Openings to other rooms or buildings shall be provided with noncombustible liquid-tight raised sills or ramps at least 4 inches in height, or the floor in the storage area shall be at least 4 inches below the surrounding floor. Openings shall be provided with approved self-closing fire doors. The room shall be liquid tight where the walls join the floor. A permissible alternate to the sill or ramp is an open-grated trench inside of the room which drains to a safe location. Where other portions of the building or other properties are exposed, windows shall be protected as set forth in the Standard for Fire Doors and Windows, NFPA No. 80-1968, for Class E or F openings. Wood at least 1 inch nominal thickness may be used for shelving, racks, dunnage, scuffboards, floor overlay, and similar installations.

(b) Rating and capacity. Storage in inside storage rooms shall comply with Table H-13.

TABLE H-13

STORAGE IN INSIDE ROOMS

Fire protection* provided	Fire resistance	Maximum size	Total allowable quantities (gals./sq. ft./floor area)
Yes _____	2 hours _____	500 sq.ft. _____	10 _____
No _____	2 hours _____	500 sq.ft. _____	4 _____
Yes _____	1 hour _____	150 sq.ft. _____	5 _____
No _____	1 hour _____	150 sq.ft. _____	2 _____

*Fire protection system shall be sprinkler, water spray, carbon dioxide, or other system.

(c) Wiring. Electrical wiring and equipment within inside storage rooms used to store Class I liquids shall comply with the provisions of WAC 296-24-956 through 296-24-960 for Class I, Division 2 locations. For inside storage rooms used to store Class II and III liquids the pertinent provisions WAC 296-24-956 through 296-24-960 apply.

(d) Ventilation. Every inside storage room shall be provided with either a gravity or a mechanical exhaust ventilation system. Such system shall be designed to provide for a complete change of air within the room at least six times per hour. If a mechanical exhaust system is used, it shall be controlled by a switch located outside of the door. The ventilating equipment and any lighting fixtures shall be operated by the same switch. A pilot light shall be installed adjacent to the switch if Class I flammable liquids are dispensed within the room. Where gravity ventilation is provided, the fresh air intake, as well as the exhaust outlet from the room, shall be on the exterior of the building in which the room is located.

(e) Storage in inside storage rooms. In every inside storage room there shall be maintained one clear aisle at least 3 feet wide. Containers over 30 gallons capacity shall not be stacked one upon the other. Dispensing shall be by approved pump or self-closing faucet only.

(5) Storage inside building. (a) Egress. Flammable or combustible liquids, including stock for sale, shall not be stored so as to limit use of exits, stairways, or areas normally used for the safe egress of people.

(b) Containers. The storage of flammable or combustible liquids in containers or portable tanks shall comply with (4)(c) through (e) of this section.

(c) Office occupancies. Storage shall be prohibited except that which is required for maintenance and operation of building and operation of equipment. Such storage shall be kept in closed metal containers stored in a storage cabinet or in safety cans or in an inside storage room not having a door that opens into that portion of the building used by the public.

(d) Mercantile occupancies and other retail stores. (i) In rooms or areas accessible to the public, storage shall be limited to quantities needed for display and normal merchandising purposes but shall not exceed 2 gallons per square foot of gross floor area. The gross floor area used for computing the maximum quantity permitted shall be considered as that portion of the store actually being used for merchandising flammable and combustible liquids.

(ii) Where the aggregate quantity of additional stock exceeds 60 gallons of Class IA, or 120 gallons of Class IB, or 180 gallons of Class IC, or 240 gallons of Class II, or 500 gallons of Class III liquids, or any combination of Class I and Class II liquids exceeding 240 gallons, it shall be stored in a room or portion of the building that complies with the construction provisions for an inside storage room as prescribed in (4) of this section. For water miscible liquids, these quantities may be doubled.

(iii) Containers in a display area shall not be stacked more than 3 feet or two containers high, whichever is the

greater, unless the stacking is done on fixed shelving or is otherwise satisfactorily secured.

(iv) Shelving shall be of stable construction, of sufficient depth and arrangement such that containers displayed thereon shall not be easily displaced.

(v) Leaking containers shall be removed to a storage room or taken to a safe location outside the building and the contents transferred to an undamaged container.

(e) General purpose public warehouses. Storage shall be in accordance with Table H-14 or H-15 and in buildings or in portions of such buildings cut off by standard firewalls. Material creating no fire exposure hazard to the flammable or combustible liquids may be stored in the same area.

TABLE H-14
INDOOR CONTAINER STORAGE

Class liquid	Storage level	Protected storage maximum per pile		Unprotected storage maximum per pile	
		Gal.	Ht.	Gal.	Ht.
IA	Ground and upper floors	2,750 (50)	3 ft. (1)	660 (12)	3 ft. (1)
	Basement	Not permitted		Not permitted	
IB	Ground and upper floors	5,500 (100)	6 ft. (2)	1,375 (25)	3 ft. (1)
	Basement	Not permitted		Not permitted	
IC	Ground and upper floors	16,500 (300)	6 ft. (2)	4,125 (75)	3 ft. (1)
	Basement	Not permitted		Not permitted	
II	Ground and upper floors	16,500 (300)	9 ft. (3)	4,125 (75)	9 ft. (3)
	Basement	5,500 (100)	9 ft. (3)	Not permitted	
III	Ground and upper floors	55,000 (1,000)	15 ft. (5)	13,750 (250)	12 ft. (4)
	Basement	8,250 (450)	9 ft. (3)	Not permitted	

NOTE 1: When 2 or more classes of materials are stored in a single pile, the maximum gallonage permitted in that pile shall be the smallest of the 2 or more separate maximum gallonages.

NOTE 2: Aisles shall be provided so that no container is more than 12 ft. from an aisle. Main aisles shall be at least 8 ft. wide and side aisles at least 4 ft. wide.

(Numbers in parentheses indicate corresponding number of 55-gal. drums.)

NOTE 3: Each pile shall be separated from each other by at least 4 ft.

TABLE H-15

INDOOR PORTABLE TANK STORAGE

Class liquid	Storage level	Protected storage maximum per pile		Unprotected storage maximum per pile	
		Gals.	Ht.	Gals.	Ht.
IA	Ground and upper floors	Not permitted		Not permitted	
	Basement	Not permitted		Not permitted	
IB	Ground and upper floors	20,000	7 ft.	2,000	7 ft.
	Basement	Not permitted		Not permitted	
IC	Ground and upper floors	40,000	14 ft.	5,500	7 ft.
	Basement	Not permitted		Not permitted	
II	Ground and upper floors	40,000	14 ft.	5,500	7 ft.
	Basement	20,000	7 ft.	Not permitted	
III	Ground and upper floors	60,000	14 ft.	22,000	7 ft.
	Basement	20,000	7 ft.	Not permitted	

NOTE 1: When 2 or more classes of materials are stored in a single pile, the maximum gallonage permitted in that pile shall be the smallest of the 2 or more separate maximum gallonages.

NOTE 2: Aisles shall be provided so that no portable tank is more than 12 ft. from an aisle. Main aisles shall be at least 8 ft. wide and side aisles at least 4 ft. wide.

NOTE 3: Each pile shall be separated from each other by at least 4 ft.

(f) Flammable and combustible liquid warehouses or storage buildings. (i) If the storage building is located 50 feet or less from a building or line of adjoining property that may be built upon, the exposing wall shall be a blank wall having a fire-resistance rating of at least 2 hours.

(ii) The total quantity of liquids within a building shall not be restricted, but the arrangement of storage shall comply with Table H-14 or H-15.

(iii) Containers in piles shall be separated by pallets or dunnage where necessary to provide stability and to prevent excessive stress on container walls.

(iv) Portable tanks stored over one tier high shall be designed to nest securely, without dunnage and adequate materials handling equipment shall be available to handle tanks safely at the upper tier level.

(v) No pile shall be closer than 3 feet to the nearest beam, chord, girder, or other obstruction, and shall be 3 feet below sprinkler deflectors or discharge orifices of water spray, or other overhead fire protection systems.

(vi) Aisles of at least 3 feet wide shall be provided where necessary for reasons of access to doors, windows or standpipe connections.

(6) Storage outside buildings. (a) General. Storage outside buildings shall be in accordance with Table H-16 or H-17, and (6)(b) and (d) of this section.

TABLE H-16

OUTDOOR CONTAINER STORAGE

1 Class	2 Maximum per pile (see note 1)	3 Distance between piles (see note 2)	4 Distance to property line that can be built upon (see notes 3 & 4)	5 Distance to street, alley, public way (see note 4)
	gal.	ft.	ft.	ft.
IA	1,100	5	20	10
IB	2,200	5	20	10
IC	4,400	5	20	10
II	8,800	5	10	5
III	22,000	5	10	5

- NOTE 1: When 2 or more classes of materials are stored in a single pile, the maximum gallonage in that pile shall be the smallest of the 2 or more separate gallonages.
- NOTE 2: Within 200 ft. of each container, there shall be 12-ft. wide access way to permit approach of fire control apparatus.
- NOTE 3: The distances listed apply to properties that have protection for exposures as defined. If there are exposures, and such protection for exposures does not exist, the distances in column 4 shall be doubled.
- NOTE 4: When total quantity stored does not exceed 50 percent of maximum per pile, the distances in columns 4 and 5 may be reduced 50 percent, but not less than 3 ft.

(b) Maximum storage. A maximum of 1,100 gallons of flammable or combustible liquids may be located adjacent to buildings located on the same premises and under the same management provided the provisions of (6)(b)(i) and (ii) are complied with.

(i) The building shall be a one-story building devoted principally to the handling and storing of flammable or combustible liquids or the building shall have 2 hour fire-resistive exterior walls having no opening within 10 feet of such storage.

(ii) Where quantity stored exceeds 1,100 gallons, or provisions of (6)(b)(i) cannot be met, a minimum distance of 10 feet between buildings and nearest container of flammable or combustible liquid shall be maintained.

TABLE H-17

OUTDOOR PORTABLE TANK STORAGE

1 Class	2 Maximum per pile	3 Distance between piles	4 Distance to property line that can be built upon	5 Distance to street, alley, public way
	gal.	ft.	ft.	ft.
IA	2,200	5	20	10
IB	4,400	5	20	10
IC	8,800	5	20	10

TABLE H-17

OUTDOOR PORTABLE TANK STORAGE

1 Class	2 Maximum per pile	3 Distance between piles	4 Distance to property line that can be built upon	5 Distance to street, alley, public way
	gal.	ft.	ft.	ft.
II	17,600	5	10	5
III	44,000	5	10	5

- NOTE 1: When 2 or more classes of materials are stored in a single pile, the maximum gallonage in that pile shall be the smallest of the 2 or more separate gallonages.
- NOTE 2: Within 200 ft. of each portable tank, there shall be a 12-ft. wide access way to permit approach of fire control apparatus.
- NOTE 3: The distances listed apply to properties that have protection for exposures as defined. If there are exposures, and such protection for exposures does not exist, the distances in column 4 shall be doubled.
- NOTE 4: When total quantity stored does not exceed 50 percent of maximum per pile, the distances in columns 4 and 5 may be reduced 50 percent, but not less than 3 ft.

(c) Spill containment. The storage area shall be graded in a manner to divert possible spills away from buildings or other exposures or shall be surrounded by a curb at least 6 inches high. When curbs are used, provisions shall be made for draining of accumulations of ground or rain water or spills of flammable or combustible liquids. Drains shall terminate at a safe location and shall be accessible to operation under fire conditions.

(d) Security. The storage area shall be protected against tampering or trespassers where necessary and shall be kept free of weeds, debris and other combustible material not necessary to the storage.

(7) Fire control. (a) Extinguishers. Suitable fire control devices, such as small hose or portable fire extinguishers, shall be available at locations where flammable or combustible liquids are stored.

(i) At least one portable fire extinguisher having a rating of not less than 12-B units shall be located outside of, but not more than 10 feet from, the door opening into any room used for storage.

(ii) At least one portable fire extinguisher having a rating of not less than 12-B units must be located not less than 10 feet, nor more than 25 feet, from any Class I or Class II liquid storage area located outside of a storage room but inside a building.

(b) Sprinklers. When sprinklers are provided, they shall be installed in accordance with WAC 296-24-605 through 296-24-60509.

(c) Open flames and smoking. Open flames and smoking shall not be permitted in flammable or combustible liquid storage areas.

(d) Water reactive materials. Materials which will react with water shall not be stored in the same room with flammable or combustible liquids. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-10-004 (Order 85-

09), § 296-24-33009, filed 4/19/85; Order 76-6, § 296-24-33009, filed 3/1/76; Order 74-27, § 296-24-33009, filed 5/7/74; Order 73-5, § 296-24-33009, filed 5/9/73 and Order 73-4, § 296-24-33009, filed 5/7/73.]

WAC 296-24-33011 Industrial plants. (1) Scope.

(a) Application. This paragraph shall apply to those industrial plants where:

(i) The use of flammable or combustible liquids is incidental to the principal business, or

(ii) Where flammable or combustible liquids are handled or used only in unit physical operations such as mixing, drying, evaporating, filtering, distillation, and similar operations which do not involve chemical reaction. This section shall not apply to chemical plants, refineries or distilleries.

(b) Exceptions. Where portions of such plants involve chemical reactions such as oxidation, reduction, halogenation, hydrogenation, alkylation, polymerization, and other chemical processes, those portions of the plant shall be in accordance with WAC 296-24-33017.

(2) Incidental storage or use of flammable and combustible liquids. (a) Application. This shall be applicable to those portions of an industrial plant where the use and handling of flammable or combustible liquids is only incidental to the principal business, such as automobile assembly, construction of electronic equipment, furniture manufacturing, or other similar activities.

(b) Containers. Flammable or combustible liquids shall be stored in tanks or closed containers.

(i) Except as provided in (2)(b)(ii) and (iii) of this section all storage shall comply with WAC 296-24-33009 (3) or (4).

(ii) The quantity of liquid that may be located outside of an inside storage room or storage cabinet in a building or in any one fire area of a building shall not exceed:

(A) 25 gallons of Class IA liquids in containers

(B) 120 gallons of Class IB, IC, II, or III liquids in containers

(C) 660 gallons of Class IB, IC, II, or III liquids in a single portable tank.

(iii) Where large quantities of flammable or combustible liquids are necessary, storage may be in tanks which shall comply with the applicable requirements of WAC 296-24-33005.

(c) Separation and protection. Areas in which flammable or combustible liquids are transferred from one tank or container to another container shall be separated from other operations in the building by adequate distance or by construction having adequate fire resistance. Drainage or other means shall be provided to control spills. Adequate natural or mechanical ventilation shall be provided.

(d) Handling liquids at point of final use. (i) Flammable liquids shall be kept in covered containers when not actually in use.

(ii) Where flammable or combustible liquids are used or handled, except in closed containers, means shall be provided to dispose promptly and safely of leakage or spills.

(iii) Class I liquids may be used only where there are no open flames or other sources of ignition within the possible path of vapor travel.

(iv) Flammable or combustible liquids shall be drawn from or transferred into vessels, containers, or portable tanks within a building only through a closed piping system, from safety cans, by means of a device drawing through the top, or from a container or portable tanks by gravity through an approved self-closing valve. Transferring by means of air pressure on the container or portable tanks shall be prohibited.

(3) Unit physical operations. (a) Application. This subdivision (3) shall be applicable in those portions of industrial plants where flammable or combustible liquids are handled or used in unit physical operations such as mixing, drying, evaporating, filtering, distillation, and similar operations which do not involve chemical change. Examples are plants compounding cosmetics, pharmaceuticals, solvents, cleaning fluids, insecticides, and similar types of activities.

(b) Location. Industrial plants shall be located so that each building or unit of equipment is accessible from at least one side for firefighting and fire control purposes. Buildings shall be located with respect to lines of adjoining property which may be built upon as set forth in WAC 296-24-33017 (2)(a) and (b) except that the blank wall referred to in WAC 296-24-33017 (2)(b) shall have a fire resistance rating of at least 2 hours.

(c) Chemical processes. Areas where unstable liquids are handled or small scale unit chemical processes are carried on shall be separated from the remainder of the plant by a fire wall of 2-hour minimum fire resistance rating.

(d) Drainage. (i) Emergency drainage systems shall be provided to direct flammable or combustible liquid leakage and fire protection water to a safe location. This may require curbs, scuppers, or special drainage systems to control the spread of fire; see WAC 296-24-33005 (2)(g)(ii).

(ii) Emergency drainage systems, if connected to public sewers or discharged into public waterways, shall be equipped with traps or separators.

(iii) The industrial plant shall be designed and operated to prevent the normal discharge of flammable or combustible liquids into public waterways, public sewers, or adjoining property.

(e) Ventilation. (i) Areas as defined in (1)(a) of this section using Class I liquids shall be ventilated at a rate of not less than 1 cubic foot per minute per square foot of solid floor area. This shall be accomplished by natural or mechanical ventilation with discharge or exhaust to a safe location outside of the building. Provision shall be made for introduction of makeup air in such a manner as not to short circuit the ventilation. Ventilation shall be arranged to include all floor areas or pits where flammable vapors may collect.

(ii) Equipment used in a building and the ventilation of the building shall be designed so as to limit flammable vapor-air mixtures under normal operating conditions to the interior of equipment, and to not more than 5 feet from equipment which exposes Class I liquids to

the air. Examples of such equipment are dispensing stations, open centrifuges, plate and frame filters, open vacuum filters, and surfaces of open equipment.

(f) Storage and handling. The storage, transfer, and handling of liquid shall comply with WAC 296-24-33017(4) of this section.

(4) Tank vehicle and tank car loading and unloading.

(a) Tank vehicle and tank car loading or unloading facilities shall be separated from aboveground tanks, warehouses, other plant buildings or nearest line of adjoining property which may be built upon by a distance of 25 feet for Class I liquids and 15 feet for Class II and Class III liquids measured from the nearest position of any fill stem. Buildings for pumps or shelters for personnel may be a part of the facility. Operations of the facility shall comply with the appropriate portions of WAC 296-24-33013(3).

(5) Fire control. (a) Portable and special equipment. Portable fire extinguishment and control equipment shall be provided in such quantities and types as are needed for the special hazards of operation and storage.

(b) Water supply. Water shall be available in volume and at adequate pressure to supply water hose streams, foam-producing equipment, automatic sprinklers, or water spray systems as the need is indicated by the special hazards of operation, dispensing and storage.

(c) Special extinguishers. Special extinguishing equipment such as that utilizing foam, inert gas, or dry chemical shall be provided as the need is indicated by the special hazards of operation dispensing and storage.

(d) Special hazards. Where the need is indicated by special hazards of operation, flammable or combustible liquid processing equipment, major piping, and supporting steel shall be protected by approved water spray systems, deluge systems, approved fire-resistant coatings, insulation, or any combination of these.

(e) Maintenance. All plant fire protection facilities shall be adequately maintained and periodically inspected and tested to make sure they are always in satisfactory operating condition, and they will serve their purpose in time of emergency.

(6) Sources of ignition. (a) General. Adequate precautions shall be taken to prevent the ignition of flammable vapors. Sources of ignition include but are not limited to open flames; lightning; smoking; cutting and welding; hot surfaces; frictional heat; static, electrical and mechanical sparks; spontaneous ignition, including heat-producing chemical reactions; and radiant heat.

(b) Grounding. Class I liquids shall not be dispensed into containers unless the nozzle and container are electrically interconnected. Where the metallic floorplate on which the container stands while filling is electrically connected to the fill stem or where the fill stem is bonded to the container during filling operations by means of a bond wire, the provisions of these standards shall be deemed to have been complied with.

(7) Electrical. (a) Equipment. (i) All electrical wiring and equipment shall be installed according to the requirements of WAC 296-24-956 through 296-24-960.

(ii) Locations where flammable vapor-air mixtures may exist under normal operations shall be classified

Class I, Division 1 according to the requirements of WAC 296-24-956 through 296-24-960. For those pieces of equipment installed in accordance with the requirements of subsection (3)(e)(ii) of this section, the Division 1 area shall extend 5 feet in all directions from all points of vapor liberation. All areas within pits shall be classified Division 1 if any part of the pit is within a Division 1 or 2 classified area, unless the pit is provided with mechanical ventilation.

(iii) Locations where flammable vapor-air mixtures may exist under abnormal conditions and for a distance beyond Division 1 locations shall be classified Division 2 according to the requirements of WAC 296-24-956 through 296-24-960. These locations include an area within 20 feet horizontally, 3 feet vertically beyond a Division 1 area, and up to 3 feet above floor or grade level within 25 feet, if indoors, or 10 feet if outdoors, from any pump, bleeder, withdrawal fitting, meter, or similar device handling Class I liquids. Pits provided with adequate mechanical ventilation within a Division 1 or 2 area shall be classified Division 2. If Class II or Class III liquids only are handled, then ordinary electrical equipment is satisfactory though care shall be used in locating electrical apparatus to prevent hot metal from falling into open equipment.

(iv) Where the provisions of (i), (ii) and (iii) of this section require the installation of electrical equipment suitable for Class I, Division 1 or Division 2 locations, ordinary electrical equipment including switchgear may be used if installed in a room or enclosure which is maintained under positive pressure with respect to the hazardous area. Ventilation makeup air shall be uncontaminated by flammable vapors.

(8) Repairs to equipment. Hot work, such as welding or cutting operations, use of spark-producing power tools, and chipping operations shall be permitted only under supervision of an individual in responsible charge. The individual in responsible charge shall make an inspection of the area to be sure that it is safe for the work to be done and that safe procedures will be followed for the work specified.

(9) Housekeeping. (a) General. Maintenance and operating practices shall be in accordance with established procedures which will tend to control leakage and prevent the accidental escape of flammable or combustible liquids. Spills shall be cleaned up promptly.

(b) Access. Adequate aisles shall be maintained for unobstructed movement of personnel and so that fire protection equipment can be brought to bear on any part of flammable or combustible liquid storage, use, or any unit physical operation.

(c) Waste and residue. Combustible waste material and residues in a building or unit operating area shall be kept to a minimum, stored in covered metal receptacles and disposed of daily.

(d) Clear zone. Ground area around buildings and unit operating areas shall be kept free of weeds, trash, or other unnecessary combustible materials. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-10-004 (Order 85-09), § 296-24-33011, filed 4/19/85; Order 76-6, § 296-24-33011, filed 3/1/76; Order 73-5, §

296-24-33011, filed 5/9/73 and Order 73-4, § 296-24-33011, filed 5/7/73.]

WAC 296-24-33013 Bulk plants. (1) Storage. (a) Class I liquids. Class I liquids shall be stored in closed containers, or in storage tanks above ground outside of buildings, or underground in accordance with WAC 296-24-33005.

(b) Class II and III liquids. Class II and Class III liquids shall be stored in containers, or in tanks within buildings or above ground outside of buildings, or underground in accordance with WAC 296-24-33005.

(c) Piling containers. Containers of flammable or combustible liquids when piled one upon the other shall be separated by dunnage sufficient to provide stability and to prevent excessive stress on container walls. The height of the pile shall be consistent with the stability and strength of containers.

(2) Buildings. (a) Exits. Rooms in which flammable or combustible liquids are stored or handled by pumps shall have exit facilities arranged to prevent occupants from being trapped in the event of fire.

(b) Heating. Rooms in which Class I liquids are stored or handled shall be heated only by means not constituting a source of ignition, such as steam or hot water. Rooms containing heating appliances involving sources of ignition shall be located and arranged to prevent entry of flammable vapors.

(c) Ventilation. (i) Ventilation shall be provided for all rooms, buildings, or enclosures in which Class I liquids are pumped or dispensed. Design of ventilation systems shall take into account the relatively high specific gravity of the vapors. Ventilation may be provided by adequate openings in outside walls at floor level unobstructed except by louvers or course screens. Where natural ventilation is inadequate, mechanical ventilation shall be provided.

(ii) Class I liquids shall not be stored or handled within a building having a basement or pit into which flammable vapors may travel, unless such area is provided with ventilation designed to prevent the accumulation of flammable vapors therein.

(iii) Containers of Class I liquids shall not be drawn from or filled within buildings unless provision is made to prevent the accumulation of flammable vapors in hazardous concentrations. Where mechanical ventilation is required, it shall be kept in operation while flammable liquids are being handled.

(3) Loading and unloading facilities. (a) Separation. Tank vehicle and tank car loading or unloading facilities shall be separated from aboveground tanks, warehouses, other plant buildings or nearest line of adjoining property that may be built upon by a distance of 25 feet for Class I liquids and 15 feet for Class II and Class III liquids measured from the nearest position of any fill spout. Buildings for pumps or shelters for personnel may be a part of the facility.

(b) Class restriction. Equipment such as piping, pumps, and meters used for the transfer of Class I liquids between storage tanks and the fill stem of the loading rack shall not be used for the transfer of Class II or Class III liquids.

(c) Valves. Valves used for the final control for filling tank vehicles shall be of the self-closing type and manually held open except where automatic means are provided for shutting off the flow when the vehicle is full or after filling of a preset amount.

(d) Static protection. (i) Bonding facilities for protection against static sparks during the loading of tank vehicles through open domes shall be provided:

(A) Where Class I liquids are loaded, or

(B) Where Class II or Class III liquids are loaded into vehicles which may contain vapors from previous cargoes of Class I liquids.

(ii) Protection as required in (3)(d)(i) of this section shall consist of a metallic bond wire permanently electrically connected to the fill stem or to some part of the rack structure in electrical contact with the fill stem. The free end of such wire shall be provided with a clamp or equivalent device for convenient attachment to some metallic part in electrical contact with the cargo tank of the tank vehicle.

(iii) Such bonding connection shall be made fast to the vehicle or tank before dome covers are raised and shall remain in place until filling is completed and all dome covers have been closed and secured.

(iv) Bonding as specified in (3)(d)(i), (ii) and (iii) of this section is not required:

(A) Where vehicles are loaded exclusively with products not having a static accumulating tendency, such as asphalt, most crude oils, residual oils, and water soluble liquids;

(B) Where no Class I liquids are handled at the loading facility and the tank vehicles loaded are used exclusively for Class II and Class III liquids; and

(C) Where vehicles are loaded or unloaded through closed bottom or top connections.

(v) Filling through open domes into the tanks of tank vehicles or tank cars, that contain vapor-air mixtures within the flammable range or where the liquid being filled can form such a mixture, shall be by means of a downspout which extends near the bottom of the tank. This precaution is not required when loading liquids which are nonaccumulators of static charges.

(e) Stray currents. Tank car loading facilities where Class I liquids are loaded through open domes shall be protected against stray currents by bonding the pipe to at least one rail and to the rack structure if of metal. Multiple lines entering the rack area shall be electrically bonded together. In addition, in areas where excessive stray currents are known to exist, all pipe entering the rack area shall be provided with insulating sections to electrically isolate the rack piping from the pipelines. No bonding between the tank car and the rack or piping is required during either loading or unloading of Class II or III liquids.

(f) Container filling facilities. Class I liquids shall not be dispensed into containers unless the nozzle and container are electrically interconnected. Where the metallic floorplate on which the container stands while filling is electrically connected to the fill stem or where the fill stem is bonded to the container during filling operations by means of a bond wire, the provisions of these standards shall be deemed to have been complied with.

(4) Wharves. (a) Definition, application. The term wharf shall mean any wharf, pier, bulkhead, or other structure over or contiguous to navigable water used in conjunction with a bulk plant, the primary function of which is the transfer of flammable or combustible liquid cargo in bulk between the bulk plant and any tank vessel, ship, barge, lighter boat, or other mobile floating craft; and this subparagraph shall apply to all such installations except marine service stations as covered in WAC 296-24-33015.

(b) Package cargo. Package cargo of flammable and combustible liquids, including full and empty drums, bulk fuel, and stores may be handled over a wharf and at such times and places as may be agreed upon by the wharf superintendent and the senior deck officer on duty.

(c) Location. Wharves at which flammable or combustible liquid cargoes are to be transferred in bulk quantities to or from tank vessels shall be at least 100 feet from any bridge over a navigable waterway, or from an entrance to or superstructure of any vehicular or railroad tunnel under a waterway. The termination of the wharf loading or unloading fixed piping shall be at least 200 feet from a bridge or from an entrance to or superstructure of a tunnel.

(d) Design and construction. Substructure and deck shall be substantially designed for the use intended. Deck may employ any material which will afford the desired combination of flexibility, resistance to shock, durability, strength, and fire resistance. Heavy timber construction is acceptable.

(e) Tanks. Tanks used exclusively for ballast water or Class II or Class III liquids may be installed on suitably designed wharves.

(f) Pumps. Loading pumps capable of building up pressures in excess of the safe working pressure of cargo hose or loading arms shall be provided with bypasses, relief valves, or other arrangement to protect the loading facilities against excessive pressure. Relief devices shall be tested at not more than yearly intervals to determine that they function satisfactorily at the pressure at which they are set.

(g) Hoses and couplings. All pressure hoses and couplings shall be inspected at intervals appropriate to the service. The hose and couplings shall be tested with the hose extended and using the "inservice maximum operating pressures." Any hose showing material deteriorations, signs of leakage, or weakness in its carcass or at the couplings shall be withdrawn from service and repaired or discarded.

(h) Piping and fittings. Piping, valves, and fittings shall be in accordance with WAC 296-24-33007 with the following exceptions and additions:

(i) Flexibility of piping shall be assured by appropriate layout and arrangement of piping supports so that motion of the wharf structure resulting from wave action, currents, tides, or the mooring of vessels will not subject the pipe to repeated strain beyond the elastic limit.

(ii) Pipe joints depending upon the friction characteristics of combustible materials or grooving of pipe ends for mechanical continuity of piping shall not be used.

(iii) Swivel joints may be used in piping to which hoses are connected, and for articulated swivel-joint transfer systems, provided that the design is such that the mechanical strength of joint will not be impaired if the packing material should fail, as by exposure to fire.

(iv) Piping systems shall contain a sufficient number of valves to operate the system properly and to control the flow of liquid in normal operation and in the event of physical damage.

(v) In addition to the requirements of (4)(h)(iv), each line conveying flammable liquids leading to a wharf shall be provided with a readily accessible block valve located on shore near the approach to the wharf and outside of any diked area. Where more than one line is involved, the valves shall be grouped in one location.

(vi) Means of easy access shall be provided for cargo line valves located below the wharf deck.

(vii) Pipelines on flammable or combustible liquids wharves shall be adequately bonded and grounded. If excessive stray currents are encountered, insulating points shall be installed. Bonding and grounding connections on all pipelines shall be located on wharfside of hose-riser insulating flanges, if used, and shall be accessible for inspection.

(viii) Hose or articulated swivel-joint pipe connections used for cargo transfer shall be capable of accommodating the combined effects of change in draft and maximum tidal range, and mooring lines shall be kept adjusted to prevent the surge of the vessel from placing stress on the cargo transfer system.

(ix) Hose shall be supported so as to avoid kinking and damage from chafing.

(i) Fire protection. Suitable portable fire extinguishers with a rating of not less than 12-BC shall be located with 75 feet of those portions of the facility where fires are likely to occur, such as hose connections, pumps, and separator tanks.

(i) Where piped water is available, ready-connected fire hose in size appropriate for the water supply shall be provided so that manifolds where connections are made and broken can be reached by at least one hose stream.

(ii) Material shall not be placed on wharves in such a manner as to obstruct access to firefighting equipment, or important pipeline control valves.

(iii) Where the wharf is accessible to vehicle traffic, an unobstructed roadway to the shore end of the wharf shall be maintained for access of firefighting apparatus.

(j) Operations control. Loading or discharging shall not commence until the wharf superintendent and officer in charge of the tank vessel agree that the tank vessel is properly moored and all connections are properly made. Mechanical work shall not be performed on the wharf

Part E

HAZARDOUS MATERIALS, FLAMMABLE AND COMBUSTIBLE LIQUIDS, SPRAY FINISHING, DIP TANKS

WAC

- 296-24-31503 Gaseous hydrogen systems.
- 296-24-31505 Liquefied hydrogen systems.
- 296-24-32003 Bulk oxygen systems.
- 296-24-33009 Container and portable tank storage.
- 296-24-33011 Industrial plants.
- 296-24-33013 Bulk plants.
- 296-24-33015 Service stations.
- 296-24-33017 Processing plants.
- 296-24-37005 Electrical and other sources of ignition.
- 296-24-37019 Drying, curing, or fusion apparatus.
- 296-24-37023 Powder coating.
- 296-24-40509 Electrical and other sources of ignition.

WAC 296-24-31503 Gaseous hydrogen systems. (1)

Design. (a) Containers. (i) Hydrogen containers shall comply with one of the following:

(A) Designed, constructed, and tested in accordance with appropriate requirements of ASME Boiler and Pressure Vessel Code, Section VIII—Unfired Pressure Vessels—1968.

(B) Designed, constructed, tested and maintained in accordance with U.S. Department of Transportation specifications and regulations.

(ii) Permanently installed containers shall be provided with substantial noncombustible supports on firm noncombustible foundations.

(iii) Each portable container shall be legibly marked with the name "hydrogen" in accordance with "marking compressed gas containers to identify the material contained" ANSI Z48.1-1954. Each manifolded hydrogen supply unit shall be legibly marked with the name hydrogen or a legend such as "this unit contains hydrogen."

(b) Safety relief devices. (i) Hydrogen containers shall be equipped with safety relief devices as required by the ASME Boiler and Pressure Vessel Code, Section VIII Unfired Pressure Vessels, 1968 or the DOT specifications and regulations under which the container is fabricated.

(ii) Safety relief devices shall be arranged to discharge upward and unobstructed to the open air in such a manner as to prevent any impingement of escaping gas upon the container, adjacent structure of personnel. This requirement does not apply to DOT specification containers having an internal volume of 2 cubic feet or less.

(iii) Safety relief devices or vent piping shall be designed or located so that moisture cannot collect and freeze in a manner which would interfere with proper operation of the device.

(c) Piping, tubing, and fittings. (i) Piping, tubing, and fittings shall be suitable for hydrogen service and for the pressures and temperatures involved. Case iron pipe and fittings shall not be used.

(ii) Piping and tubing shall conform to Section 2—"Industrial Gas and Air Piping"—Code for Pressure Piping, ANSI B31.1-1967 with addenda B31.1-1969.

(iii) Joints in piping and tubing may be made by welding or brazing or by use of flanged, threaded,

socket, or compression fittings. Gaskets and thread sealants shall be suitable for hydrogen service.

(d) Equipment assembly. (i) Valves, gauges, regulators, and other accessories shall be suitable for hydrogen service.

(ii) Installation of hydrogen systems shall be supervised by personnel familiar with proper practices with reference to their construction and use.

(iii) Storage containers, piping, valves, regulating equipment, and other accessories shall be readily accessible, and shall be protected against physical damage and against tampering.

(iv) Cabinets or housings containing hydrogen control or operating equipment shall be adequately ventilated.

(v) Each mobile hydrogen supply unit used as part of a hydrogen system shall be adequately secured to prevent movement.

(vi) Mobile hydrogen supply units shall be electrically bonded to the system before discharging hydrogen.

(e) Marking. The hydrogen storage location shall be permanently placarded as follows: "HYDROGEN—FLAMMABLE GAS—NO SMOKING—NO OPEN FLAMES," or equivalent.

(f) Testing. After installations, all piping, tubing, and fittings shall be tested and proved hydrogen gas tight at maximum operating pressure.

(2) Location. (a) General. (i) The system shall be located so that it is readily accessible to delivery equipment and to authorized personnel.

(ii) Systems shall be located above ground.

(iii) Systems shall not be located beneath electric power lines.

(iv) Systems shall not be located close to flammable liquid piping or piping of other flammable gases.

(v) Systems near aboveground flammable liquid storage shall be located on ground higher than the flammable liquid storage except when dikes, diversion curbs, grading, or separating solid walls are used to prevent accumulation of flammable liquids under the system.

(b) Specific requirements. (i) The location of a system, as determined by the maximum total contained volume of hydrogen, shall be in the order of preference as indicated by Roman numerals in Table H-1.

TABLE H-1

Nature of location	Size of hydrogen system		
	Less than 3,000 CF	3,000 CF to 15,000 CF	In excess of 15,000 CF
Outdoors	I	I	I
In a separate building	II	II	II
In a special room	III	III	Not permitted.

TABLE H-1

Nature of location	Size of hydrogen system		
	Less than 3,000 CF	3,000 CF to 15,000 CF	In excess of 15,000 CF
Inside buildings not in a special room and exposed to other occupancies	IV	Not permitted.	Not permitted.

(ii) The minimum distance in feet from a hydrogen system of indicated capacity located outdoors, in separate buildings or in special rooms to any specified outdoor exposure shall be in accordance with Table H-2.

(iii) The distances in Table H-2 Items 1, 14, and 3 to 10 inclusive do not apply where protective structures such as adequate fire walls are located between the system and the exposure.

(iv) Hydrogen systems of less than 3,000 CF when located inside buildings and exposed to other occupancies shall be situated in the building so that the system will be as follows:

(A) In an adequately ventilated area as in (3)(b)(ii) of this section.

(B) Twenty feet from stored flammable materials or oxidizing gases.

(C) Twenty-five feet from open flames, ordinary electrical equipment or other sources of ignition.

(D) Twenty-five feet from concentrations of people.

(E) Fifty feet from intakes of ventilation or air-conditioning equipment and air compressors.

(F) Fifty feet from other flammable gas storage.

(G) Protected against damage or injury due to falling objects or working activity in the area.

(H) More than one system of 3,000 CF or less may be installed in the same room, provided the systems are separated by at least 50 feet. Each such system shall meet all of the requirements of this section.

(3) Design consideration at specific locations. (a) Outdoor locations. (i) Where protective walls or roofs are provided, they shall be constructed of noncombustible materials.

(ii) Where the enclosing sides adjoin each other, the area shall be properly ventilated.

(iii) Electrical equipment shall meet the requirements for Class I, Division 2 hazardous locations of WAC 296-25-95613.

(b) Separate buildings. (i) Separate buildings shall be built of at least noncombustible construction. Windows

and doors shall be located so as to be readily accessible in case of emergency. Windows shall be of glass or plastic in metal frames.

(ii) Adequate ventilation to the outdoors shall be provided. Inlet openings shall be located near the floor in exterior walls only. Outlet openings shall be located at the high point of the room in exterior walls or roof. Inlet and outlet openings shall each have minimum total area of one square foot per 1,000 cubic feet of room volume. Discharge from outlet openings shall be directed or conducted to a safe location.

(iii) Explosion venting shall be provided in exterior walls or roof only. The venting area shall be equal to not less than 1 square foot per 30 cubic feet of room volume and may consist of any one or any combination of the following: Walls of light noncombustible material, preferably single thickness, single strength glass; lightly fastened hatch covers; lightly fastened swinging doors in exterior walls opening outward; lightly fastened walls or roof designed to relieve at a maximum pressure of 25 pounds per square foot.

(iv) There shall be no sources of ignition from open flames, electrical equipment, or heating equipment.

(v) Electrical equipment shall meet the requirements for Class I, Division 2 hazardous locations of WAC 296-24-95613.

(vi) Heating, if provided, shall be by steam, hot water, or other indirect means.

(c) Special rooms. (i) Floor, walls, and ceiling shall have a fire-resistance rating of at least 2 hours. Walls or partitions shall be continuous from floor to ceiling and shall be securely anchored. At least one wall shall be an exterior wall. Openings to other parts of the building shall not be permitted. Windows and doors shall be in exterior walls and shall be located so as to be readily accessible in case of emergency. Windows shall be of glass or plastic in metal frames.

(ii) Ventilation shall be as provided in (3)(b)(ii) of this section.

(iii) Explosion venting shall be as provided in (3)(b)(iii) of this section.

(iv) There shall be no sources of ignition from open flames, electrical equipment or heating equipment.

(v) Electrical equipment shall meet the requirements for Class I, Division 2 hazardous locations of WAC 296-24-95613.

(vi) Heating, if provided, shall be by steam, hot water, or indirect means.

(4) Operating instructions. For installations which require any operation of equipment by the user, legible instructions shall be maintained at operating locations.

(5) Maintenance. (a) The equipment and functioning of each charged gaseous hydrogen system shall be maintained in a safe operating condition in accordance with the requirements of this section. The area within 15 feet of any hydrogen container shall be kept free of dry vegetation and combustible material.

TABLE H-2

Type of outdoor exposure	Size of hydrogen system		
	Less than 3,000 CF	3,000 CF to 15,000 CF	In excess of 15,000 CF
1. Building or structure — Wood frame construction*	10	25	50
Heavy timber, non-combustible or ordinary construction*	0	10	**25
Fire-resistive construction*	0	0	0
2. Wall openings — Not above any part of a system	10	10	10
Above any part of a system	25	25	25
3. Flammable liquids above ground — 0 to 1,000 gallons	10	25	25
In excess of 1,000 gallons	25	50	50
4. Flammable liquids below ground—0 to 1,000 gallons — Tank	10	10	10
Vent or fill opening of tank	25	25	25
5. Flammable liquids below ground—in excess of 1,000 gallons — Tank	20	20	20
Vent or fill opening of tank	25	25	25
6. Flammable gas storage, either high pressure or low pressure — 0 to 15,000 CF capacity	10	25	25
In excess of 15,000 CF capacity	25	50	50
7. Oxygen storage 12,000 CF or less	Refer to NFPA No. 51, gas systems for welding and cutting (1969).		
More than 12,000 CF	Refer to NFPA No. 566, bulk oxygen systems at consumer sites (1969).		
8. Fast burning solids such as ordinary lumber, excelsior or paper	50	50	25
9. Slow burning solids such as heavy timber or coal	25	25	25
10. Open flames and other sources of ignition	25	25	50
11. Air compressor intakes or inlets to ventilating or air-condition equipment	50	50	50
12. Concentration of people***	25	50	50

TABLE H-2

Type of outdoor exposure	Size of hydrogen system		
	Less than 3,000 CF	3,000 CF to 15,000 CF	In excess of 15,000 CF
13. Public side-walks	15	15	15
14. Line of adjoining property which may be built upon	5	5	5

*Refer to NFPA No. 220 standard types of building construction for definitions of various types of construction. (1969 Ed.)

**But not less than one-half the height of adjacent side wall of the structure.

***In congested areas such as offices, lunchrooms, locker rooms, time-clock areas, and places of public assembly.

[Statutory Authority: RCW 49.17.040 and 49.17.050. 85-10-004 (Order 85-09), § 296-24-31503, filed 4/19/85; Order 76-6, § 296-24-31503, filed 3/1/76; Order 73-5, § 296-24-31503, filed 5/9/73 and Order 73-4, § 296-24-31503, filed 5/7/73.]

WAC 296-24-31505 Liquefied hydrogen systems.

(1) Design. (a) Containers. (i) Hydrogen containers shall comply with the following: Storage containers shall be designed, constructed, and tested in accordance with appropriate requirements of the ASME Boiler and Pressure Vessel Code, Section VIII—Unfired Pressure Vessels (1968) or applicable provisions of API Standard 620, Recommended Rules for Design and Construction of Large, Welded, Low-Pressure Storage Tanks, Second Edition (June 1963) and Appendix R (April 1965).

(ii) Portable containers shall be designed, constructed and tested in accordance with DOT specifications and regulations.

(b) Supports. Permanently installed containers shall be provided with substantial noncombustible supports securely anchored on firm noncombustible foundations. Steel supports in excess of 18 inches in height shall be protected with a protective coating having a 2-hour fire-resistance rating.

(c) Marking. Each container shall be legibly marked to indicate "LIQUEFIED HYDROGEN—FLAMMABLE GAS."

(d) Safety relief devices. (i) Stationary liquefied hydrogen containers shall be equipped with safety relief devices sized in accordance with CGA Pamphlet S-1-1966, Part 3, Safety Relief Device Standards for Compressed Gas Storage Containers.

(A) Portable liquefied hydrogen containers complying with the U.S. Department of Transportation regulations shall be equipped with safety relief devices as required in the U.S. Department of Transportation specifications and regulations. Safety relief devices shall be sized in accordance with the requirements of CGA Pamphlet S-1-1966, Safety Relief Device Standards, Part 1,

Compressed Gas Cylinders and Part 2, Cargo and Portable Tank Containers.

(ii) Safety relief devices shall be arranged to discharge unobstructed to the outdoors and in such a manner as to prevent impingement of escaping liquid or gas upon the container, adjacent structures or personnel. See (2)(a)(vi) of this section for venting of safety relief devices in special locations.

(iii) Safety relief devices or vent piping shall be designed or located so that moisture cannot collect and freeze in a manner which would interfere with proper operation of the device.

(iv) Safety relief devices shall be provided in piping wherever liquefied hydrogen could be trapped between closures

(e) Piping, tubing, and fittings. (i) Piping, tubing, and fittings and gasket and thread sealants shall be suitable for hydrogen service at the pressures and temperatures involved. Consideration shall be given to the thermal expansion and contraction of piping systems when exposed to temperature fluctuations of ambient to liquefied hydrogen temperatures.

(ii) Gaseous hydrogen piping and tubing (above—20°F) shall conform to the applicable sections of Pressure Piping Section 2—Industrial Gas and Air Piping, ANSI B31.1—1967 with addenda B31.1—1969. Design of liquefied hydrogen or cold (—20°F or below) gas piping shall use Petroleum Refinery Piping ANSI B31.3—1966 or Refrigeration Piping ANSI B31.5—1966 with addenda B31.5a—1968 as a guide.

(iii) Joints in piping and tubing shall preferably be made by welding or brazing; flanged, threaded, socket, or suitable compression fittings may be used.

(iv) Means shall be provided to minimize exposure of personnel to piping operating at low temperatures and to prevent air condensate from contacting piping, structural members, and surfaces not suitable for cryogenic temperatures. Only those insulating materials which are rated nonburning in accordance with ASTM Procedures D1692—68 may be used. Other protective means may be used to protect personnel. The insulation shall be designed to have a vapor-tight seal in the outer covering to prevent the condensation of air and subsequent oxygen enrichment within the insulation. The insulation material and outside shield shall also be of adequate design to prevent attrition of the insulation due to normal operating conditions.

(v) Uninsulated piping and equipment which operate at liquefied-hydrogen temperature shall not be installed above asphalt surfaces or other combustible materials in order to prevent contact of liquid air with such materials. Drip pans may be installed under uninsulated piping and equipment to retain and vaporize condensed liquid air.

(f) Equipment assembly. (i) Valves, gauges, regulators, and other accessories shall be suitable for liquefied hydrogen service and for the pressures and temperatures involved.

(ii) Installation of liquefied hydrogen systems shall be supervised by personnel familiar with proper practices and with reference to their construction and use.

(iii) Storage containers, piping, valves, regulating equipment, and other accessories shall be readily accessible and shall be protected against physical damage and against tampering. A shutoff valve shall be located in liquid product withdrawal lines as close to the container as practical. On containers of over 2,000 gallons capacity, this shutoff valve shall be of the remote control type with no connections, flanges, or other appurtenances (other than a welded manual shutoff valve) allowed in the piping between the shutoff valve and its connection to the inner container.

(iv) Cabinets or housings containing hydrogen control equipment shall be ventilated to prevent any accumulation of hydrogen gas.

(g) Testing. (i) After installation, all field-erected piping shall be tested and proved hydrogen gas-tight at operating pressure and temperature.

(ii) Containers if out of service in excess of 1 year shall be inspected and tested as outlined in (1) of this section. The safety relief devices shall be checked to determine if they are operable and properly set.

(h) Liquefied hydrogen vaporizers. (i) The vaporizer shall be anchored and its connecting piping shall be sufficiently flexible to provide for the effect of expansion and contraction due to temperature changes.

(ii) The vaporizer and its piping shall be adequately protected on the hydrogen and heating media sections with safety relief devices.

(iii) Heat used in a liquefied hydrogen vaporizer shall be indirectly supplied utilizing media such as air, steam, water, or water solutions.

(iv) A low temperature shutoff switch shall be provided in the vaporizer discharge piping to prevent flow of liquefied hydrogen in the event of the loss of the heat source.

(i) Electrical systems. (i) Electrical wiring and equipment located within 3 feet of a point where connections are regularly made and disconnected, shall meet the requirements of WAC 296-24-956 through 296-24-960 for Class I, Division 1 locations.

(ii) Except as provided in (1) of this section, electrical wiring, and equipment located within 25 feet of a point where connections are regularly made and disconnected or within 25 feet of a liquid hydrogen storage container, shall meet the requirements of WAC 296-24-956 through 296-24-960 for Class I, Division 2 locations. When equipment approved for Class I, environments is not commercially available, the equipment may be:

(A) Purged or ventilated in accordance with NFPA No. 496—1967, Standard for Purged Enclosures for Electrical Equipment in Hazardous Locations,

(B) Intrinsically safe, or

(C) Approved for Class I, Group C atmospheres. This requirement does not apply to electrical equipment which is installed on mobile supply trucks or tank cars from which the storage container is filled.

(j) Bonding and grounding. The liquefied hydrogen container and associated piping shall be electrically bonded and grounded.

(2) Location of liquefied hydrogen storage. (a) General requirements. (i) The storage containers shall be located so that they are readily accessible to mobile supply equipment at ground level and to authorized personnel.

(ii) The containers shall not be exposed by electric power lines, flammable liquid lines, flammable gas lines, or lines carrying oxidizing materials.

(iii) When locating liquefied hydrogen storage containers near above-ground flammable liquid storage or liquid oxygen storage, it is advisable to locate the liquefied hydrogen container on ground higher than flammable liquid storage or liquid oxygen storage.

(iv) Where it is necessary to locate the liquefied hydrogen container on ground that is level with or lower than adjacent flammable liquid storage or liquid oxygen storage, suitable protective means shall be taken (such as by diking, diversion, curbs, grading), with respect to the adjacent flammable liquid storage or liquid oxygen storage, to prevent accumulation of liquids within 50 feet of the liquefied hydrogen container.

(v) Storage sites shall be fenced and posted to prevent entrance by unauthorized personnel. Sites shall also be placarded as follows: "Liquefied hydrogen—Flammable gas—No smoking—No open flames."

(vi) If liquefied hydrogen is located in (as specified in Table H-3) a separate building, in a special room, or inside buildings when not in a special room and exposed to other occupancies, containers shall have the safety relief devices vented unobstructed to the outdoors at a minimum elevation of 25 feet above grade to a safe location as required in (l)(d)(ii) of this section.

(b) Specific requirements. (i) The location of liquefied hydrogen storage, as determined by the maximum total quantity of liquefied hydrogen, shall be in the order of preference as indicated by Roman numerals in the following Table H-3.

TABLE H-3

MAXIMUM TOTAL QUANTITY OF LIQUEFIED HYDROGEN STORAGE PERMITTED

Nature of location	Size of hydrogen storage (capacity in gallons)			
	39.63 (150 liters) to 50	51 to 300	301 to 600	In excess of 600
Outdoors	I	I	I	I
In a separate building	II	II	II	Not permitted.
In a special room	III	III	Not permitted	Not permitted.
Inside buildings not in a special room and exposed to other occupancies	IV	Not permitted	Not permitted	Not permitted.

NOTE: This table does not apply to the storage in dewars of the type generally used in laboratories for experimental purposes.

(ii) The minimum distance in feet from liquefied hydrogen systems of indicated storage capacity located outdoors, in a separate building, or in a special room to any specified exposure shall be in accordance with Table H-4.

TABLE H-4

MINIMUM DISTANCE (FEET) FROM LIQUEFIED HYDROGEN SYSTEMS TO EXPOSURE

Type of exposure	Liquefied hydrogen storage (capacity in gallons)		
	39.63 (150 liters) to 3,500	3,501 to 15,000	15,001 to 30,000
1. Fire-resistive building and fire walls*	5	5	5
2. Noncombustible building*	25	50	75
3. Other buildings*	50	75	100
4. Wall openings, air-compressor intakes, inlets for air-conditioning or ventilating equipment	75	75	75
5. Flammable liquids (above ground and vent or fill openings if below ground) (see 513 and 514)	50	75	100
6. Between stationary liquefied hydrogen containers	5	5	5
7. Flammable gas storage	50	75	100
8. Liquid oxygen storage and other oxidizers (see 513 and 514)	100	100	100
9. Combustible solids	50	75	100
10. Open flames, smoking, and welding	50	50	50
11. Concentrations of people**	75	75	75
12. Public ways, railroads, and property lines	25	50	75

*Refer to standard types of building construction, NFPA No. 220-1969 for definitions of various types of construction.

**In congested areas such as offices, lunchrooms, locker rooms, time-clock areas, and places of public assembly.

NOTE 1: The distance in Nos. 2, 3, 5, 7, 9, and 12 in Table H-4 may be reduced where protective structures, such as firewalls equal to height of top of the container, to safeguard the liquefied hydrogen storage system, are located between the liquefied hydrogen storage installation and the exposure.

NOTE 2: Where protective structures are provided, ventilation and confinement of product should be considered. The 5-foot distance in Nos. 1 and 6 facilitates maintenance and enhances ventilation.

(c) Handling of liquefied hydrogen inside buildings other than separate buildings and special rooms. Portable liquefied hydrogen containers of 50 gallons or less capacity as permitted in Table H-3 and in compliance

with (2)(a)(vi) of this section when housed inside buildings not located in a special room and exposed to other occupancies shall comply with the following minimum requirements:

(i) Be located 20 feet from flammable liquids and readily combustible materials such as excelsior or paper.

(ii) Be located 25 feet from ordinary electrical equipment and other sources of ignition including process or analytical equipment.

(iii) Be located 25 feet from concentrations of people.

(iv) Be located 50 feet from intakes of ventilation and air-conditioning equipment or intakes of compressors.

(v) Be located 50 feet from storage of other flammable-gases or storage of oxidizing gases.

(vi) Containers shall be protected against damage or injury due to falling objects or work activity in the area.

(vii) Containers shall be firmly secured and stored in an upright position.

(viii) Welding or cutting operations, and smoking shall be prohibited while hydrogen is in the room.

(ix) The area shall be adequately ventilated. Safety relief devices on the containers shall be vented directly outdoors or to a suitable hood. See (1)(d)(ii) of this section and (2)(a)(vi) of this section.

(3) Design considerations at specific locations. (a) Outdoor locations. (i) Outdoor location shall mean outside of any building or structure, and includes locations under a weather shelter or canopy provided such locations are not enclosed by more than two walls set at right angles and are provided with vent-space between the walls and vented roof or canopy.

(ii) Roadways and yard surfaces located below liquefied hydrogen piping, from which liquid air may drop, shall be constructed of noncombustible materials.

(iii) If protective walls are provided, they shall be constructed of noncombustible materials and in accordance with the provisions of (3)(a)(i) of this section as applicable.

(iv) Electrical wiring and equipment shall comply with (1)(i)(i) and (ii) of this section.

(v) Adequate lighting shall be provided for nighttime transfer operation.

(b) Separate buildings. (i) Separate buildings shall be of light noncombustible construction on a substantial frame. Walls and roofs shall be lightly fastened and designed to relieve at a maximum internal pressure of 25 pounds per square foot. Windows shall be of shatterproof glass or plastic in metal frames. Doors shall be located in such a manner that they will be readily accessible to personnel in an emergency.

(ii) Adequate ventilation to the outdoors shall be provided. Inlet openings shall be located near the floor level in exterior walls only. Outlet openings shall be located at the high point of the room in exterior walls or roof. Both the inlet and outlet vent openings shall have a minimum total area of 1 square foot per 1,000 cubic feet of room volume. Discharge from outlet openings shall be directed or conducted to a safe location.

(iii) There shall be no sources of ignition.

(iv) Electrical wiring and equipment shall comply with (1)(i)(i) and (ii) of this section except that the provisions of (1)(i)(ii) of this section shall apply to all electrical wiring and equipment in the separate building.

(v) Heating, if provided, shall be by steam, hot water, or other indirect means.

(c) Special rooms. (i) Floors, walls, and ceilings shall have a fire resistance rating of at least 2 hours. Walls or partitions shall be continuous from floor to ceiling and shall be securely anchored. At least one wall shall be an exterior wall. Openings to other parts of the building shall not be permitted. Windows and doors shall be in exterior walls and doors shall be located in such a manner that they will be accessible in an emergency. Windows shall be of shatterproof glass or plastic in metal frames.

(ii) Ventilation shall be as provided in (3)(b)(ii) of this section.

(iii) Explosion venting shall be provided in exterior walls or roof only. The venting area shall be equal to not less than 1 square foot per 30 cubic feet of room volume and may consist of any one or any combination of the following: Walls of light noncombustible material; lightly fastened hatch covers; lightly fastened swinging doors opening outward in exterior walls; lightly fastened walls or roofs designed to relieve at a maximum pressure of 25 pounds per square foot.

(iv) There shall be no sources of ignition.

(v) Electrical wiring and equipment shall comply with (1)(i)(i) and (ii) of this section except that the provisions of (1)(i)(ii) of this section shall apply to all electrical wiring and equipment in the special room.

(vi) Heating, if provided, shall be steam, hot water, or by other indirect means.

(4) Operating instructions. (a) Written instructions. For installation which require any operation of equipment by the user, legible instructions shall be maintained at operating locations.

(b) Attendant. A qualified person shall be in attendance at all times while the mobile hydrogen supply unit is being unloaded.

(c) Security. Each mobile liquefied hydrogen supply unit used as part of a hydrogen system shall be adequately secured to prevent movement.

(d) Grounding. The mobile liquefied hydrogen supply unit shall be grounded for static electricity.

(5) Maintenance. (a) The equipment and functioning of each charged liquefied hydrogen system shall be maintained in a safe operating condition in accordance with the requirements of this section. Weeds or similar combustibles shall not be permitted within 25 feet of any liquified hydrogen equipment. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-10-004 (Order 85-09), § 296-24-31505, filed 4/19/85; Order 76-6, § 296-24-31505, filed 3/1/76; Order 73-5, § 296-24-31505, filed 5/9/73 and Order 73-4, § 296-24-31505, filed 5/7/73.]

WAC 296-24-32003 Bulk oxygen systems. (1) Definitions. As used in this section: A bulk oxygen system is

an assembly of equipment, such as oxygen storage containers, pressure regulators, safety devices, vaporizers, manifolds, and interconnecting piping, which has storage capacity of more than 13,000 cubic feet of oxygen, normal temperature and pressure (NTP), connected in service or ready for service, or more than 25,000 cubic feet of oxygen (NTP) including unconnected reserves on hand at the site. The bulk oxygen system terminates at the point where oxygen at service pressure first enters the supply line. The oxygen containers may be stationary or movable, and the oxygen may be stored as gas or liquid.

(2) Location. (a) General. Bulk oxygen storage systems shall be located above ground out of doors, or shall be installed in a building of noncombustible construction, adequately vented, and used for that purpose exclusively. The location selected shall be such that containers and associated equipment shall not be exposed by electric power lines, flammable or combustible liquid lines, or flammable gas lines.

(b) Accessibility. The system shall be located so that it is readily accessible to mobile supply equipment at ground level and to authorized personnel.

(c) Leakage. Where oxygen is stored as a liquid, noncombustible surfacing shall be provided in an area in which any leakage of liquid oxygen might fall during operation of the system and filling of a storage container. For purposes of these standards, asphaltic or bituminous paving is considered to be combustible.

(d) Elevation. When locating bulk oxygen systems near above ground flammable or combustible liquid storage which may be either indoors or outdoors, it is advisable to locate the system on ground higher than the flammable or combustible liquid storage.

(e) Dikes. Where it is necessary to locate a bulk oxygen system on ground lower than adjacent flammable or combustible liquid storage suitable means shall be taken (such as by diking, diversion curbs, or grading) with respect to the adjacent flammable or combustible liquid storage to prevent accumulation of liquids under the bulk oxygen system.

(3) Distance between systems and exposures. (a) General. The minimum distance from any bulk oxygen storage container to exposures, measured in the most direct line except as indicated in (3)(f) and (g) of this section shall be as indicated in (3)(b) to (r) of this section inclusive.

(b) Combustible structures. Fifty feet from any combustible structures.

(c) Fire resistive structures. Twenty-five feet from any structures with fire-resistive exterior walls or sprinklered buildings or other construction, but not less than one-half the height of adjacent side wall of the structure.

(d) Openings. At least 10 feet from any opening in adjacent walls of fire resistive structures. Spacing from such structures shall be adequate to permit maintenance, but shall not be less than 1 foot.

(e) Flammable liquid storage above ground.

Distance (feet)	Capacity (gallons)
50	0-1000
90	1001 or more

(f) Flammable liquid storage below ground.

Distance measured horizontally from oxygen storage container to flammable liquid tank (feet)	Distance from oxygen storage container to filling and vent connections or openings to flammable liquid tank (feet)	Capacity gallons
15	50	0-1000
30	50	1001 or more

(g) Combustible liquid storage above ground.

Distance (feet)	Capacity (gallons)
25	0-1000
50	1001 or more

(h) Combustible liquid storage below ground.

Distance measured horizontally from oxygen storage container to combustible liquid tank (feet)	Distance from oxygen storage container to filling and vent connections or openings to combustible liquid tank (feet)
15	40

(i) Flammable gas storage. (Such as compressed flammable gases, liquefied flammable gases and flammable gases in low pressure gas holders):

Distance (feet)	Capacity (cu. ft. NTP)
50	Less than 5000
90	5000 or more

(j) Highly combustible materials. Fifty feet from solid materials which burn rapidly, such as excelsior or paper.

(k) Slow-burning materials. Twenty-five feet from solid materials which burn slowly, such as coal and heavy timber.

(l) Ventilation. Seventy-five feet in one direction and 35 feet in approximately 90° direction from confining walls (not including firewalls less than 20 feet high) to provide adequate ventilation in courtyards and similar confining areas.

(m) Congested areas. Twenty-five feet from congested areas such as offices, lunchrooms, locker rooms, time clock areas, and similar locations where people may congregate.

(n) Public areas. Fifty feet from places of public assembly.

(o) Patients. Fifty feet from areas occupied by non-ambulatory patients.

(p) Sidewalks. Ten feet from any public sidewalk.

(q) Adjacent property. Five feet from any line of adjoining property.

(r) Exceptions. The distances in (3)(b), (c), (e) to (k) inclusive, and (p) and (q) of this section do not apply where protective structures such as firewalls of adequate height to safeguard the oxygen storage systems are located between the bulk oxygen storage installation and the exposure. In such cases, the bulk oxygen storage installation may be a minimum distance of 1 foot from the firewall.

(4) Storage containers. (a) Foundations and supports. Permanently installed containers shall be provided with substantial noncombustible supports on firm noncombustible foundations.

(b) Construction—Liquid. Liquid oxygen storage containers shall be fabricated from materials meeting the impact test requirements of paragraph UG-84 of ASME Boiler and Pressure Vessel Code, Section VIII—Unfired Pressure Vessels—1968. Containers operating at pressures above 15 pounds per square inch gage (p.s.i.g.) shall be designed, constructed, and tested in accordance with appropriate requirements of ASME Boiler and Pressure Vessel Code, Section VII—Unfired Pressure Vessels—1968. Insulation surrounding the liquid oxygen container shall be noncombustible.

(c) Construction—Gaseous. High-pressure gaseous oxygen containers shall comply with one of the following:

(i) Designed, constructed, and tested in accordance with appropriate requirements of ASME Boiler and Pressure Vessel Code, Section VIII—Unfired Pressure Vessels—1968.

(ii) Designed, constructed, tested, and maintained in accordance with DOT specifications and regulations.

(5) Piping, tubing, and fittings. (a) Selection. Piping, tubing, and fittings shall be suitable for oxygen service and for the pressures and temperatures involved.

(b) Specification. Piping and tubing shall conform to Section 2—Gas and Air Piping Systems of Code for Pressure Piping, ANSI, B31.1-1967 with addenda B31.10a-1969.

(c) Fabrication. Piping or tubing for operating temperatures below -20°F shall be fabricated from materials meeting the impact test requirements of paragraph UG-84 of ASME Boiler and Pressure Vessel Code, Section VIII—Unfired Pressure Vessels—1968, when tested at the minimum operating temperature to which the piping may be subjected in service.

(6) Safety relief devices. (a) General. Bulk oxygen storage containers, regardless of design pressure shall be equipped with safety relief devices as required by the ASME code or the DOT specifications and regulations.

(b) DOT containers. Bulk oxygen storage containers designed and constructed in accordance with DOT specification shall be equipped with safety relief devices as required thereby.

(c) ASME containers. Bulk oxygen storage containers designed and constructed in accordance with the ASME Boiler and Pressure Vessel Code, Section VIII—Unfired Pressure Vessel—1968 shall be equipped with safety relief devices meeting the provisions of the Compressed Gas Association Pamphlet "Safety Relief Device Standards for Compressed Gas Storage Containers," S-1, Part 3.

(d) Insulation. Insulation casings on liquid oxygen containers shall be equipped with suitable safety relief devices.

(e) Reliability. All safety relief devices shall be so designed or located that moisture cannot collect and freeze in a manner which would interfere with proper operation of the device.

(7) Liquid oxygen vaporizers. (a) Mounts and couplings. The vaporizer shall be anchored and its connecting piping be sufficiently flexible to provide for the effect of expansion and contraction due to temperature changes.

(b) Relief devices. The vaporizer and its piping shall be adequately protected on the oxygen and heating medium sections with safety relief devices.

(c) Heating. Heat used in an oxygen vaporizer shall be indirectly supplied only through media such as steam, air, water, or water solutions which do not react with oxygen.

(d) Grounding. If electric heaters are used to provide the primary source of heat, the vaporizing system shall be electrically grounded.

(8) Equipment assembly and installation. (a) Cleaning. Equipment making up a bulk oxygen system shall be cleaned in order to remove oil, grease or other readily oxidizable materials before placing the system in service.

(b) Joints. Joints in piping and tubing may be made by welding or by use of flanged, threaded, slip, or compression fittings. Gaskets or thread sealants shall be suitable for oxygen service.

(c) Accessories. Valves, gages, regulators, and other accessories shall be suitable for oxygen service.

(d) Installation. Installation of bulk oxygen systems shall be supervised by personnel familiar with proper practices with reference to their construction and use.

(e) Testing. After installation all field erected piping shall be tested and proved gas tight at maximum operating pressure. Any medium used for testing shall be oil free and nonflammable.

(f) Security. Storage containers, piping, valves, regulating equipment, and other accessories shall be protected against physical damage and against tampering.

(g) Venting. Any enclosure containing oxygen control or operating equipment shall be adequately vented.

(h) Placarding. The bulk oxygen storage location shall be permanently placarded to indicate: "OXYGEN—NO SMOKING—NO OPEN FLAMES," or an equivalent warning.

(i) Electrical wiring. Bulk oxygen installations are not hazardous locations as defined and covered by WAC 296-24-956 through 296-24-960. Therefore, general purpose or weatherproof types of electrical wiring and equipment are acceptable depending upon whether the installation is indoors or outdoors. Such equipment shall

be installed in accordance with the provisions of WAC 296-24-956 through 296-24-960.

(9) Operating instructions. For installations which require any operation of equipment by the user, legible instructions shall be maintained at operating locations.

(10) Maintenance. (a) The equipment and functioning of each charged bulk oxygen system shall be maintained in a safe operating condition in accordance with the requirements of this section. Wood and long dry grass shall be cut back within 15 feet of any bulk oxygen storage container. [Statutory Authority: RCW 49.17-.040 and 49.17.050. 85-10-004 (Order 85-09), § 296-24-32003, filed 4/19/85; Order 76-6, § 296-24-32003, filed 3/1/76; Order 73-5, § 296-24-32003, filed 5/9/73 and Order 73-4, § 296-24-32003, filed 5/7/73.]

WAC 296-24-33009 Container and portable tank storage.

(1) Scope. (a) General. This section shall apply only to the storage of flammable or combustible liquids in drums or other containers (including flammable aerosols) not exceeding 60 gallons individual capacity and those portable tanks not exceeding 660 gallons individual capacity.

(b) Exceptions. This section shall not apply to the following:

- (i) Storage of containers in bulk plants, service stations, refineries, chemical plants, and distilleries;
- (ii) Class I or Class II liquids in the fuel tanks of a motor vehicle, aircraft, boat, or portable or stationary engine;
- (iii) Flammable or combustible paints, oils, varnishes, and similar mixtures used for painting or maintenance when not kept for a period in excess of 30 days;
- (iv) Beverages when packaged in individual containers not exceeding 1 gallon in size.

(2) Design, construction, and capacity of containers.

(a) General. Only approved containers and portable tanks shall be used. Metal containers and portable tanks meeting the requirements of and containing products authorized by Chapter I, Title 49 of the Code of Federal Regulations - October 1, 1972, (regulations issued by the hazardous materials regulations board, department of transportation), shall be deemed to be acceptable.

(b) Emergency venting. Each portable tank shall be provided with one or more devices installed in the top with sufficient emergency venting capacity to limit internal pressure under fire exposure conditions to 10 p.s.i.g., or 30 percent of the bursting pressure of the tank, whichever is greater. The total venting capacity shall be not less than that specified in WAC 296-24-33005 (2)(e)(iii) or (v). At least one pressure-actuated vent having a minimum capacity of 6,000 cubic feet of free air (14.7 p.s.i.a. and 60°F) shall be used. It shall be set to open at not less than 5 p.s.i.g. If fusible vents are used, they shall be actuated by elements that operate at a temperature not exceeding 300°F.

TABLE H-12

MAXIMUM ALLOWABLE SIZE OF CONTAINERS AND PORTABLE TANKS

Container Type	Flammable liquids			Combustible Liquids	
	Class IA	Class IB	Class IC	Class II &	Class III
Glass or approved plastic	1 pt.	1 qu.	1 gal.	1 gal.	1 gal.
Metal (other than DOT drums)	1 gal.	5 gal.	5 gal.	5 gal.	5 gal.
Safety cans	2 gal.	5 gal.	5 gal.	5 gal.	5 gal.
Metal drums (DOT spec.)	60 gal.	60 gal.	60 gal.	60 gal.	60 gal.
Approved portable tanks	660 gal.	660 gal.	660 gal.	660 gal.	660 gal.

Container exemptions: (i) Medicines, beverages, food-stuffs, cosmetics and other common consumer items, when packaged according to commonly accepted practices, shall be exempt from the requirements of (4)(a) and (b) of this section.

(c) Size. Flammable and combustible liquid containers shall be in accordance with Table H-12, except that glass or plastic containers of no more than 1-gallon capacity may be used for a Class IA or IB flammable liquid if:

(i) Such liquid either would be rendered unfit for its intended use by contact with metal or would excessively corrode a metal container so as to create a leakage hazard; and

(ii) The user's process either would require more than 1 pint of Class IA liquid or more than 1 quart of a Class IB liquid of a single assay lot to be used at one time, or would require the maintenance of an analytical standard liquid of a quality which is not met by the specified standards of liquids available, and the quantity of the analytical standard liquid required to be used in any one control process exceeds one-sixteenth the capacity of the container allowed under Table H-12 for the class of liquid; or

(iii) The containers are intended for direct export outside the United States.

(3) Design, construction, and capacity of storage cabinets. (a) Maximum capacity. Not more than 60 gallons of Class I or Class II liquids, nor more than 120 gallons of Class III liquids may be stored in a storage cabinet.

(b) Fire resistance. Storage cabinets shall be designed and constructed to limit the internal temperature to not more than 325°F when subjected to a 10-minute fire test using the standard time-temperature curve as set forth in Standard Methods of Fire Tests of Building Construction and Materials, NFPA 251-1969. All joints and seams shall remain tight and the door shall remain securely closed during the fire test. Cabinets shall be labeled "Flammable—Keep fire away," to meet specifications set forth in WAC 296-24-140.

(i) Metal cabinets constructed in the following manner shall be deemed to be in compliance. The bottom, top, door, and sides of cabinet shall be at least No. 18

gage sheet iron and double walled with 1 1/2-inch air space. Joints shall be riveted, welded or made tight by some equally effective means. The door shall be provided with a three-point lock, and the door sill shall be raised at least 2 inches above the bottom of the cabinet.

(ii) Wooden cabinets constructed in the following manner shall be deemed in compliance. The bottom, sides, and top shall be constructed of an approved grade of plywood at least 1 inch in thickness, which shall not break down or delaminate under fire conditions. All joints shall be rabbetted and shall be fastened in two directions with flathead woodscrews. When more than one door is used, there shall be a rabbetted overlap of not less than 1 inch. Hinges shall be mounted in such a manner as not to lose their holding capacity due to loosening or burning out of the screws when subjected to the fire test.

(4) Design and construction of inside storage rooms.

(a) Construction. Inside storage rooms shall be constructed to meet the required fire-resistive rating for their use. Such construction shall comply with the test specifications set forth in Standard Methods of Fire Tests of Building Construction and Materials, NFPA 251-1969. Where an automatic sprinkler system is provided, the system shall be designed and installed in an acceptable manner. Openings to other rooms or buildings shall be provided with noncombustible liquid-tight raised sills or ramps at least 4 inches in height, or the floor in the storage area shall be at least 4 inches below the surrounding floor. Openings shall be provided with approved self-closing fire doors. The room shall be liquid tight where the walls join the floor. A permissible alternate to the sill or ramp is an open-grated trench inside of the room which drains to a safe location. Where other portions of the building or other properties are exposed, windows shall be protected as set forth in the Standard for Fire Doors and Windows, NFPA No. 80-1968, for Class E or F openings. Wood at least 1 inch nominal thickness may be used for shelving, racks, dunnage, scuffboards, floor overlay, and similar installations.

(b) Rating and capacity. Storage in inside storage rooms shall comply with Table H-13.

TABLE H-13

STORAGE IN INSIDE ROOMS

Fire protection* provided	Fire resistance	Maximum size	Total allowable quantities (gals./sq. ft./floor area)
Yes	2 hours	500 sq.ft.	10
No	2 hours	500 sq.ft.	4
Yes	1 hour	150 sq.ft.	5
No	1 hour	150 sq.ft.	2

*Fire protection system shall be sprinkler, water spray, carbon dioxide, or other system.

(c) Wiring. Electrical wiring and equipment within inside storage rooms used to store Class I liquids shall comply with the provisions of WAC 296-24-956 through 296-24-960 for Class I, Division 2 locations. For inside storage rooms used to store Class II and III liquids the pertinent provisions WAC 296-24-956 through 296-24-960 apply.

(d) Ventilation. Every inside storage room shall be provided with either a gravity or a mechanical exhaust ventilation system. Such system shall be designed to provide for a complete change of air within the room at least six times per hour. If a mechanical exhaust system is used, it shall be controlled by a switch located outside of the door. The ventilating equipment and any lighting fixtures shall be operated by the same switch. A pilot light shall be installed adjacent to the switch if Class I flammable liquids are dispensed within the room. Where gravity ventilation is provided, the fresh air intake, as well as the exhaust outlet from the room, shall be on the exterior of the building in which the room is located.

(e) Storage in inside storage rooms. In every inside storage room there shall be maintained one clear aisle at least 3 feet wide. Containers over 30 gallons capacity shall not be stacked one upon the other. Dispensing shall be by approved pump or self-closing faucet only.

(5) Storage inside building. (a) Egress. Flammable or combustible liquids, including stock for sale, shall not be stored so as to limit use of exits, stairways, or areas normally used for the safe egress of people.

(b) Containers. The storage of flammable or combustible liquids in containers or portable tanks shall comply with (4)(c) through (e) of this section.

(c) Office occupancies. Storage shall be prohibited except that which is required for maintenance and operation of building and operation of equipment. Such storage shall be kept in closed metal containers stored in a storage cabinet or in safety cans or in an inside storage room not having a door that opens into that portion of the building used by the public.

(d) Mercantile occupancies and other retail stores. (i) In rooms or areas accessible to the public, storage shall be limited to quantities needed for display and normal merchandising purposes but shall not exceed 2 gallons per square foot of gross floor area. The gross floor area used for computing the maximum quantity permitted shall be considered as that portion of the store actually being used for merchandising flammable and combustible liquids.

(ii) Where the aggregate quantity of additional stock exceeds 60 gallons of Class IA, or 120 gallons of Class IB, or 180 gallons of Class IC, or 240 gallons of Class II, or 500 gallons of Class III liquids, or any combination of Class I and Class II liquids exceeding 240 gallons, it shall be stored in a room or portion of the building that complies with the construction provisions for an inside storage room as prescribed in (4) of this section. For water miscible liquids, these quantities may be doubled.

(iii) Containers in a display area shall not be stacked more than 3 feet or two containers high, whichever is the

greater, unless the stacking is done on fixed shelving or is otherwise satisfactorily secured.

(iv) Shelving shall be of stable construction, of sufficient depth and arrangement such that containers displayed thereon shall not be easily displaced.

(v) Leaking containers shall be removed to a storage room or taken to a safe location outside the building and the contents transferred to an undamaged container.

(c) General purpose public warehouses. Storage shall be in accordance with Table H-14 or H-15 and in buildings or in portions of such buildings cut off by standard firewalls. Material creating no fire exposure hazard to the flammable or combustible liquids may be stored in the same area.

TABLE H-14
INDOOR CONTAINER STORAGE

Class liquid	Storage level	Protected storage maximum per pile		Unprotected storage maximum per pile	
		Gal.	Ht.	Gal.	Ht.
IA	Ground and upper floors	2,750 (50)	3 ft. (1)	660 (12)	3 ft. (1)
	Basement	Not permitted		Not permitted	
IB	Ground and upper floors	5,500 (100)	6 ft. (2)	1,375 (25)	3 ft. (1)
	Basement	Not permitted		Not permitted	
IC	Ground and upper floors	16,500 (300)	6 ft. (2)	4,125 (75)	3 ft. (1)
	Basement	Not permitted		Not permitted	
II	Ground and upper floors	16,500 (300)	9 ft. (3)	4,125 (75)	9 ft. (3)
	Basement	5,500 (100)	9 ft. (3)	Not permitted	
III	Ground and upper floors	55,000 (1,000)	15 ft. (5)	13,750 (250)	12 ft. (4)
	Basement	8,250 (450)	9 ft. (3)	Not permitted	

NOTE 1: When 2 or more classes of materials are stored in a single pile, the maximum gallonage permitted in that pile shall be the smallest of the 2 or more separate maximum gallonages.

NOTE 2: Aisles shall be provided so that no container is more than 12 ft. from an aisle. Main aisles shall be at least 8 ft. wide and side aisles at least 4 ft. wide.

(Numbers in parentheses indicate corresponding number of 55-gal. drums.)

NOTE 3: Each pile shall be separated from each other by at least 4 ft.

TABLE H-15

INDOOR PORTABLE TANK STORAGE

Class liquid	Storage level	Protected storage maximum per pile		Unprotected storage maximum per pile	
		Gals.	Ht.	Gals.	Ht.
IA	Ground and upper floors	Not permitted		Not permitted	
	Basement	Not permitted		Not permitted	
IB	Ground and upper floors	20,000	7 ft.	2,000	7 ft.
	Basement	Not permitted		Not permitted	
IC	Ground and upper floors	40,000	14 ft.	5,500	7 ft.
	Basement	Not permitted		Not permitted	
II	Ground and upper floors	40,000	14 ft.	5,500	7 ft.
	Basement	20,000	7 ft.	Not permitted	
III	Ground and upper floors	60,000	14 ft.	22,000	7 ft.
	Basement	20,000	7 ft.	Not permitted	

NOTE 1: When 2 or more classes of materials are stored in a single pile, the maximum gallonage permitted in that pile shall be the smallest of the 2 or more separate maximum gallonages.

NOTE 2: Aisles shall be provided so that no portable tank is more than 12 ft. from an aisle. Main aisles shall be at least 8 ft. wide and side aisles at least 4 ft. wide.

NOTE 3: Each pile shall be separated from each other by at least 4 ft.

(f) Flammable and combustible liquid warehouses or storage buildings. (i) If the storage building is located 50 feet or less from a building or line of adjoining property that may be built upon, the exposing wall shall be a blank wall having a fire-resistance rating of at least 2 hours.

(ii) The total quantity of liquids within a building shall not be restricted, but the arrangement of storage shall comply with Table H-14 or H-15.

(iii) Containers in piles shall be separated by pallets or dunnage where necessary to provide stability and to prevent excessive stress on container walls.

(iv) Portable tanks stored over one tier high shall be designed to nest securely, without dunnage and adequate materials handling equipment shall be available to handle tanks safely at the upper tier level.

(v) No pile shall be closer than 3 feet to the nearest beam, chord, girder, or other obstruction, and shall be 3 feet below sprinkler deflectors or discharge orifices of water spray, or other overhead fire protection systems.

(vi) Aisles of at least 3 feet wide shall be provided where necessary for reasons of access to doors, windows or standpipe connections.

(6) Storage outside buildings. (a) General. Storage outside buildings shall be in accordance with Table H-16 or H-17, and (6)(b) and (d) of this section.

TABLE H-16

OUTDOOR CONTAINER STORAGE

1 Class	2 Maximum per pile (see note 1)	3 Distance between piles (see note 2)	4 Distance to property line that can be built upon (see notes 3 & 4)	5 Distance to street, alley, public way (see note 4)
	gal.	ft.	ft.	ft.
IA	1,100	5	20	10
IB	2,200	5	20	10
IC	4,400	5	20	10
II	8,800	5	10	5
III	22,000	5	10	5

- NOTE 1: When 2 or more classes of materials are stored in a single pile, the maximum gallonage in that pile shall be the smallest of the 2 or more separate gallonages.
- NOTE 2: Within 200 ft. of each container, there shall be 12-ft. wide access way to permit approach of fire control apparatus.
- NOTE 3: The distances listed apply to properties that have protection for exposures as defined. If there are exposures, and such protection for exposures does not exist, the distances in column 4 shall be doubled.
- NOTE 4: When total quantity stored does not exceed 50 percent of maximum per pile, the distances in columns 4 and 5 may be reduced 50 percent, but not less than 3 ft.

(b) Maximum storage. A maximum of 1,100 gallons of flammable or combustible liquids may be located adjacent to buildings located on the same premises and under the same management provided the provisions of (6)(b)(i) and (ii) are complied with.

(i) The building shall be a one-story building devoted principally to the handling and storing of flammable or combustible liquids or the building shall have 2 hour fire-resistive exterior walls having no opening within 10 feet of such storage.

(ii) Where quantity stored exceeds 1,100 gallons, or provisions of (6)(b)(i) cannot be met, a minimum distance of 10 feet between buildings and nearest container of flammable or combustible liquid shall be maintained.

TABLE H-17

OUTDOOR PORTABLE TANK STORAGE

1 Class	2 Maximum per pile	3 Distance between piles	4 Distance to property line that can be built upon	5 Distance to street, alley, public way
	gal.	ft.	ft.	ft.
IA	2,200	5	20	10
IB	4,400	5	20	10
IC	8,800	5	20	10

TABLE H-17

OUTDOOR PORTABLE TANK STORAGE

1 Class	2 Maximum per pile	3 Distance between piles	4 Distance to property line that can be built upon	5 Distance to street, alley, public way
	gal.	ft.	ft.	ft.
II	17,600	5	10	5
III	44,000	5	10	5

- NOTE 1: When 2 or more classes of materials are stored in a single pile, the maximum gallonage in that pile shall be the smallest of the 2 or more separate gallonages.
- NOTE 2: Within 200 ft. of each portable tank, there shall be a 12-ft. wide access way to permit approach of fire control apparatus.
- NOTE 3: The distances listed apply to properties that have protection for exposures as defined. If there are exposures, and such protection for exposures does not exist, the distances in column 4 shall be doubled.
- NOTE 4: When total quantity stored does not exceed 50 percent of maximum per pile, the distances in columns 4 and 5 may be reduced 50 percent, but not less than 3 ft.

(c) Spill containment. The storage area shall be graded in a manner to divert possible spills away from buildings or other exposures or shall be surrounded by a curb at least 6 inches high. When curbs are used, provisions shall be made for draining of accumulations of ground or rain water or spills of flammable or combustible liquids. Drains shall terminate at a safe location and shall be accessible to operation under fire conditions.

(d) Security. The storage area shall be protected against tampering or trespassers where necessary and shall be kept free of weeds, debris and other combustible material not necessary to the storage.

(7) Fire control. (a) Extinguishers. Suitable fire control devices, such as small hose or portable fire extinguishers, shall be available at locations where flammable or combustible liquids are stored.

(i) At least one portable fire extinguisher having a rating of not less than 12-B units shall be located outside of, but not more than 10 feet from, the door opening into any room used for storage.

(ii) At least one portable fire extinguisher having a rating of not less than 12-B units must be located not less than 10 feet, nor more than 25 feet, from any Class I or Class II liquid storage area located outside of a storage room but inside a building.

(b) Sprinklers. When sprinklers are provided, they shall be installed in accordance with WAC 296-24-605 through 296-24-60509.

(c) Open flames and smoking. Open flames and smoking shall not be permitted in flammable or combustible liquid storage areas.

(d) Water reactive materials. Materials which will react with water shall not be stored in the same room with flammable or combustible liquids. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-10-004 (Order 85-

09), § 296-24-33009, filed 4/19/85; Order 76-6, § 296-24-33009, filed 3/1/76; Order 74-27, § 296-24-33009, filed 5/7/74; Order 73-5, § 296-24-33009, filed 5/9/73 and Order 73-4, § 296-24-33009, filed 5/7/73.]

WAC 296-24-33011 Industrial plants. (1) Scope. (a) Application. This paragraph shall apply to those industrial plants where:

(i) The use of flammable or combustible liquids is incidental to the principal business, or

(ii) Where flammable or combustible liquids are handled or used only in unit physical operations such as mixing, drying, evaporating, filtering, distillation, and similar operations which do not involve chemical reaction. This section shall not apply to chemical plants, refineries or distilleries.

(b) Exceptions. Where portions of such plants involve chemical reactions such as oxidation, reduction, halogenation, hydrogenation, alkylation, polymerization, and other chemical processes, those portions of the plant shall be in accordance with WAC 296-24-33017.

(2) Incidental storage or use of flammable and combustible liquids. (a) Application. This shall be applicable to those portions of an industrial plant where the use and handling of flammable or combustible liquids is only incidental to the principal business, such as automobile assembly, construction of electronic equipment, furniture manufacturing, or other similar activities.

(b) Containers. Flammable or combustible liquids shall be stored in tanks or closed containers.

(i) Except as provided in (2)(b)(ii) and (iii) of this section all storage shall comply with WAC 296-24-33009 (3) or (4).

(ii) The quantity of liquid that may be located outside of an inside storage room or storage cabinet in a building or in any one fire area of a building shall not exceed:

(A) 25 gallons of Class IA liquids in containers

(B) 120 gallons of Class IB, IC, II, or III liquids in containers

(C) 660 gallons of Class IB, IC, II, or III liquids in a single portable tank.

(iii) Where large quantities of flammable or combustible liquids are necessary, storage may be in tanks which shall comply with the applicable requirements of WAC 296-24-33005.

(c) Separation and protection. Areas in which flammable or combustible liquids are transferred from one tank or container to another container shall be separated from other operations in the building by adequate distance or by construction having adequate fire resistance. Drainage or other means shall be provided to control spills. Adequate natural or mechanical ventilation shall be provided.

(d) Handling liquids at point of final use. (i) Flammable liquids shall be kept in covered containers when not actually in use.

(ii) Where flammable or combustible liquids are used or handled, except in closed containers, means shall be provided to dispose promptly and safely of leakage or spills.

(iii) Class I liquids may be used only where there are no open flames or other sources of ignition within the possible path of vapor travel.

(iv) Flammable or combustible liquids shall be drawn from or transferred into vessels, containers, or portable tanks within a building only through a closed piping system, from safety cans, by means of a device drawing through the top, or from a container or portable tanks by gravity through an approved self-closing valve. Transferring by means of air pressure on the container or portable tanks shall be prohibited.

(3) Unit physical operations. (a) Application. This subdivision (3) shall be applicable in those portions of industrial plants where flammable or combustible liquids are handled or used in unit physical operations such as mixing, drying, evaporating, filtering, distillation, and similar operations which do not involve chemical change. Examples are plants compounding cosmetics, pharmaceuticals, solvents, cleaning fluids, insecticides, and similar types of activities.

(b) Location. Industrial plants shall be located so that each building or unit of equipment is accessible from at least one side for firefighting and fire control purposes. Buildings shall be located with respect to lines of adjoining property which may be built upon as set forth in WAC 296-24-33017 (2)(a) and (b) except that the blank wall referred to in WAC 296-24-33017 (2)(b) shall have a fire resistance rating of at least 2 hours.

(c) Chemical processes. Areas where unstable liquids are handled or small scale unit chemical processes are carried on shall be separated from the remainder of the plant by a fire wall of 2-hour minimum fire resistance rating.

(d) Drainage. (i) Emergency drainage systems shall be provided to direct flammable or combustible liquid leakage and fire protection water to a safe location. This may require curbs, scuppers, or special drainage systems to control the spread of fire; see WAC 296-24-33005 (2)(g)(ii).

(ii) Emergency drainage systems, if connected to public sewers or discharged into public waterways, shall be equipped with traps or separators.

(iii) The industrial plant shall be designed and operated to prevent the normal discharge of flammable or combustible liquids into public waterways, public sewers, or adjoining property.

(e) Ventilation. (i) Areas as defined in (1)(a) of this section using Class I liquids shall be ventilated at a rate of not less than 1 cubic foot per minute per square foot of solid floor area. This shall be accomplished by natural or mechanical ventilation with discharge or exhaust to a safe location outside of the building. Provision shall be made for introduction of makeup air in such a manner as not to short circuit the ventilation. Ventilation shall be arranged to include all floor areas or pits where flammable vapors may collect.

(ii) Equipment used in a building and the ventilation of the building shall be designed so as to limit flammable vapor-air mixtures under normal operating conditions to the interior of equipment, and to not more than 5 feet from equipment which exposes Class I liquids to

the air. Examples of such equipment are dispensing stations, open centrifuges, plate and frame filters, open vacuum filters, and surfaces of open equipment.

(f) Storage and handling. The storage, transfer, and handling of liquid shall comply with WAC 296-24-33017(4) of this section.

(4) Tank vehicle and tank car loading and unloading.

(a) Tank vehicle and tank car loading or unloading facilities shall be separated from aboveground tanks, warehouses, other plant buildings or nearest line of adjoining property which may be built upon by a distance of 25 feet for Class I liquids and 15 feet for Class II and Class III liquids measured from the nearest position of any fill stem. Buildings for pumps or shelters for personnel may be a part of the facility. Operations of the facility shall comply with the appropriate portions of WAC 296-24-33013(3).

(5) Fire control. (a) Portable and special equipment. Portable fire extinguishment and control equipment shall be provided in such quantities and types as are needed for the special hazards of operation and storage.

(b) Water supply. Water shall be available in volume and at adequate pressure to supply water hose streams, foam-producing equipment, automatic sprinklers, or water spray systems as the need is indicated by the special hazards of operation, dispensing and storage.

(c) Special extinguishers. Special extinguishing equipment such as that utilizing foam, inert gas, or dry chemical shall be provided as the need is indicated by the special hazards of operation dispensing and storage.

(d) Special hazards. Where the need is indicated by special hazards of operation, flammable or combustible liquid processing equipment, major piping, and supporting steel shall be protected by approved water spray systems, deluge systems, approved fire-resistant coatings, insulation, or any combination of these.

(e) Maintenance. All plant fire protection facilities shall be adequately maintained and periodically inspected and tested to make sure they are always in satisfactory operating condition, and they will serve their purpose in time of emergency.

(6) Sources of ignition. (a) General. Adequate precautions shall be taken to prevent the ignition of flammable vapors. Sources of ignition include but are not limited to open flames; lightning; smoking; cutting and welding; hot surfaces; frictional heat; static, electrical and mechanical sparks; spontaneous ignition, including heat-producing chemical reactions; and radiant heat.

(b) Grounding. Class I liquids shall not be dispensed into containers unless the nozzle and container are electrically interconnected. Where the metallic floorplate on which the container stands while filling is electrically connected to the fill stem or where the fill stem is bonded to the container during filling operations by means of a bond wire, the provisions of these standards shall be deemed to have been complied with.

(7) Electrical. (a) Equipment. (i) All electrical wiring and equipment shall be installed according to the requirements of WAC 296-24-956 through 296-24-960.

(ii) Locations where flammable vapor-air mixtures may exist under normal operations shall be classified

Class I, Division 1 according to the requirements of WAC 296-24-956 through 296-24-960. For those pieces of equipment installed in accordance with the requirements of subsection (3)(e)(ii) of this section, the Division 1 area shall extend 5 feet in all directions from all points of vapor liberation. All areas within pits shall be classified Division 1 if any part of the pit is within a Division 1 or 2 classified area, unless the pit is provided with mechanical ventilation.

(iii) Locations where flammable vapor-air mixtures may exist under abnormal conditions and for a distance beyond Division 1 locations shall be classified Division 2 according to the requirements of WAC 296-24-956 through 296-24-960. These locations include an area within 20 feet horizontally, 3 feet vertically beyond a Division 1 area, and up to 3 feet above floor or grade level within 25 feet, if indoors, or 10 feet if outdoors, from any pump, bleeder, withdrawal fitting, meter, or similar device handling Class I liquids. Pits provided with adequate mechanical ventilation within a Division 1 or 2 area shall be classified Division 2. If Class II or Class III liquids only are handled, then ordinary electrical equipment is satisfactory though care shall be used in locating electrical apparatus to prevent hot metal from falling into open equipment.

(iv) Where the provisions of (i), (ii) and (iii) of this section require the installation of electrical equipment suitable for Class I, Division 1 or Division 2 locations, ordinary electrical equipment including switchgear may be used if installed in a room or enclosure which is maintained under positive pressure with respect to the hazardous area. Ventilation makeup air shall be uncontaminated by flammable vapors.

(8) Repairs to equipment. Hot work, such as welding or cutting operations, use of spark-producing power tools, and chipping operations shall be permitted only under supervision of an individual in responsible charge. The individual in responsible charge shall make an inspection of the area to be sure that it is safe for the work to be done and that safe procedures will be followed for the work specified.

(9) Housekeeping. (a) General. Maintenance and operating practices shall be in accordance with established procedures which will tend to control leakage and prevent the accidental escape of flammable or combustible liquids. Spills shall be cleaned up promptly.

(b) Access. Adequate aisles shall be maintained for unobstructed movement of personnel and so that fire protection equipment can be brought to bear on any part of flammable or combustible liquid storage, use, or any unit physical operation.

(c) Waste and residue. Combustible waste material and residues in a building or unit operating area shall be kept to a minimum, stored in covered metal receptacles and disposed of daily.

(d) Clear zone. Ground area around buildings and unit operating areas shall be kept free of weeds, trash, or other unnecessary combustible materials. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-10-004 (Order 85-09), § 296-24-33011, filed 4/19/85; Order 76-6, § 296-24-33011, filed 3/1/76; Order 73-5, §

296-24-33011, filed 5/9/73 and Order 73-4, § 296-24-33011, filed 5/7/73.]

WAC 296-24-33013 Bulk plants. (1) Storage. (a) Class I liquids. Class I liquids shall be stored in closed containers, or in storage tanks above ground outside of buildings, or underground in accordance with WAC 296-24-33005.

(b) Class II and III liquids. Class II and Class III liquids shall be stored in containers, or in tanks within buildings or above ground outside of buildings, or underground in accordance with WAC 296-24-33005.

(c) Piling containers. Containers of flammable or combustible liquids when piled one upon the other shall be separated by dunnage sufficient to provide stability and to prevent excessive stress on container walls. The height of the pile shall be consistent with the stability and strength of containers.

(2) Buildings. (a) Exits. Rooms in which flammable or combustible liquids are stored or handled by pumps shall have exit facilities arranged to prevent occupants from being trapped in the event of fire.

(b) Heating. Rooms in which Class I liquids are stored or handled shall be heated only by means not constituting a source of ignition, such as steam or hot water. Rooms containing heating appliances involving sources of ignition shall be located and arranged to prevent entry of flammable vapors.

(c) Ventilation. (i) Ventilation shall be provided for all rooms, buildings, or enclosures in which Class I liquids are pumped or dispensed. Design of ventilation systems shall take into account the relatively high specific gravity of the vapors. Ventilation may be provided by adequate openings in outside walls at floor level unobstructed except by louvers or course screens. Where natural ventilation is inadequate, mechanical ventilation shall be provided.

(ii) Class I liquids shall not be stored or handled within a building having a basement or pit into which flammable vapors may travel, unless such area is provided with ventilation designed to prevent the accumulation of flammable vapors therein.

(iii) Containers of Class I liquids shall not be drawn from or filled within buildings unless provision is made to prevent the accumulation of flammable vapors in hazardous concentrations. Where mechanical ventilation is required, it shall be kept in operation while flammable liquids are being handled.

(3) Loading and unloading facilities. (a) Separation. Tank vehicle and tank car loading or unloading facilities shall be separated from aboveground tanks, warehouses, other plant buildings or nearest line of adjoining property that may be built upon by a distance of 25 feet for Class I liquids and 15 feet for Class II and Class III liquids measured from the nearest position of any fill spout. Buildings for pumps or shelters for personnel may be a part of the facility.

(b) Class restriction. Equipment such as piping, pumps, and meters used for the transfer of Class I liquids between storage tanks and the fill stem of the loading rack shall not be used for the transfer of Class II or Class III liquids.

(c) Valves. Valves used for the final control for filling tank vehicles shall be of the self-closing type and manually held open except where automatic means are provided for shutting off the flow when the vehicle is full or after filling of a preset amount.

(d) Static protection. (i) Bonding facilities for protection against static sparks during the loading of tank vehicles through open domes shall be provided:

(A) Where Class I liquids are loaded, or

(B) Where Class II or Class III liquids are loaded into vehicles which may contain vapors from previous cargoes of Class I liquids.

(ii) Protection as required in (3)(d)(i) of this section shall consist of a metallic bond wire permanently electrically connected to the fill stem or to some part of the rack structure in electrical contact with the fill stem. The free end of such wire shall be provided with a clamp or equivalent device for convenient attachment to some metallic part in electrical contact with the cargo tank of the tank vehicle.

(iii) Such bonding connection shall be made fast to the vehicle or tank before dome covers are raised and shall remain in place until filling is completed and all dome covers have been closed and secured.

(iv) Bonding as specified in (3)(d)(i), (ii) and (iii) of this section is not required:

(A) Where vehicles are loaded exclusively with products not having a static accumulating tendency, such as asphalt, most crude oils, residual oils, and water soluble liquids;

(B) Where no Class I liquids are handled at the loading facility and the tank vehicles loaded are used exclusively for Class II and Class III liquids; and

(C) Where vehicles are loaded or unloaded through closed bottom or top connections.

(v) Filling through open domes into the tanks of tank vehicles or tank cars, that contain vapor-air mixtures within the flammable range or where the liquid being filled can form such a mixture, shall be by means of a downspout which extends near the bottom of the tank. This precaution is not required when loading liquids which are nonaccumulators of static charges.

(e) Stray currents. Tank car loading facilities where Class I liquids are loaded through open domes shall be protected against stray currents by bonding the pipe to at least one rail and to the rack structure if of metal. Multiple lines entering the rack area shall be electrically bonded together. In addition, in areas where excessive stray currents are known to exist, all pipe entering the rack area shall be provided with insulating sections to electrically isolate the rack piping from the pipelines. No bonding between the tank car and the rack or piping is required during either loading or unloading of Class II or III liquids.

(f) Container filling facilities. Class I liquids shall not be dispensed into containers unless the nozzle and container are electrically interconnected. Where the metallic floorplate on which the container stands while filling is electrically connected to the fill stem or where the fill stem is bonded to the container during filling operations by means of a bond wire, the provisions of these standards shall be deemed to have been complied with.

(4) Wharves. (a) Definition, application. The term wharf shall mean any wharf, pier, bulkhead, or other structure over or contiguous to navigable water used in conjunction with a bulk plant, the primary function of which is the transfer of flammable or combustible liquid cargo in bulk between the bulk plant and any tank vessel, ship, barge, lighter boat, or other mobile floating craft; and this subparagraph shall apply to all such installations except marine service stations as covered in WAC 296-24-33015.

(b) Package cargo. Package cargo of flammable and combustible liquids, including full and empty drums, bulk fuel, and stores may be handled over a wharf and at such times and places as may be agreed upon by the wharf superintendent and the senior deck officer on duty.

(c) Location. Wharves at which flammable or combustible liquid cargoes are to be transferred in bulk quantities to or from tank vessels shall be at least 100 feet from any bridge over a navigable waterway, or from an entrance to or superstructure of any vehicular or railroad tunnel under a waterway. The termination of the wharf loading or unloading fixed piping shall be at least 200 feet from a bridge or from an entrance to or superstructure of a tunnel.

(d) Design and construction. Substructure and deck shall be substantially designed for the use intended. Deck may employ any material which will afford the desired combination of flexibility, resistance to shock, durability, strength, and fire resistance. Heavy timber construction is acceptable.

(e) Tanks. Tanks used exclusively for ballast water or Class II or Class III liquids may be installed on suitably designed wharves.

(f) Pumps. Loading pumps capable of building up pressures in excess of the safe working pressure of cargo hose or loading arms shall be provided with bypasses, relief valves, or other arrangement to protect the loading facilities against excessive pressure. Relief devices shall be tested at not more than yearly intervals to determine that they function satisfactorily at the pressure at which they are set.

(g) Hoses and couplings. All pressure hoses and couplings shall be inspected at intervals appropriate to the service. The hose and couplings shall be tested with the hose extended and using the "inservice maximum operating pressures." Any hose showing material deteriorations, signs of leakage, or weakness in its carcass or at the couplings shall be withdrawn from service and repaired or discarded.

(h) Piping and fittings. Piping, valves, and fittings shall be in accordance with WAC 296-24-33007 with the following exceptions and additions:

(i) Flexibility of piping shall be assured by appropriate layout and arrangement of piping supports so that motion of the wharf structure resulting from wave action, currents, tides, or the mooring of vessels will not subject the pipe to repeated strain beyond the elastic limit.

(ii) Pipe joints depending upon the friction characteristics of combustible materials or grooving of pipe ends for mechanical continuity of piping shall not be used.

(iii) Swivel joints may be used in piping to which hoses are connected, and for articulated swivel-joint transfer systems, provided that the design is such that the mechanical strength of joint will not be impaired if the packing material should fail, as by exposure to fire.

(iv) Piping systems shall contain a sufficient number of valves to operate the system properly and to control the flow of liquid in normal operation and in the event of physical damage.

(v) In addition to the requirements of (4)(h)(iv), each line conveying flammable liquids leading to a wharf shall be provided with a readily accessible block valve located on shore near the approach to the wharf and outside of any diked area. Where more than one line is involved, the valves shall be grouped in one location.

(vi) Means of easy access shall be provided for cargo line valves located below the wharf deck.

(vii) Pipelines on flammable or combustible liquids wharves shall be adequately bonded and grounded. If excessive stray currents are encountered, insulating points shall be installed. Bonding and grounding connections on all pipelines shall be located on wharveside of hose-riser insulating flanges, if used, and shall be accessible for inspection.

(viii) Hose or articulated swivel-joint pipe connections used for cargo transfer shall be capable of accommodating the combined effects of change in draft and maximum tidal range, and mooring lines shall be kept adjusted to prevent the surge of the vessel from placing stress on the cargo transfer system.

(ix) Hose shall be supported so as to avoid kinking and damage from chafing.

(i) Fire protection. Suitable portable fire extinguishers with a rating of not less than 12-BC shall be located with 75 feet of those portions of the facility where fires are likely to occur, such as hose connections, pumps, and separator tanks.

(i) Where piped water is available, ready-connected fire hose in size appropriate for the water supply shall be provided so that manifolds where connections are made and broken can be reached by at least one hose stream.

(ii) Material shall not be placed on wharves in such a manner as to obstruct access to firefighting equipment, or important pipeline control valves.

(iii) Where the wharf is accessible to vehicle traffic, an unobstructed roadway to the shore end of the wharf shall be maintained for access of firefighting apparatus.

(j) Operations control. Loading or discharging shall not commence until the wharf superintendent and officer in charge of the tank vessel agree that the tank vessel is properly moored and all connections are properly made. Mechanical work shall not be performed on the wharf

(B) With the allowable working pressure and temperature for which the vaporizer is designed.

(C) With the sum of the outside surface area and the inside heat exchange surface area expressed in square feet.

(D) With the name or symbol of the manufacturer.

(ii) Vaporizers having an inside diameter of 6 inches or less exempted by the ASME Unfired Pressure Vessel Code, Section VIII of the ASME Boiler and Pressure Vessel Code—1968 shall have a design pressure not less than 250 p.s.i.g. and need not be permanently marked.

(iii) Heating or cooling coils shall not be installed inside a storage container.

(iv) Vaporizers may be installed in buildings, rooms, sheds, or lean-tos used exclusively for gas manufacturing or distribution, or in other structures of light, non-combustible construction or equivalent, well ventilated near the floor line and roof.

When vaporizing and/or mixing equipment is located in a structure or building not used exclusively for gas manufacturing or distribution, either attached to or within such a building, such structure or room shall be separated from the remainder of the building by a wall designed to withstand a static pressure of at least 100 pounds per square foot. This wall shall have no openings or pipe or conduit passing through it. Such structure or room shall be provided with adequate ventilation and shall have a roof or at least one exterior wall of light-weight construction.

(v) Vaporizers shall have, at or near the discharge, a safety relief valve providing an effective rate of discharge in accordance with (10)(c) of this section, except as provided in WAC 296-24-47509 (4)(e)(i).

(vi) The heating medium lines into and leaving the vaporizer shall be provided with suitable means for preventing the flow of gas into the heat systems in the event of tube rupture in the vaporizer. Vaporizers shall be provided with suitable automatic means to prevent liquid passing through the vaporizers to the gas discharge piping.

(vii) The device that supplies the necessary heat for producing steam, hot water, or other heating medium may be installed in a building, compartment, room, or lean-to which shall be ventilated near the floorline and roof to the outside. The device location shall be separated from all compartments or rooms containing liquefied petroleum gas vaporizers, pumps, and central gas mixing devices by a wall designed to withstand a static pressure of at least 100 pounds per square foot. This wall shall have no openings or pipes or conduit passing through it. This requirement does not apply to the domestic water heaters which may supply heat for a vaporizer in a domestic system.

(viii) Gas-fired heating systems supplying heat exclusively for vaporization purposes shall be equipped with automatic safety devices to shut off the flow of gas to main burners, if the pilot light should fail.

(ix) Vaporizers may be an integral part of a fuel storage container directly connected to the liquid section or gas section or both.

(x) Vaporizers shall not be equipped with fusible plugs.

(xi) Vaporizer houses shall not have unprotected drains to sewers or sump pits.

(b) Atmospheric vaporizers employing heat from the ground or surrounding air shall be installed as follows:

(i) Buried underground, or

(ii) Located inside the building close to a point at which pipe enters the building provided the capacity of the unit does not exceed 1 quart.

(iii) Vaporizers of less than 1 quart capacity heated by the ground or surrounding air, need not be equipped with safety relief valves provided that adequate tests demonstrate that the assembly is safe without safety relief valves.

(c) Direct gas-fired vaporizers shall be constructed, marked, and installed as follows:

(i) In accordance with the requirements of the American Society of Mechanical Engineers Boiler and Pressure Vessel Code—1968 that are applicable to the maximum working conditions for which the vaporizer is designed.

(ii) With the name of the manufacturer; rated BTU input to the burner; the area of the heat exchange surface in square feet; the outside surface of the vaporizer in square feet; and the maximum vaporizing capacity in gallons per hour.

(iii) Vaporizers may be connected to the liquid section or the gas section of the storage container, or both; but in any case there shall be at the container a manually operated valve in each connection to permit completely shutting off when desired, of all flow of gas or liquid from container to vaporizer.

(iv) Vaporizers with capacity not exceeding 35 gallons per hour shall be located at least 5 feet from container shutoff valves. Vaporizers having capacity of more than 35 gallons but not exceeding 100 gallons per hour shall be located at least 10 feet from the container shutoff valves. Vaporizers having a capacity greater than 100 gallons per hour shall be located at least 15 feet from container shutoff valves.

(v) Vaporizers may be installed in buildings, rooms, housings, sheds, or lean-tos used exclusively for vaporizing or mixing of liquefied petroleum gas. Vaporizing housing structures shall be of noncombustible construction, well ventilated near the floorline and the highest point of the roof. When vaporizer and/or mixing equipment is located in a structure or room attached to or within a building, such structure or room shall be separated from the remainder of the building by a wall designed to withstand a static pressure of at least 100 pounds per square foot. This wall shall have no openings or pipes or conduit passing through it. Such structure or room shall be provided with adequate ventilation, and shall have a roof or at least one exterior wall of light-weight construction.

(vi) Vaporizers shall have at or near the discharge, a safety relief valve providing an effective rate of discharge in accordance with (10)(c) of this section. The relief valve shall be so located as not to be subjected to temperatures in excess of 140°F.

(vii) Vaporizers shall be provided with suitable automatic means to prevent liquid passing from the vaporizer to the gas discharge piping of the vaporizer.

(viii) Vaporizers shall be provided with means for manually turning off the gas to the main burner and pilot.

(ix) Vaporizers shall be equipped with automatic safety devices to shut off the flow of gas to main burners if the pilot light should fail. When the flow through the pilot exceeds 2,000 B.T.U. per hour, the pilot also shall be equipped with an automatic safety device to shut off the flow of gas to the pilot should the pilot flame be extinguished.

(x) Pressure regulating and pressure reducing equipment if located within 10 feet of a direct fired vaporizer shall be separated from the open flame by a substantially airtight noncombustible partition or partitions.

(xi) Except as provided in (11)(c)(v), of this section, the following minimum distances shall be maintained between direct fired vaporizers and the nearest important building or group of buildings or line of adjoining property which may be built upon:

Ten feet for vaporizers having a capacity of 15 gallons per hour or less vaporizing capacity.

Twenty-five feet for vaporizers having a vaporizing capacity of 16 to 100 gallons per hour.

Fifty feet for vaporizers having a vaporizing capacity exceeding 100 gallons per hour.

(xii) Direct fired vaporizers shall not raise the product pressure above the design pressure of the vaporizer equipment nor shall they raise the product pressure within the storage container above the pressure shown in the second column of Table H-31. (See WAC 296-24-47509.)

(xiii) Vaporizers shall not be provided with fusible plugs.

(xiv) Vaporizers shall not have unprotected drains to sewers or sump pits.

(d) Direct gas-fired tank heaters, shall be constructed and installed as follows:

(i) Direct gas-fired tank heaters, and tanks to which they are applied, shall only be installed above ground.

(ii) Tank heaters shall be permanently marked with the name of the manufacturer, the rated B.T.U. input to the burner, and the maximum vaporizing capacity in gallons per hour.

NOTE: Tank heaters may be an integral part of a fuel storage container directly connected to the container liquid section, or vapor section, or both.

(iii) Tank heaters shall be provided with a means for manually turning off the gas to the main burner and pilot.

(iv) Tank heaters shall be equipped with an automatic safety device to shut off the flow of gas to main burners, if the pilot light should fail. When flow through pilot exceeds 2,000 B.T.U. per hour, the pilot also shall be equipped with an automatic safety device to shut off the flow of gas to the pilot should the pilot flame be extinguished.

(v) Pressure regulating and pressure reducing equipment if located within 10 feet of a direct fired tank heater shall be separated from the open flame by a substantially airtight noncombustible partition.

(vi) The following minimum distances shall be maintained between a storage tank heated by a direct fired tank heater and the nearest important building or group of buildings or line of adjoining property which may be built upon:

Ten feet for storage containers of less than 500 gallons water capacity.

Twenty-five feet for storage containers of 500 to 1,200 gallons water capacity.

Fifty feet for storage containers of over 1,200 gallons water capacity.

(vii) No direct fired tank heater shall raise the product pressure within the storage container over 75 percent of the pressure set out in the second column of Table H-31. (See WAC 296-24-47509.)

(e) The vaporizer section of vaporizer-burners used for dehydrators or dryers shall be located outside of buildings; they shall be constructed and installed as follows:

(i) Vaporizer-burners shall have a minimum design pressure of 250 p.s.i.g. with a factor of safety of five.

(ii) Manually operated positive shutoff valves shall be located at the containers to shut off all flow to the vaporizer-burners.

(iii) Minimum distances between storage containers and vaporizer-burners shall be as follows:

Water capacity per container (gallons)	Minimum distances (feet)
Less than 501	10
501 to 2,000	25
Over 2,000	50

(iv) The vaporizer section of vaporizer-burners shall be protected by a hydrostatic relief valve. The relief valve shall be located so as not to be subjected to temperatures in excess of 140°F. The start-to-discharge pressure setting shall be such as to protect the components involved, but not less than 250 p.s.i.g. The discharge shall be directed upward and away from component parts of the equipment and away from operating personnel.

(v) Vaporizer-burners shall be provided with means for manually turning off the gas to the main burner and pilot.

(vi) Vaporizer-burners shall be equipped with automatic safety devices to shut off the flow of gas to the main burner and pilot in the event the pilot is extinguished.

(vii) Pressure regulating and control equipment shall be located or protected so that the temperatures surrounding this equipment shall not exceed 140°F except that equipment components may be used at higher temperatures if designed to withstand such temperatures.

(viii) Pressure regulating and control equipment when located downstream of the vaporizer shall be designed to

withstand the maximum discharge temperature of the vapor.

(ix) The vaporizer section of vaporizer-burners shall not be provided with fusible plugs.

(x) Vaporizer coils or jackets shall be made of ferrous metal or high temperature alloys.

(xi) Equipment utilizing vaporizer-burners shall be equipped with automatic shutoff devices upstream and downstream of the vaporizer section connected so as to operate in the event of excessive temperature, flame failure, and, if applicable, insufficient airflow.

(12) Filling densities. (a) The "filling density" is defined as the percent ratio of the weight of the gas in a container to the weight of water the container will hold at 60°F. All containers shall be filled according to the filling densities shown in Table H-27.

TABLE H-27

MAXIMUM PERMITTED FILLING DENSITY

Specific gravity at 60°F (15.6°C)	Above ground containers		Under-ground containers, all capacities
	0 to 1,200 U.S. gals. (1,000 imp. gal. total water cap.	Over 1,200 U.S. gals. (1,000 imp. gal. total water cap.	
	Percent	Percent	Percent
0.496-0.503	41	44	45
.504-.510	42	45	46
.511-.519	43	46	47
.520-.527	44	47	48
.528-.536	45	48	49
.537-.544	46	49	50
.545-.552	47	50	51
.553-.560	48	51	52
.561-.568	49	52	53
.569-.576	50	53	54
.577-.584	51	54	55
.585-.592	52	55	56
.593-.600	53	56	57

(b) Except as provided in (12)(c) of this section, any container including mobile cargo tanks and portable tank containers regardless of size or construction, shipped under DOT jurisdiction or constructed in accordance with 49 CFR Chapter I Specifications shall be charged according to 49 CFR Chapter I requirements.

(c) Portable containers not subject to DOT jurisdiction (such as, but not limited to, motor fuel containers on industrial and lift trucks, and farm tractors covered in (5) of this section, or containers recharged at the installation) may be filled either by weight, or by volume using a fixed length dip tube gaging device.

(13) LP-gas in buildings. (a) Vapor shall be piped into buildings at pressures in excess of 20 p.s.i.g. only if the buildings or separate areas thereof, (i) are constructed in accordance with this section; (ii) are used

exclusively to house equipment for vaporization, pressure reduction, gas mixing, gas manufacturing, or distribution, or to house internal combustion engines, industrial processes, research and experimental laboratories, or equipment and processes using such gas and having similar hazard; (iii) buildings, structures, or equipment under construction or undergoing major renovation.

(b) Liquid may be permitted in buildings as follows:

(i) Buildings, or separate areas of buildings, used exclusively to house equipment for vaporization, pressure reduction, gas mixing, gas manufacturing, or distribution, or to house internal combustion engines, industrial processes, research and experimental laboratories, or equipment and processes using such gas and having similar hazard; and when such buildings, or separate areas thereof are constructed in accordance with this section.

(ii) Buildings, structures, or equipment under construction or undergoing major renovation provided the temporary piping meets the following conditions:

(A) Liquid piping inside the building shall conform to the requirements of (8) of this section, and shall not exceed three-fourths iron pipe size. Copper tubing with an outside diameter of three-fourths inch or less may be used provided it conforms to Type K of Specifications for Seamless Water Tube, ANSI H23.1-1970 (ASTM B88-1969) (see WAC 296-24-47505 Table H-24). All such piping shall be protected against construction hazards. Liquid piping inside buildings shall be kept to a minimum. Such piping shall be securely fastened to walls or other surfaces so as to provide adequate protection from breakage and so located as to subject the liquid line to lowest ambient temperatures.

(B) A shutoff valve shall be installed in each intermediate branch line where it takes off the main line and shall be readily accessible. A shutoff valve shall also be placed at the appliance end of the intermediate branch line. Such shutoff valve shall be upstream of any flexible connector used with the appliance.

(C) Suitable excess flow valves shall be installed in the container outlet line supplying liquid LP-gas to the building. A suitable excess flow valve shall be installed immediately downstream of each shutoff valve. Suitable excess flow valves shall be installed where piping size is reduced and shall be sized for the reduced size piping.

(D) Hydrostatic relief valves shall be installed in accordance with (10)(1) of this section.

(E) The use of hose to carry liquid between the container and the building or at any point in the liquid line, except at the appliance connector, shall be prohibited.

(F) Where flexible connectors are necessary for appliance installation, such connectors shall be as short as practicable and shall comply with (8)(b) or (9) of this section.

(G) Release of fuel when any section of piping or appliances is disconnected shall be minimized by either of the following methods:

(aa) Using an approved automatic quick-closing coupling (a type closing in both directions when coupled in the fuel line), or

(bb) Closing the valve nearest to the appliance and allowing the appliance to operate until the fuel in the line is consumed.

(cc) Portable containers shall not be taken into buildings except as provided in (6)(a) of this section.

(14) Transfer of liquids. The employer shall assure that (a) at least one attendant shall remain close to the transfer connection from the time the connections are first made until they are finally disconnected, during the transfer of the product.

(b) Containers shall be filled or used only upon authorization of the owner.

(c) Containers manufactured in accordance with specifications of 49 CFR Part 178 and authorized by 49 CFR Chapter 1 as a "single trip" or "nonrefillable container" shall not be refilled or reused in LP-gas service.

(d) Gas or liquid shall not be vented to the atmosphere to assist in transferring contents of one container to another, except as provided in WAC 296-24-47511 (5)(d) and except that this shall not preclude the use of listed pump utilizing LP-gas in the vapor phase as a source of energy and venting such gas to the atmosphere at a rate not to exceed that from a No. 31 drill size opening and provided that such venting and liquid transfer shall be located not less than 50 feet from the nearest important building.

(e) Filling of fuel containers for industrial trucks or motor vehicles from industrial bulk storage containers shall be performed not less than 10 feet from the nearest important masonry-walled building or not less than 25 feet from the nearest important building or other construction and, in any event, not less than 25 feet from any building opening.

(f) Filling of portable containers, containers mounted on skids, fuel containers on farm tractors, or similar applications, from storage containers used in domestic or commercial service, shall be performed not less than 50 feet from the nearest important building.

(g) The filling connection and the vent from the liquid level gages in containers, filled at point of installation, shall not be less than 10 feet in any direction from air openings into sealed combustion system appliances or mechanical ventilation air intakes.

(h) Fuel supply containers shall be gaged and charged only in the open air or in buildings especially provided for that purpose.

(i) The maximum vapor pressure of the product at 100°F which may be transferred into a container shall be in accordance with WAC 296-24-47509(2) and 296-24-47511(3). (For DOT containers use DOT requirements.)

(j) Marketers and users shall exercise precaution to assure that only those gases for which the system is designed, examined, and listed, are employed in its operation, particularly with regard to pressures.

(k) Pumps or compressors shall be designed for use with LP-gas. When compressors are used they shall normally take suction from the vapor space of the container being filled and discharge to the vapor space of the container being emptied.

(l) Pumping systems, when equipped with a positive displacement pump, shall include a recirculating device which shall limit the differential pressure on the pump under normal operating conditions to the maximum differential pressure rating of the pump. The discharge of the pumping system shall be protected so that pressure does not exceed 350 p.s.i.g. If a recirculation system discharges into the supply tank and contains a manual shutoff valve, an adequate secondary safety recirculation system shall be incorporated which shall have no means of rendering it inoperative. Manual shutoff valves in recirculation systems shall be kept open except during an emergency or when repairs are being made to the system.

(m) When necessary, unloading piping or hoses shall be provided with suitable bleeder valves for relieving pressure before disconnection.

(n) Agricultural air moving equipment, including crop dryers, shall be shut down when supply containers are being filled unless the air intakes and sources of ignition on the equipment are located 50 feet or more from the container.

(o) Agricultural equipment employing open flames or equipment with integral containers, such as flame cultivators, weed burners, and, in addition, tractors, shall be shut down during refueling.

(15) Tank car or transport truck loading or unloading points and operations. (a) The track of tank car siding shall be relatively level.

(b) A "tank car connected" sign, as covered by DOT rules, shall be installed at the active end or ends of the siding while the tank car is connected.

(c) While cars are on side track for loading or unloading, the wheels at both ends shall be blocked on the rails.

(d) The employer shall insure that an employee is in attendance at all times while the tank car, cars, or trucks are being loaded or unloaded.

(e) A backflow check valve, excess-flow valve, or a shutoff valve with means of remote closing, to protect against uncontrolled discharge of LP-gas from storage tank piping shall be installed close to the point where the liquid piping and hose or swing joint pipe is connected.

(f) Except as provided in (15)(g) of this section, when the size (diameter) of the loading or unloading hoses and/or piping is reduced below the size of the tank car or transport truck loading or unloading connections, the adaptors to which lines are attached shall be equipped with either a backflow check valve, a properly sized excess flow valve, or shutoff valve with means of remote closing, to protect against uncontrolled discharge from the tank car or transport truck.

(g) The requirement of (15)(f) of this section shall not apply if the tank car or transport is equipped with a quick-closing internal valve that can be remotely closed.

(h) The tank car or transport truck loading or unloading point shall be located with due consideration to the following:

(i) Proximity to railroads and highway traffic.

(ii) The distance of such unloading or loading point from adjacent property.

- (iii) With respect to buildings on installer's property.
- (iv) Nature of occupancy.
- (v) Topography.
- (vi) Type of construction of buildings.
- (vii) Number of tank cars or transport trucks that may be safely loaded or unloaded at one time.
- (viii) Frequency of loading or unloading.
- (i) Where practical, the distance of the unloading or loading point shall conform to the distances in (6)(b) of this section.

(16) Instructions. Personnel performing installation, removal, operation, and maintenance work shall be properly trained in such function.

(17) Electrical equipment and other sources of ignition. (a) Electrical equipment and wiring shall be of a type specified by and shall be installed in accordance with WAC 296-24-956 through 296-24-960, for ordinary locations except that fixed electrical equipment in classified areas shall comply with (18) of this section.

(b) Open flames or other sources of ignition shall not be permitted in vaporizer rooms (except those housing direct-fired vaporizers), pumphouses, container charging rooms or other similar locations. Direct-fired vaporizers shall not be permitted in pumphouses or container charging rooms.

NOTE: Liquefied petroleum gas storage containers do not require lightning protection. Since liquefied petroleum gas is contained in a closed system of piping and equipment, the system need not be electrically conductive or electrically bonded for protection against static electricity (see NFPA No. 77-1972-1973, Recommended Practice for Static Electricity).

(c) Open flames (except as provided for in (17)(b) of this section), cutting or welding, portable electric tools, and extension lights capable of igniting LP-gas, shall not be permitted within classified areas specified in Table H-28 (see WAC 296-24-47505) unless the LP-gas facilities have been freed of all liquid and vapor, or special precautions observed under carefully controlled conditions.

(18) Fixed electrical equipment in classified areas. Fixed electrical equipment and wiring installed within classified areas shall comply with Table H-28 (see WAC 296-24-47505) and shall be installed in accordance with WAC 296-24-956 through 296-24-960. This provision does not apply to fixed electrical equipment at residential or commercial installations of LP-gas systems or to systems covered by WAC 296-24-47511 or 296-24-47515.

(19) Liquid-level gaging device. (a) Each container manufactured after December 31, 1965, and filled on a volumetric basis shall be equipped with a fixed liquid-level gage to indicate the maximum permitted filling level as provided in (19)(e) of this section. Each container manufactured after December 31, 1969, shall have permanently attached to the container adjacent to

the fixed level gage a marking showing the percentage full that will be shown by that gage. When a variable liquid-level gage is also provided, the fixed liquid-level gage will also serve as a means for checking the variable gage. These gages shall be used in charging containers as required in (12) of this section.

(b) All variable gaging devices shall be arranged so that the maximum liquid level for butane, for a 50-50 mixture of butane and propane, and for propane, to which the container may be charged is readily determinable. The markings indicating the various liquid levels from empty to full shall be on the system nameplate or gaging device or part may be on the system nameplate and part on the gaging device. Dials of magnetic or rotary gages shall show whether they are for cylindrical or spherical containers and whether for aboveground or underground service. The dials of gages intended for use only on aboveground containers of over 1,200 gallons water capacity shall be so marked.

(c) Gaging devices that require bleeding of the product to the atmosphere, such as the rotary tube, fixed tube, and slip tube, shall be designed so that the bleed valve maximum opening is not larger than a No. 54 drill size, unless provided with excess flow valve.

(d) Gaging devices shall have a design working pressure of at least 250 p.s.i.g.

(e) Length of tube or position of fixed liquid-level gage shall be designed to indicate the maximum level to which the container may be filled for the product contained. This level shall be based on the volume of the product at 40°F at its maximum permitted filling density for aboveground containers and at 50°F for underground containers. The employer shall calculate the filling point for which the fixed liquid level gage shall be designed according to the method in this subsection.

TABLE H-28

Part	Location	Extent of classified area ¹	Equipment shall be suitable for National Electrical Code, Class 1, Group D ²
A	Storage containers other than DOT cylinders.	Within 15 feet in all directions from connections, except connections otherwise covered in Table H-28.	Division 2.
B	Tank vehicle and tank car loading and unloading. ³	Within 5 feet in all directions from connections regularly made or disconnected for product transfer.	Division 1.

TABLE H-28

TABLE H-28

Part	Location	Extent of classified area ¹	Equipment shall be suitable for National Electrical Code, Class 1, Group D ²
		Beyond 5 feet but within 15 feet in all directions from a point where connections are regularly made or disconnected and within the cylindrical volume between the horizontal equator of the sphere and grade. (See Figure H-1.)	Division 2.
C	Gage vent openings other than those on DOT cylinders.	Within 5 feet in all directions from point of discharge.	Division 1.
		Beyond 5 feet but within 15 feet in all directions from point of discharge.	Division 2.
D	Relief valve discharge other than those on DOT cylinders.	Within direct path of discharge.	Division 1. NOTE—Fixed electrical equipment should preferably not be installed.
		Within 5 feet in all directions from point of discharge.	Division 1.
		Beyond 5 feet but within 15 feet in all directions from point of discharge except within the direct path of discharge.	Division 2.
E	Pumps, compressors, gas-air mixers and vaporizers other than direct fired.		
	Indoors without ventilation	Entire room and any adjacent room not separated by a gastight partition.	Division 1.
		Within 15 feet of the exterior side of any exterior wall or roof that is not vaportight or within 15 feet of any exterior opening.	Division 2.
	Indoors with adequate ventilation. ⁴	Entire room and any adjacent room not separated by a gastight partition.	Division 2.

Part	Location	Extent of classified area ¹	Equipment shall be suitable for National Electrical Code, Class 1, Group D ²
	Outdoors in open air at or abovegrade.	Within 15 feet in all directions from this equipment and within the cylindrical volume between the horizontal equator of the sphere and grade. See Figure H-1.	Division 2.
F	Service station dispensing units.	Entire space within dispenser enclosure, and 18 inches horizontally from enclosure exterior up to an elevation 4 ft. above dispenser base. Entire pit or open space beneath dispenser.	Division 1.
		Up to 18 inches abovegrade within 20 ft. horizontally from any edge of enclosure.	Division 2.
		NOTE: For pits within this area, see Part F of this table.	
G	Pits or trenches containing or located beneath LP-gas valves, pumps, compressors, regulators, and similar equipment.		
	Without mechanical ventilation.	Entire pit or trench	Division 1.
		Entire room and any adjacent room not separated by a gastight partition.	Division 2.
		Within 15 feet in all directions from pit or trench when located outdoors.	Division 2.
	With adequate mechanical ventilation.	Entire pit or trench	Division 2.
		Entire room and any adjacent room not separated by a gastight partition.	Division 2.
		Within 15 feet in all directions from pit or trench when located outdoors.	Division 2.

TABLE H-28

Part	Location	Extent of classified area ¹	Equipment shall be suitable for National Electrical Code, Class 1, Group D ²
H	Special buildings or rooms for storage of portable containers.	Entire room	Division 2.
I	Pipelines and connections containing operational bleeds, drips, vents or drains.	Within 5 ft. in all directions from point of discharge.	Division 1.
		Beyond 5 ft. from point of discharge, same as Part E of this table.	
J	Container filling: Indoors without ventilation.	Entire room	Division 1.
		Indoors with adequate ventilation. ⁴	Division 1.
	Indoors with adequate ventilation. ⁴	Within 5 feet in all directions from connections regularly made or disconnected for product transfer.	Division 1.
Outdoors in open air -		Beyond 5 feet and entire room	Division 2.
		Within 5 feet in all directions from connections regularly made or disconnected for product transfer.	Division 1.
		Beyond 5 feet but within 15 feet in all directions from a point where connections are regularly made or disconnected and within the cylindrical volume between the horizontal equator of the sphere and grade (See Fig. H-1.)	Division 2.

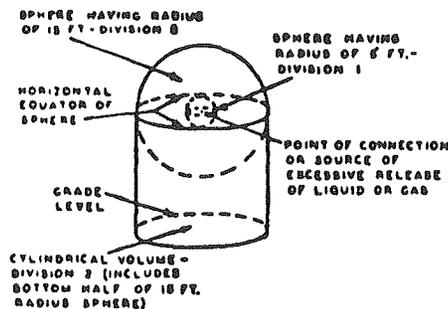


Figure H-1

NOTE: It is impossible to set out in a table the length of a fixed dip tube for various capacity tanks because of the varying tank diameters and lengths and because the tank may be installed either in a vertical or horizontal position. Knowing the maximum permitted filling volume in gallons, however, the length of the fixed tube can be determined by the use of a strapping table obtained from the container manufacturer. The length of the fixed tube should be such that when its lower end touches the surface of the liquid in the container, the contents of the container will be the maximum permitted volume as determined by the following formula:

$$\frac{\text{Water capacity (gals.) of container}^* \times \text{filling density}^{**}}{\text{Specific gravity of LP-gas}^* \times \text{volume correction factor}^{***} \times 100} = \frac{\text{Maximum volume of LP-gas}}{\text{of LP-gas}}$$

*Measure at 60°F.

**From (12(a)) of this section "filling densities."

***For aboveground containers the liquid temperature is assumed to be 40°F and for underground containers the liquid temperature is assumed to be 50°F. To correct the liquid volumes at these temperatures to 60°F. the following factors shall be used.

(i) Formula for determining maximum volume of liquefied petroleum gas for which a fixed length of dip tube shall be set:

TABLE H-29

VOLUME CORRECTION FACTORS

Specific gravity	Aboveground	Underground
0.500	1.033	1.017
.510	1.031	1.016
.520	1.029	1.015
.530	1.028	1.014
.540	1.026	1.013
.550	1.025	1.013

¹The classified area shall not extend beyond an unpierced wall, roof, or solid vaportight partition.

²See chapter 296-46 WAC, and WAC 296-24-956 through 296-24-960.

³When classifying extent of hazardous area, consideration shall be given to possible variations in the spotting of tank cars and tank vehicles at the unloading points and the effect these variations of actual spotting point may have on the point of connection.

⁴Ventilation, either natural or mechanical, is considered adequate when the concentration of the gas in a gas-air mixture does not exceed 25 percent of the lower flammable limit under normal operating conditions.

TABLE H-29
VOLUME CORRECTION FACTORS

Specific gravity	Aboveground	Underground
.560	1.024	1.012
.570	1.023	1.011
.580	1.021	1.011
.590	1.020	1.010

(ii) The maximum volume of LP-gas which can be placed in a container when determining the length of the dip tube expressed as a percentage of total water content of the container is calculated by the following formula.

(iii) The maximum weight of LP-gas which may be placed in a container for determining the length of a fixed dip tube is determined by multiplying the maximum volume of liquefied petroleum gas obtained by the formula in (19)(e)(i) of this section by the pounds of liquefied petroleum gas in a gallon at 40°F for aboveground and at 50°F for underground containers. For example, typical pounds per gallon are specified below:

Example: Assume a 100-gallon total water capacity tank for aboveground storage of propane having a specific gravity of 0.510 of 60°F.

$$\begin{aligned}
 &100 \text{ (gals.)} \times 42 \text{ (filling density} \\
 &\text{from (12)(a) of this section)} = 4200 \\
 &0.510 \times 1.031 \text{ (correction factor} \\
 &\text{from Table H-29)} \times 100 = 52.6
 \end{aligned}$$

79.8 gallons propane, the maximum amount permitted to be placed in a 100-gallon total water capacity aboveground container equipped with a fixed dip tube.

$$\begin{aligned}
 &\frac{4200}{52.6} = \text{Maximum volume of LP-gas (from formula in (19)(e)(i) of this section) } \times 100 = \text{Maximum percent of LP-gas} \\
 &\text{Total water content of container in gallons.}
 \end{aligned}$$

	Aboveground, pounds per gallon	Underground, pounds per gallon
Propane	4.37	4.31
N Butane	4.97	4.92

(f) Fixed liquid-level gages used on containers other than DOT containers shall be stamped on the exterior of the gage with the letters "DT" followed by the vertical distance (expressed in inches and carried out to one decimal place) from the top of container to the end of the

dip tube or to the centerline of the gage when it is located at the maximum permitted filling level. For portable containers that may be filled in the horizontal and/or vertical position the letters "DT" shall be followed by "V" with the vertical distance from the top of the container to the end of the dip tube for vertical filling and with "H" followed by the proper distance for horizontal filling. For DOT containers the stamping shall be placed both on the exterior of the gage and on the container. On aboveground or cargo containers where the gages are positioned at specific levels, the marking may be specified in percent of total tank contents and the marking shall be stamped on the container.

(g) Gage glasses of the columnar type shall be restricted to charging plants where the fuel is withdrawn in the liquid phase only. They shall be equipped with valves having metallic handwheels, with excess flow valves, and with extra-heavy glass adequately protected with a metal housing applied by the gage manufacturer. They shall be shielded against the direct rays of the sun. Gage glasses of the columnar type are prohibited on tank trucks, and on motor fuel tanks, and on containers used in domestic, commercial, and industrial installations.

(h) Gaging devices of the float, or equivalent type which do not require flow for their operation and having connections extending to a point outside the container do not have to be equipped with excess flow valves provided the piping and fittings are adequately designed to withstand the container pressure and are properly protected against physical damage and breakage.

(20) Requirements for appliances. (a) Except as provided in (20)(b) of this section, new commercial and industrial gas consuming appliances shall be approved.

(b) Any appliance that was originally manufactured for operation with a gaseous fuel other than LP-gas and is in good condition may be used with LP-gas only after it is properly converted, adapted, and tested for performance with LP-gas before the appliance is placed in use.

(c) Unattended heaters used inside buildings for the purpose of animal or poultry production or care shall be equipped with an approved automatic device designed to shut off the flow of gas to the main burners, and pilot if used, in the event of flame extinguishment.

(d) All commercial, industrial, and agricultural appliances or equipment shall be installed in accordance with the requirements of these standards and in accordance with the following:

(i) Domestic and commercial appliances—NFPA 54-1969, Standard for the Installation of Gas Appliances and Gas Piping.

(ii) Industrial appliances—NFPA 54A-1969, Standard for the Installation of Gas Piping and Gas Equipment on Industrial Premises and Certain Other Premises.

(iii) Standard for the Installation and Use of Stationary Combustion Engines and Gas Turbines—NFPA 37-1970.

(iv) Standard for the Installation of Equipment for the Removal of Smoke and Grease-Laden Vapors from

Commercial Cooking Equipment, NFPA 96-1970. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-10-004 (Order 85-09), § 296-24-47505, filed 4/19/85; Order 76-6, § 296-24-47505, filed 3/1/76; Order 73-5, § 296-24-47505, filed 5/9/73 and Order 73-4, § 296-24-47505, filed 5/7/73.]

Chapter 296-30 WAC
RULES FOR THE ADMINISTRATION OF THE
CRIME VICTIM COMPENSATION PROGRAM

WAC

296-30-010	Definitions.
296-30-020	Vehicular assault and vehicular homicide.
296-30-050	Distribution of third party recoveries.
296-30-060	Requirement to report criminal acts.
296-30-080	Counseling for sexual assault.
296-30-081	Acceptance of rules and fees.
296-30-120	Factors considered in order to modify debt due department.
296-30-130	Lump sum benefits.
296-30-170	Payment for medical examination of victims of sexual assault.
296-30-180	Payment of benefits to prevent unjust enrichment.
296-30-900	Effective date of amendatory acts.

WAC 296-30-010 Definitions. Whenever used in these rules, the following words mean:

(1) "Innocent victim" means any person whose injury was not the direct, proximate result of his or her consenting to, provoking, or inciting the criminal act that resulted in the injury.

(2) "Bodily injury" means any harmful or offensive touching, and includes severe emotional distress where no touching takes place when:

(a) Claimant is not the object of the criminal act and:

(i) The distress is intentionally or recklessly inflicted;

(ii) The distress is inflicted by extreme or outrageous conduct;

(iii) The claimant has a reasonable apprehension of imminent bodily harm;

(iv) The claimant is in the immediate vicinity of the criminal act at the time the criminal act takes place.

(b) Claimant is the victim of the criminal act and:

(i) The distress is intentionally inflicted;

(ii) The distress is inflicted by outrageous or extreme conduct; and

(iii) The claimant had a reasonable apprehension of imminent bodily harm.

(3) "Private insurance" means sources of recompense available by contract, such as life or disability insurance.

(4) "Public insurance" means any state or federal statutory welfare and insurance plan that compensates victims or their beneficiaries as a result of the claimed injury or death. This does not include state, federal, or private deferred income retirement plans.

(5) The test used to define "the result of" as used in RCW 7.68.070 (3) (a) and (b) is two pronged. First, it must be determined that cause in fact exists, and second, it must then be determined that proximate cause exists.

(a) Cause in fact exists if "but for" the acts of the victim the crime that produced the injury would not have occurred.

(b) Proximate cause exists if, once cause in fact is found, it is determined that the acts of the victim:

(i) Resulted in a foreseeable injury to the victim;

(ii) Played a substantial role in the injury; and

(iii) Were the direct cause of the injury.

(6) "Institutions maintained and operated by department of social and health services" means those institutions in which the department of social and health services assumes responsibility for medical coverage of the institution's residents.

(7) "Reasonable cooperation" generally exists when the claimant is:

(a) Willing to talk to police and give information to aid in the investigation; and

(b) Willing to assist in the prosecution of the alleged criminal.

(8) A person is "unjustly enriched" within the meaning of RCW 7.68.070(15) when it would be deficient in justice and fairness, or inequitable, to allow that person to obtain, or have control of or access to, benefits or compensation paid as a result of an injury to a victim of crime. [Statutory Authority: Chapter 7.68 RCW. 86-01-028 (Order 85-37), § 296-30-010, filed 12/11/85; 85-03-060 (Order 85-3), § 296-30-010, filed 1/15/85.]

WAC 296-30-020 Vehicular assault and vehicular homicide. Chapter 7.68 RCW shall cover those people killed or injured as a result of a vehicular homicide or vehicular assault that occurred after July 24, 1983 if there has been a conviction for the vehicular assault or vehicular homicide. Eligibility occurs when the claimant's injury results in the assailant's conviction for vehicular assault or vehicular homicide, or when the claimant's injury is a direct result of the collision that led to the vehicular assault or vehicular homicide conviction. The claimant's injury need not be the one that led to the conviction. [Statutory Authority: Chapter 7.68 RCW. 86-01-028 (Order 85-37), § 296-30-020, filed 12/11/85; 85-03-060 (Order 85-3), § 296-30-020, filed 1/15/85.]

WAC 296-30-050 Distribution of third party recoveries. (1) Before July, 1977. Any claimant who receives crime victim's benefits is required to reimburse fully the department for all benefits paid to the claimant under chapter 7.68 RCW if the claimant recovers damages from the person or persons who committed the criminal act. The reimbursement is limited to the amount recovered by the victim.

(2) After July, 1977 and before April 1, 1980. Any claimant who receives crime victim's benefits is required to reimburse fully the department for all benefits paid to the claimant under chapter 7.68 RCW if the claimant recovers damages from any liable party. The reimbursement is limited to that amount recovered by the victim.

(3) An injury or death that occurred on or after April 1, 1980, for which recovery was made before July 24, 1983. This amendment incorporated the industrial insurance third party recovery statutes RCW 51.24.050

through 51.24.100 into chapter 7.68 RCW. The amendment changed the department's entitlement to reimbursement. For those victims injured or killed on or after April 1, 1980, and for which any recovery was made before July 24, 1983, disbursement of an award or settlement is as follows:

- (a) Reasonable attorney's fees.
- (b) Victim receives 25% of the balance.
- (c) The department shall receive the balance to the extent necessary to reimburse the department for benefits paid.
- (d) Any remaining balance is paid to the victim.

(e) If any remaining balance is paid to the victim, no further crime victim benefits will be paid to the victim until the amount of benefits she or he continued to be eligible for equals the remaining balance paid at the time of settlement or award.

(4) Recoveries made on or after July 24, 1983. This subsection applies to all claimants who receive an award or settlement from a liable third party on or after July 24, 1983. These awards shall be disbursed as follows:

- (a) Costs and reasonable attorney's fees paid proportionately by the victim and the department.
- (b) Victim then receives 25% of the balance.
- (c) Department receives the balance to the extent necessary to reimburse the department for its lien minus its share of attorney's fees.
- (d) Any remaining balance goes to the victim.

(e) The department may compromise its lien for injuries that were sustained on or after April 1, 1980.

(5) Steps for determining proportionate attorney's fees:

- (a) Determine the amount of the settlement or award obtained by the claimant.
- (b) Determine attorney's fees and costs.
- (c) For an open claim, determine the amount of the department's lien at the time of settlement or award. If the claim is closed at the time of the recovery, determine the claimant's full entitlement from the department.

(6) Calculate what percent of the total recovery equals the department's lien for open cases, and the claimant's entitlement for closed claims. This percent is the department's proportionate share.

Ex. in a nondeficiency judgment	
\$ 1,000	Gross recovery
\$ 200	Attorney fees
\$ 100	Entitlement or claim costs
\$ 20	Department's proportionate share of attorney's fees and costs. The \$100 claim costs equals 10% of the total recovery. Thus, the department's proportionate share of attorney's fees are equal to 10% of \$200 or \$20

Ex. in deficiency judgments/recoveries	
\$ 1,000	Gross recovery
\$ 200	Attorney fees
\$ 2,000	Claim costs
\$ 1,000	

\$ -200	Attorney fees
\$ 800	Claimant receives 25% of this figure = 200
\$ -200	Claimant 25% share
\$ 600	Balance remaining goes to the department and is used to determine if settlement/judgment is deficient. If this balance is deficient, as it is here, this figure is used to calculate the department's proportionate share of attorney's fees and costs.
60%	Department percent of attorney fees (\$6.00 = 60% of \$1,000 recovery)
\$ 120	Department's share of attorney fees
\$ +200	Claimant's 25% share
\$ 320	Claimant's total recovery
\$ 600	Balance
\$ -120	Attorney fees, department
\$ 480	Department's recovery

(7) Once the claim is closed, the department shall re-examine its proportionate share. If the claimant's final entitlement is greater than the amount of the department's lien at the time of recovery, the department shall reimburse the claimant for the department's increased percentage of the attorney's fees and costs.

Ex.:	\$ 1,000	Recovery.
	\$ 200	Attorney's fees and costs.
	\$ 100	Department's lien at time of recovery.
	\$ 20	Attorney's fees and costs paid at time of recovery.
	\$ 500	Claimant's total entitlement (50% of total recovery).
	\$ 100	Department's full proportionate share of attorney's fees and costs (50%, that amount determined by the claimant's entitlement).
	\$ 80	The amount that the department must reimburse the claimant for attorney's fees and costs.

[Statutory Authority: Chapter 7.68 RCW. 86-01-028 (Order 85-37), § 296-30-050, filed 12/11/85; 85-03-060 (Order 85-3), § 296-30-050, filed 1/15/85.]

WAC 296-30-060 Requirement to report criminal acts. (1) The following are examples under which the seventy-two hour reporting requirement in RCW 7.68.060(2) may be tolled:

- (a) Unconsciousness or coma of victim.
- (b) Youth of victim (because of age the victim is unaware that a crime has been committed against her).

(c) Rape trauma syndrome.

(d) A report of an assault against a child made to children's protective services when the report is made within seventy-two hours of when it reasonably could have been made.

(2) This list is not and should not be considered exhaustive but is for illustrative purposes. [Statutory Authority: Chapter 7.68 RCW. 86-01-028 (Order 85-37), § 296-30-060, filed 12/11/85; 85-03-060 (Order 85-3), § 296-30-060, filed 1/15/85.]

WAC 296-30-080 Counseling for sexual assault. (1) Pursuant to RCW 7.68.070(12), the department shall pay for counseling for victims of sexual assault and, when appropriate, for members of a victim's immediate family. An immediate family member shall be defined as the victim's parents, spouse, child(ren), siblings, grandparents, and those members of the same household who have assumed the rights and duties commonly associated with a family and who hold themselves out as a family unit.

(2) Counseling for the above defined family members is appropriate when:

(a) The counseling is for the spouse, child, parent, or sibling of the victim who suffers psychological trauma as a result of the sexual assault; or

(b) The family member and victim live in the same household and the family member suffers psychological trauma as a result of the sexual assault; or

(c) The family member sees the assault; or

(d) Counseling of the family member will aid in the victim's recovery.

(3) Evaluation and counseling must be done by a counselor with a MSW or equivalent degree, a PhD psychologist, or a psychiatrist. The fee for an MSW or equivalent degree for 45-50 minutes with report 40 units. [Statutory Authority: Chapter 7.68 RCW. 86-01-028 (Order 85-37), § 296-30-080, filed 12/11/85; 85-03-060 (Order 85-3), § 296-30-080, filed 1/15/85.]

WAC 296-30-081 Acceptance of rules and fees. Providing medical or counseling services to an injured crime victim whose claim for crime victims benefits has been accepted by the department constitutes acceptance of the department's medical aid rules and compliance with its rules and fees. Maximum allowable fees shall be those fees contained in WAC 296-21-010 through 296-23-9408 and in WAC 296-30-080 less any available benefits of public or private collateral resources.

An injured victim shall not be billed for his or her accepted injury. The department shall be billed only after available benefits of public or private insurance have been determined.

If the medical provider has billed the injured victim and is later notified that the department has accepted the victim's claim, the provider shall refund to the injured victim any amounts paid that are in excess of the amounts that the victim is entitled to from public or private insurers, and bill the department for services rendered at fee schedule rates if such rates are in excess of

the public or private insurance entitlements. [Statutory Authority: Chapter 7.68 RCW. 86-01-028 (Order 85-37), § 296-30-081, filed 12/11/85.]

WAC 296-30-120 Factors considered in order to modify debt due department. RCW 7.68.120 allows the department in the interest of justice or rehabilitation, to waive, modify, or adjust the debt owed to the department by any person found to have committed the criminal act for which crime victim benefits were paid. To determine whether or not the debt should be modified, waived or adjusted, the department shall consider the following factors:

(1) The gravity of the offense;

(2) Extent of injury to victim;

(3) Type of crime;

(4) circumstances surrounding the criminal act;

(5) The assailant's attempts at rehabilitation:

(a) Rehabilitation program involvement;

(b) Employment efforts;

(c) Community involvement;

(6) Ability to pay:

(a) Income;

(b) Necessary expenses;

(c) Number and ages of dependents;

(7) Sentence imposed by the court. [Statutory Authority: Chapter 7.68 RCW. 86-01-028 (Order 85-37), § 296-30-120, filed 12/11/85.]

WAC 296-30-130 Lump sum benefits. (1) Lump sum benefits paid to the survivor(s) of an unemployed victim shall be paid on a monthly basis if the survivor(s) is entitled to private or public death benefits. The death benefit payments shall be deducted each month from the crime victim's death benefits. Crime victim's benefit payments shall continue until the combined public or private death benefits and the crime victim's death benefits equal the total amount that the survivor(s) is eligible for under chapter 7.68 RCW.

(2) The amount of the monthly payments is based on the state's average monthly wage and are determined by the percentages established in RCW 51.32.050.

(3) This lump sum payment shall be adjusted upward by a factor of 8% to reflect the present and future value of the money.

(4) The survivor(s) of an employed victim are entitled to a maximum of ten thousand dollars in death benefits. These benefits shall be paid in the same manner as the benefits paid to the survivor(s) of an unemployed victim except that the monthly rate shall be determined by the deceased's regular rate of pay.

(5) This procedure was adopted to ensure equal treatment of survivor(s) in like circumstances. [Statutory Authority: Chapter 7.68 RCW. 86-01-028 (Order 85-37), § 296-30-130, filed 12/11/85; 85-03-060 (Order 85-3), § 296-30-130, filed 1/15/85.]

WAC 296-30-170 Payment for medical examination of victims of sexual assault. A victim of sexual assault is entitled to payment for the costs of a medical examination under RCW 7.68.170 regardless of whether

she or he qualifies for benefits under chapter 7.68 RCW, if the hospital or emergency medical facility proves to the department that:

(1) The care was provided; and

(2) The examination was performed at least in part to gather medical evidence for possible prosecution of the assailant. [Statutory Authority: Chapter 7.68 RCW. 86-01-028 (Order 85-37), § 296-30-170, filed 12/11/85; 85-03-060 (Order 85-3), § 296-30-170, filed 1/15/85.]

WAC 296-30-180 Payment of benefits to prevent unjust enrichment. RCW 7.68.070(15) prohibits the department from paying any benefits or compensation to the person who caused a crime victims injuries, or to any other person if that person would be unjustly enriched by the benefits. In some situations, as when a child is injured by a parent or a spouse by the other spouse, there is a danger that the injuring person will divert to her own use the benefits or compensation intended for the victim.

To prevent this possibility, the department may on its own motion or the motion of the victim or his or her guardian, request that the victim or other responsible adult establish (1) a trust for which the trustee shall be a neutral third person; or (2) a savings or checking account for which a neutral third person must cosign all withdrawals or checks. Crime victims compensation benefits shall then be deposited in the established account.

The department shall continue to pay medical providers directly. [Statutory Authority: Chapter 7.68 RCW. 86-01-028 (Order 85-37), § 296-30-180, filed 12/11/85.]

WAC 296-30-900 Effective date of amendatory acts. (1) The statute in effect at the time the criminally caused injury occurred is the controlling law. [Statutory Authority: Chapter 7.68 RCW. 85-03-060 (Order 85-3), § 296-30-900, filed 1/15/85.]

Chapter 296-46 WAC

SAFETY STANDARDS--INSTALLING ELECTRIC WIRES AND EQUIPMENT--ADMINISTRATIVE RULES

WAC

296-46-110	Foreword.
296-46-120	Repealed.
296-46-130	Classification of occupancies.
296-46-140	Plan review for educational and health care facilities and other buildings.
296-46-150	Wiring methods for designated building occupancies.
296-46-160	Service requirements.
296-46-170	Repealed.
296-46-180	Meter installation.
296-46-190	Repealed.
296-46-200	Service entrance conductors.
296-46-210	Repealed.
296-46-220	Service equipment.
296-46-230	Repealed.
296-46-240	Service mast.
296-46-242	Repealed.
296-46-244	Repealed.
296-46-270	Repealed.

296-46-280	Repealed.
296-46-290	Repealed.
296-46-300	Repealed.
296-46-335	Repealed.
296-46-350	Emergency systems.
296-46-355	Repealed.
296-46-360	Carnivals, circuses, and traveling shows.
296-46-370	Boat moorages and similar installations.
296-46-380	Repealed.
296-46-390	Repealed.
296-46-420	Electrical equipment grounding.
296-46-424	Repealed.
296-46-426	Repealed.
296-46-480	Location of pad-mounted transformers.
296-46-490	Location of total underground transformers.
296-46-495	Electrical work permits and fees.
296-46-500	Repealed.
296-46-501	Repealed.
296-46-535	Repealed.
296-46-540	Repealed.
296-46-545	Repealed.
296-46-550	Repealed.
296-46-555	Repealed.
296-46-560	Repealed.
296-46-565	Repealed.
296-46-590	Repealed.
296-46-59005	Repealed.
296-46-59010	Repealed.
296-46-900	Repealed.
296-46-905	Repealed.
296-46-910	Inspection fees.

DISPOSITION OF SECTIONS FORMERLY CODIFIED IN THIS CHAPTER

296-46-120	Workmanship. [Order 72-7, § 296-46-120, filed 6/7/72; Order 69-2, § 296-46-120, filed 2/28/69, effective 4/1/69.] Repealed by 84-15-051 (Order 84-10), filed 7/17/84. Statutory Authority: RCW 19.28.010 and 19.28.060.
296-46-170	Clearance of service drop for single family or duplex residences. [Order 69-2, § 296-46-170, filed 2/28/69, effective 4/1/69.] Repealed by 84-15-051 (Order 84-10), filed 7/17/84. Statutory Authority: RCW 19.28.010 and 19.28.060.
296-46-190	Current transformers. [Order 69-2, § 296-46-190, filed 2/28/69, effective 4/1/69.] Repealed by 84-15-051 (Order 84-10), filed 7/17/84. Statutory Authority: RCW 19.28.010 and 19.28.060.
296-46-210	Service entrance cable. [Order 69-2, § 296-46-210, filed 2/28/69, effective 4/1/69.] Repealed by 84-15-051 (Order 84-10), filed 7/17/84. Statutory Authority: RCW 19.28.010 and 19.28.060.
296-46-230	Service entrance. [Order 74-43, § 296-46-230, filed 12/19/74; Order 72-7, § 296-46-230, filed 6/7/72; Order 69-2, § 296-46-230, filed 2/28/69, effective 4/1/69.] Repealed by 84-15-051 (Order 84-10), filed 7/17/84. Statutory Authority: RCW 19.28.010 and 19.28.060.
296-46-242	Transformer neutral grounding. [Statutory Authority: RCW 19.28.060. 78-02-098 (Order 77-31), § 296-46-242, filed 1/31/78.] Repealed by 84-15-051 (Order 84-10), filed 7/17/84. Statutory Authority: RCW 19.28.010 and 19.28.060.
296-46-244	Utility conductor limitations. [Statutory Authority: RCW 19.28.060. 78-02-098 (Order 77-31), § 296-46-244, filed 1/31/78.] Repealed by 84-15-051 (Order 84-10), filed 7/17/84. Statutory Authority: RCW 19.28.010 and 19.28.060.
296-46-270	Metallic plumbing lines. [Statutory Authority: RCW 19.28.060. 78-02-098 (Order 77-31), § 296-46-270, filed 1/31/78; Order 69-2, § 296-46-270, filed 2/28/69, effective 4/1/69.] Repealed by 84-15-051 (Order 84-10), filed 7/17/84. Statutory Authority: RCW 19.28.010 and 19.28.060.
296-46-280	Garbage disposal, waste disposal or waste compactor appliances and dishwasher circuits. [Order 72-7, §

- 296-46-280, filed 6/7/72; Order 69-2, § 296-46-280, filed 2/28/69, effective 4/1/69.] Repealed by 84-15-051 (Order 84-10), filed 7/17/84. Statutory Authority: RCW 19.28.010 and 19.28.060.
- 296-46-290 Range circuit. [Order 69-2, § 296-46-290, filed 2/28/69, effective 4/1/69.] Repealed by 84-15-051 (Order 84-10), filed 7/17/84. Statutory Authority: RCW 19.28.010 and 19.28.060.
- 296-46-300 Water heaters. [Order 75-25, § 296-46-300, filed 8/4/75; Order 74-43, § 296-46-300, filed 12/19/74; Order 69-2, § 296-46-300, filed 2/28/69, effective 4/1/69.] Repealed by 84-15-051 (Order 84-10), filed 7/17/84. Statutory Authority: RCW 19.28.010 and 19.28.060.
- 296-46-335 Unfinished areas. [Statutory Authority: RCW 19.28.060. 81-06-037 (Order 81-5), § 296-46-335, filed 2/27/81, effective 4/1/81; Order 74-43, § 296-46-335, filed 12/19/74; Order 72-7, § 296-46-335, filed 6/7/72.] Repealed by 84-15-051 (Order 84-10), filed 7/17/84. Statutory Authority: RCW 19.28.010 and 19.28.060.
- 296-46-355 Mobile home connections. [Statutory Authority: RCW 19.28.060. 81-06-037 (Order 81-5), § 296-46-355, filed 2/27/81, effective 4/1/81.] Repealed by 84-15-051 (Order 84-10), filed 7/17/84. Statutory Authority: RCW 19.28.010 and 19.28.060.
- 296-46-380 Rockcrushers. [Order 69-2, § 296-46-380, filed 2/28/69, effective 4/1/69.] Repealed by 84-15-051 (Order 84-10), filed 7/17/84. Statutory Authority: RCW 19.28.010 and 19.28.060.
- 296-46-390 Woodworking plants. [Statutory Authority: RCW 19.28.060. 78-02-098 (Order 77-31), § 296-46-390, filed 1/31/78; Order 69-2, § 296-46-390, filed 2/28/69, effective 4/1/69.] Repealed by 84-15-051 (Order 84-10), filed 7/17/84. Statutory Authority: RCW 19.28.010 and 19.28.060.
- 296-46-424 Residential occupancies, ground fault circuit interrupters. [Statutory Authority: RCW 19.28.060. 81-06-037 (Order 81-5), § 296-46-424, filed 2/27/81, effective 4/1/81; 78-02-098 (Order 77-31), § 296-46-424, filed 1/31/78; Order 75-25, § 296-46-424, filed 8/4/75.] Repealed by 84-15-051 (Order 84-10), filed 7/17/84. Statutory Authority: RCW 19.28.010 and 19.28.060.
- 296-46-426 Bonding agricultural structures and equipment. [Statutory Authority: RCW 19.28.060. 78-02-098 (Order 77-31), § 296-46-426, filed 1/31/78; Order 74-43, § 296-46-426, filed 1/3/75.] Repealed by 84-15-051 (Order 84-10), filed 7/17/84. Statutory Authority: RCW 19.28.010 and 19.28.060.
- 296-46-500 Electrical advisory board. [Statutory Authority: RCW 19.28.060. 81-06-037 (Order 81-5), § 296-46-500, filed 2/27/81, effective 4/1/81; 78-02-098 (Order 77-31), § 296-46-500, filed 1/31/78; Order 74-43, § 296-46-500, filed 12/19/74.] Repealed by 84-15-051 (Order 84-10), filed 7/17/84. Statutory Authority: RCW 19.28.010 and 19.28.060.
- 296-46-501 Board of electrical examiners. [Statutory Authority: RCW 19.28.060. 81-06-037 (Order 81-5), § 296-46-501, filed 2/27/81, effective 4/1/81.] Repealed by 84-15-051 (Order 84-10), filed 7/17/84. Statutory Authority: RCW 19.28.010 and 19.28.060.
- 296-46-535 Appearance and practice before advisory board. [Order 74-43, § 296-46-535, filed 12/19/74.] Repealed by 84-15-051 (Order 84-10), filed 7/17/84. Statutory Authority: RCW 19.28.010 and 19.28.060.
- 296-46-540 Solicitation of business unethical. [Order 74-43, § 296-46-540, filed 12/19/74.] Repealed by 84-15-051 (Order 84-10), filed 7/17/84. Statutory Authority: RCW 19.28.010 and 19.28.060.
- 296-46-545 Standards of ethical conduct. [Order 74-43, § 296-46-545, filed 12/19/74.] Repealed by 84-15-051 (Order 84-10), filed 7/17/84. Statutory Authority: RCW 19.28.010 and 19.28.060.
- 296-46-550 Appearance by former employee. [Order 74-43, § 296-46-550, filed 12/19/74.] Repealed by 84-15-051 (Order 84-10), filed 7/17/84. Statutory Authority: RCW 19.28.010 and 19.28.060.
- 296-46-555 Former employee as expert witness. [Order 74-43, § 296-46-555, filed 12/19/74.] Repealed by 84-15-051 (Order 84-10), filed 7/17/84. Statutory Authority: RCW 19.28.010 and 19.28.060.
- 296-46-560 Computation of time. [Order 74-43, § 296-46-560, filed 12/19/74.] Repealed by 84-15-051 (Order 84-10), filed 7/17/84. Statutory Authority: RCW 19.28.010 and 19.28.060.
- 296-46-565 Administrative Procedure Act. [Order 74-43, § 296-46-565, filed 12/19/74.] Repealed by 84-15-051 (Order 84-10), filed 7/17/84. Statutory Authority: RCW 19.28.010 and 19.28.060.
- 296-46-590 Electric heating. [Statutory Authority: RCW 19.28.060. 78-02-098 (Order 77-31), § 296-46-590, filed 1/31/78.] Repealed by 84-15-051 (Order 84-10), filed 7/17/84. Statutory Authority: RCW 19.28.010 and 19.28.060.
- 296-46-59005 Appendix A—Residential heat loss tables. [Statutory Authority: RCW 19.28.060. 78-02-098 (Order 77-31), § 296-46-59005, filed 1/31/78. Formerly Appendix A.] Repealed by 84-15-051 (Order 84-10), filed 7/17/84. Statutory Authority: RCW 19.28.010 and 19.28.060.
- 296-46-59010 Appendix B—Outdoor design temperatures. [Statutory Authority: RCW 19.28.060. 78-02-098 (Order 77-31), § 296-46-59010, filed 1/31/78. Formerly Appendix B.] Repealed by 84-15-051 (Order 84-10), filed 7/17/84. Statutory Authority: RCW 19.28.010 and 19.28.060.
- 296-46-900 Appendix C—Drawing E-103. [Statutory Authority: RCW 19.28.060. 78-02-098 (Order 77-31), § 296-46-900, filed 1/31/78; Order 75-25, Appendix C—Drawing E-103 (codified as WAC 296-46-900), filed 8/4/75; Order 72-7, Appendix C, filed 6/7/72.] Repealed by 84-15-051 (Order 84-10), filed 7/17/84. Statutory Authority: RCW 19.28.010 and 19.28.060.
- 296-46-905 Appendix D—Drawing E-104. [Order 75-25, Appendix D (codified as WAC 296-46-905), filed 8/4/75; Order 72-7, Appendix D, filed 6/7/72.] Repealed by 84-15-051 (Order 84-10), filed 7/17/84. Statutory Authority: RCW 19.28.010 and 19.28.060.

WAC 296-46-110 Foreword. The 1984 edition of the National Electrical Code is hereby adopted by reference as part of this chapter. Other codes, manuals, and reference works referred to in this chapter are available for inspection and review in the Seattle office of the electrical section of the department during business hours. Where there is any conflict between a specific rule, this chapter and the National Electrical Code, the specific rule shall be observed.

Electrical inspectors will give information as to the meaning or application of the National Electrical Code and this chapter, but will not lay out work or act as consultants for contractors, owners, or users. [Statutory Authority: RCW 19.28.010 and 19.28.060. 84-15-051 (Order 84-10), § 296-46-110, filed 7/17/84. Statutory Authority: RCW 19.28.060. 81-06-037 (Order 81-5), § 296-46-110, filed 2/27/81, effective 4/1/81; 78-02-098 (Order 77-31), § 296-46-110, filed 1/31/78; Order 74-43, § 296-46-110, filed 12/19/74; Order 72-7, § 296-46-110, filed 6/7/72; Order 69-2, § 296-46-110, filed 2/28/69, effective 4/1/69.]

WAC 296-46-120 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-46-130 Classification of occupancies. (1) Educational occupancy refers to a building or portion of a building used primarily for educational purposes and shall include buildings used for the gathering of groups of six or more persons for purposes of instruction. Educational occupancy includes, but is not restricted to: Schools, colleges, academies, and universities.

(2) Institutional occupancy refers to a building or portion of a building used primarily for detention and correctional occupancies where some degree of restraint or security is required. Such occupancies shall include, but are not restricted to: Penal institutions, reformatories, jails, detention centers, correctional centers, and residential-restrained care.

(3) Health care occupancy, in addition to the health care facilities defined in the 1984 National Electrical Code in Article 517-2, shall also include, but is not restricted to the following: Ambulatory surgeries, alcoholism hospitals, alcoholism detoxification facilities, residential treatment facilities for psychiatrically impaired children and youth, and such other health care occupancies where patients who may be unable to provide for their own needs and safety without the assistance of another person are treated. [Statutory Authority: RCW 19.28.010 and 19.28.060. 84-15-051 (Order 84-10), § 296-46-130, filed 7/17/84. Statutory Authority: RCW 19.28.060. 81-06-037 (Order 81-5), § 296-46-130, filed 2/27/81, effective 4/1/81; Order 72-7, § 296-46-130, filed 6/7/72; Order 69-2, § 296-46-130, filed 2/28/69, effective 4/1/69.]

WAC 296-46-140 Plan review for educational and health care facilities and other buildings. (1) All plans for new or altered electrical installations in educational, institutional, and health care occupancies shall be reviewed and approved by the department before the installations are begun. Refer plans for review to the Electrical Inspection Section, Department of Labor and Industries, 520 South Water Street, Olympia, Washington 98504. Please refer to WAC 296-46-910 for required fees for plan review.

(2) Plan review for new or altered electrical installations of other types of construction may be voluntarily requested by the owner or other interested parties. [Statutory Authority: RCW 19.28.010 and 19.28.060. 84-15-051 (Order 84-10), § 296-46-140, filed 7/17/84. Statutory Authority: RCW 19.28.060. 81-06-037 (Order 81-5), § 296-46-140, filed 2/27/81, effective 4/1/81; 78-02-098 (Order 77-31), § 296-46-140, filed 1/31/78; Order 74-43, § 296-46-140, filed 12/19/74; Order 72-7, § 296-46-140, filed 6/7/72; Order 69-2, § 296-46-140, filed 2/28/69, effective 4/1/69.]

WAC 296-46-150 Wiring methods for designated building occupancies. Wiring methods for institutional, educational, health care facilities, and places of assembly of one hundred or more persons shall be wired as set forth in Article 518 of the National Electrical Code. The wiring methods in Section 518-3, Exception 1 shall not be permitted. For determining the occupant load of

places of assembly, the methods in NFPA 101-1981, Life Safety Code shall be used. [Statutory Authority: RCW 19.28.010 and 19.28.060. 84-15-051 (Order 84-10), § 296-46-150, filed 7/17/84. Statutory Authority: RCW 19.28.060. 81-06-037 (Order 81-5), § 296-46-150, filed 2/27/81, effective 4/1/81; 78-02-098 (Order 77-31), § 296-46-150, filed 1/31/78; Order 75-25, § 296-46-150, filed 8/4/75; Order 74-43, § 296-46-150, filed 12/19/74; Order 72-7, § 296-46-150, filed 6/7/72; Order 69-2, § 296-46-150, filed 2/28/69, effective 4/1/69.]

WAC 296-46-160 Service requirements. The serving utility shall be consulted by the owner, the owner's agent, or the contractor making the installation regarding the service entrance location and meter equipment requirements before installing the service and equipment. Provisions for a meter and related equipment, an attachment of a service drop, or an underground service lateral shall be made at a location acceptable to the serving utility. The point of attachment for a service drop must permit the clearances required by the National Electrical Code. [Statutory Authority: RCW 19.28.010 and 19.28.060. 84-15-051 (Order 84-10), § 296-46-160, filed 7/17/84; Order 69-2, § 296-46-160, filed 2/28/69, effective 4/1/69.]

WAC 296-46-170 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-46-180 Meter installation. Except as otherwise permitted by the serving utility, the height of the center of the meter shall not be more than 7 feet or less than 5 feet above finished grade or the floor below the meter. Secondary instrument transformer conductors for metering shall not be permitted in the service raceway. [Statutory Authority: RCW 19.28.010 and 19.28.060. 84-15-051 (Order 84-10), § 296-46-180, filed 7/17/84; Order 74-43, § 296-46-180, filed 12/19/74; Order 69-2, § 296-46-180, filed 2/28/69, effective 4/1/69.]

WAC 296-46-190 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-46-200 Service entrance conductors. (1) Service entrance conductors shall extend at least 18 inches from the service head to permit connection to the service drop.

(2) Unfused service conductors within a building or structure shall be installed in the metallic raceways, other than electrical metallic tubing, permitted in Section 230-43 of the National Electrical Code or in Schedule 80 rigid nonmetallic conduit. The raceway shall extend no more than fifteen feet inside the building or structure.

(3) Service conductors under the exclusive control of the serving utility, when installed within a building or structure shall be installed in rigid steel galvanized conduit or Schedule 80 nonmetallic conduit and shall comply with subsection (2) of this section. The grounded

conductor may be identified with a yellow jacket. [Statutory Authority: RCW 19.28.010 and 19.28.060. 84-15-051 (Order 84-10), § 296-46-200, filed 7/17/84. Statutory Authority: RCW 19.28.060. 78-02-098 (Order 77-31), § 296-46-200, filed 1/31/78; Order 74-43, § 296-46-200, filed 12/19/74; Order 73-7, § 296-46-200, filed 5/17/73; Order 69-2, § 296-46-200, filed 2/28/69, effective 4/1/69.]

WAC 296-46-210 Repealed. See Disposition Table at beginning of this chapter.

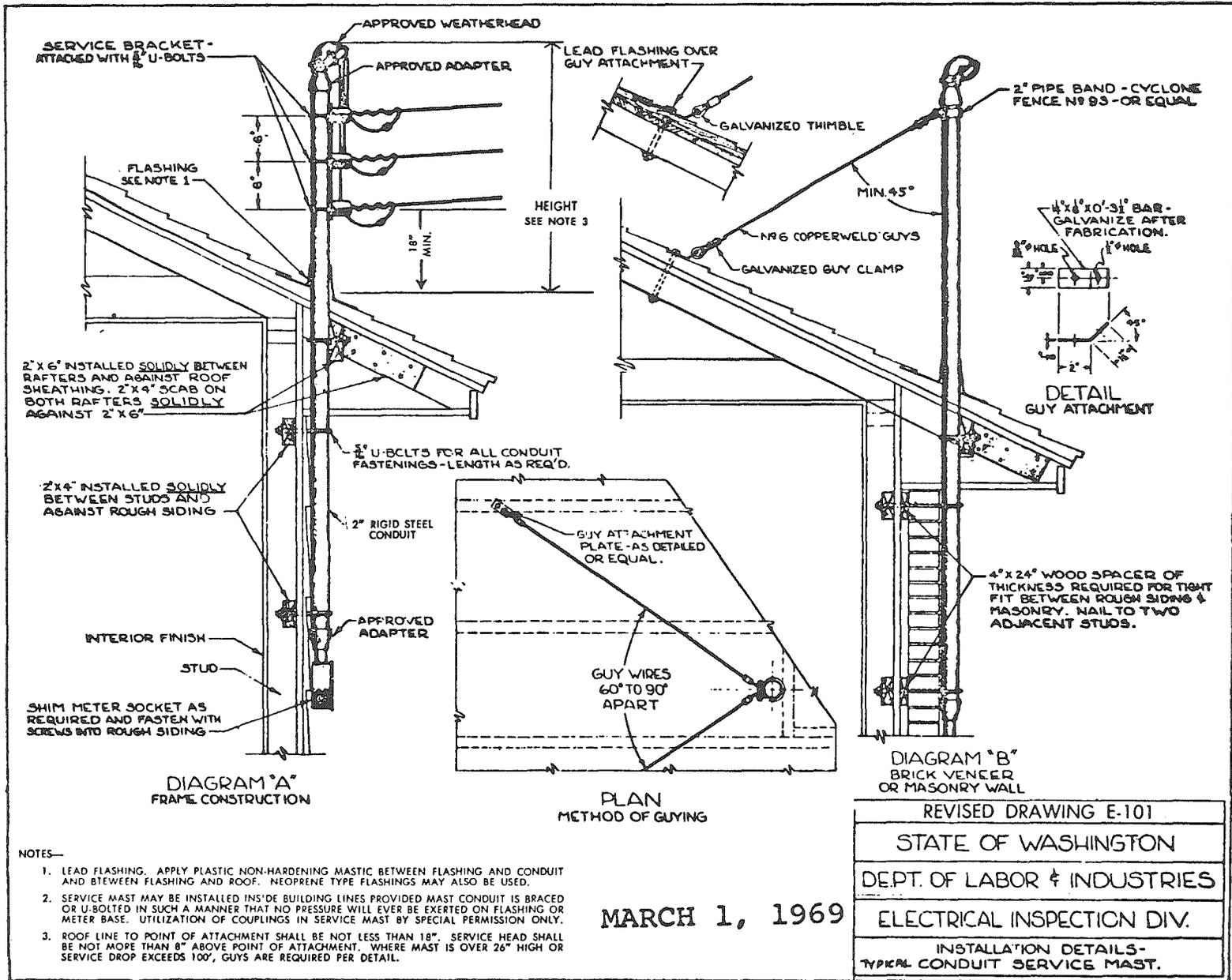
WAC 296-46-220 Service equipment. Service equipment, sub-panels, and similar electrical equipment shall be installed so that they are readily accessible and shall not be installed in bathrooms, clothes closets, shower rooms, cupboards, or attics, or above washers, clothes dryers, or plumbed-in fixtures. All service equipment and sub-panel equipment shall be adequately illuminated.

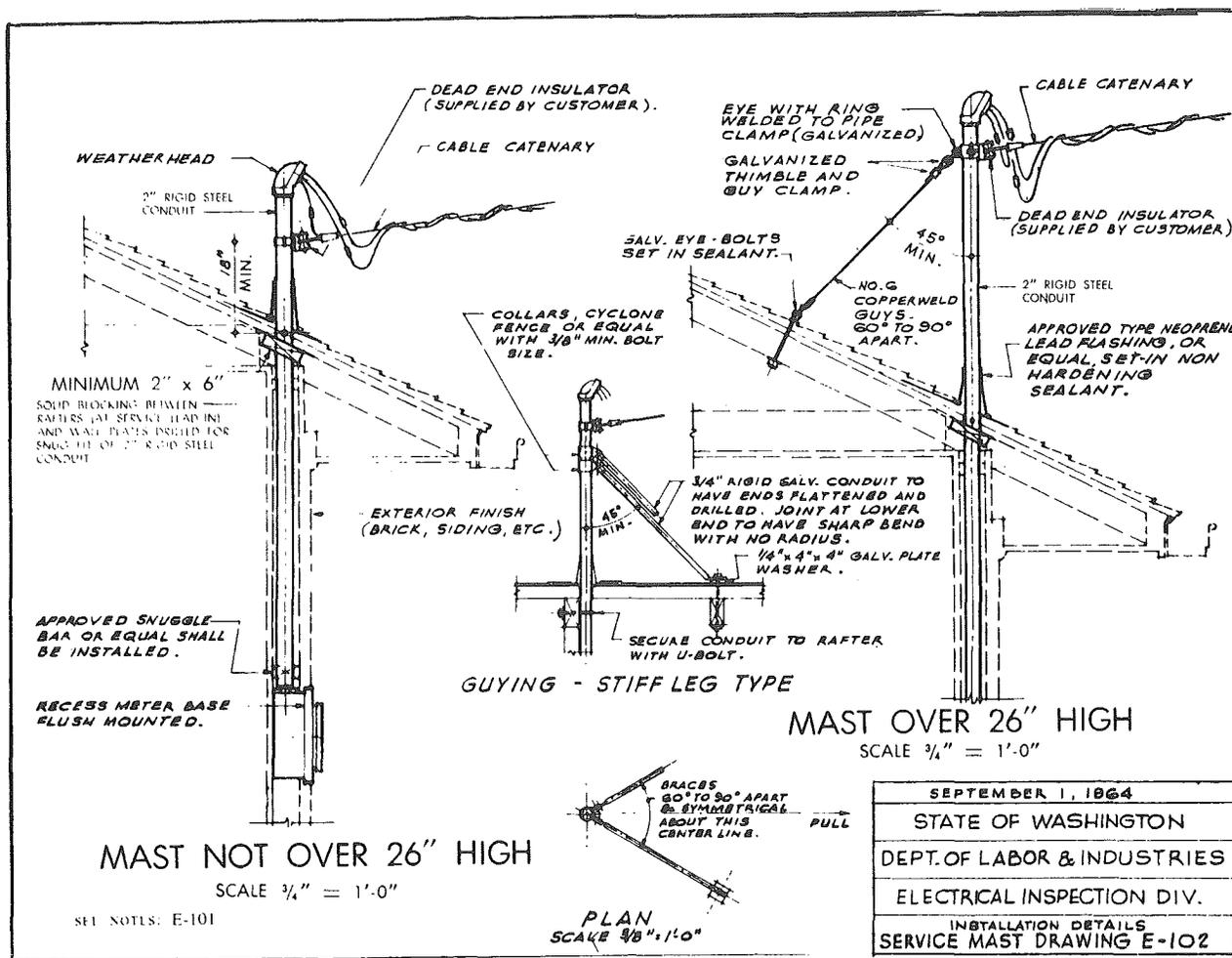
Service switches and other equipment exposed to elements of the outside weather shall be rain tight type factory built for the purpose. Refer to NEMA-3R. [Statutory Authority: RCW 19.28.010 and 19.28.060.

84-15-051 (Order 84-10), § 296-46-220, filed 7/17/84. Statutory Authority: RCW 19.28.060. 78-02-098 (Order 77-31), § 296-46-220, filed 1/31/78; Order 72-7, § 296-46-220, filed 6/7/72; Order 69-2, § 296-46-220, filed 2/28/69, effective 4/1/69.]

WAC 296-46-230 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-46-240 Service mast. A service entrance conduit extended through the roof to provide a means of attaching the service drop shall be no smaller than 2-inch rigid steel galvanized conduit. It shall provide a structurally sound attachment for the service drop and shall be equipped with a properly installed flashing at the roof line. Installation shall comply with drawings E-101 and E-102, or shall provide equivalent strength by other approved means.





[Statutory Authority: RCW 19.28.010 and 19.28.060. 84-15-051 (Order 84-10), § 296-46-240, filed 7/17/84; Order 69-2, § 296-46-240, filed 2/28/69, effective 4/1/69.]

WAC 296-46-242 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-46-244 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-46-270 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-46-280 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-46-290 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-46-300 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-46-335 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-46-350 Emergency systems. Exit and emergency lights shall be installed in accordance with the National Electrical Code, Article 700, and Life Safety Code NFPA 101 in all health care facilities, educational facilities, hotels, motels, and places of assembly. Installation shall be made in strict accordance with the National Electrical Code, Article 700, and WAC 296-46-150. [Statutory Authority: RCW 19.28.010 and 19.28.060. 84-15-051 (Order 84-10), § 296-46-350, filed 7/17/84. Statutory Authority: RCW 19.28.060. 81-06-037 (Order 81-5), § 296-46-350, filed 2/27/81, effective 4/1/81; 78-02-098 (Order 77-31), § 296-46-350, filed 1/31/78; Order 72-7, § 296-46-350, filed 6/7/72; Order 69-2, § 296-46-350, filed 2/28/69, effective 4/1/69.]

WAC 296-46-355 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-46-360 Carnivals, circuses, and traveling shows. Wiring methods shall comply with Chapter 3 of the National Electrical Code.

(1) Secondary feeders shall be a type approved for the purpose, and shall use type "S" cable or an equivalent.

(2) Each concession or ride is a single occupancy. A separate enclosed externally operable fused switch or circuit breaker shall be provided for each concession or ride. [Statutory Authority: RCW 19.28.010 and 19.28.060. 84-15-051 (Order 84-10), § 296-46-360, filed 7/17/84; Order 69-2, § 296-46-360, filed 2/28/69, effective 4/1/69.]

WAC 296-46-370 Boat moorages and similar installations. Docks, wharves, boat moorages, and similar facilities in addition to complying with Article 555 of the National Electrical Code shall have a disconnect located on the shoreline for all services of 600 volts or less. [Statutory Authority: RCW 19.28.010 and 19.28.060. 84-15-051 (Order 84-10), § 296-46-370, filed 7/17/84; Order 75-25, § 296-46-370, filed 8/4/75; Order 72-7, § 296-46-370, filed 6/7/72; Order 69-2, § 296-46-370, filed 2/28/69, effective 4/1/69.]

WAC 296-46-380 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-46-390 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-46-420 Electrical equipment grounding. All electrical equipment grounding for nonmetallic cable systems shall be completely made up at the time of the inspection. [Statutory Authority: RCW 19.28.010 and 19.28.060. 84-15-051 (Order 84-10), § 296-46-420, filed 7/17/84; Order 69-2, § 296-46-420, filed 2/28/69, effective 4/1/69.]

WAC 296-46-424 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-46-426 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-46-480 Location of pad-mounted transformers. (1) A pad-mounted transformer installation is an installation of an oil-filled transformer outdoors in which installation of all bushings, handholes, and live and operating parts are guarded by a solid metal enclosure secured so that they are accessible to authorized qualified personnel only. This does not prohibit the use of approved glass monitoring devices or properly baffled ventilators.

(2) If a pad-mounted transformer is to be installed next to a structure of combustible material, it shall not be installed closer than eight feet to the structure. This eight foot separation shall be measured from the nearest metal portion of the pad-mounted transformer installation to the nearest building features required to be safeguarded. If there are overhanging eaves or roof lines of combustible material on a standard single story structure, the eight foot measurement should be made to

provide eight feet of clear space between the eaves and the nearest metal portion of the pad-mounted transformer installed outside a vertical line extended from the ends of the eaves to the ground if this distance is at least eight feet horizontally from all combustible walls. In addition, the grade of the ground at the location of the pad-mounted transformer shall be such that any oil leaking from the transformer will flow away from the building and will not form pools. As an exception to subsection (2) of this section, in an urban residential area that has an improved alleyway, and in which a pad-mounted transformer is to be installed next to a noninhabited structure of combustible material the transformer shall not be installed closer than two feet to the structure.

(3) Pad-mounted transformers shall not be installed nearer than two feet, measured horizontally, to a non-combustible building surface having no doors, windows, or other openings closer to the transformer than eight feet.

(4) Pad-mounted transformers should not be located where they are exposed to damage by automobiles, trucks, or other mobile machinery. If transformers are installed in areas subject to traffic other than pedestrian traffic, they shall be provided with additional guarding.

(5) Pad-mounted transformer installations shall be effectively grounded as provided in Section 250-51 of the National Electrical Code. [Statutory Authority: RCW 19.28.010 and 19.28.060. 84-15-051 (Order 84-10), § 296-46-480, filed 7/17/84. Statutory Authority: RCW 19.28.060. 78-02-098 (Order 77-31), § 296-46-480, filed 1/31/78; Order 69-2, § 296-46-480, filed 2/28/69, effective 4/1/69.]

WAC 296-46-490 Location of total underground transformers. Enclosures for total underground oil filled transformers shall not be located within eight feet of a doorway or fire escape. Adequate space shall be maintained above the total underground transformer enclosure so that a boom may be used to lift the transformer. [Statutory Authority: RCW 19.28.010 and 19.28.060. 84-15-051 (Order 84-10), § 296-46-490, filed 7/17/84; Order 69-2, § 296-46-490, filed 2/28/69, effective 4/1/69.]

WAC 296-46-495 Electrical work permits and fees. Inspections shall not be made nor services connected unless an electrical work permit is completely and legibly filled out and readily available.

Electrical work permits shall be obtained prior to beginning the installation or alteration. Electrical work permits shall expire one year after the date of purchase unless electrical work is actively and consistently in progress. Fees shall be paid in accordance with the inspection fee schedule WAC 296-46-910 (Appendix F).

Each electrical work permit shall be signed by the electrical contractor's administrator (or designee) or the person, firm, partnership, corporation, or other entity which is performing the electrical installation or alteration. [Statutory Authority: RCW 19.28.060 and 19.28.210. 85-20-065 (Order 85-16), § 296-46-495, filed

9/27/85. Statutory Authority: RCW 19.28.060. 78-02-098 (Order 77-31), § 296-46-495, filed 1/31/78.]

WAC 296-46-500 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-46-501 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-46-535 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-46-540 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-46-545 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-46-550 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-46-555 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-46-560 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-46-565 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-46-590 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-46-59005 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-46-59010 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-46-900 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-46-905 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-46-910 Inspection fees. To calculate the inspection fees, the amperage is based on the larger of the conductor ampacity or the over current device.

(1) The fee for inspection of the installation, alteration, or maintenance of the following service(s), or feeder(s), is:

	Residential Services Column A	Commercial/Industrial Column B	Additional Feeders in Commercial/Industrial Column C
1 - 100 AMP -	\$ 30	\$ 40	\$ 30
101 - 200 AMP -	\$ 40	\$ 60	\$ 30
201 - 400 AMP -	\$ 55	\$100	\$ 50
401 - 600 AMP -	\$ 70	\$140	\$ 70
601 - 1000 AMP -	\$ 85	\$180	\$ 90
1001 - Over AMP -	\$100	\$220	\$110
Two family dwelling	\$ 50		

Residential Services Column A	Commercial/Industrial Column B	Additional Feeders in Commercial/Industrial Column C
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Temporary Construction Service \$ 30

No additional fee for inspection of branch circuits when included on the service/feeder permit.

- Column A - Residential
 - Single family residential services.
 - Multi family residential services.
- Column B - Commercial and industrial
 - Each service or the first feeder when the service is not being installed, increased or altered.
 - Feeders that terminate in a separate building.
 - Secondaries of transformers that have a capacity greater than 600 VA.
 - Each service or feeder that is over 600 volts.
- Column C - Additional feeders in commercial and industrial facilities
 - Each feeder inspected with a service or feeder in Column B at the same time and on the same permit.

(2) The following fees shall be provided for the inspection of each of the following units:

	Single/first Unit Column A	Additional Units Column B
a. Mobile home, modular home, or commercial coach service. (200 Amp. Max.)	25	10*
b. Mobile home feeder.	25	10*
c. Each lot for a recreational vehicle.	25	10
d. Berth at a marina or dock.	25	10
e. Yard pole meter loops or similar isolated metering installations.	25	10
f. Outbuilding(s) on residential property: <ul style="list-style-type: none"> 1. served by a 60 Ampere or larger feeder - 25 2. served by a circuit or a feeder less than 60 Amperes - 10 		
g. Motors 10 HP or larger	25	10
h. Multi-family dwelling feeders	25	10
i. Signs	25	10

Column A - The fee for inspection of a single unit or the first of several units when a service or feeder in (1)(A) or (1)(B) is not installed.

Column B - The fee for inspection of additional units when they are inspected at the same time, at the same location and on the same permit as a unit in Column (1)(A), (1)(B), or (2)(A).

*Total fee for inspection of one service and feeder for a mobile home when they are inspected at the same time is \$35.00.

The above fees are in addition to master meter, mobile home park, recreational vehicle park, marina shore services and/or the main service(s).

(3) The fee for new circuits, circuit extensions, and circuit alterations where the service or feeder is not modified, shall be \$30 for one to four circuits inspected at the same time on the same premises under a single permit plus \$1 for each additional circuit. The total fee shall be no greater than the fee for a new service of like ampacity.

(4) Low voltage systems. The fee for inspection of residential, burglar or fire alarm systems, and other Class 2, low voltage systems shall be \$25 for one to four circuits (zone) plus \$1 for each additional circuit (zone). For commercial or industrial, Class 2, low voltage system installations, the minimum fee shall be \$25 for the control panel plus \$5 for each zone.

(5) In addition to the service and feeder installation fees, the fee for inspecting each electrically driven irrigation machine is \$50 including tower and drive motors.

(6) The fee for emergency, standby, and resource recovery generators up to 50 KVA is \$25. The fee for a generator installation larger than 50 KVA, or that is the main source of power, is that for the applicable service in subsection (1) of this section.

(7) Fees for carnival electrical inspections.

a. Preseason inspection, \$40 per hour.

b. The first field inspection of each ride, concession, or generator which has not had a preseason inspection shall be \$10.

c. For subsequent inspections, the fee shall be \$40 for the first ten rides, concessions, or generators, and \$2 each for all additional rides, concessions, and generators. If a ride, concession, or generator has no insignia of inspection for the calendar year, the fee for that ride, concession, or generator shall be that charged in b. of this subsection.

(8) Trip fees. A fee of \$25 shall be paid before approval of the installation if the following services are necessary:

a. Requests to inspect existing installations. After the first one half hour, an additional \$25 fee shall be provided for each one half hour of inspection time.

b. Trips to inspect when the permit submitter has given notice to the inspector that the work is ready for inspection when it is not.

c. An additional inspection trip is necessary because the submitter has given an erroneous or incomplete address.

d. More than one additional inspection trip per permit to inspect corrections required by the inspector as a result of carelessness or neglect, or for improperly responding to a corrective notice.

e. Each trip necessary to remove a noncompliance citation from the jobsite, posted because unlicensed electrical contractors or uncertified electricians or trainees were working on the jobsite.

f. When corrections have not been made in the prescribed time, unless an exception has been requested and granted.

(9) Double fees. A double inspection fee shall be charged for:

a. Installations that are covered or concealed before inspection;

b. Failure to obtain the electrical work permit prior to beginning the installation or alteration. Exception — emergency repairs to existing electrical systems.

(10) On jobs requiring partial or progress inspections, "one" inspection of one half hour duration is allowed per \$25 of fee.

(11) The fee for a plan review request pursuant to WAC 296-46-140 (1) and (2) is thirty-five percent of the electrical work permit fee as determined by WAC 296-46-495, plus a fee of \$35. The fee for review of electrical plans voluntarily requested pursuant to WAC 296-46-140(4) and for supplemental submissions of plans is \$30 per hour or a fraction of an hour. [Statutory Authority: RCW 19.28.060 and 19.28.210. 85-20-065 (Order 85-16), § 296-46-910, filed 9/27/85. Statutory Authority: RCW 19.28.210. 83-16-058 (Order 83-20), § 296-46-910, filed 8/2/83. Statutory Authority: RCW 19.28.060 and 19.28.210. 82-18-036 (Order 82-29), § 296-46-910, filed 8/26/82. Statutory Authority: RCW 19.28.060. 81-06-037 (Order 81-5), § 296-46-910, filed 2/27/81, effective 4/1/81; 78-02-098 (Order 77-31), § 296-46-910, filed 1/31/78.]

Chapter 296-52 WAC

SAFETY STANDARDS FOR THE POSSESSION AND HANDLING OF EXPLOSIVES

WAC

296-52-030	Definitions.
296-52-040	User's (blaster's) license.
296-52-043	Use of explosives and blasting agents.
296-52-090	Construction of magazines.
296-52-095	Storage of explosives.
296-52-160	License for manufacturing.
296-52-400	Enforcement.
296-52-9001	Repealed.
296-52-9002	Repealed.
296-52-9003	Repealed.
296-52-9004	Repealed.
296-52-9005	Repealed.
296-52-9006	Repealed.
296-52-9007	Repealed.

DISPOSITION OF SECTIONS FORMERLY CODIFIED IN THIS CHAPTER

296-52-9001	Appendix Figure 1—Application for user's (blaster's) license. [Statutory Authority: RCW 49.17.040 and 49.17.050. 82-02-003 (Order 81-32), § 296-52-9001, filed 12/24/81; Order 75-41, Appendix Figure 1 (codified as WAC 296-52-9001), filed 12/19/75; Order 70-4, Appendix Figure 1, filed 4/29/70.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
296-52-9002	Appendix Figure 2—Request for inspection. [Statutory Authority: RCW 49.17.040 and 49.17.050. 82-02-003 (Order 81-32), § 296-52-9002, filed 12/24/81; Order 70-4, Appendix Figure 2 (codified as WAC 296-52-9002), filed 4/29/70.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
296-52-9003	Appendix Figure 3—Application for license to manufacture explosives. [Statutory Authority: RCW 49.17.040 and 49.17.050. 82-02-003 (Order 81-32), § 296-52-9003, filed 12/24/81; Order 70-4, Appendix Figure 3 (codified as WAC 296-52-9003), filed 4/29/70.] Repealed by 85-01-022 (Order 84-24),

- filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-52-9004 Appendix Figure 4—Application for license to operate a storage magazine for explosives. [Order 75-41, Appendix Figure 4 (codified as WAC 296-52-9004), filed 12/19/75; Order 70-4, Appendix Figure 4, filed 4/29/70.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-52-9005 Appendix Figure 5—Application for dealer's license. [Statutory Authority: RCW 49.17.040 and 49.17.050. 82-02-003 (Order 81-32), § 296-52-9005, filed 12/24/81; Order 70-4, Appendix Figure 5 (codified as WAC 296-52-9005), filed 4/29/70.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-52-9006 Appendix Figure 6—Application for license to purchase explosives. [Statutory Authority: RCW 49.17.040 and 49.17.050. 82-02-003 (Order 81-32), § 296-52-9006, filed 12/24/81; Order 75-41, Appendix Figure 6 (codified as WAC 296-52-9006), filed 12/19/75; Order 70-4, Appendix Figure 6, filed 4/29/70.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-52-9007 Appendix Figure 7—Dealer's record. [Statutory Authority: RCW 49.17.040 and 49.17.050. 82-02-003 (Order 81-32), § 296-52-9007, filed 12/24/81; Order 70-4, Appendix Figure 7 (codified as WAC 296-52-9007), filed 4/29/70.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.

WAC 296-52-030 Definitions. Definitions as used in this chapter, unless a different meaning is plainly required by the context:

(1) "Attend" shall mean the physical presence of an authorized person within the field of vision of explosives. The said attendant shall be awake, alert and not engaged in activities which may divert his attention so that in case of an emergency he can get to the explosives quickly and without interference, except for brief periods of necessary absence, during which absence simple theft of explosives is not ordinarily possible.

(2) "Authorized," "approved" or "approval" shall be held to mean authorized, approved, or approval by the department of labor and industries or other approving agency or individual as specified by the provisions of this chapter.

(3) "Blaster" shall be held to mean that qualified person in charge of and responsible for the loading and firing of a blast.

(4) "Blasting agent" shall be held to mean and include any material or mixture consisting of a fuel and oxidizer, intended for blasting, not otherwise classified as an explosive, and in which none of the ingredients are classified as an explosive, provided that the finished product, as mixed and packaged for use or shipment, cannot be detonated when unconfined by means of a No. 8 test blasting cap.

(5) "Day box" shall denote a box which is not approved as a magazine for unattended storage of explosives. Such box may be used for storage of explosives during working hours on a job site, provided that it shall always be guarded against theft, particularly in inhabited areas, and shall either be attended, locked or secured against outright lifting, as the risk demands. Caps

shall be safely separated from other explosives. Such day boxes shall be marked with the word "explosives."

(6) "Dealer" shall be held to mean and include any person who purchases explosives or blasting agents for the sole purpose of resale, and not for use or consumption.

(7) "Department" shall denote the department of labor and industries.

(8) "Detonating cord" (fuse) shall mean a round, flexible cord containing a center core of high explosive.

(9) "Detonator" shall mean a blasting cap, an electric blasting cap or a delay electric blasting cap.

(10) "Director" shall denote the director of the department of labor and industries, or his designated representative.

(11) "Division" shall denote the division of industrial safety and health of the department.

(12) "Efficient artificial barricade" shall be held to mean an artificial mound or properly revetted wall of earth of a minimum thickness of not less than three feet or such other artificial barricade as approved by the department of labor and industries.

(13) "Explosive" or "explosives" whenever used in this chapter shall be held to mean and include any chemical compound or mechanical mixture that is commonly used or intended for the purpose of producing an explosion, that contains any oxidizing and combustible units, or other ingredients, in such proportions, quantities or packing, that an ignition by fire, by friction, by concussion, by percussion, or by detonation of any part of the compound or mixture may cause such a sudden generation of highly heated gases that the resultant gaseous pressures are capable of producing destructive effects on contiguous objects or of destroying life or limb. In addition, the term "explosives" shall include all material which is classified as Class A, Class B, and Class C explosives by the federal Department of Transportation: *Provided*, That for the purposes of this chapter small arms ammunition, small arms ammunition primers, smokeless powder not exceeding fifty pounds, and black powder not exceeding five pounds shall not be defined as explosives: *Provided*, That such black powder is intended to be used solely for sporting, recreational, or cultural purposes in antique firearms. Classification of explosives shall include but not be limited to the following:

NOTE: Classification of explosives is described by the U.S. Department of Transportation as follows (see 49 CFR Chapter I):

- (a) Class A explosives: (Possessing detonating hazard) dynamite, nitroglycerin, picric acid, lead azide, fulminate of mercury, black powder exceeding five pounds, blasting caps in quantities of 1001 or more, and detonating primers.
- (b) Class B explosives: (Possessing flammable hazard) propellant explosives, including smokeless propellants exceeding fifty pounds.

(c) Class C explosives: (Including certain types of manufactured articles which contain Class A or Class B explosives, or both, as components but in restricted quantities) blasting caps in quantities of 1000 or less.

(14) "Explosive-actuated power devices" shall be held to mean any tool or special mechanized device which is actuated by explosives, but not to include propellant-actuated power devices.

(15) "Explosives manufacturing building" shall be held to mean and include any building or other structure (excepting magazines) containing explosives, in which the manufacture of explosives, or any processing involving explosives, is carried on, and any building where explosives are used as a component part or ingredient in the manufacture of any article or device.

(16) "Explosives manufacturing plant" shall be held to mean and include all lands, with the buildings situated thereon, used in connection with the manufacturing or processing of explosives or in which any process involving explosives is carried on, or the storage of explosives thereat, as well as any premises where explosives are used as a component part or ingredient in the manufacture of any article or device.

(17) "Factory building" shall denote the same as "manufacturing building."

(18) "Forbidden or not acceptable explosives" shall be held to mean and include explosives which are forbidden or not acceptable for transportation by common carriers by rail freight, rail express, highway, or water in accordance with the regulations of the federal Department of Transportation.

(19) "Fuel" shall be held to mean and include a substance which may react with the oxygen in the air or with the oxygen yielded by an oxidizer to produce combustion.

(20) "Handling" shall denote any one or more of manufacturing, buying, selling, transporting, storing or using of explosives.

(21) "Handloader" shall be held to mean and include any person who engages in the noncommercial assembling of small arms ammunition for his own use, specifically the operation of installing new primers, powder, and projectiles into cartridge cases.

(22) "Handloader components" means small arms ammunition, small arms ammunition primers, smokeless powder not exceeding fifty pounds, and black powder as used in muzzle loading firearms not exceeding five pounds.

(23) "Highway" shall be held to mean and include any public street, public alley, or public road.

(24) "Inhabited building" shall be held to mean and include only a building regularly occupied in whole or in part as a habitation for human beings, or any church, schoolhouse, railroad station, store, or other building where people are accustomed to assemble, other than any building or structure occupied in connection with the manufacture, transportation, storage, or use of explosives.

The magazine for indoor storage is not required to be a cubic yard in size as long as it is constructed as stated in WAC 296-52-090(3).

The interpretation of an uninhabited building as defined by the "Bureau of Alcohol, Tobacco, and Fire Arms" Department of the Treasury, which is the federal regulatory agency of explosives, allows 50 pounds of high explosives or 5,000 caps in a warehouse, wholesale, or retail establishments. It also states: "No indoor facilities for storage of high explosive shall be located in a residence or dwelling."

We only allow 1,000 caps, which is computed to 1-1/2 pounds of explosives and is much less than the Bureau of Alcohol, Tobacco, and Fire Arms allows. Therefore, we will allow indoor storage to include shops and maintenance buildings.

(25) "Magazine" shall be held to mean and include any building or other structure, other than a factory building, used for the storage of explosives.

(26) "Motor vehicle" shall be held to mean and include any self-propelled automobile, truck, tractor, semi-trailer or full trailer, or other conveyance used for the transportation of freight.

(27) "Mudcap" shall be held to mean covering the required number of cartridges that have been laid on top of a boulder with a three or four inch layer of mud (free from rocks or other material which might constitute a missile hazard). Mudcapping is also commonly known as "bulldozing" and "dobyng."

(28) "Natural barricade" shall be held to mean and include any natural hill, mound, wall, or barrier composed of earth or rock or other solid material of a minimum thickness of not less than three feet.

(29) "Oxidizer" shall be held to mean a substance that yields oxygen readily to stimulate the combustion of organic matter or other fuel.

(30) "Permanent magazines" shall denote magazines that are permanently fastened to a foundation and that are left unattended. The capacity of said permanent magazines shall not exceed the limits stated in RCW 70.74.040. Permanent magazines shall be approved and licensed.

(31) "Person" shall be held to mean and include any individual, firm, copartnership, corporation, company, association, joint stock association, and including any trustee, receiver, assignee, or personal representative thereof.

(32) "Person responsible," for an explosives magazine, shall mean the legal person who actually operates the magazine and who is responsible for the proper storage, protection and removal of the explosives. The responsible person may be the owner or the lessee or the authorized operator of the magazine.

(33) "Portable magazines" also called "field" magazines shall denote magazines that are designed to be unattended and that are not permanently fastened to a foundation. Said magazines shall be so constructed or secured that they can not be readily lifted and carried away by unauthorized persons. The capacity of said portable magazines shall be limited to the amount of

explosives required for efficient operation. Portable magazines shall be approved and licensed.

(34) "Possess" shall denote in this code the physical possession of explosives in one's hand, vehicle, magazine or building.

(35) "Primer" shall be held to mean a cartridge or container of explosives into which a detonator or detonating cord is inserted or attached and whose purpose is to initiate the main explosive charge.

(36) "Propellant-actuated power device" shall be held to mean and include any tool or special mechanized device or gas generator system which is actuated by a propellant or which releases and directs work through a propellant charge.

(37) "Public conveyance" shall be held to mean and include any railroad car, streetcar, ferry, cab, bus, airplane, or other vehicle which is carrying passengers for hire.

(38) "Public utility transmission system" shall mean power transmission lines over 10 KV, telephone cables, or microwave transmission systems, or buried or exposed pipelines carrying water, natural gas, petroleum, or crude oil, or refined products and chemicals, whose services are regulated by the utilities and transportation commission, municipal, or other publicly owned systems.

(39) "Purchaser" shall be held to mean any person who buys, accepts, or receives any explosives or blasting agents.

(40) "Pyrotechnics" shall be held to mean and include any combustible or explosive compositions or manufactured articles designed and prepared for the purpose of producing audible or visible effects which are commonly referred to as fireworks.

(41) "Railroad" shall be held to mean and include any steam, electric, or other railroad which carries passengers for hire.

(42) "Railroad freight car" shall denote cars that are built for and loaded with explosives and operated in accordance with DOT rules.

(43) "Semiconductive hose" means a hose with an electrical resistance high enough to limit flow of stray electric currents to safe levels, yet not so high as to prevent drainage of static electric charges to ground; hose of not more than 2 megohms resistance over its entire length and of not less than 5,000 ohms per foot meets the requirement.

(44) "Shall" means that the rule establishes a minimum standard which is mandatory. The department welcomes better or higher standards than the minimums. If extenuating circumstances make even the minimum standard impractical, supporting evidence shall be submitted in writing to the department for review and granting of a variance in accordance with WAC 296-52-025.

(45) "Small arms ammunition" shall be held to mean and include any shotgun, rifle, pistol, or revolver cartridge, and cartridges for propellant-actuated power devices and industrial guns. Military-type ammunition containing explosive bursting charges, incendiary, tracer, spotting, or pyrotechnic projectiles is excluded from this definition.

(46) "Small arms ammunition primers" shall be held to mean small percussion-sensitive explosive charges encased in a cup, used to ignite propellant powder and shall include percussion caps as used in muzzle loaders.

(47) "Smokeless propellants" shall be held to mean and include solid chemicals or solid chemical mixtures in excess of fifty pounds which function by rapid combustion.

(48) "Special industrial explosive devices" means explosive-actuated power devices and propellant-actuated power devices.

(49) "Special industrial explosives materials" means shaped materials and sheet forms and various other extrusions, pellets, and packages of high explosives, which include dynamite, trinitrotoluene (TNT), pentaerythritol tetranitrate (PETN), hexahydro-1, 3, 5-trinitro-s-triazine (RDX), and other similar compounds used for high-energy-rate forming, expanding, and shaping in metal fabrication, and for dismemberment and quick reduction of scrap metal.

(50) "Sprung holes" shall mean to spring or chamber the bottom of the drilled hole to allow room for additional explosives as a bottom load.

(51) "Trailer" shall denote semitrailers or full trailers as defined by DOT, that are built for and loaded with explosives and operated in accordance with DOT rules.

(52) "Unclassified explosives" shall be held to mean any two components which, when mixed become capable of detonation by a No. 6 test blasting cap.

(53) "User" shall be held to mean and include any natural person, manufacturer, or blaster who acquires, purchases, or uses explosives as an ultimate consumer or who supervises such use.

(54) "Water gels or slurry explosives" comprise a wide variety of materials used for blasting. They all contain substantial proportions of water and high proportions of ammonium nitrate, some of which is in solution in the water. Two broad classes of water gels are:

(a) Those which are sensitized by a material classed as an explosive, such as TNT or smokeless powder,

(b) Those which contain no ingredient classified as an explosive; these are sensitized with metals such as aluminum or with other fuels. Water gels may be premixed at an explosives plant or mixed at the site immediately before delivery into the bore hole.

(55) "DOT specification" are regulations of the Department of Transportation published in 49 CFR Chapter I. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-52-030, filed 12/11/84; 81-07-048 (Order 81-4), § 296-52-030, filed 3/17/81; Order 75-41, § 296-52-030, filed 12/19/75; Order 70-4, § 296-52-030, filed 4/29/70.]

WAC 296-52-040 User's (blaster's) license. RCW 70.74.020, applies.

(1) The application for a user's (blaster's) license to use, blast or dispose explosives and blasting agents shall be made by means of an application form which is available at any of the department's district offices or from explosives' dealers.

A "hand loader" as defined in RCW 70.74.010, does not require a user's license.

In addition to the submission of the application form, all new applicants and all applicants requesting change in classification of their license will be required to submit a resume of successful blasting experience, properly witnessed, and to pass a written examination prepared and administered by the department.

The department will issue a user's license card which shall state the limitations imposed on the licensee and shall be presented by the user to authorized persons, upon request, together with valid personal identification.

The user's license shall be valid for one year.

Request for renewal application may be made at any of the department district offices, or from explosives dealers.

(2) The request for an inspection of compounds, mixtures or materials that may become explosive due to drying out or undergoing other physical changes within the definition of RCW 70.74.020, shall be made by any possessor of suspect compounds to the chief explosives inspector by means of a form similar to that shown in Fig. 2, of this code. (See Appendix)

(3) The safety rules on using, blasting or disposing explosives in specific industries are stated in chapters listed under WAC 296-52-010. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-52-040, filed 12/11/84; 82-02-003 (Order 81-32), § 296-52-040, filed 12/24/81; Order 70-4, § 296-52-040, filed 4/29/70.]

WAC 296-52-043 Use of explosives and blasting agents. (1) General provisions.

(a) While explosives are being handled or used, smoking, matches, or any other source of fire or flame shall not be allowed within 100 feet of the blast area. No person shall be allowed to handle explosives while under the influence of intoxicating liquors, narcotics, or other dangerous drugs. This rule does not apply to persons taking prescription drugs and/or narcotics as directed by a physician providing such use shall not endanger the worker or others.

(b) Original containers or day box magazines shall be used for taking detonators and other explosives from storage magazines to the blasting area.

(c) When blasting is done in congested areas or in close proximity to a structure, railway, or highway or any other installation that may be damaged, the blast shall be covered before firing with a mat or material that is capable of preventing fragments from being thrown.

(d) Persons authorized to prepare explosive charges or conduct blasting operations shall use every reasonable precaution, including but not limited to warning signals, flags and barricades.

(e) Blasting operations shall be conducted during daylight hours whenever possible.

(f) Whenever blasting is being conducted in the vicinity of gas, electric, water, fire alarm, telephone, telegraph, and steam utilities, the user (blaster) shall notify the appropriate representatives of such utilities at least

24 hours in advance of blasting, specifying the location and intended item of such blasting. Verbal notice shall be confirmed with written notice.

(g) Due precautions shall be taken to prevent accidental discharge of electric blasting caps from current induced by radar, radio transmitters, lightning, adjacent powerlines, dust storms, or other sources of extraneous electricity. These precautions shall include:

(i) The suspension of all blasting operations and removal of persons from the blasting area during the approach and progress of an electric storm.

(ii) The posting of signs, warning against the use of mobile radio transmitters, on all roads shall be in accordance with the applicable provisions of the *American National Standards Institute D6.1-1971, Manual on Uniform Traffic Control Devices for Streets and Highways*, as amended by *Washington State Department of Highways Manual M24-01 (HT)*, (February 22, 1972).

(iii) Ensuring that mobile radio transmitters which are less than 100 feet away from electric blasting caps, when the caps are in other than original containers, shall be deenergized and effectively locked.

(iv) Compliance with the recommendations of The Institute of the Makers of Explosives (IME) with regard to blasting in the vicinity of radio transmitters as stipulated in *Radio Frequency Energy—A Potential Hazard in the Use of Electric Blasting Caps*, IME Publication No. 20, March 1971.

(v) When electric blasting caps are being used in blasting operations in the proximity of fixed radio transmitters, the following table of distances must be observed, unless it is determined by designated test procedures that there is not sufficient radio frequency energy present to create a hazard. The test procedure shall be to attach a No. 47 radio pilot lamp in place of the cap in the blasting circuit progressively as the circuit is connected, starting with the initial hole. In the event the lamp glows, the length of the wires connecting the circuit shall be altered by adding or cutting off wire until the lamp does not glow. A radio frequency field strength meter may be used in lieu of the test lamp.

Electromagnetic radiation. Blasting operations or storage of electrical detonators shall be prohibited in vicinity of operating radio frequency (RF) transmitter stations except where the clearances given below can be observed.

Transmitter Power Except FM Mobile (Watts)	Minimum Distance (Feet)
5 - 25	100
25 - 50	150
50 - 100	220
100 - 250	350
250 - 500	450
500 - 1,000	650
1,000 - 2,500	1,000
2,500 - 5,000	1,500
5,000 - 10,000	2,200
10,000 - 25,000	3,500
25,000 - 50,000	5,000
50,000 - 100,000	7,000

Transmitter Power FM Mobile (Watts)	Minimum Distance (Feet)
1 - 10	5
10 - 30	10
30 - 60	15
60 - 250	30

(vi) When necessary to perform blasting operations at distances less than those shown in table, detonating type fuse or other approved type systems shall be used.

(h) All explosives shall be accounted for at all times. Explosives not being used shall be kept in a locked magazine, unavailable to persons not authorized to handle them. The employer shall maintain an inventory and use record of all explosives. Appropriate authorities shall be notified of any loss, theft, or unauthorized entry into a magazine.

(i) No fire shall be fought where the fire is in imminent danger of contact with explosives. All employees shall be removed to a safe area and the fire area guarded against intruders.

(j) Electric detonators shall be shunted until wired into the blasting circuit.

(k) Explosives shall not be handled near open flames, uncontrolled sparks or open electric circuits.

(l) Delivery and issue of explosives shall only be made by and to authorized persons and into authorized magazines or approved temporary storage or handling area.

(m) All loading and firing shall be directed and supervised by licensed persons thoroughly experienced in this field.

(n) The employer shall permit only persons having proof of valid safety explosive training to handle explosives at the blasting site.

(o) User (blaster) qualifications:

(i) A user (blaster) shall be able to understand given written and oral orders.

(ii) A user (blaster) shall be in good physical condition and not be addicted to narcotics, intoxicants, or similar types of drugs. This rule does not apply to persons taking prescription drugs and/or narcotics as directed by a physician providing such use shall not endanger the worker or others.

(iii) A user (blaster) shall be qualified by reason of training, knowledge, or experience, in the field of transporting, storing, handling, and use of explosives, and have a working knowledge of state and local laws and regulations which pertain to explosives.

(iv) User (blaster) shall be required to furnish satisfactory evidence of competency in handling explosives and performing in a safe manner the type of blasting that will be required.

(v) The user (blaster) shall be knowledgeable and competent in the use of each type of blasting method used.

(2) Storage at use sites.

(a) Empty boxes and paper and fiber packing materials which have previously contained high explosives shall not be used again for any purpose, but shall be destroyed by burning at an approved isolated location out of doors,

and no person shall be nearer than 100 feet after the burning has started.

(b) Containers of explosives shall not be opened in any magazine or within 50 feet of any magazine. In opening kegs or wooden cases, no sparking metal tools shall be used; wooden wedges and either wood, fiber or rubber mallets shall be used. Nonsparking metallic slitters may be used for opening fiberboard cases.

(c) Should cartridges or packages of explosives show signs of discoloration or deterioration, the manufacturer or the department shall be notified. Such explosives must be carefully set aside and must not be used.

(3) Loading of explosives or blasting agents.

(a) Procedures that permit safe and efficient loading shall be established before loading is started.

(b) All drill holes shall be sufficiently large to admit freely the insertion of the cartridges of explosives.

(c) Tamping shall be done only with wood rods or with approved plastic tamping poles without exposed metal parts, but nonsparking metal connectors may be used for jointed poles. Violent tamping shall be avoided. The primer shall never be tamped.

(d) No holes shall be loaded except those to be fired in the next round of blasting. After loading, all remaining explosives and detonators shall be immediately returned to an authorized magazine.

(e) Drilling shall not be started until all remaining butts of old holes are examined for unexploded charges, and if any are found, they shall be refired before work proceeds.

(f) When a charge of explosives has been exploded in a bore hole to enlarge or "spring" it, an interval of at least two hours must be allowed to pass before an additional charge of explosives can be loaded into the hole.

NOTE: Where it is necessary to clear obstacles for the moving of equipment there may be an exception made to this rule provided the sprung hole is thoroughly wet down with water before it is loaded.

(g) No person shall be allowed to deepen drill holes which have contained explosives or blasting agents.

(h) No explosives or blasting agents shall be left unattended at the blast site, unless properly stored.

(i) Users (blasters) shall not load, store or use explosives closer than the length of the steel being used for drilling and in no event nearer than fifty feet of drilling operations.

(j) Machines and all tools not used for loading explosives into bore holes shall be removed from the immediate location of holes being loaded with explosives. Equipment shall not be operated within 50 feet of loaded holes except when equipment is needed to add burden, mats or tracking of drills out of the loading area.

(k) Powerlines and portable electric cables for equipment being used shall be kept a safe distance from explosives or blasting agents being loaded into drill holes. Cables in the proximity of the blast area shall be deenergized and locked out.

(l) Holes shall not be drilled where there is danger of intersecting a charged or misfired hole.

(m) No explosives for underground operations other than those in Fume Class 1, as set forth by the Institute of Makers of Explosives, shall be used; however, explosives complying with the requirements of Fume Class 2 and Fume Class 3 may be used if adequate ventilation has been provided.

(n) Warning signs, indicating a blast area, shall be maintained at all approaches to the blast area. The warning sign lettering shall not be less than 4 inches in height on a contrasting background. All loaded stumps must be marked for identification on logging sites.

(o) A bore hole shall never be sprung when it is adjacent to or near a hole which has been loaded.

(p) No loaded holes shall be left unattended.

(q) The user (blaster) shall keep an accurate, up-to-date record of explosives, blasting agents, and blasting supplies used in a blast and shall keep an accurate running inventory of all explosives and blasting agents stored on the operation.

(r) When loading blasting agents pneumatically over electric blasting caps, semiconductive delivery hose shall be used and the equipment shall be bonded and grounded.

(4) Initiation of explosive charges – electric blasting.

(a) Only electric blasting caps shall be used for blasting operations in congested districts, or on highways, or adjacent to highways open to traffic, except where sources of extraneous electricity make such use dangerous. Blasting cap leg wires shall be kept short-circuited (shunted) until they are connected into the circuit for firing.

(b) Before adopting any system of electrical firing, the user (blaster) shall conduct a thorough survey for extraneous currents, and all dangerous currents shall be eliminated before any holes are loaded.

(c) In any single blast using electric blasting caps, all caps shall be of the same manufacture.

(d) Electric blasting shall be carried out by using blasting circuits or power circuits in accordance with the electric blasting cap manufacturer's recommendations.

(e) The firing line shall be checked with an approved testing device at the terminals before being connected to the blasting machine or other power source.

(f) The circuit including all caps shall be tested with an approved testing device before being connected to the firing line.

(g) When firing a circuit of electric blasting caps, care shall be exercised to ensure that an adequate quantity of delivered current is available, in accordance with the manufacturer's recommendations.

(h) Connecting wires and lead wires shall be insulated single solid wires of sufficient current-carrying capacity, and shall not be less than twenty gauge (American wire gauge) solid core insulated wire.

(i) Firing line or leading wires shall be solid single wires of sufficient current-carrying capacity, and shall be not less than fourteen gauge (American wire gauge) solid core insulated wire. Bus wires – depends on the size of the blast, fourteen gauge (American wire gauge) copper is recommended.

(j) The ends of lead wires which are to be connected to a firing device shall be shorted by twisting them together or otherwise connecting them before they are connected to the leg wires or connecting wires, and they shall be kept in the possession of the person who is doing the loading until loading is completed and the leg wires attached. Lead wires shall not be attached to the firing device until the blaster is ready to fire the shot and must be attached by the user (blaster) themselves.

(k) The ends of the leg wires on electric detonators shall be shorted in a similar manner and not separated until all holes are loaded and the loader is ready to connect the leg wires to the connecting wires or lead wires.

(l) When firing electrically, the insulation on all firing lines shall be adequate and in good condition.

(m) A power circuit used for firing electric blasting caps shall not be grounded.

(n) In underground operations when firing from a power circuit, a safety switch shall be placed at intervals in the permanent firing line. This switch shall be made so it can be locked only in the "off" position and shall be provided with a short-circuiting arrangement of the firing lines to the cap circuit.

(o) In underground operations there shall be a "lightning" gap of at least 5 feet in the firing system ahead of the main firing switch; that is, between this switch and the source of power. This gap shall be bridged by a flexible jumper cord just before firing the blast.

(p) When firing from a power circuit, the firing switch shall be locked in the open or "off" position at all times, except when firing. It shall be so designed that the firing lines to the cap circuit are automatically short-circuited when the switch is in the "off" position. Keys to this switch shall be entrusted only to the user (blaster).

(q) Blasting machines shall be in good condition and the efficiency of the machine shall be tested periodically to make certain that it can deliver power at its rated capacity.

(r) When firing with blasting machines, the connections shall be made as recommended by the manufacturer of the electric blasting caps used.

(s) The number of electric blasting caps connected to a blasting machine shall not be in excess of its rated capacity. Furthermore, in primary blasting, a series circuit shall contain no more caps than the limits recommended by the manufacturer of the electric blasting caps in use.

(t) The user (blaster) shall be in charge of the blasting machines, and no other person shall connect the leading wires to the machine.

(u) Users (blasters), when testing circuits to charged holes, shall use only blasting testers especially designed for this purpose.

(v) Whenever the possibility exists that a leading line or blasting wire might be thrown over a live powerline by the force of an explosion, care shall be taken to see that the total length of wires are kept too short to hit the lines, or that the wires are securely anchored to the ground. If neither of these requirements can be satisfied, a nonelectric system shall be used.

(w) In electrical firing, only the person making leading wire connections shall fire the shot. All connections shall be made from the bore hole back to the source of firing current, and the leading wires shall remain shorted and not be connected to the blasting machine or other source of current until the charge is to be fired.

(x) After firing an electric blast from a blasting machine, the leading wires shall be immediately disconnected from the machine and short-circuited.

(y) When electric blasting caps have been used, workers shall not return to misfired holes for at least thirty minutes.

(5) Use of safety fuse.

(a) A fuse that is deteriorated or damaged in any way shall not be used.

(b) The hanging of fuse on nails or other projections which will cause a sharp bend to be formed in the fuse is prohibited.

(c) Before capping safety fuse, a short length shall be cut from the end of the supply reel so as to assure a fresh cut end in each blasting cap.

(d) Only a cap crimper of approved design shall be used for attaching blasting caps to safety fuse. Crimpers shall be kept in good repair and accessible for use.

(e) No unused cap or short capped fuse shall be placed in any hole to be blasted; such unused detonators shall be removed from the working place and disposed of or properly stored.

(f) No fuse shall be capped, or primers made up, in any magazine or near any possible source of ignition.

(g) Capping of fuse and making of primers shall only be done in a place selected for this purpose and at least one hundred feet distant from any storage magazine.

(h) Fuse must be cut long enough to reach beyond the collar of the bore hole and in no case less than three feet. When shooting choker holes, not less than three feet of fuse shall be used.

(i) At least two persons shall be present when multiple cap and fuse blasting is done by hand lighting methods.

(j) Not more than 12 fuses shall be lighted by each blaster when hand lighting devices are used. However, when two or more safety fuses in a group are lighted as one by means of igniter cord, or other similar fuse-lighting devices, they may be considered as one fuse.

(k) The so-called "drop fuse" method of dropping or pushing a primer or any explosive with a lighted fuse attached is prohibited.

(l) Cap and fuse shall not be used for firing mudcap charges unless charges are separated sufficiently to prevent one charge from dislodging other shots in the blast.

(m) When blasting with safety fuses, consideration shall be given to the length and burning rate of the fuse. Sufficient time, with a margin of safety, shall always be provided for the blaster to reach a place of safety.

(n) The burning rate of the safety fuse in use at any time shall be measured, posted in conspicuous locations, and brought to the attention of all workers concerned with blasting. No fuse shall be used that burns faster than one foot in forty seconds or slower than one foot in fifty-five seconds.

(o) For use in wet places the joint between the cap and fuse shall be waterproofed with a compound prepared for this purpose.

(p) In making up primers only nonsparking skewers shall be used for punching the hole in the cartridge to insert the capped fuse.

(q) Only sufficient primers for one day's use shall be made up at one time. They shall be stored in a box type magazine in which no other explosives are stored.

(r) Any loose cartridges of explosives, detonators, primers and capped fuse unused at the end of the shift shall be returned to their respective magazines and locked up.

(6) Use of detonating cord.

(a) Care shall be taken to select a detonating cord consistent with the type and physical condition of the bore hole and stemming and the type of explosives used.

(b) Detonating cord shall be handled and used with the same respect and care given other explosives.

(c) For quantity and distance purposes detonating fuse up to 60 grains per foot should be calculated as equivalent to 9 lbs. of high explosives per 1,000 feet. Heavier cord loads should be rated proportionately.

(d) If using a detonating type cord for blasting the double-trunk-line or loop systems shall be used.

(e) Trunk lines in multiple-row blasts shall make one or more complete loops, with crossties between loops at intervals of not over two hundred feet.

(f) All detonating cord knots shall be tight and all connections shall be kept at right angles to the trunk lines.

(g) The line of detonating cord extending out of a bore hole or from a charge shall be cut from the supply spool before loading the remainder of the bore hole or placing additional charges.

(h) Detonating cord shall be handled and used with care to avoid damaging or severing the cord during and after loading and hooking-up.

(i) Detonating cord connections shall be competent and positive in accordance with approved and recommended methods. Knot-type or other cord-to-cord connections shall be made only with detonating cord in which the explosive core is dry.

(j) All detonating cord trunklines and branchlines shall be free of loops, sharp kinks, or angles that direct the cord back toward the oncoming line of detonation.

(k) All detonating cord connections shall be inspected before firing the blast.

(l) When detonating cord millisecond-delay connectors or short-interval-delay electric blasting caps are used with detonating cord, the practice shall conform strictly to the manufacturer's recommendations.

(m) When connecting a blasting cap or an electric blasting cap to detonating cord, the cap shall be taped or otherwise attached securely along the side or the end of the detonating cord, with the end of the cap containing the explosive charge pointed in the direction in which the detonation is to proceed.

(n) Detonators for firing the trunkline shall not be brought to the loading area nor attached to the detonating cord until everything else is in readiness for the blast.

(7) Firing the blast.

(a) A code of blasting signals equivalent to Table T-1 shall be posted on one or more conspicuous places at the operation, and all employees shall be required to familiarize themselves with the code and conform to it. Danger signs shall be placed at suitable locations.

(b) All charges shall be covered with blasting mats before firing, where blasting may cause injury or damage by flying rock or debris.

(c) Before a blast is fired, a loud warning signal shall be given by the blaster in charge, who has made certain that all surplus explosives are in a safe place and all employees, vehicles, and equipment are at a safe distance, or under sufficient cover.

(d) Flagmen shall be safely stationed on highways which pass through the danger zone so as to stop traffic during blasting operations.

(e) It shall be the duty of the blaster to fix the time of blasting.

(f) Before firing an underground blast, warning shall be given, and all possible entries into the blasting area, and any entrances to any working place where a drift, raise, or other opening is about to hole through, shall be carefully guarded. The blaster shall make sure that all employees are out of the blast area before firing a blast.

TABLE T-1

WARNING SIGNAL	— A 1-minute series of long blasts 5 minutes prior to blast signal.
BLAST SIGNAL	— A series of short blasts 1 minute prior to the shot.
ALL CLEAR SIGNAL	— A prolonged blast following the inspection of blast area.

(8) Inspection after blasting.

(a) Immediately after the blast has been fired, the firing line shall be disconnected from the blasting machine, or where power switches are used, they shall be locked open or in the off position.

(b) Sufficient time shall be allowed, for the smoke and fumes to leave the blasted area before returning to the shot. An inspection of the area and the surrounding rubble shall be made by the user (blaster) to determine if all charges have been exploded before employees are allowed to return to the operation, and in tunnels, after the muck pile has been wetted down.

(9) Misfires.

(a) If a misfire is found, the user (blaster) shall provide proper safeguards for excluding all employees from the danger zone.

(b) No other work shall be done except that necessary to remove the hazard of the misfire and only those employees necessary to do the work shall remain in the danger zone.

(c) No attempt shall be made to extract explosives from any charged or misfired hole; a new primer shall be

put in and the hole reblasted. If refiring of the misfired hole presents a hazard, the explosives may be removed by washing out with water or, where the misfire is under water, blown out with air.

(d) If there are any misfires while using cap and fuse, all employees shall remain away from the charge for at least one hour. Misfires shall be handled under the direction of the person in charge of the blasting.

(e) When electric blasting caps have been used, workers shall not return to misfired holes for at least thirty minutes. All wires shall be carefully traced and a search made for unexploded charges.

(f) If explosives are suspected of burning in a hole, all persons in the endangered area shall move to a safe location and no one shall return to the hole until the danger has passed, but in no case within one hour.

(g) No drilling, digging, or picking shall be permitted until all missed holes have been detonated or the authorized representative has approved that work can proceed.

(10) Underwater blasting.

(a) A user (blaster) shall conduct all blasting operations.

(b) Loading tubes and casings of dissimilar metals shall not be used because of possible electric transient currents from galvanic action of the metals and water.

(c) Only water-resistant blasting caps and detonating cords shall be used for all underwater blasting. Loading shall be done through a nonsparking metal loading tube when tube is necessary.

(d) No blast shall be fired while any vessel under way is closer than 1,500 feet to the blasting area. Those on board vessels or craft moored or anchored within 1,500 feet shall be notified before a blast is fired.

(e) No blast shall be fired while any swimming or diving operations are in progress in the vicinity of the blasting area. If such operations are in progress, signals and arrangements shall be agreed upon to assure that no blast shall be fired while any persons are in the water.

(f) Blasting flags shall be displayed.

(g) The storage and handling of explosives aboard vessels used in underwater blasting operations shall be according to provisions outlined herein on handling and storing explosives.

(h) When more than one charge is placed under water, a float device shall be attached to an element of each charge in such manner that it will be released by the firing. Misfires shall be handled in accordance with the requirements of WAC 296-52-043(9).

(11) Blasting in excavation work in pressurized air locks.

(a) Detonators and explosives shall not be stored or kept in tunnels, shafts, or caissons. Detonators and explosives for each round shall be taken directly from the magazines to the blasting zone and immediately loaded. Detonators and explosives left over after loading a round shall be removed from the working chamber before the connecting wires are connected up.

(b) When detonators or explosives are brought into an air lock, no employee except the powderman, user (blaster), lock tender and the employees necessary for

carrying, shall be permitted to enter the air lock. No material, supplies, or equipment shall be brought through with the explosives.

(c) Primers, detonators and explosives shall be taken separately into pressure working chambers.

(d) The user (blaster) or powderman shall be responsible for the receipt, unloading, storage, and on-site transportation of explosives and detonators.

(e) All metal pipes, rails, air locks, and steel tunnel lining shall be electrically bonded together and grounded at or near the portal or shaft, and such pipes and rails shall be cross-bonded together at not less than 1,000-foot intervals throughout the length of the tunnel. In addition, each air supply pipe shall be grounded at its delivery end.

(f) The explosives suitable for use in wet holes shall be water-resistant and shall be Fume Class 1, or other approved explosives.

(g) When tunnel excavation in rock face is approaching mixed face, and when tunnel excavation is in mixed face, blasting shall be performed with light charges and with light burden on each hole. Advance drilling shall be performed as tunnel excavation in rock face approaches mixed face, to determine the general nature and extent of rock cover and the remaining distance ahead to soft ground as excavation advances.

(12) Vibration and damage control. Blasting operations in or adjacent to cofferdams, piers, underwater structures, buildings, structures, or other facilities shall be carefully planned with full consideration for all forces and conditions involved.

(13) Black blasting powder shall not be used for blasting except when a desired result cannot be obtained with another type of explosive such as in quarrying certain types of dimension stone.

(14) In the use of black blasting powder:

(a) Containers shall not be opened in, or within fifty feet of any magazine; within any building in which a fuel-fired or exposed-element electric heater is in operation; where electrical or incandescent-particle sparks could result in powder ignition; or within fifty feet of any open flame.

(b) Granular powder shall be transferred from containers only by pouring.

(c) Spills of granular powder shall be cleaned up promptly with nonsparking equipment, contaminated powder shall be put into a container of water and its content disposed of promptly after the granules have disintegrated, or the spill area shall be flushed with a copious amount of water to completely disintegrate the granules.

(d) Containers of powder shall be kept securely closed at all times other than when the powder is being transferred from or into a container.

(e) Containers of powder transported by vehicles shall be in a wholly enclosed cargo space.

(f) Misfires shall be disposed of by:

(i) Washing the stemming and powder charge from the bore hole, and

(ii) Removal and disposal of the initiator as a damaged explosive.

(iii) Bore holes of shots that fire but fail to break, or fail to break promptly, shall not be recharged for at least twelve hours.

(15) No person shall store, handle, or transport explosives or blasting agents when such storage, handling, and transportation of explosives or blasting agents constitutes an undue hazard to life.

(16) It shall be unlawful for any person to abandon explosives or explosive substances. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-52-043, filed 12/11/84; 82-08-026 (Order 82-10), § 296-52-043, filed 3/30/82; 81-07-048 (Order 81-4), § 296-52-043, filed 3/17/81; Order 76-6, § 296-52-043, filed 3/1/76; Order 75-41, § 296-52-043, filed 12/19/75.]

WAC 296-52-090 Construction of magazines. (1) Construction of permanent storage facilities.

(a) Definition. A Class 1 storage facility shall be a permanent structure; a building, an igloo or army-type structure, a tunnel, or a dugout. It shall be bullet-resistant, fire-resistant, weather-resistant, theft-resistant, and well ventilated.

(b) Buildings. All building type storage facilities shall be constructed of masonry, wood, metal, or a combination of these materials and shall have no openings except for entrances and ventilation. Ground around such storage facilities shall slope away for drainage.

(c) Masonry wall construction. Masonry wall construction shall consist of brick, concrete, tile, cement block, or cinder block and shall be not less than 6 inches in thickness. Hollow masonry units used in construction shall have all hollow spaces filled with well tamped coarse dry sand or weak concrete (a mixture of one part cement and eight parts of sand with enough water to dampen the mixture while tamping in place). Interior wall shall be covered with a nonsparking material.

(d) Fabricated metal wall construction. Metal wall construction shall consist of sectional sheets of steel or aluminum not less than number 14 gauge, securely fastened to a metal framework. Such metal wall construction shall be either lined inside with brick, solid cement blocks, hardwood not less than 4 inches in thickness or material of equivalent strength, or shall have at least a 6 inch sand fill between interior and exterior walls. Interior walls shall be constructed of or covered with a nonsparking material.

(e) Wood frame wall construction. The exterior of outer wood walls shall be covered with iron or aluminum not less than number 26 gauge. An inner wall of nonsparking materials shall be constructed so as to provide a space of not less than 6 inches between the outer and inner walls, which space shall be filled with coarse dry sand or weak concrete.

(f) Floors. Floors shall be constructed of a nonsparking material and shall be strong enough to bear the weight of the maximum quantity to be stored.

(g) Foundations. Foundations shall be constructed of brick, concrete, cement block, stone, or wood posts. If

piers or posts are used, in lieu of a continuous foundation, the space under the buildings shall be enclosed with metal.

(h) Roof.

(i) Except for buildings with fabricated metal roofs, the outer roof shall be covered with no less than number 26-gauge iron or aluminum fastened to a 7/8 inch sheathing.

(ii) Where it is possible for a bullet to be fired directly through the roof and into the storage facility at such an angle that the bullet would strike a point below the top of inner walls, storage facilities shall be protected by one of the following methods:

(A) A sand tray shall be located at the tops of inner walls covering the entire ceiling area, except that necessary for ventilation, lined with a layer of building paper, and filled with not less than 4 inches of coarse dry sand.

(B) A fabricated metal roof shall be constructed of 3/16 inch plate steel lined with 4 inches of hardwood or material of equivalent strength (for each additional 1/16 inch of plate steel, the hardwood or material of equivalent strength lining may be decreased one inch).

(i) Doors. All doors shall be constructed of 1/4 inch plate steel and lined with 2 inches of hardwood or material of equivalent strength. Hinges and hasps shall be attached to the doors by welding, riveting or bolting (nuts on inside of door). They shall be installed in such a manner that the hinges and hasps cannot be removed when the doors are closed and locked.

(j) Locks. Each door shall be equipped with two mortise locks; or with two padlocks fastened in separate hasps and staples; or with a combination of mortise lock and a padlock, or with a mortise lock that requires two keys to open; or a three-point lock. Locks shall be five-tumbler proof. All padlocks shall be protected with 1/4 inch steel caps constructed so as to prevent sawing or lever action on the locks or hasps.

(k) Ventilation. Except at doorways, a 2 inch air space shall be left around ceilings and the perimeter of floors. Foundation ventilators shall be not less than 4 by 6 inches. Vents in the foundation, roof, or gables shall be screened and offset.

(l) Exposed metal. No sparking metal construction shall be exposed below the top of walls in the interior of storage facilities, and all nails therein shall be blind-nailed or countersunk.

(m) Igloos, army-type structures, tunnels and dug-outs. Storage facilities shall be constructed of reinforced concrete, masonry, metal or a combination of these materials. They shall have an earthmound covering of not less than 24 inches on the top, sides and rear. Interior walls and floors shall be covered with a nonsparking material. Storage facilities of this type shall also be constructed in conformity with the requirements of subsection (1), subdivisions (a), (b), (f), (i), (j), (k) and (l) of this section.

(2) Construction of portable (field) storage facilities.

(a) Definition. A Class 2 storage facility shall be a box, a trailer, a semitrailer or other mobile facility. It

shall be bullet-resistant, fire-resistant, weather-resistant, theft-resistant, and well ventilated. Except as provided in subsection (3) of this section, hinges and hasps shall be attached to the covers or doors in the manner prescribed in subsection (1), subdivision (i) and the locking system shall be that prescribed in subsection (1) subdivision (j).

(b) Outdoor storage facilities. Outdoor storage facilities shall be at least one cubic yard in size and supported in such a manner so as to prevent direct contact with the ground. The sides, bottoms, tops and covers or doors shall be constructed of 1/4 inch steel and shall be lined with two inches of hardwood or material of equivalent strength. Edges of metal covers shall overlap sides at least one inch. The ground around such storage facilities shall slope away for drainage. When unattended, vehicular storage facilities shall have wheels removed or shall be otherwise effectively immobilized by kingpin locking devices or other methods approved by the division of industrial safety and health.

NOTE: The following alternatives may be used. (All steel and wood dimensions indicated are actual thicknesses. To meet the concrete block and brick dimensions indicated, the manufacturer's represented thicknesses may be used.)

(i) Exterior of 5/8-inch steel, lined with an interior of any type of nonsparking material.

(ii) Exterior of 1/2-inch steel, lined with an interior of not less than 3/8-inch plywood.

(iii) Exterior of 3/8-inch steel, lined with an interior of two inches of hardwood.

(iv) Exterior of 3/8-inch steel, lined with an interior of three inches of softwood or 2-1/4-inches of plywood.

(v) Exterior of 1/4-inch steel, lined with an interior of five inches of softwood or 5-1/4-inches of plywood.

(vi) Exterior of 3/16-inch steel, lined with an interior of four inches of hardwood.

(vii) Exterior of 3/16-inch steel, lined with an interior of seven inches of softwood or 6-3/4-inches of plywood.

(viii) Exterior of 3/16-inch steel, lined with an intermediate layer of three inches of hardwood and an interior lining of 3/4-inch plywood.

(ix) Exterior of 1/8-inch steel, lined with an interior of five inches of hardwood.

(x) Exterior of 1/8-inch steel, lined with an interior of nine inches of softwood.

(xi) Exterior of 1/8-inch steel, lined with an intermediate layer of four inches of hardwood and an interior lining of 3/4-inch plywood.

(xii) Exterior of any type of fire-resistant material which is structurally sound, lined with an intermediate layer of four inches solid concrete block or four inches solid brick or four inches of solid concrete, and an interior lining of 1/2-inch plywood placed securely against the masonry lining.

(xiii) Standard eight-inch concrete block with voids filled with well-tamped sand/cement mixture.

(xiv) Standard eight-inch solid brick.

(xv) Exterior of any type of fire-resistant material which is structurally sound, lined with an intermediate

six-inch space filled with well-tamped dry sand or well-tamped sand/cement mixture.

(xvi) Exterior of 1/8-inch steel, lined with a first intermediate layer of 3/4-inch plywood, a second intermediate layer of 3-5/8 inches well-tamped dry sand or sand/cement mixture and an interior lining of 3/4-inch plywood.

(xvii) Exterior of any type of fire-resistant material, lined with a first intermediate layer of 3/4-inch plywood, a second intermediate layer of 3-5/8-inch well-tamped dry sand or sand/cement mixture, a third intermediate layer of 3/4-inch plywood, and a fourth intermediate layer of two inches of hardwood or 14-gauge steel and an interior lining of 3/4-inch plywood.

(xviii) Eight-inch thick solid concrete.

(3) Class 3 storage for 1,000 or less blasting caps in a locked uninhabited building. Storage facilities for blasting caps in quantities of 1,000 or less shall have sides, bottoms, and covers constructed of number 12 gauge metal and lined with a nonsparking material. Hinges and hasps shall be attached thereto by welding. A single five-tumble proof lock shall be sufficient for locking purposes.

(4) Construction of blasting agent storage facilities.

(a) A Class 4 storage facility may be a building, an igloo, or army-type structure, a tunnel, a dugout, a box, a trailer, or a semitrailer or other mobile facility and shall be fire-resistant, weather-resistant, theft-resistant, and ventilated. They shall be constructed of masonry, metal-covered wood, fabricated metal, or a combination of these materials. The walls and floors of such storage facilities shall be lined with a nonsparking material. The doors or covers shall be metal or solid wood covered with metal. The foundations, hinges, hasps, and interior shall be in conformity with the requirements of subsection (1)(g), (i), (k), and (l) of this section. Locks and lock protection shall be in conformity with the requirements of subsection (1)(j) of this section except that only one lock is required on each door of trailers, semitrailers and other mobile equipment.

(b) Outdoor storage facilities. The ground around such storage facilities shall slope away for drainage. When unattended, vehicular storage facilities shall have wheels removed or otherwise effectively immobilized by kingpin locking devices or other methods approved by the division of industrial safety and health.

(5) Smoking and open flames.

Smoking, matches, open flames, and spark-producing devices shall not be permitted in, or within 50 feet of, any outdoor storage facility.

(6) Quantity and storage restrictions.

General. Explosive materials in excess of 300,000 pounds and blasting caps in excess of 200 million shall not be stored in one storage facility. Blasting caps shall not be stored with other explosive materials in the same storage facility.

(7) Construction of day box storage facilities.

(a) A temporary storage facility shall be a "day box" or other portable magazine. It must be fire-resistant, weather-resistant, and theft-resistant. A magazine is to be constructed of not less than number 12-gauge (.1046

inches) steel, lined with at least either 1/2-inch plywood or 1/2-inch Masonite-type hardboard. Doors must overlap sides by at least one inch. Hinges and hasps are to be attached by welding, riveting or bolting (nuts on inside). One steel padlock (which need not be protected by a steel hood) having at least five tumblers and a case-hardened shackle of at least 3/8-inch diameter is sufficient for locking purposes. Explosive materials are not to be left unattended in magazines and must be removed to Class 1 or 2 magazines for unattended storage.

(b) The ground around such storage facilities shall slope away for drainage.

(c) No explosive materials shall be left in such facilities if unattended. The explosive materials contained therein must be removed to licensed storage facilities for unattended storage.

(d) When used for temporary storage at a site for blasting operations, magazines shall be located away from neighboring inhabited buildings, railways, highways, and other magazines. A distance of at least one hundred and fifty feet shall be maintained between magazines and the work in progress when the quantity of explosives kept therein is in excess of 25 pounds, and at least 50 feet when the quantity of explosives is 25 pounds, or less.

(8) Cap day box.

(a) Temporary storage facilities for blasting caps in quantities of 100 or less shall have sides, bottoms and covers constructed of number 12 gauge metal and lined with a nonsparking material. Hinges and hasps shall be attached thereto by welding. A single five-tumbler proof lock shall be sufficient for locking purposes.

(b) No explosive materials shall be left in such facilities if unattended. The explosive materials contained therein must be removed to licensed storage facilities for unattended storage.

(9) Storage within magazines.

(a) Packages of explosives shall be laid flat with top side up. Black powder when stored in magazines with other explosives shall be stored separately. Black powder stored in kegs shall be stored on ends, bungs down, or on side, seams down. Corresponding grades and brands shall be stored together in such a manner that brands and grade marks show. All stocks shall be stored so as to be easily counted and checked. Packages of explosives shall be piled in a stable manner. When any kind of explosive is removed from a magazine for use, the oldest explosive of that particular kind shall always be taken first.

(b) Packages of explosives shall not be unpacked or repacked in a magazine nor within 50 feet of a magazine or in close proximity to other explosives. Tools used for opening packages of explosives shall be constructed of nonsparking materials, except that metal slitters may be used for opening fiberboard boxes. A wood wedge and a fiber, rubber, or wood mallet shall be used for opening or closing wood packages of explosives. Opened packages of explosives shall be securely closed before being returned to a magazine.

(c) Magazines shall not be used for the storage of any metal tools nor any commodity except explosives, but

this restriction shall not apply to the storage of blasting agents and blasting supplies.

(d) Magazine floors shall be regularly swept, kept clean, dry, free of grit, paper, empty used packages, and rubbish. Brooms and other cleaning utensils shall not have any spark-producing metal parts. Sweepings from floors of magazines shall be properly disposed of. Magazine floors stained with nitroglycerin shall be cleaned according to instructions by the manufacturer.

(e) When any explosive has deteriorated to an extent that it is in an unstable or dangerous condition, or if nitroglycerin leaks from any explosives, then the person in possession of such explosive shall immediately proceed to destroy such explosive in accordance with the instructions of the manufacturer. Only experienced persons shall be allowed to do the work of destroying explosives.

(f) When magazines need inside repairs, all explosives shall be removed therefrom and the floors cleaned. In making outside repairs, if there is a possibility of causing sparks or fire the explosives shall be removed from the magazine. Explosives removed from a magazine under repair shall either be placed in another magazine or placed a safe distance from the magazine where they shall be properly guarded and protected until repairs have been completed, when they shall be returned to the magazine.

(g) Smoking, matches, open flames, spark-producing devices, and firearms (except firearms carried by guards) shall not be permitted inside of or within 50 feet of magazines. The land surrounding a magazine shall be kept clear of all combustible materials for a distance of at least 25 feet. Combustible materials shall not be stored within 50 feet of magazines.

(h) Magazines shall be in the charge of a competent person at all times who shall be at least 21 years of age, and who shall be held responsible for the enforcement of all safety precautions.

(i) Explosives recovered from blasting misfires shall be placed in a separate magazine until competent personnel has determined from the manufacturer the method of disposal. Caps recovered from blasting misfires shall not be reused. Such explosives and caps shall then be disposed of in the manner recommended by the manufacturer.

(10) Magazine heating systems requirements, NFPA Code No. 495, "Manufacture, Transportation, Storage and Use of Explosive Materials, 1973." The following will apply:

(a) Magazines requiring heat shall be heated by either hot water radiant heating within the magazine building; or air directed into the magazine building over either hot water or low pressure steam (15 psig) coils located outside the magazine building.

(b) The magazine heating systems shall meet the following requirements:

(i) The radiant heating coils within the building shall be installed in such a manner that the explosive materials or their containers cannot contact the coils and air is free to circulate between the coils and the explosive materials or their containers.

(ii) The heating ducts shall be installed in such a manner that the hot air discharge from the duct is not directed against the explosive materials or their containers.

(iii) The heating device used in connection with a magazine shall have controls which prevent the ambient building temperature from exceeding 130°F.

(iv) The electric fan or pump used in the heating system for a magazine shall be mounted outside and separate from the wall of the magazine and shall be grounded.

(v) The electric fan motor and the controls for electrical heating devices used in heating water or steam shall have overloads and disconnects, which comply with the National Electrical Code, (National Fire Protection Association, NFPA No. 70-1971). All electrical switch gear shall be located a minimum distance of 25 feet from the magazine.

(vi) The heating source for water or steam shall be separated from the magazine by a distance of not less than 25 feet when electrical and 50 feet when fuel-fired. The area between the heating unit and the magazine shall be cleared of all combustible materials.

(vii) The storage of explosive materials and their containers in the magazine shall allow uniform air circulation so temperature uniformity can be maintained throughout the explosive materials.

(11) Lighting. No lighting shall be placed or used in a storage facility of Class 1, 2, 3 or 4 except battery-activated safety lanterns.

(12) Underground storage.

(a) Explosives and related materials shall be stored in approved facilities required under the applicable provisions of WAC 296-61-280 (7), (8), safety standard metal and nonmetallic mines, quarries, pits, and crushing operations.

(b) No explosives or blasting agents shall be permanently stored in any underground operation until the operation has been developed to the point where at least two modes of exit have been developed.

(c) Permanent underground storage magazines shall be at least 300 feet from any shaft, adit, or active underground working area.

(d) Permanent underground magazines containing detonators shall not be located closer than 50 feet to any magazine containing other explosives or blasting agents.

(e) Upon the approach of an electrical storm, unless a greater hazard would be created thereby, explosives at the adit or the top of any shaft leading to where persons are working shall be moved away from such location a distance equal to that required for inhabited buildings, as listed in the American table of distances for storage of explosive materials. [Statutory Authority: RCW 49-17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-52-090, filed 12/11/84; 82-08-026 (Order 82-10), § 296-52-090, filed 3/30/82; 81-07-048 (Order 81-4), § 296-52-090, filed 3/17/81; Order 75-41, § 296-52-090, filed 12/19/75; Order 70-4, § 296-52-090, filed 4/29/70.]

WAC 296-52-095 Storage of explosives. General provisions. (1) All Class A, Class B, Class C explosives, and special industrial explosives, and any newly developed and unclassified explosives, shall be kept in magazines which meet the requirements of this section as defined in RCW 70.74.030, 70.74.040, 70.74.050, 70.74.061, 70.74.100 and the following shall apply.

NOTE: RCW 70.74.297 Separate storage of components capable of detonation when mixed. Any two components which, when mixed, become capable of detonation by a number 6 cap must be stored in separate locked containers or in a licensed, approved magazine. [1972 1st ex.s. c 88 § 4.]

(2) Blasting caps, electric blasting caps, detonating primers and primed cartridges shall not be stored in the same magazine with other explosives.

(3) Ground around magazines shall slope away for drainage. The land surrounding magazines shall be kept clear of brush, dried grass, leaves, and other materials for a distance of at least 25 feet.

(4) Magazines as required by this chapter shall be of four classes as defined in WAC 296-52-090.

(5) All explosive manufacturing buildings and magazines in which explosives or blasting agents, except small arms ammunition and smokeless powder are had, kept, or stored, must be located at distances from inhabited buildings, railroads, highways, and public utility transmission systems in conformity with the following quantity and distance tables, and these tables shall be the basis on which applications for license for storage shall be made and license for storage issued, as provided in RCW 70.74.110 and 70.74.120. All distances prescribed in the following quantity and distance tables are unbaricaded, and, if there is an efficient artificial barricade or natural barricade between the explosives manufacturing building or magazine and another explosives manufacturing building or magazine, building, railroad, highway, or public utility transmission system, the distance prescribed in the following quantity and distance tables may be reduced by one-half. Blasting and electric blasting caps in strength through number 8 should be rated as one and one-half pounds of explosives per one thousand caps. Blasting and electric blasting caps of strength higher than number 8 should be computed on the combined weight of explosives.

(6) When two or more storage magazines are located on the same property, each magazine must comply with the minimum distances specified from inhabited buildings, railways, and highways, and in addition, they should be separated from each other by not less than the distances shown for "separation of magazines," except that the quantity of explosives contained in cap magazines shall govern in regard to the spacing of said cap magazines from magazines containing other explosives. If any two or more magazines are separated from each other by less than the specified "separation of magazines" distances, then such two or more magazines, as a group, must be considered as one magazine, and the total quantity of explosives stored in such group must be

treated as if stored in a single magazine located on the site of any magazine of the group, and must comply with the minimum of distances specified from other magazines, inhabited buildings, railways and highways. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-52-095, filed 12/11/84; 81-07-048 (Order 81-4), § 296-52-095, filed 3/17/81; Order 75-41, § 296-52-095, filed 12/19/75.]

WAC 296-52-160 License for manufacturing. RCW 70.74.110, applies.

The application for license for manufacturing explosives and/or blasting agents shall be made on a form substantially similar to that shown in Fig. 3, of this code.

The manufacturer's license shall be valid for one year. Request for renewal may be made at any of the department district offices.

A copy of the plan of the plant submitted with said application and approved by the department shall be kept in the plant open to inspection by the department.

The manufacturing of explosives is covered by chapter 296-50 WAC. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-52-160, filed 12/11/84; Order 70-4, § 296-52-160, filed 4/29/70.]

WAC 296-52-400 Enforcement. The department of labor and industries, through the division of industrial safety and health, shall enforce the entire code, particularly all items affecting persons covered under Title 51 RCW, the transportation and storage of explosives not exempted under RCW 70.74.191, and the licensing required under this code.

Other law enforcement agencies, city, municipal, county, Washington state, other states and federal are obliged, under their own laws, codes, and ordinances, to enforce specific aspects of the possession and handling of explosives (RCW 70.74.201).

The division of industrial safety and health shall cooperate with all other law enforcement agencies in carrying out the intent of the Explosives Code and the Explosives Act. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-52-400, filed 12/11/84; Order 70-4, § 296-52-400, filed 4/29/70.]

WAC 296-52-9001 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-52-9002 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-52-9003 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-52-9004 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-52-9005 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-52-9006 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-52-9007 Repealed. See Disposition Table at beginning of this chapter.

Chapter 296-56 WAC

SAFETY STANDARDS--LONGSHORE, STEVEDORE AND RELATED WATERFRONT OPERATIONS

WAC

296-56-401 Repealed.
296-56-405 Repealed.
296-56-410 Repealed.
296-56-412 Repealed.
296-56-415 Repealed.
296-56-420 Repealed.
296-56-430 Repealed.
296-56-432 Repealed.
296-56-435 Repealed.
296-56-436 Repealed.
296-56-43801 Repealed.
296-56-43803 Repealed.
296-56-43805 Repealed.
296-56-43807 Repealed.
296-56-43809 Repealed.
296-56-43811 Repealed.
296-56-43813 Repealed.
296-56-43815 Repealed.
296-56-440 Repealed.
296-56-442 Repealed.
296-56-44201 Repealed.
296-56-44203 Repealed.
296-56-44205 Repealed.
296-56-44207 Repealed.
296-56-44209 Repealed.
296-56-446 Repealed.
296-56-44601 Repealed.
296-56-44603 Repealed.
296-56-44605 Repealed.
296-56-44607 Repealed.
296-56-44609 Repealed.
296-56-44611 Repealed.
296-56-44613 Repealed.
296-56-44615 Repealed.
296-56-44617 Repealed.
296-56-455 Repealed.
296-56-45501 Repealed.
296-56-45503 Repealed.
296-56-45505 Repealed.
296-56-45507 Repealed.
296-56-45509 Repealed.
296-56-45511 Repealed.
296-56-45513 Repealed.
296-56-45515 Repealed.
296-56-45517 Repealed.
296-56-46001 Repealed.
296-56-461 Repealed.
296-56-462 Repealed.
296-56-465 Repealed.
296-56-467 Repealed.
296-56-475 Repealed.
296-56-47501 Repealed.
296-56-47503 Repealed.
296-56-47504 Repealed.
296-56-47505 Repealed.
296-56-47507 Repealed.
296-56-47509 Repealed.
296-56-47511 Repealed.
296-56-47513 Repealed.
296-56-47515 Repealed.

296-56-47517 Repealed.
296-56-47519 Repealed.
296-56-47521 Repealed.
296-56-47523 Repealed.
296-56-47525 Repealed.
296-56-47527 Repealed.
296-56-47529 Repealed.
296-56-47531 Repealed.
296-56-480 Repealed.
296-56-48001 Repealed.
296-56-48003 Repealed.
296-56-48005 Repealed.
296-56-490 Repealed.
296-56-495 Repealed.
296-56-500 Repealed.
296-56-50001 Repealed.
296-56-50003 Repealed.
296-56-50005 Repealed.
296-56-50007 Repealed.
296-56-50009 Repealed.
296-56-50010 Repealed.
296-56-50011 Repealed.
296-56-50013 Repealed.
296-56-50015 Repealed.
296-56-50017 Repealed.
296-56-50019 Repealed.
296-56-50021 Repealed.
296-56-50023 Repealed.
296-56-50025 Repealed.
296-56-50027 Repealed.
296-56-510 Repealed.
296-56-520 Repealed.
296-56-535 Repealed.
296-56-53501 Repealed.
296-56-53503 Repealed.
296-56-560 Repealed.
296-56-600 Marine terminals.
296-56-60001 Scope and applicability.
296-56-60003 Variance and procedure.
296-56-60005 Definitions.
296-56-60007 Housekeeping.
296-56-60009 Accident prevention program.
296-56-60011 Slings.
296-56-60013 Stacking of cargo and pallets.
296-56-60015 Coopering.
296-56-60017 Line handling.
296-56-60019 Standard gauge railroad operations.
296-56-60021 Signals displayed by each maintenance crew.
296-56-60023 Warning flags or lights.
296-56-60025 Signals unobscured.
296-56-60027 Audible warning system.
296-56-60029 Safety observer on railroad switching.
296-56-60031 Warning at road crossing.
296-56-60033 Flying switches.
296-56-60035 Clearance from railroad tracks.
296-56-60037 Car plates.
296-56-60039 Dockboards (bridge plates).
296-56-60041 Log handling.
296-56-60043 Movement of barges and railcars.
296-56-60045 Communication.
296-56-60047 Open fires.
296-56-60049 Hazardous cargo.
296-56-60051 Handling explosives or hazardous materials.
296-56-60053 Hazardous atmospheres and substances.
296-56-60055 Carbon monoxide.
296-56-60057 Fumigants, pesticides, insecticides and hazardous preservatives.
296-56-60059 First-aid and lifesaving facilities.
296-56-60060 First-aid training and certification.
296-56-60062 First-aid kit.
296-56-60065 First-aid station.
296-56-60067 First-aid room.
296-56-60069 Personnel.

CARGO HANDLING GEAR AND EQUIPMENT

296-56-60071 House falls.
296-56-60073 Miscellaneous auxiliary gear.

- 296-56-60075 Cargo boards and other type pallet boards.
- 296-56-60077 Powered industrial trucks.
- 296-56-60079 General rules applicable to vehicles.
- 296-56-60081 Multipiece rim wheels.
- 296-56-60083 Cranes and derricks.
- 296-56-60085 Crane load and limit devices.
- 296-56-60087 Winches.
- 296-56-60089 Conveyors.
- 296-56-60091 Spouts, chutes, hoppers, bins, and associated equipment.
- 296-56-60093 Certification of marine terminal material handling devices.
- 296-56-60095 Advisory crane certification panel.
- 296-56-60097 Unit proof load test and inspection.
- 296-56-60098 Examination and inspection of cranes and derricks.
- 296-56-60099 Hand tools.

SPECIALIZED TERMINALS

- 296-56-60101 General.
- 296-56-60103 Terminals handling intermodal containers or roll-on roll-off operations.
- 296-56-60105 Grain elevator terminals.
- 296-56-60107 Terminal facilities handling menhaden and similar species of fish.

PERSONAL PROTECTION

- 296-56-60109 Eye protection.
- 296-56-60110 Respiratory protection.
- 296-56-60111 Head protection.
- 296-56-60113 Foot protection.
- 296-56-60115 Other protective measures.
- 296-56-60117 Maintenance and load limits.
- 296-56-60119 Protection from falling.
- 296-56-60121 Minimum safety requirements for docks and dock facilities.
- 296-56-60123 Guarding of edges.
- 296-56-60125 Clearance heights.
- 296-56-60127 Cargo doors.
- 296-56-60129 Platforms and skids.
- 296-56-60131 Elevators and escalators.
- 296-56-60133 Manlifts.

MANLIFTS—ELECTRIC

- 296-56-60135 Manlifts.
- 296-56-60137 Repealed.
- 296-56-60139 Hoistway enclosures and landings.
- 296-56-60141 Scope and application.
- 296-56-60143 Hoistway gates.
- 296-56-60145 Elevator car.
- 296-56-60147 Elevator doors.
- 296-56-60149 Counterweight, enclosures, and fastenings.
- 296-56-60151 Guide rails.
- 296-56-60153 Hoisting ropes.
- 296-56-60155 Space under hoistway.
- 296-56-60157 Car safeties.
- 296-56-60159 Brakes.
- 296-56-60161 Car controls and safety devices.
- 296-56-60167 Hoisting machine mechanisms.
- 296-56-60169 Elevator car and counterweight buffers.
- 296-56-60171 General requirements.

MANLIFTS—HAND POWER

- 296-56-60180 Scope and application.
- 296-56-60182 Repealed.
- 296-56-60183 Hoistway landings.
- 296-56-60185 Hoistway clearances.
- 296-56-60187 Habitable space under hoistways.
- 296-56-60189 Hoistway guide rails.
- 296-56-60191 Buffer springs and overtravel of car.
- 296-56-60193 Car specifications.
- 296-56-60195 Counterweights.
- 296-56-60197 Sheaves.
- 296-56-60199 Hoisting ropes.
- 296-56-60201 Operating rope.
- 296-56-60203 Lighting.
- 296-56-60205 Overhead supports.
- 296-56-60207 General requirements.

- 296-56-60209 Fixed ladders.
- 296-56-60211 Portable ladders.
- 296-56-60213 Jacob's ladders.
- 296-56-60215 Fixed stairways.
- 296-56-60217 Spiral stairways.
- 296-56-60219 Employee exits.
- 296-56-60221 Illumination.
- 296-56-60223 Passage between levels and across openings.
- 296-56-60225 Guarding temporary hazards.
- 296-56-60227 River banks.
- 296-56-60229 Sanitation.
- 296-56-60231 Signs and marking.
- 296-56-60233 Related terminal operations and equipment—Machine guarding.
- 296-56-60235 Welding, cutting and heating (hot work).
- 296-56-60237 Spray painting.
- 296-56-60239 Compressed air.
- 296-56-60241 Air receivers.
- 296-56-60243 Fuel handling and storage.
- 296-56-60245 Battery charging and changing.
- 296-56-60247 Prohibited operations.
- 296-56-60249 Petroleum docks.
- 296-56-60251 Boat marinas.
- 296-56-60253 Canneries and cold storage docks.
- 296-56-60255 Excerpts from Revised Code of Washington.

DISPOSITION OF SECTIONS FORMERLY CODIFIED IN THIS CHAPTER

- 296-56-401 Scope and application. [Order 74-14, § 296-56-401, filed 4/22/74; Order 69-3, § 296-56-401, filed 5/26/69, effective 7/1/69; Rules (part), filed 9/24/65; Rule (part), filed 3/23/60.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-56-405 Practical application. [Order 74-14, § 296-56-405, filed 4/22/74.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-56-410 Introduction. [Order 74-14, § 296-56-410, filed 4/22/74; Introduction, filed 9/24/65; Rules (part), filed 3/23/60.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-56-412 Variance and procedure. [Order 74-14, § 296-56-412, filed 4/22/74.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-56-415 Definitions. [Order 74-14, § 296-56-415, filed 4/22/74.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-56-420 Education and first-aid standards. [Order 76-7, § 296-56-420, filed 3/1/76; Order 74-14, § 296-56-420, filed 4/22/74; Rules (part), filed 9/24/65; Rules (part), filed 3/23/60.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-56-430 Management's responsibility. [Order 74-14, § 296-56-430, filed 4/22/74; Rules (part), filed 9/24/65; Rules (part), filed 3/23/60.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-56-432 Employee's responsibility. [Order 74-14, § 296-56-432, filed 4/22/74.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-56-435 Accident prevention program. [Order 74-14, § 296-56-435, filed 4/22/74.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-56-436 General safety requirements. [Order 76-7, § 296-56-436, filed 3/1/76; Order 74-14, § 296-56-436, filed 4/22/74.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.

- 296-56-43801 Eye protection. [Order 74-14, § 296-56-43801, filed 4/22/74.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-56-43803 Respiratory protection. [Statutory Authority: RCW 49.17.040 and 49.17.050. 83-24-013 (Order 83-34), § 296-56-43803, filed 11/30/83; Order 74-14, § 296-56-43803, filed 4/22/74.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-56-43805 Protective clothing. [Order 74-14, § 296-56-43805, filed 4/22/74.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-56-43807 Foot protection. [Order 74-14, § 296-56-43807, filed 4/22/74.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-56-43809 Head protection. [Order 74-14, § 296-56-43809, filed 4/22/74.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-56-43811 Required clothing, caps, etc. [Order 74-14, § 296-56-43811, filed 4/22/74.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-56-43813 Protection from falling. [Order 74-14, § 296-56-43813, filed 4/22/74.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-56-43815 Personal flotation devices. [Order 76-7, § 296-56-43815, filed 3/1/76.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-56-440 Minimum safety requirements for docks and dock facilities. [Order 74-14, § 296-56-440, filed 4/22/74; Order 69-3, § 296-56-440, filed 5/26/69, effective 7/1/69; § I, Rules 1.010-1.030, filed 9/24/65; Rule (part), filed 3/23/60.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-56-442 Crane and spout certification, application. [Order 74-14, § 296-56-442, filed 4/22/74.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-56-44201 Qualifications of persons making inspections, issuance of certificates, posting certificates, etc. [Order 74-14, § 296-56-44201, filed 4/22/74.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-56-44203 Unit proof load test and inspection. [Order 74-14, § 296-56-44203, filed 4/22/74.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-56-44205 Examination and inspection of cranes and derricks. [Order 74-14, § 296-56-44205, filed 4/22/74.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-56-44207 Equipment and information to be installed or posted on cranes or derricks. [Order 74-14, § 296-56-44207, filed 4/22/74.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-56-44209 Cargo spouts, suckers and similar types of equipment. [Order 74-14, § 296-56-44209, filed 4/22/74.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-56-446 Cranes and crane operations—Scope and application. [Order 74-14, § 296-56-446, filed 4/22/74.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-56-44601 Operators. [Order 74-14, § 296-56-44601, filed 4/22/74.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-56-44603 Signalmen. [Order 74-14, § 296-56-44603, filed 4/22/74.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-56-44605 Signals. [Order 74-14, § 296-56-44605, filed 4/22/74.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-56-44607 Signalman for power units. [Order 74-14, § 296-56-44607, filed 4/22/74.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-56-44609 Radio communication. [Order 74-14, § 296-56-44609, filed 4/22/74.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-56-44611 Obstructions. [Order 74-14, § 296-56-44611, filed 4/22/74.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-56-44613 Crane clearance. [Order 74-14, § 296-56-44613, filed 4/22/74.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-56-44615 Qualifications of machinery operators. [Order 74-14, § 296-56-44615, filed 4/22/74.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-56-44617 Radio controls. [Order 74-14, § 296-56-44617, filed 4/22/74.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-56-455 Inspection of stevedore equipment or gear—Scope and application. [Order 74-14, § 296-56-455, filed 4/22/74.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-56-45501 General requirements. [Order 74-14, § 296-56-45501, filed 4/22/74.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-56-45503 Fiber rope and fiber rope slings. [Order 76-7, § 296-56-45503, filed 3/1/76; Order 74-14, § 296-56-45503, filed 4/22/74.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-56-45505 Wire rope and wire rope slings. [Order 74-14, § 296-56-45505, filed 4/22/74.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-56-45507 Chains and chain slings. [Order 74-14, § 296-56-45507, filed 4/22/74.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-56-45509 Shackles. [Order 74-14, § 296-56-45509, filed 4/22/74.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-56-45511 Hooks other than hand hooks. [Order 74-14, § 296-56-45511, filed 4/22/74.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-56-45513 Cargo boards and other type pallet boards. [Order 74-14, § 296-56-45513, filed 4/22/74.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-56-45515 Chutes, gravity conveyors and rollers. [Order 74-14, § 296-56-45515, filed 4/22/74.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-56-45517 Disposition of defective material or gear. [Order 74-14, § 296-56-45517, filed 4/22/74.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-56-46001 Keep clear of lines. [Order 74-14, § 296-56-460 (codified as WAC 296-56-46001), filed 4/22/74.]

- Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-56-461 Greasing power units. [Order 74-14, § 296-56-461, filed 4/22/74.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-56-462 Use of tools. [Order 76-7, § 296-56-462, filed 3/1/76; Order 74-14, § 296-56-462, filed 4/22/74.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-56-465 Jacob's ladders. [Order 74-14, § 296-56-465, filed 4/22/74.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-56-467 Secure storage. [Order 74-14, § 296-56-467, filed 4/22/74.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-56-475 Standard gauge railroad operations—Scope and application. [Order 74-14, § 296-56-475, filed 4/22/74.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-56-47501 Warning flags or light. [Order 74-14, § 296-56-47501, filed 4/22/74.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-56-47503 Signals unobscured. [Order 74-14, § 296-56-47503, filed 4/22/74.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-56-47504 Derails. [Order 74-14, § 296-56-47504, filed 4/22/74.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-56-47505 Signals displayed by each maintenance crew. [Order 74-14, § 296-56-47505, filed 4/22/74.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-56-47507 Warning device. [Order 74-14, § 296-56-47507, filed 4/22/74.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-56-47509 Audible warning system. [Order 74-14, § 296-56-47509, filed 4/22/74.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-56-47511 Passageway across railroad tracks required. [Order 74-14, § 296-56-47511, filed 4/22/74.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-56-47513 Cars to be immobilized. [Order 74-14, § 296-56-47513, filed 4/22/74.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-56-47515 Working in railroad cars. [Order 74-14, § 296-56-47515, filed 4/22/74.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-56-47517 Safety observer on railroad switching. [Order 74-14, § 296-56-47517, filed 4/22/74.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-56-47519 Warning at road crossing. [Order 74-14, § 296-56-47519, filed 4/22/74.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-56-47521 Preparation of cars for moving. [Order 74-14, § 296-56-47521, filed 4/22/74.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-56-47523 Flying switches. [Order 74-14, § 296-56-47523, filed 4/22/74.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-56-47525 Car opening devices. [Order 74-14, § 296-56-47525, filed 4/22/74.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-56-47527 Safe car floors. [Order 74-14, § 296-56-47527, filed 4/22/74.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-56-47529 Clearance from railroad tracks. [Order 74-14, § 296-56-47529, filed 4/22/74.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-56-47531 Safety while moving cars. [Order 74-14, § 296-56-47531, filed 4/22/74.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-56-480 Mobile vehicles—Scope and application. [Order 74-14, § 296-56-480, filed 4/22/74; § V, Rules 5.010-5.280 filed 9/24/65; Rules (part), filed 3/23/60.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-56-48001 Traffic lanes. [Order 74-14, § 296-56-48001, filed 4/22/74.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-56-48003 Duties of operator. [Order 74-14, § 296-56-48003, filed 4/22/74.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-56-48005 Vehicle equipment and maintenance. [Order 74-14, § 296-56-48005, filed 4/22/74.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-56-490 Lift jitneys. [Order 74-14, § 296-56-490, filed 4/22/74; § VI, Rules 6.010-6.100, filed 9/24/65; Rules (part), filed 3/23/60.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-56-495 Changing and charging storage batteries. [Order 74-14, § 296-56-495, filed 4/22/74.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-56-500 Handling of cargo—Scope and application. [Order 74-14, § 296-56-500, filed 4/22/74; § VII, Rules 7.010-7.110, filed 9/24/65; Rules (part), filed 3/23/60.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-56-50001 Nonuse of defective slings. [Order 74-14, § 296-56-50001, filed 4/22/74.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-56-50003 Landing loads. [Order 74-14, § 296-56-50003, filed 4/22/74.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-56-50005 Secure hoisted cargo. [Order 74-14, § 296-56-50005, filed 4/22/74.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-56-50007 Hoisting material by bands or fasteners. [Order 76-7, § 296-56-50007, filed 3/1/76; Order 74-14, § 296-56-50007, filed 4/22/74.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-56-50009 Slings for handling pulp. [Order 74-14, § 296-56-50009, filed 4/22/74.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-56-50010 Containerized cargo secured by bands or wire. [Order 74-14, § 296-56-50010, filed 4/22/74.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.

- 296-56-50011 Securing glass cases. [Order 74-14, § 296-56-50011, filed 4/22/74.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-56-50013 Hoisting bulk cargo. [Order 76-7, § 296-56-50013, filed 3/1/76; Order 74-14, § 296-56-50013, filed 4/22/74.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-56-50015 Hand and eye protection on wire rope. [Order 74-14, § 296-56-50015, filed 4/22/74.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-56-50017 Car plates. [Order 74-14, § 296-56-50017, filed 4/22/74.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-56-50019 Dockboards (bridge plates). [Order 74-14, § 296-56-50019, filed 4/22/74.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-56-50021 Trucks and railroad cars. [Order 74-14, § 296-56-50021, filed 4/22/74.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-56-50023 Hazardous cargo. [Order 74-14, § 296-56-50023, filed 4/22/74.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-56-50025 Recouping broken cargo. [Order 74-14, § 296-56-50025, filed 4/22/74.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-56-50027 Containerized cargo. [Order 74-14, § 296-56-50027, filed 4/22/74.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-56-510 Handling explosives or hazardous materials. [Order 74-14, § 296-56-510, filed 4/22/74; § VIII, Rules 8.010-8.070, filed 9/24/65; Rules (part), filed 3/23/60.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-56-520 Log handling on docks. [Order 74-14, § 296-56-520, filed 4/22/74; § IX, Rules 9.010-9.090, filed 9/24/65; Rules (part), filed 3/23/60.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-56-535 Petroleum docks. [Order 74-14, § 296-56-535, filed 4/22/74.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-56-53501 Boat marinas. [Order 74-14, § 296-56-53501, filed 4/22/74.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-56-53503 Canneries and cold storage docks. [Order 74-14, § 296-56-53503, filed 4/22/74.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-56-560 Excerpts from Revised Code of Washington. [Order 74-14, § 296-56-560, filed 4/22/74; Rules (part), filed 9/24/65; Rules (part), filed 3/23/60.] Repealed by 85-01-022 (Order 84-24), filed 12/11/84. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-56-60137 Waiver and variance. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60137, filed 12/11/84.] Repealed by 85-10-004 (Order 85-09), filed 4/19/85. Statutory Authority: RCW 49.17.040 and 49.17.050.
- 296-56-60182 Waiver and variance. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60182, filed 12/11/84.] Repealed by 85-10-004 (Order 85-09), filed 4/19/85. Statutory Authority: RCW 49.17.040 and 49.17.050.

WAC 296-56-401 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-56-405 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-56-410 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-56-412 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-56-415 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-56-420 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-56-430 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-56-432 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-56-435 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-56-436 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-56-43801 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-56-43803 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-56-43805 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-56-43807 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-56-43809 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-56-43811 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-56-43813 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-56-43815 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-56-440 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-56-442 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-56-44201 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-56-47523 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-56-47525 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-56-47527 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-56-47529 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-56-47531 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-56-480 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-56-48001 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-56-48003 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-56-48005 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-56-490 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-56-495 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-56-500 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-56-50001 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-56-50003 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-56-50005 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-56-50007 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-56-50009 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-56-50010 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-56-50011 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-56-50013 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-56-50015 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-56-50017 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-56-50019 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-56-50021 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-56-50023 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-56-50025 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-56-50027 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-56-510 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-56-520 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-56-535 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-56-53501 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-56-53503 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-56-560 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-56-600 Marine terminals. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-600, filed 12/11/84.]

WAC 296-56-60001 Scope and applicability. (1) The rules included in this chapter apply throughout the state of Washington, to any and all waterfront operations under the jurisdiction of the department of labor and industries, division of industrial safety and health.

(2) These minimum requirements are promulgated to augment the general safety and health standards, and any other safety and health standards promulgated by the department of labor and industries which are applicable to all places of employment under the jurisdiction of the department of labor and industries. The rules of this chapter, and the rules of chapters 296-24 and 296-62 WAC are applicable to all longshore, stevedore and related waterfront operations: *Provided*, That such rules shall not be applicable to those operations under the exclusive safety jurisdiction of the federal government.

(3) The provisions of this chapter shall prevail in the event of a conflict with, or duplication of, provisions contained in chapters 296-24 and 296-62 WAC.

(a) Electrical—WAC 296-24-956 through 296-24-960.

(b) Toxic and hazardous substances. Chapter 296-62 WAC applies where specifically referenced in this standard, except that the requirements of chapter 296-62 WAC do not apply when a substance or cargo is contained within a sealed, intact means of packaging or containment complying with department of transportation or International Maritime Organization requirements.

(c) Noise—WAC 296-62-09015.

(d) Commercial diving operations—Chapter 296-37 WAC.

(e) Safety requirements for scaffolding—WAC 296-24-825.

(f) Abrasive blasting—WAC 296-24-675.

(g) Access to employee exposure and medical records—WAC 296-62-052.

(h) Respiratory protection—WAC 296-62-071.

(i) Grain elevators—Chapter 296-88 WAC.

(4) The provisions of WAC 296-56-600 through 296-56-60255 do not apply to the following:

(a) Fully automated bulk coal handling facilities contiguous to electrical power generating plants.

(b) Facilities subject to the regulations of the office of pipeline safety regulation of the materials transportation bureau, department of transportation, to the extent such regulations apply. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-10-004 (Order 85-09), § 296-56-60001, filed 4/19/85; 85-01-022 (Order 84-24), § 296-56-60001, filed 12/11/84.]

WAC 296-56-60003 Variance and procedure. Any employer may apply to the director for an order for a variance from any rule or regulation establishing a safety and health standard promulgated under this chapter. Affected employees shall be given notice of each such application and in the manner prescribed by this chapter shall be informed of their right to request a hearing on any such application. The director shall issue such order granting a variance, after opportunity for an inspection, if he determines or decides after a hearing has been held, if request for hearing has been made, that the applicant for the variance has demonstrated by a preponderance of the evidence that the conditions, practices, means, methods, operations, or processes used or proposed to be used by such applicant employer will provide employment and places of employment to his employees which are as safe and healthful as those which would prevail if he complied with the safety and health standard or standards from which the variance is sought. The order so issued shall prescribe the conditions the employer must maintain, and the practices, means, methods, operations, and processes which he must adopt and utilize to the extent they differ from the standard in question. At any time after six months has elapsed from the date of the issuance of the order granting a variance upon application of an employer, employee or the director on his own motion, after notice has been given in the manner prescribed for the issuance of such order may modify or revoke the order granting the variance from any standard promulgated under the authority of this

chapter. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60003, filed 12/11/84.]

WAC 296-56-60005 Definitions. (1) "Apron" means that open portion of a marine terminal immediately adjacent to a vessel berth and used in the direct transfer of cargo between the terminal and vessel.

(2) "Assistant director of industrial safety and health" means the assistant director of industrial safety and health, department of labor and industries or his authorized representative.

"Authorized," in reference to an employee's assignment, means selected by the employer for that purpose.

(3) "Cargo door" (transit shed door) means a door designed to permit transfer of cargo to and from a marine terminal structure.

(4) "Cargo packaging" means any method of containment for shipment, including cases, cartons, crates and sacks, but excluding large units such as intermodal containers, vans or similar devices.

(5) "Confined space" means a space having all of the following characteristics:

(a) Small size;

(b) Severely limited natural ventilation;

(c) Capability to accumulate or contain a hazardous atmosphere;

(d) Exits that are not readily accessible; and

(e) A design not meant for continuous human occupancy.

Examples of confined spaces are intermodal tank containers, brailwater tanks and portable tanks.

(6) "Conveyor" means a device designed exclusively for transporting bulk materials, packages or objects in a predetermined path and having fixed or selective points of loading or discharge.

(7) "Danger zone" means any place in or about a machine or piece of equipment where an employee may be struck by or caught between moving parts, caught between moving and stationary objects or parts of the machine, caught between the material and a moving part of the machine, burned by hot surfaces or exposed to electric shock. Examples of danger zones are nip and shear points, shear lines, drive mechanisms, and areas beneath counterweights.

(8) "Designated person" means a person who possesses specialized abilities in a specific area and is assigned by the employer to perform a specific task in that area.

(9) "Dock" means any wharf, pier, terminal, warehouse, or any other place where cargo is stored, assembled, received, or prepared for transfer to or from a vessel, railway car or truck.

(10) "Dock facilities" means all piers, wharves, sheds, aprons, dolphins, cranes, or other gear or equipment owned or controlled by the dock or facility owner, where cargo or materials are loaded, moved, or handled to or from a vessel.

(11) "Dockboard" (bridge plate or car plate) means a device utilized to span the gap between railroad cars, or

between railroad cars or highway vehicles and the loading dock or platform. A car plate may be fixed, adjustable, portable, powered, or unpowered.

(12) "Enclosed space" means an indoor space, other than a confined space, that may contain or accumulate a hazardous atmosphere due to inadequate natural ventilation. Examples of enclosed spaces are trailers, railcars, and storage rooms.

(13) "Examination," as applied to material handling devices required by this section to be certificated, means a comprehensive survey consisting of the criteria outlined in WAC 296-56-60093 as applicable to the type of gear or device. The examination is supplemented by a unit proof test in the case of annual survey.

(14) "Flammable atmosphere" means an atmosphere containing more than ten percent of the lower flammable limit of a flammable or combustible vapor or dust mixed with air.

(15) "Front-end attachments."

(a) As applied to power-operated industrial trucks, means the various devices, such as roll clamps, rotating and sideshifting carriages, magnets, rams, crane arms or booms, load stabilizers, scoops, buckets, and dumping bins, attached to the load end for handling lifts as single or multiple units.

(b) As applied to cranes, means various attachments applied to the basic machine for the performance of functions such as lifting, clamshell or magnet services.

(16) "Fumigant" is a substance or mixture of substances, used to kill pests or prevent infestation, which is a gas or is rapidly or progressively transformed to the gaseous state, even though some nongaseous or particulate matter may remain and be dispersed in the treatment space.

(17) "Hazardous cargo, material, substance or atmosphere" means:

(a) Any substance listed in chapter 296-62 WAC;

(b) Any material in the hazardous materials table and hazardous materials communications regulations of the Department of Transportation, 49 CFR Part 172;

(c) Any article not properly described by a name in the hazardous materials table and hazardous materials communications regulations of the Department of Transportation, 49 CFR Part 172 but which is properly classified under the definition of those categories of dangerous articles given in 49 CFR Part 173; or

(d) Any atmosphere with an oxygen content of less than nineteen and one-half percent.

(18) "House falls" means spans and supporting members, winches, blocks, and standing and running rigging forming part of a marine terminal and used with a vessel's cargo gear to load or unload by means of married falls.

(19) "Inspection," as applied to material handling devices required by this part to be certificated, means a complete visual examination of all visible parts of the device.

(20) "Intermodal container" means a reusable cargo container of rigid construction and rectangular configuration, intended to contain one or more articles of cargo or bulk commodities for transportation by water and one

or more other transport modes without intermediate cargo handling. The term includes completely enclosed units, open top units, fractional height units, units incorporating liquid or gas tanks and other variations fitting into the container system, demountable or with attached wheels. It does not include cylinders, drums, crates, cases, cartons, packages, sacks, unitized loads or any other form of packaging.

(21) "Loose gear" means removable and replaceable components of equipment or devices which may be used with or as a part of assembled material handling units for purposes such as making connections, changing line direction and multiplying mechanical advantage. Examples are shackles and snatch blocks.

(22) "Marina" means a small harbor or boat basin providing dockage, supplies, and services for small craft.

(23) "Marine terminal" means wharves, bulkheads, quays, piers, docks and other berthing locations and adjacent storage or contiguous areas and structures associated with the primary movements of cargo or materials from vessel to shore or shore to vessel including structures which are devoted to receiving, handling, holding, consolidation, and loading or delivery of waterborne shipments and passengers, including areas devoted to the maintenance of the terminal or equipment. The term does not include production or manufacturing areas having their own docking facilities and located at a marine terminal nor does the term include storage facilities directly associated with those production or manufacturing areas. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60005, filed 12/11/84.]

WAC 296-56-60007 Housekeeping. (1) Active work areas shall be kept free of equipment and materials not in use, and clear of debris, projecting nails, strapping and other sharp objects not necessary for the work in progress.

(2) Hatch beams, covers, and pontoons placed in terminal working areas shall be stowed in stable piles with beams secured against tipping or falling. Alternatively, beams may be laid on their sides. When beams and pontoons are stowed in tiers more than one high, dunnage or other suitable material shall be used under and between tiers.

(3) Cargo and material shall not obstruct access to vessels, cranes, vehicles, or buildings. Means of access and egress within buildings shall be similarly unobstructed.

(4) The employer shall eliminate, to the extent possible, conditions causing slippery working and walking surfaces in immediate work areas used by employees. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60007, filed 12/11/84.]

WAC 296-56-60009 Accident prevention program. (1) An accident prevention program, wherein there is equitable management-employee participation, shall be established in all establishments, industrial plants, or operations.

(2) It shall be the responsibility of the employer to initiate and maintain such accident prevention programs as may be necessary to comply with this section. The division of industrial safety and health may be contacted for assistance in initiating and maintaining an effective accident prevention program.

(3) All accident prevention programs shall be tailored to the needs of the particular operation.

(4) Employer and employee representatives, as elected, delegated or appointed, shall attend and actively take part in frequent and regular safety committee meetings.

(5) Accident prevention programs shall provide for employer-employee safety meetings and frequent and regular safety inspections of job sites, materials, equipment, and operating procedures.

(6) A record of safety activities, such as inspections and meetings, shall be maintained by the employer for a period covering the previous twelve months and shall be made available, upon request, to noncompliance personnel of the department of labor and industries.

(7) The employees shall individually comply with all safety rules and cooperate with management in carrying out the accident prevention program.

(8) To make effective the preceding statement and promote on-the-job accident prevention, committees shall be established in each port. These committees shall consist of an equal number of port or stevedore company and longshoremen representatives at the job level with the industry or company safety supervisor serving as secretary and coordinator. A function of this committee is to obtain the interest of the workers in accident prevention by providing for their actual participation in the program, to direct their attention to the real causes of accidents, and provide a means for making practical use of their intimate knowledge of working conditions and practices.

(9) It is further intended that this program will produce mutually practical and effective recommendations regarding correction of accident-producing circumstances and conditions. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60009, filed 12/11/84.]

WAC 296-56-60011 Slings. (1) Drafts shall be safely slung before being hoisted. Loose dunnage or debris hanging or protruding from loads shall be removed.

(2) Bales of cotton, wool, cork, wood pulp, gunny bags, or similar articles shall be hoisted only by straps strong enough to support the weight of the bale. At least two hooks, each in a separate strap, shall be used.

(3) Unitized loads bound by bands or straps may be hoisted by the banding or strapping only if the banding or strapping is suitable for hoisting and is strong enough to support the weight of the load.

(4) Additional means of hoisting shall be employed to ensure safe lifting of unitized loads having damaged banding or strapping.

(5) Case hooks shall be used only with cases designed to be hoisted by these hooks.

(6) Loads requiring continuous manual guidance during handling shall be guided by guide ropes (tag lines) that are long enough to control the load.

(7) Intermodal containers shall be handled in accordance with WAC 296-56-60103(5).

(8) Cargo handling bridles, such as pallet bridles, which are to remain attached to the hoisting gear while hoisting successive drafts, shall be attached by shackles, or other positive means shall be taken to prevent them from becoming accidentally disengaged from the cargo hook.

(9) Drafts of lumber, pipe, dunnage and other pieces, the top layer of which is not bound by the sling, shall be slung in such a manner as to prevent sliders. Double slings shall be used on unstrapped dunnage, except when, due to the size of hatch or deep tank openings, it is impractical to use them.

(10) Hand loaded buckets, tubs, bins and baskets used in handling bulk cargo shall not be loaded above their rim. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60011, filed 12/11/84.]

WAC 296-56-60013 Stacking of cargo and pallets. Cargo, pallets, and other material stored in tiers shall be stacked in such a manner as to provide stability against sliding and collapse. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60013, filed 12/11/84.]

WAC 296-56-60015 Coopering. Repair and reconditioning of damaged or leaking cargo packaging (coopering) shall be performed so as not to endanger employees. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60015, filed 12/11/84.]

WAC 296-56-60017 Line handling. (1) In order to provide safe access for handling lines while mooring and unmooring vessels, cargo or material shall not be stowed or vehicles placed where they obstruct the work surface to be used.

(2) When stringpiece or apron width is insufficient for safe footing, grab lines on rails shall be installed on the sides of permanent structures. ("Stringpiece" means a narrow walkway between the water edge of a berth and a shed or other structure.)

(3) Areas around bitts or cleats where workers perform their duties as line handlers shall be lighted as required in this section and have a nonslip surface around each bitt or cleat.

(4) Walkways on which mooring hausers must be moved may have the handrail omitted on the line handling side provided a six-inch toeboard is installed. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60017, filed 12/11/84.]

WAC 296-56-60019 Standard gauge railroad operations. All sections of this chapter which include WAC

296-56-60019 through 296-56-60041 apply to standard gauge railroad operations.

(1) Work shall be performed in railcars only if floors of the railcars are in visibly safe condition for the work activity being conducted and equipment being used.

(2) A route shall be established to allow employees to pass to and from places of employment without passing under, over or through railcars, or between cars less than ten feet (3 m) apart on the same track.

(3) The employer shall direct that no employees remain in railcars after work is concluded.

(4) Railcars shall be chocked or otherwise prevented from moving:

(a) While dockboards or carplates are in position; or

(b) While employees are working within, on or under the railcars or near the tracks at the ends of the cars.

(5) When employees are working in, on, or under a railcar, positive means shall be taken to protect them from exposure to impact from moving railcars.

(6) Work being carried on, in, or under cars which subjects employees to the hazard of moving railroad equipment shall be protected by flags and derails set a minimum of fifty feet from one or both ends of the worksite. Where the spur track switch is less than fifty feet from the work location, the switch padlocked in the open position will take the place of the derail and the blue flag shall be placed at that point.

(7) Before cars are moved, unsecured and overhanging stakes, wire straps, banding, and similar objects shall be removed or placed so as not to create hazards.

(8) The employer shall institute all necessary controls during railcar movement to safeguard personnel. If winches or capstans are employed for movement, employees shall stand clear of the hauling rope and shall not stand between the rope and the cars.

(9) Before being opened fully, doors shall be opened slightly to ensure that the load has not shifted during transit. Special precautions shall be taken if the doors being opened are visibly damaged.

(10) If power industrial trucks are used to open freight car doors, the trucks or the railcar doors shall be equipped with door opening attachments. Employees shall stand clear of the railcar doors while they are being opened and closed.

(11) Only railcar door openers or power trucks equipped with door opening attachments shall be used to open jammed doors.

(12) Employees shall not remain in or on gondolas or flat cars when drafts that create overhead, caught-in, caught-between or struck-by hazards are being landed in or on the railcar; end gates, if raised, shall be secured.

(13) Operators of railcar dumps shall have an unrestricted view of dumping operations and shall have emergency means of stopping movement.

(14) Recessed railroad switches shall be enclosed to provide a level surface.

(15) Warning signs shall be posted where doorways open onto tracks, at blind corners and at similar places where vision may be restricted.

(16) Warning signs shall be posted if insufficient clearance for personnel exists between railcars and

structures. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-10-004 (Order 85-09), § 296-56-60019, filed 4/19/85; 85-01-022 (Order 84-24), § 296-56-60019, filed 12/11/84.]

WAC 296-56-60021 Signals displayed by each maintenance crew. Each maintenance crew shall display and remove its own set of blue signals. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60021, filed 12/11/84.]

WAC 296-56-60023 Warning flags or lights. A blue flag, bright colored flag or blue light shall be displayed at one or both ends of an engine, car(s), or train, to indicate that workers are under or about the railway equipment. When such warning devices are displayed, the equipment shall not be coupled to, or moved. On a deadend spur, a blue light or flag may be displayed adjacent to the switch opening while cars are being loaded or unloaded. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60023, filed 12/11/84.]

WAC 296-56-60025 Signals unobscured. Equipment which would obscure signals shall not be placed on the track. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60025, filed 12/11/84.]

WAC 296-56-60027 Audible warning system. A clearly audible warning system shall be employed when cars are being moved in areas where workers are in the vicinity of the tracks. When the audible warning signal may not be heard above the surrounding noises, a person shall be delegated and stationed close enough to the track crew to warn them, by contact, of the oncoming equipment. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60027, filed 12/11/84.]

WAC 296-56-60029 Safety observer on railroad switching. When persons are required to work between railway cars, underneath railway cars or in areas where switching is done, there shall be a person who shall be charged with the responsibility to warn of an approaching switch of the railway car or cars, unless other reasonable and practical safeguards are provided. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60029, filed 12/11/84.]

WAC 296-56-60031 Warning at road crossing. An audible whistle, horn or bell shall be sounded by the locomotive engineer to give adequate warning prior to switching across any road crossing. In the case of pushing cars with a locomotive, a signalman shall be located at the crossing to give signals in conjunction with other warnings by the engineer. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60031, filed 12/11/84.]

WAC 296-56-60033 Flying switches. Flying switches shall not be used when switching railroad equipment in congested areas or across roadways or walkways. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60033, filed 12/11/84.]

WAC 296-56-60035 Clearance from railroad tracks. Materials shall not be stacked or piled closer than eight and one-half feet from the center line of the railroad tracks. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60035, filed 12/11/84.]

WAC 296-56-60037 Car plates. Whenever workers are required to move cargo into or out of a railway car, a railway car plate shall be used which shall meet the following specifications:

(1) All car plates shall be strong enough to carry maximum loads with a safety factor of three.

(2) All car plates shall be provided with positive stops to prevent shifting of plates. One set of these stops shall be adjustable to take care of different spaces between car door and platform.

(3) Car plates shall be so shaped that edges will always bear on floor of car and platform to prevent "teetering" or rocking.

(4) All car plates shall have skid resistant surfaces.

(5) All car plates are to be provided with toe or guard plates at the sides with a minimum height of four inches.

(6) All car plates must bear no less than six inches back from edge of platform.

(7) Maximum capacity of car plates shall be marked in a conspicuous place.

(8) Car plates shall be provided with an appropriate fixture to enable the plates to be lifted and moved by fork trucks. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60037, filed 12/11/84.]

WAC 296-56-60039 Dockboards (bridge plates). (1) Portable and powered dockboards shall be strong enough to carry the load imposed on them.

(2) Portable dockboards shall be secured in position, either by being anchored or equipped with devices which will prevent their slipping.

(3) Powered dockboards shall be designed and constructed in accordance with commercial standards CS202-56 (1956) *Industrial Lifts and Hinged Loading Ramps* published by the United States Department of Commerce.

(4) Handholds or other effective means, shall be provided on portable dockboards to permit safe handling.

(5) Positive protection shall be provided to prevent railroad cars from being moved while dockboards or bridge plates are in position. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60039, filed 12/11/84.]

WAC 296-56-60041 Log handling. (1) The employer shall ensure that structures (bunks) used to contain logs have rounded corners and rounded structural parts to avoid sling damage.

(2) Two or more binders or equivalently safe means of containment shall remain on logging trucks and railcars to secure logs during movement of the truck or car within the terminal. During unloading, logs shall be prevented from moving while binders are being removed.

(3) Logs shall be hoisted by two slings or by other gear designed for safe hoisting.

(4) Logs placed adjacent to vehicle curbs on the dock shall not be over one tier high unless placed in bunks or so stacked as not to roll or otherwise create a hazard to employees.

(5) Before logs are slung up from the dock, they shall be stably supported to prevent spreading and to allow passage of slings beneath the load. When bunks or similar retaining devices are used, no log shall be higher than the stanchions or retaining members of the device.

(6) Draft of logs for hoisting aboard ship shall not vary in length more than twenty percent.

(7) Audible alarms.

(a) All bidirectional machines, shall be equipped with a horn, distinguishable from the surrounding noise level, which shall be operated as needed when the machine is moving in either direction. The horn shall be maintained in an operative condition.

(b) Automatic back-up alarms shall be installed on bidirectional equipment used to handle logs or containers and shall be maintained in an operative condition. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60041, filed 12/11/84.]

WAC 296-56-60043 Movement of barges and railcars. Barges and railcars shall not be moved by cargo runners (running rigging) from vessel cargo booms, cranes or other equipment not suitable for the purpose. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60043, filed 12/11/84.]

WAC 296-56-60045 Communication. (1) Radio. When practical and safe, crane operators shall be provided with a radio or telephone to be in contact with the signalman or crane chaser in those cases where a signalman or crane chaser is required.

(2) Interference. Cargo handling operations shall not be carried on when noise-producing maintenance, construction or repair work interferes with communication of warnings or instructions. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-10-004 (Order 85-09), § 296-56-60045, filed 4/19/85; 85-01-022 (Order 84-24), § 296-56-60045, filed 12/11/84.]

WAC 296-56-60047 Open fires. Open fires and fires in drums or similar containers are prohibited. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60047, filed 12/11/84.]

WAC 296-56-60049 Hazardous cargo. (1) Before cargo handling operations begin, the employer shall ascertain whether any hazardous cargo is to be handled and shall determine the nature of the hazard. The employer shall inform employees of the nature of any hazard and any special precautions to be taken to prevent employee exposure, and shall instruct employees to notify him of any leaks or spills.

(2) All hazardous cargo shall be slung and secured so that neither the draft nor individual packages can fall as a result of tipping the draft or slacking of the supporting gear.

(3) If hazardous cargo is spilled or if its packaging leaks, employees shall be removed from the affected area until the employer has ascertained the specific hazards, provided any equipment, clothing and ventilation and fire protection equipment necessary to eliminate or protect against the hazard, and has instructed cleanup employees in a safe method of cleaning up and disposing of a spill and handling and disposing of leaking containers. Actual cleanup or disposal work shall be conducted under the supervision of a designated person.

(4) The department of transportation and the United States Coast Guard apply requirements related to handling, storing and transportation of hazardous cargo (see 33 CFR Part 126, 46 CFR, 49 CFR). [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60049, filed 12/11/84.]

WAC 296-56-60051 Handling explosives or hazardous materials. (1) Dangerous or explosive nature to be made known. All workers handling explosive or other hazardous material which is properly labeled pursuant to the Washington state labeling code promulgated by the department of labor and industries, or the Explosive Act, or the Federal and Washington State Food, Drug and Cosmetic Acts, the Federal Insecticide, Fungicide and Rodenticide Act, the Washington Pesticide Act, the Federal Hazardous Substances Labeling Act, the Interstate Commerce Commission and Foreign Commerce regulations, or explosives or other dangerous cargo which is reasonably known by the employers to be mislabeled or to be lacking a required label, shall be thoroughly informed by the employer of the explosive or dangerous nature of the cargo.

(2) Preparation and handling of explosive or hazardous materials. In all shipping operations including, but not limited to, handling, storing, and preparation, compliance with the standards of the Interstate Commerce Commission, the United States Coast Guard, or the safety rules developed by the Institute of Makers of Explosives shall be deemed proper and safe methods of operation.

(3) Handling of breakage. If breakage should occur while handling explosives or other hazardous materials, the foreman shall order the work in the immediate area to cease until the hazard has been removed. It shall be the responsibility of the employer to use a safe method of handling such breakage and placing the same in a location safety remote from the work area.

(4) No smoking. All workers supervising or engaged in the handling, hoisting, stowing of explosives, combustible oxidizing materials or flammable materials shall smoke only in designated areas.

(5) Loading chute. In chuting packaged explosives, care must be exercised to make sure that one package shall have been taken from the mat before starting another. Each package shall have been completely removed from the mat before another is placed on the chute.

(6) Specifications for chutes. In the loading of explosive merchandise in package form where chutes are used, the chutes shall be constructed only of wood. All fastenings thereon shall be of wooden pins, dowelings, or pegs. Metal fastenings may be used, provided they are countersunk.

(7) Mattress landing buffer. The bottoms of the chutes shall be provided with a stuffed mattress not less than four inches thick and of sufficient width and length to allow for safe landing of packages.

(8) Drafts of cargo ascertained by the employer to be hazardous shall be so slung and secured that neither the draft nor individual packages can fall as a result of tipping the draft or slacking the supporting gear. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60051, filed 12/11/84.]

WAC 296-56-60053 Hazardous atmospheres and substances. (1) Purpose and scope. This section covers areas in which the employer is aware that a hazardous atmosphere or substance may exist, except where one or more of the following sections apply: WAC 296-56-60049 Hazardous cargo; 296-56-60055 Carbon monoxide; 296-56-60057 Fumigants, pesticides, insecticides and hazardous preservatives; 296-56-60107 Menhaden terminals; 296-56-60235 Welding, cutting, and heating (hot work); and 296-56-60237 Spray painting.

(2) Determination of hazard.

(a) When the employer is aware that a room, building, vehicle, railcar or other space contains or has contained a hazardous atmosphere, a designated and appropriately equipped person shall test the atmosphere before employee entry to determine whether a hazardous atmosphere exists.

(b) Records of results of any tests required by this section shall be maintained for at least thirty days.

(3) Testing during ventilation. When mechanical ventilation is used to maintain a safe atmosphere, tests shall be made by a designated person to ensure that the atmosphere is not hazardous.

(4) Entry into hazardous atmospheres. Only designated persons shall enter hazardous atmospheres, in which case the following provisions shall apply:

(a) Persons entering a space containing a hazardous atmosphere shall be protected by respiratory and emergency protective equipment meeting the requirements of WAC 296-62-071;

(b) Persons entering a space containing a hazardous atmosphere shall be instructed in the nature of the hazard, precautions to be taken, and the use of protective and emergency equipment. Standby observers, similarly

equipped and instructed, shall continuously monitor the activity of employees within such space;

(c) Except for emergency or rescue operations, employees shall not enter into any atmosphere which has been identified as flammable or oxygen deficient (less than nineteen and one-half percent oxygen). Persons who may be required to enter flammable or oxygen deficient atmospheres in emergency operations shall be instructed in the dangers attendant to those atmospheres and instructed in the use of self-contained breathing apparatus, which shall be utilized.

(d) To prevent inadvertent employee entry into spaces that have been identified as having hazardous, flammable or oxygen deficient atmospheres, appropriate warning signs or equivalent means shall be posted at all means of access to those spaces.

(5) When the packaging of asbestos cargo leaks, spillage shall be cleaned up by designated employees protected from the harmful effects of asbestos as required by WAC 296-62-07517. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60053, filed 12/11/84.]

WAC 296-56-60055 Carbon monoxide. (1) Exposure limits. The carbon monoxide content of the atmosphere in a room, building, vehicle, railcar or any enclosed space shall be maintained at not more than fifty parts per million (0.005%) as an eight-hour time-weighted average and employees shall be removed from the enclosed space if the carbon monoxide concentration exceeds one hundred parts per million (0.01%).

(2) Testing. Tests to determine carbon monoxide concentration shall be made when necessary to ensure that employee exposure does not exceed the limits specified in subsection (1) of this section.

(3) Instrumentation. Tests for carbon monoxide concentration shall be made by designated persons using gas detector tube units certified by NIOSH under 30 CFR Part 11 or other measuring instruments whose accuracy is as great or greater.

(4) Records. A record of the date, time, location and results of carbon monoxide tests shall be available for at least thirty days. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60055, filed 12/11/84.]

WAC 296-56-60057 Fumigants, pesticides, insecticides and hazardous preservatives. (1) When the employer is aware that cargo in a space is or has been stowed, handled, or treated with a fumigant, pesticide, insecticide, or hazardous preservative, a determination shall be made as to whether a hazardous atmosphere is present in the space, and only employees protected as required in subsection (5) of this section shall enter the space if it is hazardous.

(2) Tests to determine the atmospheric concentration of chemicals used to treat cargo shall be:

- (a) Appropriate for the hazard involved;
- (b) Conducted by designated persons; and

(c) Performed at the intervals necessary to ensure that employee exposure does not exceed the permissible exposure limit for the chemical involved.

(3) Results of any tests shall be available for at least thirty days.

(4) Chemicals shall only be applied to cargoes by designated persons.

(5) Only designated persons shall enter hazardous atmospheres, in which case the following provisions apply.

(a) Persons entering a space containing a hazardous atmosphere shall be protected by respiratory and emergency protective equipment meeting the requirements of WAC 296-62-071; and

(b) Persons entering a space containing a hazardous atmosphere shall be instructed in the nature of the hazard, precautions to be taken, and the use of protective and emergency equipment. Standby observers, similarly equipped and instructed, shall continuously monitor the activity of employees within such a space.

(6) Signs shall be clearly posted where fumigants, pesticides or hazardous preservatives have created a hazardous atmosphere. These signs shall note the danger, identify specific chemical hazards, and give appropriate information and precautions, including instructions for the emergency treatment of employees affected by any chemical in use. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60057, filed 12/11/84.]

WAC 296-56-60059 First-aid and lifesaving facilities. (1) Employers shall instruct employees to report every injury, regardless of severity, to the employer.

(2) A first-aid kit shall be available at the terminal, and at least one person holding a valid first-aid certificate shall be at the terminal when work is in progress.

(3) First-aid kits shall be weatherproof and contain individual sealed packages for each item that must be kept sterile. Each kit shall include at least the following items: Gauze roller bandages, 1 inch and 2 inch (25.4 mm and 50.8 mm); gauze compress bandages, 4 inch (101.6 mm); adhesive bandages, 1 inch (25.4 mm); triangular bandage, 40 inch (101.6 cm); ammonia inhalants and ampules; antiseptic applicators or swabs; eye dressing; wire or thin board splints; forceps and tourniquet; and first-aid dressing.

(4) Stretchers permanently equipped with bridles for hoisting shall be readily accessible. A blanket or other suitable covering shall be available.

(5) Telephone or equivalent means of communication shall be readily available.

(6) It shall be the duty of every employer to comply with such standards and systems of education for safety as shall be, from time to time, prescribed for such employer by the director of labor and industries through the division of industrial safety and health or by statute.

(7) Employees working on any bridge or structure leading to a detached vessel berthing installation shall wear United States Coast Guard approved personal flotation devices except where protected by railings, nets, or safety belts and lifelines.

(8) Life ladders. On all docks spaced at intervals not to exceed four hundred feet, there shall be provided substantial built-in-place ladders to reach lowest water use. When portable ladders are to be used, ladder may be bolted to the bullrail or dock structure or ladder can be secured to an embedded eye bolt in a concrete dock surface. The immediate area where such ladders or fastenings are located shall be painted with a bright color or of a color which contrasts with the surrounding area. There shall be a ladder at each end of the dock.

(9) Life rings. On all docks, spaced at intervals not to exceed two hundred feet, and so located to be readily available in case of emergency, there shall be at least one life ring of an approved standard type with ninety feet of line attached. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60059, filed 12/11/84.]

WAC 296-56-60060 First-aid training and certification. The purpose of this section is to assure that all employees of this state can be afforded quick and effective first-aid attention in the event that an injury occurs on the job. The means of achieving this purpose is to assure the presence of personnel trained in first-aid procedures at or near those places where employees are working. Compliance with the provisions of this section may require the presence of more than one first-aid trained person.

(1) In addition to RCW 51.36.030, every employer shall comply with the department's requirements for first-aid training and certification.

(2) There shall be present or available at all times, a person or persons holding a valid certificate of first-aid training. (A valid first-aid certificate is one which is less than three years old.)

(3) Compliance with the requirements of subsection (2) of this section may be achieved as follows:

(a) All foremen, supervisors, or persons in direct charge of crews working in physically dispersed operations, shall have a valid first-aid certificate: *Provided*, That if the duties or work of the foreman, supervisor or person in direct charge of the crew requires an absence from the crew, another person holding a valid first-aid certificate shall be present. For the purposes of this section, a crew shall mean a group of two or more employees working at a work site separate and remote from the main office or fixed work place such as occurs in construction, logging, etc. If there is no foreman, supervisor or person in direct charge assigned to the crew, at least one employee shall have a valid first-aid certificate. In emergencies, foremen, supervisors and persons in direct charge of a crew will be permitted to work up to thirty days without having the required certificate, providing an employee in the crew or another foreman in the immediate work area has the necessary certificate.

(b) In fixed establishments, all foremen, supervisors, or persons in direct charge of a group or groups of employees shall have a valid first-aid certificate: *Provided*, That in fixed establishments where the foreman, supervisor, or person in charge has duties which require his absence from the work site of the group, another person

holding a valid first-aid certificate shall be present or available to the group.

NOTE: Foremen, supervisors or persons in direct charge of a group or groups of employees will be permitted to work up to thirty days without having the required certificate, providing an employee in the crew or another foreman in the immediate work area has the necessary certificate.

(c) In fixed establishments organized into distinct departments or equivalent organizational units such as department stores, large company offices, etc., a person or persons holding a valid first-aid certificate shall be present or available at all times employees are working within that department or organizational unit.

(d) In small businesses, offices or similar types of fixed workplaces, compliance may be achieved by having a number of such small businesses, offices, etc., combined into a single unit for the purpose of assuring the continued presence or availability of a person or persons holding a valid first-aid training certificate.

A plan for combining a number of small businesses etc., into such a group shall be submitted to the division of industrial safety and health, safety education section, for approval. That section is also available to assist employers who wish to develop such a plan. Criteria for approval by the division shall include:

(i) The businesses within the group must not be widely dispersed;

(ii) The name(s) of the person or persons holding the first-aid certificates, their usual places of work, their phone numbers, and other appropriate information shall be posted in each establishment which is a member of the group, in a place which can reasonably be expected to give notice to employees of that establishment;

(iii) First-aid kits must be available as required by WAC 296-56-60062.

(e) Valid certification shall be achieved by passing a course of first-aid instruction and participation in practical application of the following subject matter.

Bleeding control and bandaging.

Practical methods of artificial respiration, including mouth to mouth and mouth to nose resuscitation.

Closed chest heart massage.

Poisons.

Shock, unconsciousness, stroke.

Burns, scalds.

Sunstroke, heat exhaustion.

Frostbite, freezing, hypothermia.

Strains, sprains, hernias.

Fractures, dislocations.

Proper transportation of the injured.

Bites, stings.

Subjects covering specific health hazards likely to be encountered by co-workers of first-aid students enrolled in the course.

(4) In physically dispersed operations, at least one member of each crew shall have a valid first-aid certificate. A crew shall mean a group of two or more employees working at a work site separate and remote from the main office or fixed workplace such as occurs in construction, logging, etc.

(5) Industrial first-aid course instructors will, upon request, be furnished by the division of industrial safety and health, department of labor and industries, either directly or through a program with the community colleges or vocational education.

(6) Employers of employees working in fixed establishments, meeting the following criteria, are exempt from the requirements of this section: *Provided*

(a) They can submit written evidence to the department, upon request, that the worksite of their employees is within a two-minute time frame of response by an aid car, medic unit or established ambulance service with first-aid trained attendants.

(b) There is a back-up aid car, medic unit or established ambulance service within the two-minute response time; or that a first-aid trained person with readily available transportation is on the site of the posted emergency phone number for immediate dispatch in the event the primary unit is not available.

(c) There are no traffic impediments, such as draw bridges, railroad track; etc., along the normal route of travel of the aid car, medic unit or established ambulance service that would delay arrival beyond the required two minute time frame.

(d) Emergency telephone numbers are posted on all first-aid kits and at all telephones on the worksite.

(e) The above services are available or exist at all times when more than one employee is on the worksite.

NOTE: A construction site that will be of more than six months duration, such as a large building, shall be considered a fixed establishment for the purposes of this section. Doctor's offices and clinics are not to be considered as alternates due to the fact that very often doctor's schedules require them to be away from their offices.

[Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60060, filed 12/11/84.]

WAC 296-56-60062 First-aid kit. (1) All employers who employ men and women covered by the Industrial Safety and Health Act shall furnish first-aid kits as required by the division of safety, department of labor and industries, (RCW 51.36.030).

(2) First-aid supplies shall be readily accessible when required.

(3) In the absence of readily accessible first-aid supplies such as first-aid kits, first-aid stations, first-aid rooms or their equivalent, all crew trucks, power shovels, cranes, locomotives, loaders, dozers, logging trucks, speeders, freight trucks, and similar equipment shall be equipped with not less than a ten package first-aid kit.

(4) All crew vehicles used for transporting workmen shall be equipped with not less than a ten package first-

aid kit. When more than five employees are being transported on any one trip, the kit shall be increased in size to comply with a 16, 24, or 36-package kit depending upon the number of personnel normally being transported.

(5) At least one first-aid kit shall be available on construction jobs, line crews, and other transient or short duration jobs. The size and quantity of first-aid kits, required to be located at any site, shall be determined by the number of personnel normally dependent upon each kit as outlined in the following table:

NUMBER OF PERSONNEL NORMALLY ASSIGNED TO WORKSITE	MINIMUM FIRST-AID SUPPLIES REQUIRED AT WORKSITE
1 - 50 persons	First-Aid Kit
1 - 5	10 package kit
6 - 15	16 package kit
16 - 30	24 package kit
31 - 50	36 package kit
51 - 200 persons	First-Aid Station
51 - 75	One 36 and one 10 package kit
76 - 100	One 36 and one 16 package kit
101 - 150	One 36 and one 24 package kit
151 - 200	Two 36 package kits
Over 200 Persons	First-Aid Room Refer to WAC 296-24-070

(6) Employers shall establish a procedure to assure that first-aid kits and required contents are maintained in a serviceable condition.

(7) First-aid kits shall contain at least the following items:

10 Package Kit

- 1 Pkg. Adhesive bandages, 1" (16 per pkg.)
- 1 Pkg. Bandage compress, 4" (1 per pkg.)
- 1 Pkg. Scissors* and tweezers (1 each per pkg.)
- 1 Pkg. Triangular bandage, 40" (1 per pkg.)
- 1 Pkg. Antiseptic soap or pads (3 per pkg.)
- 5 Pkgs. of consulting physician's choice**

16 Package Kit

- 1 Pkg. Absorbent gauze, 24" x 72" (1 per pkg.)
- 1 Pkg. Adhesive bandages, 1" (16 per pkg.)
- 2 Pkgs. Bandage compresses, 4" (1 per pkg.)
- 1 Pkg. Eye dressing (1 per pkg.)
- 1 Pkg. Scissors* and tweezers (1 each per pkg.)
- 2 Pkgs. Triangular bandages, 40" (1 per pkg.)
- 1 Pkg. Antiseptic soap or pads (3 per pkg.)
- 7 Pkgs. of consulting physician's choice**

24 Package Kit

- 2 Pkgs. Absorbent gauze, 24" x 72" (1 per pkg.)
- 2 Pkgs. Adhesive bandages, 1" (16 per pkg.)
- 2 Pkgs. Bandage compresses, 4" (1 per pkg.)
- 1 Pkg. Eye dressing (1 per pkg.)
- 1 Pkg. Scissors* and tweezers (1 each per pkg.)

- 6 Pkgs. Triangular bandages (1 per pkg.)
- 1 Pkg. Antiseptic soap or pads (3 per pkg.)
- 9 Pkgs. of consulting physician's choice**

36 Package Kit

- 4 Pkgs. Absorbent gauze, 24" x 72" (1 per pkg.)
- 2 Pkgs. Adhesive bandages, 1" (16 per pkg.)
- 5 Pkgs. Bandage compresses, 4" (1 per pkg.)
- 2 Pkgs. Eye dressing (1 per pkg.)
- 1 Pkg. Scissors* and tweezers (1 each per pkg.)
- 8 Pkgs. Triangular bandages, 40" (1 per pkg.)
- 1 Pkg. Antiseptic soap or pads (3 per pkg.)
- 13 Pkgs. of consulting physician's choice**

*Scissors shall be capable of cutting two layers of fifteen ounce cotton cloth or its equivalent.

**First-aid kits shall be maintained at the ten, sixteen, twenty-four or thirty-six package level. In the event the consulting physician chooses not to recommend items, the department of labor and industries shall be contacted for recommended items to complete the kit.

(8) Where the eyes or body of any person may be exposed to injurious chemicals and/or materials, suitable facilities for quick drenching or flushing of the eyes and body shall be provided, within the work area, for immediate emergency use.

(9) When practical, a poster shall be fastened and maintained either on or in the cover of each first-aid kit and at or near all phones plainly stating, the phone numbers of available doctors, hospitals, and ambulance services within the district of the worksite.

(10) When required by the department, in addition to the first-aid kit which must be kept on the equipment or at the place of work, there shall be available within the closest practicable distance from the operations (not to exceed one-half mile) the following items:

- 1 set of arm and leg splints.
- 2 all wool blankets or blankets equal in strength and fire resistant (properly protected and marked).
- 1 stretcher.

[Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60062, filed 12/11/84.]

WAC 296-56-60065 First-aid station. (1) First-aid stations shall be located as close as practicable to the highest concentration of personnel.

(2) First-aid stations shall be well marked and available to personnel during all working hours.

(3) One person holding a valid first-aid certificate shall be responsible for the proper use and maintenance of the first-aid station.

(4) First-aid stations shall be equipped with a minimum of two first-aid kits, the size of which shall be dependent upon the number of personnel normally employed at the worksite. One first-aid kit may be a permanent wall-mounted kit, but in all cases the station shall be equipped with at least one portable first-aid kit.

(5) When required by the department, the station shall be equipped with two wool blankets and a stretcher in addition to first-aid kits.

(6) A roster, denoting the telephone numbers and addresses of doctors, hospitals and ambulance services available to the worksite, shall be posted at each first-aid station. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60065, filed 12/11/84.]

WAC 296-56-60067 First-aid room. (1) A first-aid room meeting the requirements of this section shall be required when:

(a) A fixed establishment employs more than two hundred employees at one central location,

EXCEPTION: The department may permit the employer to follow the requirements of WAC 296-56-60060, 296-56-60062 and 296-56-60065, as appropriate when employees would be better served for first-aid purposes and the following conditions are present:

(i) In low hazard occupations such as retail clothing stores, banks, or general office work where exposure to manufacturing processes or heavy materials handling does not exist, and

(ii) Where the two hundred or more employees have physically dispersed normal work stations which would result in excessive travel to the first-aid room. (Excessive travel shall mean travel of one quarter mile or more or three or more floors of vertical travel.)

(b) At construction sites which are expected to remain construction sites for six months or more.

(2) First-aid rooms shall be located as close as possible to the heaviest concentrated work area. They shall be identified in such a manner as to be easily recognizable as first-aid rooms.

(3) The first-aid room shall be well lighted and ventilated, kept clean and orderly, provided with hot and cold running water, and maintained in a fully-equipped condition.

(4) The first-aid room shall be manned and maintained by:

- (a) A licensed physician, or
- (b) A licensed or registered nurse, or
- (c) An employee who:

(i) Holds a valid advanced first-aid certificate as recognized by the department,

(ii) Works in the vicinity of the first-aid room, and

(iii) Does not perform other work of the nature that is likely to affect adversely her/his ability to administer first-aid.

(5) First-aid rooms shall be equipped with items recommended by the consulting physician or plant medical officer and, as a minimum, should contain an adequate supply of the following:

- Antiseptic soap
- 3/4" or 1" adhesive compresses
- Adhesive knuckle bands
- 2" Bandage compresses
- 4" Bandage compresses
- 3" x 3" gauze pads
- Assorted sizes of large gauze pads

2" roller bandages
 3" roller bandages
 4" roller bandages
 Assorted adhesive tape rolls
 Eye dressings
 Ammonia inhalants
 Burn ointment
 Triangular bandages
 Scissors, forceps, razor and blades, medicine droppers
 Safety pins
 Drinking cups
 Rubbing alcohol
 Absorbent cotton
 Arm and leg splints
 Antidotes for specific industrial poisons
 Pressure points chart
 Stretcher
 Wool blankets and clean linen
 Hot water bottles
 Quick colds or ice bag
 Emergency first-aid kit
 A method of sterilizing instruments

(6) A poster shall be maintained on, or in the cover of, each first-aid cabinet and near each first-aid room phone. Such poster will state phone numbers of available doctors, hospitals, and ambulance services within the employer's district. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60067, filed 12/11/84.]

WAC 296-56-60069 Personnel. (1) Qualifications of machinery operators.

(a) Only those employees determined by the employer to be competent by reason of training or experience, and who understand the signs, notices and operating instructions and are familiar with the signal code in use shall be permitted to operate a crane, winch or other power-operated cargo handling apparatus, or any power-operated vehicle, or give signals to the operator of any hoisting apparatus. Exception: Employees being trained and supervised by a designated person may operate such machinery and give signals to operators during training.

(b) No employee known to have defective uncorrected eyesight or hearing, or to be suffering from heart disease, epilepsy, or similar ailments which may suddenly incapacitate the employee shall be permitted to operate a crane, winch, other power-operated cargo handling apparatus or a power-operated vehicle.

(2) Supervisory accident prevention proficiency.

(a) After October 3, 1985, immediate supervisors of cargo-handling operations of more than five persons shall satisfactorily complete a course in accident prevention. Employees newly assigned to supervisory duties after that date shall be required to meet the provisions of this paragraph within ninety days of such assignment.

(b) The course shall consist of instruction suited to the particular operations involved.

(c) No minor under eighteen years of age shall be employed in occupations involving the operation of any power-operated hoisting apparatus or assisting in such

operations by performing work such as hooking on or landing drafts, rigging gear, etc. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-10-004 (Order 85-09), § 296-56-60069, filed 4/19/85; 85-01-022 (Order 84-24), § 296-56-60069, filed 12/11/84.]

CARGO HANDLING GEAR AND EQUIPMENT

WAC 296-56-60071 House falls. (1) Span beams shall be secured to prevent accidental dislodgement.

(2) A safe means of access shall be provided for employees working with house fall blocks.

(3) Designated employees shall inspect chains, links, shackles, swivels, blocks and other loose gear used in house fall operations before each day's use. Defective gear shall not be used. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60071, filed 12/11/84.]

WAC 296-56-60073 Miscellaneous auxiliary gear.

(1) Routine inspection.

(a) At the completion of each use, loose gear such as slings, chains, bridles, blocks, and hooks shall be so placed as to avoid damage to the gear. Loose gear shall be inspected and any defects corrected before reuse.

(b) All loose gear shall be inspected by the employer or his authorized representative before each use and, when necessary, at intervals during its use, to ensure that it is safe. Any gear which is found upon such inspection to be visibly unsafe shall not be used until it is made safe.

(c) Defective gear shall not be used. Distorted hooks, shackles, or similar gear shall be discarded.

(d) Chains or other gear which have been lengthened, altered, or repaired by welding shall be properly heat treated where necessary, and, before again being put into use, shall be tested and reexamined in the manner set forth in WAC 296-56-60097 and 296-56-60098.

(2) The employer shall maintain a record of the dates and results of the tests with each unit of gear concerned clearly identifiable. The records shall be available for examination by representatives of the division of industrial safety and health personnel and the employee safety committee.

(3) Wire rope and wire rope slings.

(a) The employer shall ascertain and adhere to the manufacturer's recommended ratings for wire rope and wire rope slings and shall have such ratings available for inspection. When the manufacturer is unable to supply such ratings, the employer shall use the tables for wire rope and wire rope slings found in American National Safety Standard for Slings, current ANSI B30.9. A design safety factor of at least five shall be maintained for the common sizes of running wire used as falls, in purchases or in such uses as light load slings. Wire rope with a safety factor of less than five may be used only:

(i) In specialized equipment, such as but not limited to cranes, designed to be used with lesser wire rope safety factors;

(ii) In accordance with design factors in standing rigging applications; or

(iii) For heavy lifts or other purposes for which a safety factor of five is impracticable and for which the employer can demonstrate that equivalent safety is ensured.

(b) Wire rope or wire rope slings having any of the following conditions shall not be used:

(i) Ten randomly distributed broken wires in one rope lay or three or more broken wires in one strand in one rope lay;

(ii) Kinking, crushing, bird caging, or other damage resulting in distortion of the wire rope structure;

(iii) Evidence of heat damage;

(iv) Excessive wear or corrosion, deformation or other defect in the wire or attachments, including cracks in attachments;

(v) Any indication of strand or wire slippage in end attachments; or

(vi) More than one broken wire in the close vicinity of a socket or swaged fitting.

(c) Protruding ends of strands in splices on slings and bridles shall be covered or blunted. Coverings shall be removable so that splices can be examined. Means used to cover or blunt ends shall not damage the wire.

(d) Where wire rope clips are used to form eyes, the employer shall adhere to the manufacturer's recommendations, which shall be available at the terminal. If "U" bolt clips are used and the manufacturer's recommendations are not available, Table C-1 shall be used to determine the number and spacing of clips. "U" bolts shall be applied with the "U" section in contact with the dead end of the rope.

TABLE C-1—NUMBER AND SPACING OF U-BOLT WIRE ROPE CLIPS

Improved plow steel, rope diameter inches/(cm)	Minimum number of clips		Minimum spacing inches/(cm)
	Drop forged	Other material	
1/2 or less(1.3)	3	4	3(7.6)
3/8(1.6)	3	4	3 3/4(9.5)
1/2(1.9)	4	5	4 1/2(11.4)
5/8(2.2)	4	5	5 1/4(13.3)
1(2.5)	5	7	6(15.2)
1 1/8(2.7)	6	7	6 3/4(17.1)
1 1/4(3.2)	6	8	7 1/2(18.1)
1 3/8(3.5)	7	8	8 1/4(21.0)
1 1/2(3.8)	7	9	9(22.9)

(e) Wire rope shall not be secured by knots.

(f) Eyes in wire rope bridles, slings, bull wires, or in single parts used for hoisting shall not be formed by wire rope clips or knots.

(g) Eye splices in wire ropes shall have at least three tucks with a whole strand of the rope and two tucks with one-half of the wire cut from each strand. Other forms of splices or connections which are shown to be equivalent safe may be used.

(h) Except for eye splices in the ends of wires and for endless rope slings, each wire rope used in hoisting or lowering, or in bulling cargo, shall consist of one continuous piece without knot or splice.

(4) Natural fiber rope.

(a) The employer shall ascertain the manufacturer's ratings for the specific natural fiber rope used and have

such ratings available at the terminal. The manufacturer's ratings shall be adhered to and a minimum design safety factor of five maintained.

(b) Eye splices shall consist of at least three full tucks. Short splices shall consist of at least six full tucks, three on each side of the center line.

(5) Synthetic rope.

(a) The employer shall adhere to the manufacturer's ratings and use recommendations for the specific synthetic fiber rope used and shall have such ratings available at the terminal.

(b) Unless otherwise recommended by the manufacturer, when synthetic fiber ropes are substituted for manila ropes of less than three inches (7.62 cm) in circumference, the substitute shall be of equal size. Where substituted for manila rope of three inches or more in circumference, the size of the synthetic rope shall be determined from the formula:

$$C = \sqrt{0.6C_s^2 + 0.4C_m^2}$$

Where C = the required circumference of the synthetic rope in inches, C_s = the circumference to the nearest one-quarter inch of a synthetic rope having a breaking strength not less than that of the size manila rope that would be required by subsection (4) of this section, and C_m = the circumference of manila rope in inches which would be required by subsection (4) of this section. In making such substitution, it shall be ascertained that the inherent characteristics of the synthetic fiber are suitable for hoisting.

(6) Removal of natural and synthetic rope from service. Natural and synthetic rope having any of the following defects shall be removed from service:

(a) Abnormal wear;

(b) Powdered fiber between strands;

(c) Sufficient cut or broken fibers to affect the capability of the rope;

(d) Variations in the size or roundness of strands;

(e) Discolorations other than stains not associated with rope damage;

(f) Rotting; or

(g) Distortion or other damage to attached hardware.

(7) Thimbles. Properly fitting thimbles shall be used where any rope is secured permanently to a ring, shackle or attachment, where practicable.

(8) Synthetic web slings.

(a) Slings and nets or other combinations of more than one piece of synthetic webbing assembled and used as a single unit (synthetic web slings) shall not be used to hoist loads in excess of the sling's rated capacity.

(b) Synthetic web slings shall be removed from service if they exhibit any of the following defects:

(i) Acid or caustic burns;

(ii) Melting or charring of any part of the sling surface;

(iii) Snags, punctures, tears or cuts;

(iv) Broken or worn stitches; or

(v) Distortion or damage to fittings.

(c) Defective synthetic web slings removed from service shall not be returned to service unless repaired by a sling manufacturer or similar entity. Each repaired sling

shall be proof tested by the repairer to twice the slings' rated capacity prior to its return to service. The employer shall retain a certificate of the proof test and make it available for examination.

(d) Synthetic web slings provided by the employer shall only be used in accordance with the manufacturer's use recommendations, which shall be available.

(e) Fittings shall have a breaking strength at least equal to that of the sling to which they are attached and shall be free of sharp edges.

(9) Chains and chain slings used for hoisting.

(a) The employer shall adhere to the manufacturer's recommended ratings for safe working loads for the sizes of alloy steel chains and chain slings used and shall have such ratings available. When the manufacturer is unable to provide such ratings, the employer shall use the tables for chains and chain slings found in American National Safety Standard for Slings, ANSI B30.9-current revision.

(b) Proof coil steel chain, also known as common or hardware chain, and other chain not recommended by the manufacturer for slinging or hoisting shall not be used for slinging or hoisting.

(c)(i) Sling chains, including end fastenings, shall be inspected for visible defects before each day's use and as often as necessary during use to ensure integrity of the sling.

(ii) Thorough inspections of chains in use shall be made quarterly to detect wear, defective welds, deformation or increase in length or stretch. The month of inspection shall be indicated on each chain by color of paint on a link or by other equally effective means.

(iii) Chains shall be removed from service when maximum allowable wear, as indicated in Table C-2, is reached at any point of link.

(iv) Chain slings shall be removed from service when stretch has increased the length of a measured section by more than five percent; when a link is bent, twisted or otherwise damaged; or when a link has a raised scarf or defective weld.

(v) Only designated persons shall inspect chains used for slinging and hoisting.

(d) Chains shall only be repaired under qualified supervision. Links or portions of chain defective under any of the criteria of WAC 296-56-60073 (9)(c)(v) shall be replaced with properly dimensioned links or connections of material similar to that of the original chain. Before repaired chains are returned to service, they shall be tested to the proof test load recommended by the manufacturer for the original chain. Tests shall be performed by the manufacturer or shall be certified by an agency accredited for the purpose under WAC 296-56-60093. Test certificates shall be available at the terminal.

(e) Alloy chains shall not be annealed.

(f) Kinked or knotted chains shall not be used for lifting. Chains shall not be shortened by bolting, wiring or knotting. Makeshift links or fasteners such as wire, bolts or rods shall not be used.

(g) Hooks, rings, links and attachments affixed to sling chains shall have rated capacities at least equal to that of the chains to which they are attached.

(h) Chain slings shall bear identification of size, grade and rated capacity.

(10) Shackles.

(a) If available, the manufacturer's recommended safe working loads for shackles shall not be exceeded. In the absence of manufacturer's recommendations, Table C-3 shall apply.

(b) Screw pin shackles used aloft in house fall or other gear, except in cargo hook assemblies, shall have their pins moused or otherwise effectively secured.

TABLE C-3.—SAFE WORKING LOADS FOR SHACKLES

Material size		Pin diameter		Safe working load in 2,000 lb tons
Inches	(cm)	Inches	(cm)	
½	(1.3)	¾	(1.9)	1.4
¾	(1.9)	1	(2.5)	2.2
1	(2.5)	1 ¼	(3.2)	3.2
1 ¼	(3.2)	1 ½	(3.8)	4.3
1 ½	(3.8)	2	(5.0)	5.6
2	(5.0)	2 ¼	(5.7)	6.7
				8.2
				10.0
				11.9
				16.2
				21.2

TABLE C-2.—MAXIMUM ALLOWABLE WEAR AT ANY POINT OF LINK

Chain size		Maximum allowable wear	
Inches	(cm)	Inches	(cm)
¼(6.3)	(0.6)	¼	(0.1)
½	(1.0)	¼	(0.2)
¾	(1.3)	¼	(0.3)
1	(1.6)	¼	(0.4)
1 ¼	(1.9)	¼	(0.4)
1 ½	(2.2)	¼	(0.4)
2	(2.5)	¼	(0.5)
2 ¼	(2.9)	¼	(0.6)
2 ½	(3.2)	¼	(0.6)
3	(3.5)	¼	(0.7)
3 ½	(3.8)	¼	(0.8)
4	(4.4)	¼	(0.9)

(c) Tables G-2 through G-5 shall be used to determine the safe working loads of various sizes and classifications of improved plow steel wire rope slings with various types of terminals. For sizes, classifications and grades not included in these tables the safe working load recommended by the manufacturer for specific, identifiable products shall be followed: *Provided*, That a safety factor of not less than five is maintained.

TABLE G-1
MANILA ROPE
(In pounds or tons of 2000 pounds)

Circumference	Diameter in inches	Single Leg			
		60°	45°	30°	
3/4	1/4	120 lbs.	204 lbs.	170 lbs.	120 lbs.
1	5/16	200	346	282	200
1-1/8	3/8	270	467	380	270
1-1/4	7/16	350	605	493	350
1-3/8	15/32	450	775	635	450
1-1/2	1/2	530	913	798	530
1-3/4	9/16	690	1190	973	690
2	5/8	880	1520	1240	880
2-1/4	3/4	1080	1870	1520	1080
2-1/2	13/16	1300	2250	1830	1300
2-3/4	7/8	1540	2660	2170	1540
3	1	1800	3120	2540	1800
3-1/4	1-1/16	1.0 Tons	1.7 Tons	1.4 Tons	1.0 Tons
3-1/2	1-1/8	1.2	2.1	1.7	1.2
3-3/4	1-1/4	1.35	2.3	1.9	1.35
4	1-5/16	1.5	2.6	2.1	1.5
4-1/2	1-1/2	1.8	3.1	2.5	1.8
5	1-5/8	2.25	3.9	3.2	2.25
5-1/2	1-3/4	2.6	4.5	3.7	2.6
6	2	3.1	5.4	4.4	3.1
6-1/2	2-1/8	3.6	6.2	5.1	3.6

In making such a substitution it should be ascertained that the inherent characteristics of the synthetic fiber are suitable for the intended service of the rope.

TABLE G-2
RATED CAPACITIES FOR IMPROVED PLOW STEEL,
INDEPENDENT WIRE CORE,
WIRE ROPE AND WIRE ROPE SLINGS
(In tons of 2000 pounds)

Rope Dia. Inches	SINGLE LEG					
	Vertical			Choker		
	A	B	C	A	B	C
6x19 CLASSIFICATION						
1/4"	.59	.56	.53	.44	.42	.40
3/8"	1.3	1.2	1.1	.98	.93	.86
1/2"	2.3	2.2	2.0	1.7	1.6	1.5
5/8"	3.6	3.4	3.0	2.7	2.5	2.2
3/4"	5.1	4.9	4.2	3.8	3.6	3.1
7/8"	6.9	6.6	5.5	5.2	4.9	4.1
1"	9.0	8.5	7.2	6.7	6.4	5.4
1-1/8"	11.	10.	9.0	8.5	7.8	6.8
6x37 CLASSIFICATION						
1-1/4"	13.	12.	10.	9.9	9.2	7.9
1-3/8"	16.	15.	13.	12.	11.	9.6
1-1/2"	19.	17.	15.	14.	13.	11.
1-3/4"	26.	24.	20.	19.	18.	15.
2"	33.	30.	26.	25.	23.	20.
2-1/4"	41.	38.	33.	31.	29.	25.

(A) - Socket or Swaged Terminal attachment.
(B) - Mechanical Sleeve attachment.
(C) - Hand Tucked Splice attachment.

TABLE G-3
RATED CAPACITIES FOR IMPROVED PLOW STEEL, INDEPENDENT
WIRE ROPE CORE, WIRE ROPE SLINGS
(In tons of 2000 pounds)

Rope Dia. Inches	TWO - LEG BRIDLE OR BASKET HITCH											
	Vertical			60°			45°			30°		
	A	B	C	A	B	C	A	B	C	A	B	C
6x19 CLASSIFICATION												
1/4"	1.2	1.1	1.0	1.0	.97	.93	.89	.85	.81	.77	.73	.69
3/8"	2.6	2.5	2.3	2.3	2.2	2.0	1.9	1.8	1.7	1.6	1.5	1.4
1/2"	4.3	4.1	3.7	3.7	3.6	3.2	3.1	2.9	2.8	2.7	2.5	2.3
5/8"	6.7	6.3	5.6	5.6	5.4	4.8	4.7	4.4	4.3	4.1	3.8	3.5
3/4"	9.2	8.7	7.7	7.7	7.4	6.6	6.5	6.1	6.0	5.7	5.3	4.9
7/8"	12.	11.	10.	10.	9.7	8.6	8.4	8.0	7.8	7.5	7.0	6.6
1"	15.	14.	13.	13.	12.	11.	10.	9.7	9.5	9.1	8.5	7.9
1-1/8"	19.	18.	16.	16.	15.	14.	13.	12.	11.	10.	9.5	9.0
6x37 CLASSIFICATION												
1-1/4"	26.	24.	21.	21.	20.	17.	16.	15.	14.	13.	12.	10.
1-3/8"	32.	29.	25.	25.	24.	20.	19.	18.	17.	16.	15.	13.
1-1/2"	38.	35.	30.	30.	29.	24.	23.	22.	21.	20.	18.	16.
1-3/4"	51.	47.	41.	41.	40.	33.	32.	29.	28.	27.	24.	20.
2"	66.	61.	52.	52.	51.	42.	41.	37.	36.	34.	30.	26.
2-1/4"	83.	76.	66.	66.	64.	53.	51.	47.	46.	43.	38.	33.

(A) - Socket or Swaged Terminal Attachment.
(B) - Mechanical Sleeve Attachment.
(C) - Hand Tucked Splice Attachment.

TABLE G-4
RATED CAPACITIES FOR IMPROVED PLOW STEEL,
FIBER CORE, WIRE ROPE AND
WIRE ROPE SLINGS
(In tons of 2000 pounds)

Rope Dia. Inches	SINGLE LEG								
	Vertical			60°			Choker		
	A	B	C	A	B	C	A	B	C
6x19 CLASSIFICATION									
1/4"	.55	.51	.49	.41	.38	.37	.31	.28	.27
3/8"	1.3	1.1	1.0	.91	.85	.80	.70	.65	.60
1/2"	2.1	2.0	1.8	1.6	1.5	1.4	1.2	1.1	1.0
5/8"	3.3	3.1	2.8	2.5	2.3	2.1	1.8	1.7	1.6
3/4"	4.6	4.4	3.9	3.5	3.3	3.0	2.6	2.5	2.3
7/8"	6.0	5.9	5.1	4.6	4.4	3.9	3.4	3.3	3.0
1"	8.0	7.7	6.7	6.1	5.8	5.0	4.4	4.3	3.9
1-1/8"	10.	9.8	8.4	7.9	7.1	6.2	5.4	5.1	4.6
6x37 CLASSIFICATION									
1-1/4"	13.	11.	10.	9.2	8.3	7.4	6.4	6.0	5.4
1-3/8"	16.	14.	12.	11.	10.	9.0	7.8	7.4	6.6
1-1/2"	19.	17.	15.	14.	13.	11.	10.	9.4	8.4
1-3/4"	26.	21.	19.	18.	16.	14.	12.	11.	10.
2"	36.	29.	26.	24.	22.	19.	16.	15.	14.

(A) - Socket or Swaged Terminal attachment.
(B) - Mechanical Sleeve attachment.
(C) - Hand Tucked Splice attachment.

TABLE G-5
RATED CAPACITIES FOR IMPROVED PLOW STEEL,
FIBER CORE, WIRE ROPE SLINGS
(In tons of 2000 pounds)

Rope Dia. Inches	TWO - LEG BRIDLE OR BASKET HITCH											
	Vertical			60°			45°			30°		
	A	B	C	A	B	C	A	B	C	A	B	C
6x19 CLASSIFICATION												
1/4"	1.1	1.0	.99	.95	.90	.85	.81	.77	.73	.70	.65	.61
3/8"	2.4	2.2	2.1	2.1	2.0	1.9	1.8	1.7	1.6	1.5	1.4	1.3
1/2"	4.1	3.9	3.7	3.7	3.6	3.3	3.2	3.0	2.9	2.8	2.6	2.5
5/8"	6.7	6.3	5.6	5.6	5.4	4.8	4.7	4.4	4.3	4.0	3.8	3.5
3/4"	9.2	8.7	7.7	7.7	7.4	6.6	6.5	6.1	6.0	5.7	5.3	4.9
7/8"	12.	11.	10.	10.	9.7	8.6	8.4	8.0	7.8	7.5	7.0	6.6
1"	15.	14.	13.	13.	12.	11.	10.	9.7	9.5	9.1	8.5	7.9
1-1/8"	19.	18.	16.	16.	15.	14.	13.	12.	11.	10.	9.5	9.0
6x37 CLASSIFICATION												
1-1/4"	25.	21.	20.	21.	20.	17.	16.	15.	14.	13.	12.	11.
1-3/8"	30.	27.	24.	24.	23.	20.	19.	18.	17.	16.	15.	13.
1-1/2"	35.	32.	28.	28.	27.	24.	23.	22.	20.	19.	18.	16.
1-3/4"	48.	43.	38.	38.	37.	33.	32.	30.	27.	26.	24.	21.
2"	62.	55.	49.	49.	48.	43.	42.	39.	35.	34.	30.	25.

(A) - Socket or Swaged Terminal attachment.
(B) - Mechanical Sleeve attachment.
(C) - Hand Tucked Splice attachment.

TABLE G-6
ALLOY STEEL CHAIN
(In tons of 2000 pounds)

Nominal Size Chain Stock Inch.	Single Leg	60°	45°	30°
1/4"	1.42	2.02	2.37	3.62
3/8"	3.30	5.70	6.65	10.30
1/2"	5.62	9.75	11.20	17.10
5/8"	8.25	14.25	16.55	25.25
3/4"	11.5	19.9	23.3	35.5
7/8"	14.3	24.9	28.9	44.3
1"	19.3	33.5	37.2	56.8
1-1/8"	22.2	38.3	43.9	66.2
1-1/4"	29.7	49.7	56.8	86.7
1-3/8"	33.5	58.0	67.0	101.5
1-1/2"	39.7	68.5	78.9	119.7
1-3/4"	43.9	73.3	84.5	128.5
2"	47.0	78.0	90.0	138.0

(11) Hooks other than hand hooks.

(a) The manufacturer's recommendations shall be followed in determining the safe working loads of the various sizes and types of specific and identifiable hooks. All hooks for which no applicable manufacturer's recommendations are available shall be tested to twice the intended safe working load before they are initially put into use. The employers shall maintain a record of the dates and results of such tests.

(b) Loads shall be applied to the throat of the hook since loading the point overstresses and bends or springs the hook.

(c) Hooks shall be inspected once a month to see that they have not been bent by overloading. Bent or sprung hooks shall not be used.

(d) Crane hooks. Magnetic particle or other suitable crack detecting inspection shall be performed at least once each year. When testing by x-ray, the pertinent provisions of the Nuclear Regulatory Commission's standards for protection against radiation, relating to protection against occupational radiation exposure, shall apply.

(e) Any activity which involves the use of radioactive materials or x-rays, whether or not under license from the Nuclear Regulatory Commission, shall be performed by competent persons specially trained in the proper and safe operation of such equipment. In the case of materials used under commission license, only persons actually licensed, or competent persons under direction and supervision of the licensee, shall perform such work.

(f) Teeth of case hooks shall not be split, cracked, or deformed.

(g) Jaws of patent clamp type plate hooks shall be kept in safe condition so that they will grip plates securely.

(12) Pallets.

(a) Pallets shall be made and maintained to safely support and carry loads being handled. Fastenings of reusable pallets used for hoisting shall be bolts and nuts, drive screws (helically threaded nails), annular threaded nails or fastenings, or equivalent holding strength.

(b) Damaged pallets shall be stored in designated areas and identified.

(c) Reusable wing or lip-type pallets shall be hoisted by bar bridles or other suitable gear and shall have an overhanging wing or lip of at least three inches (76.2 mm). They shall not be hoisted by wire slings alone.

(d) Loaded pallets that do not meet the requirements of this paragraph shall be hoisted only after being placed on pallets meeting such requirements or shall be handled by other means providing equivalent safety.

(e) Bridles for handling flush end or box-type pallets shall be designed to prevent disengagement from the pallet under load.

(f) Pallets shall be stacked or placed to prevent falling, collapsing or otherwise causing a hazard under standard operating conditions.

(g) Disposable pallets intended only for one use shall not be reused for hoisting. [Statutory Authority: RCW 49.17.040 and 49.17.050, 85-10-004 (Order 85-09), § 296-56-60073, filed 4/19/85; 85-01-022 (Order 84-24), § 296-56-60073, filed 12/11/84.]

WAC 296-56-60075 Cargo boards and other type pallet boards. (1) The term "cargo board" shall mean the typical wing or lip-type stevedore board hoisted to or from vessels by means of a bar bridle. "Other pallet boards" include all other platforms used to hold cargo for the purpose of transporting it from place to place.

(2) All pallets and cargo boards shall be of such material and construction as to safely support and carry loads being handled on them.

(3) All cargo boards shall be sheathed (decked) top and bottom with the top sheathing being of two-inch lumber and with the top sheathing extending at least six inches beyond the end stringers.

(4) The outer sheathing boards or boards adjacent thereto on cargo boards shall be fastened to the stringers by bolts and nuts. Other sheathing shall be fastened by bolts and nuts, drive screws (helically threaded nails), annular threaded nails, or fastenings of equivalent strength.

(5) Pallet boards, other than cargo boards, may be hoisted if safe means are provided for the type of board used.

(6) Loaded cargo or pallet boards which do not meet the requirements of this section shall be reboarded or placed on cargo boards meeting the requirements before being hoisted, provided weight of the load can be safely distributed on the cargo board.

(7) Cargo boards which are not loaded and secured so that the load will not tip or fall shall not be hoisted.

(8) Bridles used to handle flush-end or box-type pallets shall be of such a design as to prevent them from becoming disengaged from the pallet under load.

NOTE: In areas where the two lip cargo board is being used, that practice shall remain. The department of labor and industries recommends the use of the two lip cargo board.

[Statutory Authority: RCW 49.17.040 and 49.17.050, 85-01-022 (Order 84-24), § 296-56-60075, filed 12/11/84.]

WAC 296-56-60077 Powered industrial trucks. (1) Applicability. This section applies to every type of powered industrial truck used for material or equipment handling within a marine terminal. It does not apply to over-the-road vehicles.

(2) General.

(a) After October 3, 1983, modifications, such as adding counterweights, that might affect the vehicle's capacity or safety shall not be performed without either the manufacturer's prior written approval or the written approval of a professional engineer experienced with the equipment who has consulted with the manufacturer, if available. Capacity, operation and maintenance instruction plates, tags or decals shall be changed to conform to the equipment as modified.

(b) Unauthorized personnel shall not ride on powered industrial trucks. A safe place to ride shall be provided when riding is authorized.

(c) When a powered industrial truck is left unattended, load-engaging means shall be fully lowered, controls neutralized and brakes set. Unless the truck is in view and within twenty-five feet (7.6 m) of the operator, power shall be shut off. Wheels shall be blocked or curbed if the truck is on an incline.

(d) Powered industrial trucks shall not be operated inside highway vehicles or railcars having damage which could affect operational safety.

(e) Powered industrial trucks shall be marked with their rated capacities, which shall be visible to the operator.

(f) Only stable and safety arranged loads within the rated capacity of the truck shall be handled.

(g) The employer shall direct drivers to ascend and descend grades slowly.

(h) The employer shall direct drivers to slow down and sound the horn at crossaisles and other locations where visibility is obstructed.

(i) If the load obstructs the forward view, the employer shall direct drivers to travel with the load trailing.

(j) Steering knobs shall not be used unless the truck is equipped with power steering.

(k) When powered industrial trucks use cargo lifting devices that have a means of engagement hidden from the operator, a means shall be provided to enable the operator to determine that the cargo has been engaged.

(l) When cargo is being towed on pipe trucks or similar equipment, a safe means shall be provided to protect the driver from sliding loads.

(3) Maintenance.

(a) Only designated persons shall perform maintenance and repair.

(b) Batteries on all powered trucks shall be disconnected during repairs to the primary electrical system unless power is necessary for testing and repair. On trucks equipped with systems capable of storing residual energy, that energy shall be safely discharged before work on the primary electrical system begins.

(c) Replacement parts whose function might affect operational safety shall be equivalent in strength and performance capability to the original parts which they replace.

(d) Braking systems or other mechanisms used for braking shall be operable and in safe condition.

(e) Powered industrial trucks shall be maintained in safe working order. Safety devices shall not be removed or made inoperative except as otherwise provided in this section. Trucks with a fuel system leak or any other safety defect shall not be operated.

(f) Those repairs to the fuel and ignition systems of industrial trucks which involve fire hazards shall be conducted only in locations designated as safe for such repairs.

(4) Approved trucks.

(a) "Approved power-operated industrial truck" means one listed or approved for the intended use by a nationally recognized testing laboratory.

(b) Approved trucks acquired and used after February 15, 1972, shall bear a label or other identification indicating testing laboratory approval.

(c) When the atmosphere in an area is hazardous and the provisions of United States Coast Guard regulations at 33 CFR 126.15(e) do not apply, only power-operated industrial trucks approved for such locations shall be used.

(5) Duties of operator.

(a) A power-driven vehicle operator's special duties are:

(i) To operate the vehicle in a safe manner.

(ii) To test brakes, steering gear, lights, horns, or other warning devices, clutches, etc., before starting work.

(iii) To have the vehicle at all times under control so that it can be brought to an emergency stop in the clear space in front of the vehicle.

(iv) To back down any incline of two percent or more when traveling with a load on the fork lift jitney.

(b) Unobstructed view. When traveling, power-propelled vehicles shall at all times be operated in a manner giving the operator a reasonably unobstructed view in the direction of travel, or where this is impractical, the operator shall be directed in travel, by a person designated to do so.

(c) Employee riding safety. Operators and authorized passengers shall not be permitted to ride with legs or arms extending outside any vehicle nor shall they be permitted to ride while standing unless the vehicle is designed to be operated from a standing position.

(d) Moving vehicles. Vehicles shall be controlled manually while being pushed or towed except when a tow bar is used. Special precautions shall be taken when pushing vehicles where view is obstructed. Vehicles shall not be pushed with blades of a forklift.

(e) Moving highway trailers. In all cargo operations involving the use of highway trailers, such trailers shall be moved in such a manner that at all times the moving trailer is completely under control. Special caution shall be exercised when such trailers are moving on inclines. Trailers shall be loaded in a manner which will prevent the cargo from shifting, and the load in the trailer shall be evenly distributed so as not to cause the trailer to tip to one side.

(f) Prohibited forms of riding. Riding on tongue or handles of trailers or forks of power-propelled vehicles is prohibited.

(g) Regular seats for riders. No one except the operator shall ride on power-driven vehicles unless regular seats are provided to accommodate passengers.

(h) Jumping on or off moving vehicles. Employees shall not jump on or off moving vehicles.

(i) Reporting defects. If power-driven vehicle is at any time found to be in any way unsafe, the operator shall report same immediately to the person in charge and such vehicle shall not be used for production work until it has been made safe.

(6) Vehicle equipment and maintenance.

(a) Horns and lights. All power-propelled vehicles shall be provided with horns or other warning devices.

(b) Power-propelled vehicles used for night work, when required to travel away from an illuminated work area shall be equipped with a light or lights directed in the direction of travel as required to safely travel about the area.

(c) Guards on operator's platform. Every power truck operated from an end platform or standing position shall be equipped with a substantial guard securely attached to the platform or frame of the vehicle in such a manner as to protect the operator from falling objects and so designed that the operator can easily mount or dismount from the operating station.

(d) Seat cushions. All vehicles having a driver's seat shall be provided with resilient seat cushions fixed in place.

(e) Securing of counterbalances. Counterbalances of all power-driven vehicles shall be positively secured to prevent accidentally dislodging, but may be a removable type which may be removed, if desired, prior to hoisting.

(f) Exhaust pipes and mufflers. Exhaust pipes and mufflers of internal combustion engines, where workers are exposed to contact shall be isolated or insulated. Exhaust pipes shall be constructed to discharge not less than seventy-two inches above the floor on jitneys and eighty-four inches on forklifts or less than twenty inches from the floor.

(g) Ventilation where internal combustion-type vehicles are used. Internal combustion-type engines may be used only in areas where adequate ventilation is provided.

(h) Concentration levels of carbon monoxide gas created by powered industrial truck operations shall not exceed the levels specified in WAC 296-62-075 (General occupational health standards).

(i) When disputes arise concerning degree of concentration, methods of sampling to ascertain the conditions should be referred to a qualified industrial hygienist.

(j) Cargo truck couplings. Couplings installed on cargo trucks (four-wheelers) shall be of a type which will prevent accidental disengaging.

(k) Operating levers. Operating levers on power-driven vehicles shall be so placed as not to project toward the operator's body.

(l) Front axle assembly secure. The front axle assembly on all trailers shall be securely fastened to the truck bed.

(m) Air line hook-up. Tractors hauling heavy duty highway trailers shall have an air line brake hook-up.

(n) Floor mats. On power-driven vehicles where the operator stands on a platform, resilient foot mats shall be securely attached.

(o) Cleaning vehicles. All power-propelled vehicles shall be cleaned at frequent intervals to remove any accumulation of dust and grease that may present a hazard.

(7) Forklift trucks.

(a) Overhead guards.

(i) When operators are exposed to overhead falling hazards, the employer shall ensure that forklift trucks are equipped with securely attached overhead guards. Guards shall be constructed to protect the operator from falling boxes, cartons, packages, or similar objects.

(ii) Overhead guards shall not obstruct the operator's view, and openings in the top of the guard shall not exceed six inches (15.2 cm) in one of the two directions, width or length. Larger openings are permitted if no opening allows the smallest unit of cargo being handled to fall through the guard.

(iii) Overhead guards shall be built so that failure of the vehicle's mast tilting mechanism will not displace the guard.

(iv) An overhead guard, otherwise required by this paragraph, may be removed only when it would prevent a truck from entering a work space and if the operator is not exposed to low overhead obstructions in the work space.

(v) Overhead guards shall be large enough to extend over the operator during all truck operations, including forward tilt.

(b) Supplies to ship's rail. Cargo or supplies shall not be hoisted to or from ship's rail with a forklift. This does not apply to ramp or side port loading.

(c) Position of forks. When standing, lift forklift forks shall be lowered to floor. When moving, lift forklift forks shall be kept as low as possible.

(d) Forklift use in gangplank moving. Not less than two forklifts shall be used to place or remove gangplanks unless fork width prevents tipping and manufacturer's rated lifting capacity of the forklift is not exceeded.

(e) Forklift seat covers. Seats on forklifts shall be provided with a removable waterproof cover when they are exposed to the weather.

(f) Raised equipment to be blocked. Workers shall not work below the raised bed of a dump truck, raised buckets of front end loaders, raised blades of tractors or in similar positions without blocking the equipment in a manner that will prevent it from falling. When working under equipment suspended by use of jacks, safety stands or blocking shall also be used in conjunction with the jack.

(g) Maximum speed. The maximum speed for forklifts on all docks shall not exceed eight miles per hour. This speed limit shall be prominently posted on such docks.

(h) Load backrest extensions. Where necessary to protect the operator, forklift trucks shall be fitted with a vertical load backrest extension to prevent the load from hitting the mast when the mast is positioned at maximum backward tilt. For this purpose, a "load backrest extension" means a device extending vertically from the fork carriage frame to prevent raised loads from falling backward.

(i) Forks. Forks, fork extensions and other attachments shall be secured so that they cannot be accidentally dislodged, and shall be used only in accordance with the manufacturer's recommendations.

(j) Counterweights. Counterweights shall be so affixed that they cannot be accidentally dislodged.

(k) Capacities and weights.

(i) Forklift truck rated capacities, with and without removable counterweights, shall not be exceeded. Rated capacities shall be marked on the vehicle and shall be visible to the operator. The vehicle weight, with and without counterweight, shall be similarly marked.

(ii) If loads are lifted by two or more trucks working in unison, the total weight of the load shall not exceed the combined rated lifting capacity of all trucks involved.

(l) Lifting of employees. Employees may be elevated by forklift trucks only when a platform is secured to the lifting carriage or forks. The platform shall meet the following requirements:

(i) The platform shall have a railing complying with WAC 296-56-60123(3).

(ii) The platform shall have toeboards complying with WAC 296-56-60123(4), if tools or other objects could fall on employees below.

(iii) When the truck has controls which are elevated with the lifting carriage, means shall be provided for employees on the platform to shut off power to the vehicle.

(iv) Employees on the platform shall be protected from exposure to moving truck parts.

(v) The platform floor shall be skid resistant.

(vi) A truck operator shall be at the truck's controls when employees are elevated unless the truck's controls are elevated with the lifting carriage.

(vii) While employees are elevated, the truck may be moved only to make minor placement adjustments.

(8) Bulk cargo-moving vehicles.

(a) Where a seated operator may come into contact with projecting overheads, crawler-type bulk-cargo-moving vehicles that are rider operated shall be equipped with operator's guards.

(b) Guards and their attachment points shall be so designed as to be able to withstand, without excessive deflection, a load applied horizontally at the operator's shoulder level equal to the drawbar pull of the machine.

(9) Straddle trucks.

(a) Accessibility. Straddle trucks shall have a permanent means of access to the operator's station, including any handholds necessary for safe ascent and descent.

(b) Guarding.

(i) Main sprockets and chains to the wheels shall be guarded as follows:

(A) The upper sprocket shall be enclosed;

(B) The upper half of the lower sprocket shall be enclosed; and

(C) The drive chain shall be enclosed to a height of eight feet (2.6 m) except for that portion at the lower half of the lower sprocket.

(ii) Gears shall be enclosed and revolving parts which may be contacted by the operator shall be guarded.

(iii) When straddle trucks are used in the vicinity of employees, personnel-deflecting guards shall be provided around leading edges of front and rear wheels.

(c) Visibility. Operator visibility shall be provided in all directions of movement.

(10) Trailer-spotting tractors.

(a) Trailer-spotting tractors (fifth wheels) shall be fitted with any hand grabs and footing necessary for safe access to the fifth wheel.

(b) Rear cab windows shall be of safety glass or of equivalent material. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-10-004 (Order 85-09), § 296-56-60077, filed 4/19/85; 85-01-022 (Order 84-24), § 296-56-60077, filed 12/11/84.]

WAC 296-56-60079 General rules applicable to vehicles. (1) The requirements of this section apply to general vehicle use within marine terminals except in cases where the provisions of subsections (3) and (13) of this section are preempted by applicable regulations of the Department of Transportation.

(2) Private vehicle parking in marine terminals shall be allowed only in designated areas.

(3) Trailers shall not be disconnected from tractors at loading docks until the road wheels have been immobilized. The road wheels shall be immobilized from the time the brake system is disconnected until braking is again provided. Supplementary front end support shall be employed as necessary to prevent tipping when a trailer is entered by a material handling vehicle. Rear end support shall be employed if rear wheels are so far forward as to allow tipping when the trailer is entered.

(4) The employer shall direct motor vehicle operators to comply with any posted speed limits and other traffic control signs or signals, and written traffic instructions.

(5) Stop signs shall be posted at main entrances and exits of structures where visibility is impaired, and at blind intersections, unless direct traffic control or warning mirror systems or other systems of equivalent safety are provided.

(6) Vehicular routes, traffic rules, and parking areas shall be established, identified, and used.

(7) The employer shall direct vehicle drivers to warn employees in traffic lanes of the vehicle's approach.

(8) Signs indicating pedestrian traffic shall be clearly posted at vehicular check-in and check-out lines and similar locations where employees may be working.

(9) A distance of not less than twenty feet (4.5 m) shall be maintained between the first two vehicles in a check-in, check-out roadability, or vessel loading/discharging line. This distance shall be maintained between any subsequent vehicles behind which employees are required to work.

(10) No unattended vehicle shall be left with its engine running unless secured against movement (see WAC 296-56-60077 for powered industrial trucks).

(11) When the rear of a vehicle is elevated to facilitate loading or discharging, a ramp shall be provided and secured. The vehicle shall be secured against accidental movement during loading or discharging.

(12) Only highway vehicle floors in safe condition shall be used.

(13) When flatbed trucks, platform containers or similar conveyances are loaded or discharged and the cargo consists of pipe or other products which could spread or roll to endanger employees, the cargo shall be contained to prevent movement.

(14) Vehicles used to transport employees within a terminal shall be maintained in safe working order and safety devices shall not be removed or made inoperative. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60079, filed 12/11/84.]

WAC 296-56-60081 Multipiece rim wheels. (1) Scope. This section applies to the servicing of vehicle wheels containing tube-type tires mounted on multipiece rims.

(2) Definition. "Multipiece rim" means a vehicle wheel rim consisting of two or more parts, one of which is a (side) locking ring designed to hold the tire on the rim by tension on interlocking components when the tire is inflated, regardless of the relative sizes of the component parts.

(3) Employee training.

(a) The employer shall ensure that only employees trained in the procedures required in subsection (4) of this section who have demonstrated their ability to service multipiece rim wheels shall be assigned such duties.

(b) The employer shall ensure that each employee demonstrates his ability to service multipiece rim wheels, including performance of the following tasks:

- (i) Tire demounting (including deflation);
- (ii) Inspection of wheel components;
- (iii) Mounting of tires;
- (iv) Inflation of tires, including use of a restraining device;
- (v) Handling of wheels;
- (vi) Inflation of tires when a wheel is mounted on the vehicle; and
- (vii) Installation and removal of wheels.

(4) Servicing procedures. The employer shall ensure that the following procedures are followed:

(a) Tires shall be completely deflated before demounting by removal of the valve core;

(b) The valve core shall be removed before the wheel is removed from the axle when:

(i) The tire has been operated underinflated at eighty percent or less of its recommended pressure; or

(ii) There is discernible or suspected damage to the tire or wheel components;

(c) Mating surfaces shall be free of dirt, surface rust, scale and rubber build up before mounting;

(d) Rubber lubricant shall be applied to bead and rim mating surfaces upon wheel assembly and inflation of the tire;

(e) Air pressure shall not exceed 3 psig (0.21 kg/cm²) when seating the locking ring or rounding out the tube when a tire is being partially inflated without a restraining device;

(f) While the tire is pressurized, components shall not be struck or forced to correct the seating of side or lock rings;

(g) There shall not be any contact between an employee or unit of equipment and a restraining device during tire inflation;

(h) After inflation, tires, rims, and rings shall be inspected while within the restraining device to ensure seating and locking. If adjustment is necessary the tire shall first be deflated by valve core removal; and

(i) Before assembly, wheel components shall be inspected, and damaged rim components shall not be reused.

(5) Charts and manuals.

(a) The employer shall provide a chart containing as a minimum the instructions and information provided in the United States Department of Transportation, National Highway Traffic Safety Administration (NHTSA) publication "Safety Precautions for Mounting and Demounting Tube-Type Truck/Bus Tires" and "Multipiece Rim Wheel Matching Chart," and pertinent to the type(s) of multipiece rim wheels being serviced. The chart shall be available in the terminal's service area.

(b) A current rim manual containing the manufacturer's instructions for mounting, demounting, maintenance and safety precautions relating to the multipiece rim wheels being serviced shall be available in the terminal's service area.

(6) Restraining devices.

(a) Except as otherwise noted, inflation shall be done within a restraining device such as a cage, rack or other device capable of withstanding the maximum force that would be transferred to it during an explosive wheel separation occurring at one hundred fifty percent of maximum tire specification pressure for the wheels being serviced. The restraining device shall be capable of preventing rim components from being thrown outside the frame of the device for any wheel position within the device. When the wheel assembly is mounted on a vehicle, tires may be inflated without a restraining device only if they have more than eighty percent of the recommended pressure and if remote control inflation equipment is used and employees are clear of the danger area.

(b) Restraining devices shall be kept in good repair and be capable of preventing rim components from being thrown outside the device.

(7) Inflation hoses. Inflation hoses shall have a manual clip-on chuck with sufficient hose to permit an employee to be clear of the danger zone. An in-line, manually operated valve with gauge or a preset pressure regulator shall be used to inflate tires.

(8) Other equipment.

(a) Only tools recommended in the rim manual for the type of wheel being serviced shall be used to service multipiece rim wheels.

(b) Wheel components shall not be interchanged except as provided in the applicable chart or manual. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-10-004 (Order 85-09), § 296-56-60081, filed 4/19/85; 85-01-022 (Order 84-24), § 296-56-60081, filed 12/11/84.]

WAC 296-56-60083 Cranes and derricks. (1) Coverage.

(a) This section applies to every kind of crane and derrick and to any other type of equipment performing the functions of a crane or derrick except as noted in (b) of this subsection.

(b) This section does not apply to small industrial truck-type cranes, container handling toploaders and sideloaders, chain hoists, and mobile straddle-type cranes incapable of straddling two or more intermodal containers (sixteen feet (4.88 m) in width).

(2) Ratings.

(a) Except for bridge cranes covered by subsection (7) of this section, cranes and derricks having ratings that vary with boom length, radius (outreach) or other variables shall have a durable rating chart visible to the operator, covering the complete range of the manufacturer's (or design) capacity ratings. The rating chart shall include all operating radii (outreach) for all permissible boom lengths and jib lengths as applicable, with and without outriggers, and alternate ratings for

optional equipment affecting such ratings. Precautions or warnings specified by the owner or manufacturer shall be included along with the chart.

(b) The manufacturer's (or design) rated loads for the conditions of use shall not be exceeded.

(c) Designated working loads shall not be increased beyond the manufacturer's ratings or original design limitations unless such increase receives the manufacturer's approval. When the manufacturer's services are not available or where the equipment is of foreign manufacture, engineering design analysis shall be performed or approved by a person accredited for certifying the equipment under WAC 296-56-60093. Cranes shall conform with the manufacturer's specifications and/or any current ANSI standards that apply. Engineering design analysis shall be performed by a registered professional engineer competent in the field of cranes and derricks. Any structural changes necessitated by the change in rating shall be carried out.

(3) Radius indicator. When the rated load varies with the boom radius, the crane or derrick shall be fitted with a boom angle or radius indicator visible to the operator.

(4) Prohibited usage.

(a) Equipment shall not be used in a manner that exerts sideloading stresses upon the crane or derrick boom.

(b) No crane or derrick having a visible or known defect that affects safe operation shall be used.

(5) Protective devices.

(a) When exposed moving parts such as gears, chains and chain sprockets present a hazard to employees during crane and derrick operations, those parts shall be securely guarded.

(b) Crane hooks shall be latched or otherwise secured to prevent accidental load disengagement.

(c) When hoisting personnel in an approved man basket, the hook shall have a positive safety latch to prevent rollouts.

(6) General.

(a) Operating controls.

(i) Crane and derrick operating controls shall be clearly marked, or a chart indicating their function shall be posted at the operator's position.

(ii) All crane controls shall operate in a uniform manner within a given port.

(iii) After October 3, 1984, overhead bridge and container gantry crane operating control levers shall be self-centering so that they will automatically move to the "off" position when the operator releases the control.

(b) Booms. Cranes with elevatable booms and without operable automatic limiting devices shall be provided with boom stops if boom elevation can exceed maximum design angles from the horizontal.

(c) Foot pedals. Foot pedals shall have a nonskid surface.

(d) Access. Ladders, stairways, stanchions, grab irons, foot steps or equivalent means shall be provided as necessary to ensure safe access to footwalks, cab platforms, the cab and any portion of the superstructure which employees must reach.

(i) Footwalks shall be of rigid construction, and shall be capable of supporting a load of one hundred pounds (4.79 kPa) per square foot.

(ii) If more than twenty feet (6.1 m) in height, vertical ladders shall comply with WAC 296-56-60209 (4), (5)(a), (5)(b)(iii) and (5)(b)(iv).

(iii) Stairways on cranes shall be equipped with rigid handrails meeting the requirements of WAC 296-56-60123 (5)(a).

(iv) If the top of a ladder or stairway or any position thereof is located where a moving part of a crane, such as a revolving house, could strike an employee ascending or descending the ladder or stairway, a prominent warning sign shall be posted at the foot of the ladder or stairway. A system of communication (such as a buzzer or bell) shall be established and maintained between the foot of the ladder or stairway and the operator's cab.

(e) Operator's station. The cab, controls, and mechanism of the equipment shall be so arranged that the operator has a clear view of the load or signalman, when one is used. Cab glass, when used, shall be safety plate glass or equivalent and good visibility shall be maintained through the glass. Clothing, tools and equipment shall be stored so as not to interfere with access, operation, or the operator's view.

(f) Counterweights or ballast. Cranes shall be operated only with the specified type and amount of ballast or counterweights. Ballast or counterweight shall be located and secured only as provided in the manufacturer's or design specifications, which shall be available.

(g) Outriggers. Outriggers shall be used according to the manufacturer's specifications or design data, which shall be available. Floats, when used, shall be securely attached to the outriggers. Wood blocks or other support shall be of sufficient size to support the outrigger, free of defects that may affect safety and of sufficient width and length to prevent the crane from shifting or toppling under load.

(h) Exhaust gases. Engine exhaust gases shall be discharged away from the normal position of crane operating personnel.

(i) Electrical equipment shall be so located or enclosed that live parts will not be exposed to accidental contact. Designated persons may work on energized equipment only if necessary during inspection, maintenance, or repair.

(j) Fire extinguisher.

(i) At least one portable fire extinguisher of at least 5-BC rating or equivalent shall be accessible in the cab of the crane or derrick.

(ii) No portable fire extinguisher using carbon tetrachloride or chlorobromomethane extinguishing agents shall be used.

(k) Rope on drums. At least three full turns of rope shall remain on ungrooved drums, and two turns on grooved drums, under all operating conditions. Wire rope shall be secured to drums by clamps, U-bolts, shackles or equivalent means. Fiber rope fastenings are prohibited.

(l) Assembly or disassembly of boom sections. Mobile crane booms being assembled or disassembled on the

ground with or without the support of the boom harness shall be blocked to prevent dropping of the boom or boom sections.

(m) Brakes.

(i) Each independent hoisting unit of a crane shall be equipped with at least one holding brake, applied directly to the motor shaft or gear train.

(ii) Each independent hoisting unit of a crane, except worm geared hoists, the angle of whose worm is such as to prevent the load from accelerating in the lowering direction, shall, in addition to a holding brake, be equipped with a controlled braking means to control lowering speeds.

(iii) Holding brakes for hoist units shall have not less than the following percentage of the rated load hoisting torque at the point where the brake is applied:

(A) One hundred twenty-five percent when used with a controlled braking means.

(B) One hundred percent when used with a mechanically-controlled braking means.

(C) One hundred percent when two holding brakes are provided.

(iv) All power control braking means shall be capable of maintaining safe lowering speeds of rated loads.

(n) Each crane or derrick shall be equipped with sufficient lights to maintain five foot candles in the working area around the load hook. All crane ladders and machinery houses shall be illuminated at a minimum of two candle power.

(o) Light fixtures connected to the boom, gantry legs, or machinery house shall be provided with safety devices which will prevent the light fixture from falling in case of bracket failure.

(p) Electronic devices may be installed to prevent collision subject to approval of the accredited certification agency.

(q) On all rail gantry cranes, truck guards shall extend on the ends of the trucks, close to the top of the rail to prevent worker's feet from being caught between the rail and wheel. This subsection would not apply if rail sweeps are present.

(r) All hydraulic cylinders used to control crane booms or to provide crane stability (outriggers) shall be equipped with a pilot operated check valve or a device which will prevent the boom or outrigger from retracting in case of failure of a component of the hydraulic system.

(s) Gantry cranes shall be provided with automatic rail clamps or other devices to prevent the crane from moving when not being used or when power is off.

(7) Rail-mounted cranes (excluding locomotive types).

(a) For the purposes of this section, rail-mounted cranes include bridge cranes and portal cranes.

(b) Rated load marking. The rated loads of bridge cranes shall be plainly marked on each side of the crane and in the cab. If there is more than one hoisting unit, each hoist shall have its rated load marked on it or on its load block. Marking shall be legible from the ground level.

(c) Wind-indicating devices.

(i) After October 3, 1983, each rail-mounted bridge and portal crane located outside of an enclosed structure shall be fitted with an operable wind-indicating device.

(ii) The wind indicating device shall provide a visible or audible warning to alert the operator of high wind conditions. That warning shall be transmitted whenever the following circumstances are present:

(A) When wind velocity reaches the warning speed, not exceeding the crane manufacturer's recommendations; and

(B) When wind velocity reaches the shutdown speed, not exceeding the crane manufacturer's recommendations, at which work is to be stopped and the crane secured.

(iii) Instructions. The employer shall post operating instructions for high wind conditions in the operator's cab of each crane. Operators shall be directed to comply with these instructions. The instructions shall include procedures for responding to high wind alerts and for any coordination necessary with other cranes.

(d) Securing of cranes in high winds.

(i) When the wind reaches the crane's warning speed:

(A) Gantry travel shall be stopped; and

(B) The crane shall be readied for shutdown.

(ii) When the wind reaches the crane's shutdown speed:

(A) Any portion of the crane spanning or partially spanning a vessel shall be moved clear of the vessel if safe to do so; and

(B) The crane shall be secured against travel, using all available means of securing.

(e) The employer shall monitor local weather conditions by subscribing to a weather service or using equally effective means.

(f) Stops and bumpers.

(i) The ends of all tracks shall be equipped with stops or bumpers. If a stop engages the tread of the wheel, it shall be of a height not less than the radius of the wheel.

(ii) When more than one crane operates on the same runway or more than one trolley on the same bridge, each crane or trolley shall be equipped with bumpers or equivalent devices at adjacent ends subject to impact.

(g) Employee exposure to crane movement. When employees may be in the vicinity of the tracks, crane trucks shall be equipped with personnel-deflecting guards.

(h) Pedestrian clearance. If the track area is used for employee passage or for work, a minimum clearance of three feet (0.9 m) shall be provided between trucks or the structures of rail-mounted cranes and any other structure or obstruction. When the required clearance is not available on at least one side of the crane's trucks, the area shall not be used and shall be marked and identified.

(i) Warning devices. Rail-mounted cranes shall be equipped with an effective travel, audible and visible, warning device which shall be used to warn employees who may be in the path of the moving crane.

(j)(i) Communications. Means of communication shall be provided between the operator's cab and the

base of the gantry of all rail-mounted cranes. This requirement may be met by telephone, radio, sound-signaling system or other effective methods, but not solely by hand-signaling.

(ii) All rail-mounted cranes thirty ton and above capacity will be equipped with a voice hailing device (PA systems) from the operator to the ground, audible within one hundred feet.

(k) Cranes and crane operations—Scope and application. The sections of this chapter, WAC 296-56-60083 through 296-56-60099, apply to cranes and crane operations.

(l) Signalmen. A signalman shall be required when a crane operator's visibility is obstructed. When a signalman is required to transmit hand signals, he shall be in such a position that the operator can plainly see the signals.

(m) Signals. All operators and signalmen shall use standard signals as illustrated for longshore crane operations. (See Appendix C and D, at the end of this chapter.)

(n) Signalman for power units. Where power units, such as cranes and winches are utilized and signaling is required, the operator shall have definite instructions as to who is authorized to give signals. The operator shall take signals only from such authorized person. In case of emergency, any worker shall be authorized to give a stop signal.

(i) No draft shall be hoisted unless the winch or crane operator(s) can clearly see the draft itself or see the signals of any signalman associated with the operation.

(ii) Loads requiring continuous manual guidance while in motion shall be provided with tag lines.

(o) Landing loads. Persons assisting in landing a load shall face the load and use caution to prevent themselves from getting in a position where they may be caught between the load and a fixed object.

(8) Stabilizing of locomotive cranes. Loads may be hoisted by locomotive cranes only if outriggers are in place, unless means are taken to prevent the load being carried by the truck springs of the crane.

(9) Operations.

(a) Use of cranes together. When two or more cranes hoist a load in unison, a designated person shall direct the operation and instruct personnel in positioning, rigging of the load and movements to be made.

(b) Guarding of swing radius. Accessible areas within the swing radius of the body of a revolving crane shall be physically guarded during operations to prevent an employee from being caught between the body of the crane and any fixed structure or between parts of the crane.

(c) Securing mobile crane components in transit. The crane's superstructure and boom shall be secured against rotation and carried in line with the direction of travel except when negotiating turns with an operator in the cab or when the boom is supported on a dolly. The empty hook or other attachment shall be secured.

(d) Unattended cranes. The following steps shall be taken before leaving a crane unattended between work periods:

(i) Suspended loads, such as those hoisted by lifting magnets or clamshell buckets, shall be landed unless the storage position or maximum hoisting of the suspended device will provide equivalent safety;

(ii) Clutches shall be disengaged;

(iii) The power supply shall be shut off;

(iv) The crane shall be secured against accidental travel; and

(v) The boom shall be lowered or secured against movement.

(e) Operating near electric power lines.

(i) Clearance. Unless electrical distribution and transmitting lines are deenergized and visibly grounded at point of work, or unless insulating barriers not a part of or an attachment to the crane have been erected to prevent physical contact with lines, cranes may be operated near power lines only in accordance with following:

(A) For lines rated 50 kV or below, minimum clearance between the lines and any part of the crane or load shall be ten feet (3 m);

(B) For lines rated over 50 kV, minimum clearance between the lines and any part of the crane or load shall be either 10 feet (3 m) plus 0.4 inch (10 mm) for each 1 kV over 50 kV, or twice the length of the line insulator, but never less than ten feet; and

(C) In transit with no load and boom lowered, the clearance shall be a minimum of four feet (1.2 m).

(ii) Boom guards. Cage-type boom guards, insulating links or proximity warning devices may be used on cranes, but they shall not be used in place of the clearances required by subsection (9)(e)(i) of this section.

(iii) Determination of energized lines. Any overhead line shall be presumed to be energized until the owner of the line indicates that it is not energized.

(10) Protection for employees being hoisted.

(a) No employee shall be hoisted by the load hoisting apparatus of a crane or derrick except:

(i) On intermodal container spreaders, equipped in accordance with subsection (10) of this section; or

(ii) In a boatswain's chair or other device rigged to prevent it from accidental disengagement from the hook or supporting member; or

(iii) On a platform meeting the following requirements:

(A) Enclosed by a railing or other means providing protection equivalent to that described in WAC 296-56-60123(3). If equipped with open railings, the platform shall be fitted with toe boards;

(B) Having a safety factor of four based on ultimate strength;

(C) Bearing a plate or permanent marking indicating maximum load rating, which shall not be exceeded, and the weight of the platform itself;

(D) Equipment with a device to prevent access doors, when used, from opening accidentally;

(E) Equipped with overhead protection for employees on the platform if they are exposed to falling objects or overhead hazards;

(F) Secured to the load line by means other than wedge and socket attachments, unless the free (bitter)

end of the line is secured back to itself by a clamp placed as close above the wedge as possible.

(b) Except in an emergency, the hoisting mechanism of all overhead and container gantry cranes used to hoist personnel shall operate in power up and power down, with automatic brake application when not hoisting or lowering.

(c) Variable radius booms of a crane or derrick used to hoist personnel shall be so constructed or secured as to prevent accidental boom movement.

(d) Platforms or devices used to hoist employees shall be inspected for defects before each day's use and shall be removed from service if defective.

(e) Employees being hoisted shall remain in continuous sight of and communication with the operator or signalman.

(f) Operators shall remain at the controls when employees are hoisted.

(g) Cranes shall not travel while employees are hoisted, except in emergency or in normal tier to tier transfer of employees during container operations.

(h) When intermodal container spreaders are used to transfer employees to or from the tops of containers, the spreaders shall be equipped with a personnel platform equipped with fixed railings, provided that the railings have one or more openings for access. The openings shall be fitted with a means of closure, such as chains with hooks. Existing railings shall be at least thirty-six inches (0.91 m) in height. New railings installed after October 3, 1983 shall be forty-two inches (1.07 m), plus or minus three inches (7.6 cm), in height. The provisions of (a)(iii)(C), (D), and (F) of this subsection also apply to personnel platforms when such container spreaders are used.

(i) Positive safety latch-type hooks or moused hooks shall be used.

(11) Routine inspection.

(a) Designated persons shall visually inspect each crane and derrick on each day of use for defects in functional operating components and shall report any defect found to the employer. The employer shall inform the operator of the findings.

(b) A designated person shall thoroughly inspect all functional components and accessible structural features of each crane or device at monthly intervals.

(c) Any defects found during such inspections which may create a safety hazard shall be corrected before further equipment use. Repairs shall be performed only by designated persons.

(d) A record of monthly inspections shall be maintained for six months in or on the crane or derrick or at the terminal. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-10-004 (Order 85-09), § 296-56-60083, filed 4/19/85; 85-01-022 (Order 84-24), § 296-56-60083, filed 12/11/84.]

WAC 296-56-60085 Crane load and limit devices.

(1)(a) Except as provided in (a)(viii) of this subsection, every crane after October 3, 1984 shall be fitted with a load indicating device or alternative device in proper

working condition which shall meet the following criteria:

(i) The type or model or any load indicating or alternate device which is used shall provide:

(A) A direct indication in the cab of actual weight hoisted or a means of determining this by referencing a weight indication to crane ratings posted and visible to the operator, except that the use of a dynamometer or simple scale alone will not meet this requirement; or

(B) Indications in the cab according to the radius and load at the moment; or

(C) A direct means to prevent an overload from occurring.

(ii) Accuracy of the devices required by this section shall be such that any indicated load (or limit), including the sum of actual weight hoisted and additional equipment or "add ons" such as slings, sensors, blocks, etc., is within the range from no less than ninety-five percent of the actual true total load (five percent overload) to one hundred ten percent of the actual true total load (ten percent underload). Such accuracy shall be required over the range of the daily operating variables to be expected under the conditions of use.

(iii) The device shall permit the operator to determine, before making any lift, that the indicating or substitute system is operative. In the alternative, if a device is so mounted or attached to preclude such a determination, it may not be used unless it has been certified by the manufacturer to remain operable within the limits stated in (a)(ii) of this subsection for a specific period of use. Checks for accuracy, using known values of load, shall be performed at the time of every certification survey (see WAC 296-56-60093) and at such additional times as may be recommended by the manufacturer.

(iv) When a load indicating device or alternative system is so arranged in the supporting system (crane structure) that its failure could cause the load to be dropped, its strength shall not be the limiting factor of the supporting system (crane structure).

(v) Marking shall be conspicuously placed giving: Units of measure in pounds or both pounds and kilograms, capacity of the indicating system, accuracy of the indicating system, and operating instructions and precautions. In the case of systems utilizing indications other than actual weights, the marking shall include data on: The means of measurement, capacity of the system, accuracy of the system, and operating instructions and precautions. If the system used provides no readout, but it is such as to automatically cease crane operation when the rated load limit under any specific condition of use is reached, marking shall be provided giving the make and model of the device installed, a description of what it does, how it is operated, and any necessary precautions regarding the system. All weight indications, other types of loading indications, and other data required shall be readily visible to the operator.

(vi) All load indicating devices shall be operative over the full operating radius. Overall accuracy shall be based on actual applied load and not on full scale (full capacity) load.

Explanatory note. For example, if accuracy of the load indicating device is based on full scale load and the device is arbitrarily set at plus/minus ten percent, it would accept a reading between ninety thousand and one hundred ten thousand pounds, at full capacity of a machine with one hundred thousand pounds, maximum rating, but would also allow a reading between zero and twenty thousand pounds, at that outreach (radius) at which the rating would be ten thousand pounds, capacity—an unacceptable figure. If, however, accuracy is based on actual applied load under the same conditions, the acceptable range would remain the same with the one hundred thousand pound load but becomes a figure between nine thousand and eleven thousand pounds, a much different and acceptable condition, at the ten thousand pound load.

(vii) When the device uses the radius as a factor in its use or in its operating indications, the indicated radius (which may be in feet and/or meters, or degrees of boom angle, depending on the system used) shall be a figure which is within the range of a figure no greater than one hundred ten percent of the actual radius to a figure which is no less than ninety-seven percent of the actual (true) radius. A conversion chart shall be provided whenever it is necessary to convert between degrees of radius and feet or meters.

(viii) The load indicating device requirements of this item do not apply to a crane:

(A) Of trolley equipped bridge type while handling container known to be and identified as empty, or loaded, and in either case in compliance with the provisions of WAC 296-56-60103, or while hoisting other lifts by means of a lifting beam supplied by the crane manufacturer for the purpose, and in all cases within the crane rating;

(B) While handling bulk commodities or cargoes by means of clamshell bucket or magnet;

(C) While used to handle or hold hoses in connection with transfer of bulk liquids or other hose handled products; or

(D) While the crane is used exclusively to handle cargo or equipment the total actual gross weight of which is known by means of marking of the unit or units hoisted, when such total actual gross weight never exceeds eleven thousand two hundred pounds, and when eleven thousand two hundred pounds, is less than the rated capacity of the crane at the maximum outreach that is possible under the conditions of use at the time.

(ix) Limit switches shall be installed on the main line and whip line assemblies which will deactivate the hoisting power when a load reaches the upper limits of travel and at such other places as required by this chapter. Line limit switches shall be tested prior to or at the beginning of each shift to determine if they are functioning properly. Any malfunction shall be reported to the person in charge immediately and shall be repaired at the first reasonable opportunity. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-10-004 (Order 85-09), § 296-56-60085, filed 4/19/85; 85-01-022 (Order 84-24), § 296-56-60085, filed 12/11/84.]

WAC 296-56-60087 Winches. (1) Moving winch parts which present caught-in hazards to employees shall be guarded.

(2) Winches shall have clearly identifiable and readily accessible stop controls.

(3) Portable winches shall be secured against accidental shifting while in use.

(4) Portable winches shall be fitted with limit switches if employees have access to areas from which it is possible to be drawn into the winch.

(5) The provisions of WAC 296-56-60083 (6)(k) shall apply to winches. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60087, filed 12/11/84.]

WAC 296-56-60089 Conveyors. (1) Guards.

(a) Danger zones at or adjacent to conveyors shall be guarded to protect employees.

(b) An elevated walkway with guardrail or equivalent means of protection shall be provided where employees cross over moving conveyors, and suitable guarding shall be provided when employees pass under moving conveyors.

(2) Moving parts. Conveyor rollers and wheels shall be secured in position.

(3) Positioning. Gravity conveyor sections shall be firmly placed and secured to prevent them from falling.

(4) Braking.

(a) When necessary for safe operation, provisions shall be made for braking objects at the delivery end of the conveyor.

(b) Conveyor using electrically released brakes shall be constructed so that the brakes cannot be released until power is applied, and that the brakes are automatically engaged if the power fails or the operating control is returned to the "stop" position.

(5) Stability. Portable conveyors shall be stable within their operating ranges. When used at variable fixed levels, the unit shall be secured at the operating level.

(6) Emergency stop devices. Readily accessible stop controls shall be provided for use in an emergency whenever employees are required to walk or work in the vicinity of the conveyor. The emergency stop device shall be available within easy reach from any position on or adjacent to the conveyor.

(7) Starting powered conveyors. Powered conveyors shall not be started until all employees are clear of the conveyor or have been warned that the conveyor is about to start.

(8) Loading and unloading. The area around conveyor loading and unloading points shall be kept clear of obstructions during conveyor operations.

(9) Lockout/tagout.

(a) Conveyors shall be stopped and their power sources locked out and tagged out during maintenance, repair, and servicing, unless power is necessary for testing.

(b) The starting device shall be locked out and tagged out in the stop position before an attempt is made to remove the cause of a jam or overload of the conveying

medium, unless it is necessary to have the power on to remove the jam.

(10) Chutes, gravity conveyors and rollers.

(a) Chutes used in the manual handling of cargo shall be adequate for the use to which they are put and shall be kept free of splinters and sharp edges.

(b) Chutes shall be equipped with sideboards of sufficient height to prevent cargo from falling off.

(c) Chutes and gravity roller sections shall be firmly placed or secured to prevent displacement.

(d) Gravity rollers shall be of sufficient strength for the weight of material which is placed upon them. Rollers shall be locked in position to prevent them from falling or jumping out of the frame.

(e) Frames shall be kept free of burrs and sharp edges.

(f) When necessary, provision shall be made for braking objects at the delivery end of the roller or chute.

(11) Safe practices.

(a) Only designated persons shall operate, repair or service powered conveyors.

(b) The employer shall direct employees to stay off operating conveyors.

(c) Conveyors shall be operated only with all overload devices, guards and safety devices in place and operable. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-10-004 (Order 85-09), § 296-56-60089, filed 4/19/85; 85-01-022 (Order 84-24), § 296-56-60089, filed 12/11/84.]

WAC 296-56-60091 Spouts, chutes, hoppers, bins, and associated equipment. (1) Standing and running rigging and associated gear used as a permanent part of spouts, chutes or similar devices shall be inspected before each use and shall not be used if it has any functional defects. (See also WAC 296-56-60093 (3)(b) for certification requirements.)

(2) Direct communication shall be provided between the discharge or shipboard control end of loading spouts and chutes and the point in the terminal from which the flow of cargo is controlled.

(3) Chute and hopper openings which present a hazard shall be guarded to prevent employees from falling through them.

(4) When employees are working on hoppers, the hopper shall be equipped with a safe walkway and means of access.

(5) When necessary for the safety of employees, chutes shall be equipped with sideboards to afford protection from falling objects.

(6) Chutes shall be firmly placed and secured to prevent them from falling.

(7) When necessary for the safety of employees, provisions shall be made for braking objects other than bulk commodities at the delivery end of the chute.

(8) Before an employee enters an empty bin:

(a) Personnel controlling the flow of cargo into the bin shall have been notified of the entry; and

(b) The power supply to the equipment carrying the cargo to the bin shall be turned off, locked out and tagged.

(9) Before an employee enters a bin containing a bulk commodity such as coal or sugar, the employer shall ensure that:

(a) Personnel controlling the flow of cargo into the bin have been notified of the entry;

(b) The power supply to the equipment carrying the cargo to the bin is turned off, locked out and tagged;

(c) The employee entering the bin wears a life-line and safety harness; and

(d) A standby attendant equipped to perform a rescue is continuously stationed outside the bin until the employee has left the bin.

(10) Bin top openings that present a hazard to employees shall be covered to prevent employees from falling into bins.

(11) Chutes and hoppers shall be repaired only by designated persons.

(12)(a) Before power shoveling operations begin, a designated person shall inspect the equipment to be used. The inspection shall include at least the eye bolts, wires, and sheaves.

(b) Power shovels and associated equipment with defects affecting safe operation shall not be used.

(c) Before adjustments are made to a power shovel, wire, or associated equipment, the power supply to the shovel shall be turned off, locked out, and tagged, the belt stopped, and the hopper closed. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60091, filed 12/11/84.]

WAC 296-56-60093 Certification of marine terminal material handling devices. (1) The employer shall not use any material handling device listed in WAC 296-56-60098(22) until he has ascertained that the device has been certificated, as evidenced by current and valid documents attesting to compliance with the requirements of WAC 296-56-60098(21).

(2) Certification surveys are to be completed for the conditions of use found at the time such surveys are completed, with the understanding that equipment owners/users can change the configurations of the equipment according to the manufacturer's specifications without affecting the established certification status for the equipment.

(3) These rules apply to employment within a marine terminal including the loading, unloading, movement, or other handling of cargo, ship's stores, or gear within the terminal or into or out of any land carrier, holding or consolidation area, or any other activity within and associated with the overall operation and functions of the terminal, such as the use and routine maintenance of facilities and equipment.

(4) Inspection and test certificates shall be issued only for that equipment which meets or exceeds the requirements as specified in these rules. All inspection and test certificates shall be issued through the office of the assistant director of the division of industrial safety and health, department of labor and industries, and shall be valid for a period not to exceed one year from the date of issuance.

(5) Equipment requiring certification shall be inspected by representatives of the division of industrial safety and health; or individuals who have received a "certificate of competency" from the supervisor of industrial safety and health indicating that they are qualified and capable of performing such work.

(6) When deficiencies are found they shall be noted on forms provided for such purpose by the division of industrial safety and health. Copies shall be delivered to the owner of the equipment and the division of industrial safety and health at the Olympia office by the person conducting such tests and/or inspections.

(7) A certificate of unit test and/or examination of equipment shall not be issued for any equipment found not to be in compliance with the provisions of this chapter.

(8) Persons desiring a "certificate of competency" shall demonstrate and document their capabilities and qualifications to the assistant director of the division of industrial safety and health, who will issue such certificates to those persons whom he considers qualified. The assistant director reserves the right to revoke such certificates at any time for cause. A "certificate of competency" shall be issued for a period of not more than three years. Applications for renewal may be made not more than sixty days prior to the expiration date shown on the certificate.

(9) The assistant director of industrial safety and health or his representative, reserves the right to inspect such equipment or to witness or attend any test or inspection in order to ascertain the adequacy of any certification activity performed.

(10) Unless otherwise exempted, all cranes or derricks required to be certificated by these regulations shall have a current test certificate posted in the operator's cab or station. No person shall be required to operate such crane or derrick unless a current valid certificate is posted. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-10-004 (Order 85-09), § 296-56-60093, filed 4/19/85; 85-01-022 (Order 84-24), § 296-56-60093, filed 12/11/84.]

WAC 296-56-60095 Advisory crane certification panel. (1) Any person desiring a certificate of competency for crane inspection or certification shall make application to the assistant director for industrial safety and health for the certificate of competency. The application shall include documentation of all qualifications. Including all past experience, education, training and any other factors deemed to be relevant to the application.

(2) The advisory crane certification panel shall assist the assistant director for industrial safety and health in his duties under this chapter. The panel shall consist of six members. Two members shall represent labor, two members shall represent management, and a crane expert. The sixth member shall be chairman of the panel, the assistant director of industrial safety and health or his designee. The panel shall be responsible for advising the assistant director as to the issuance of any certificate of competency. The panel shall review all applications

for certificates of competency. Minutes of meetings shall be kept.

(3) In addition, the panel shall, upon request by the assistant director, render advice concerning any matter which is relevant to crane safety. The panel shall meet twice yearly or more often as deemed necessary by the chairman of the panel. Any panel member who is not an employee of the state of Washington shall serve voluntarily. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60095, filed 12/11/84.]

WAC 296-56-60097 Unit proof load test and inspection. Cranes and derricks shall be proof load tested, rated and certificated in tons (2,000 lbs. = 1 ton). Cranes and derricks shall be inspected and unit proof load tested prior to being put into use, after any significant modification or repairs of structural parts, or when deemed necessary by the supervisor of industrial safety and health; however, each crane or derrick shall be unit proof load tested at least once during each twelve-month period. Unit proof load tests shall be carried out by the use of weights as a dead load. When use of weights for unit proof load tests is not possible or reasonable a dynamometer or other recording test equipment may be used. Such equipment shall be tested for accuracy with certified calibrating equipment within twelve months prior to being used and a copy of the certified calibration test shall have been made available to authorized representatives of the division of industrial safety and health upon request.

The weight of the objects used for a dead load weight test shall be certified and a record of the weight shall be made available upon request. Any replacements or repairs deemed necessary by the person conducting a test shall be carried out before application of the required proof load unit test.

(1) The proof load tests for derricks shall be conducted as follows:

Safe Working Load	Proof Load
to 20 tons	25% in excess
20-50 tons	5 tons in excess
over 50 tons	10% in excess of manufacturer's recommended lifting capacity.

Proof load shall be applied at the designed maximum and minimum boom angles or radii, or if this is impracticable, as close to these as practicable. The angles or radii of test shall be stated in the certificate of test. Proof loads shall be swung as far as possible in all directions. The weight of auxiliary handling devices such as spreader bars, robots, clams, magnets, or other gear shall be considered a part of the load. Brakes shall be tested by holding the proof load suspended without other mechanical assistance. After satisfactory completion of a unit proof load test the derrick and all component parts thereof shall be carefully examined and, if necessary, nondestructive tests may be conducted to assure that the

equipment is safe for use and has not been damaged in the unit proof load testing process.

(2) Unit proof load tests for cranes shall be carried out where applicable with the boom in the least stable direction relative to the mounting, based on the manufacturer's specifications.

Unit proof load tests for cranes shall be based on the manufacturer's load ratings for the conditions of use and shall, except in the case of bridge type cranes utilizing a trolley, consist of application of a proof load of ten percent in excess of the load ratings at maximum and minimum radius, and at such intermediate radii as the certificating authority may deem necessary in the circumstances. (The manufacturer's load ratings are usually based upon percentage of tipping loads under some conditions and upon limitations of structural competence at others, as well as on other criteria such as type of crane mounting, whether or not outriggers are used, etc. Some cranes utilizing a trolley may have only one load rating assigned and applicable at any outreach. It is important that the manufacturer's ratings be used.) Trolley equipped cranes shall be subject to a proof load of twenty-five percent in excess of the manufacturer's load rating. In cases of foreign manufacture, the manufacturer's specifications shall be subject to approval by the certificating authority. The weight of all auxiliary handling devices such as, but not limited to, magnets, hooks, slings, and clamshell buckets shall be considered part of the load.

(3) In the event neither manufacturer's data nor design data on safe working loads (including any applicable limitations) are obtainable, the safe working load ratings assigned shall be based on the owner's information and warranty that those so assigned are correct. Unit test certificates shall state the basis for any such safe working load assignment.

(4) If the operation in which equipment is engaged never utilizes more than a fraction of the safe working load rating, the owner of such equipment may, at his option, have the crane or derrick certificated for and operated at a lesser maximum safe working load in keeping with the use and based on radius and other pertinent factors: *Provided, however,* That the equipment concerned is physically capable of operation at the original load rating and the load reduction is not for the purpose of avoiding correction of any deficiency.

(5) Safe working load ratings shall not be increased beyond the manufacturer's ratings or original design limitations without prior approval by the accredited certification agency. Such prior approval shall be based on the manufacturers' approval of such increase or documented engineering design analysis or both. All necessary structural changes shall be completed prior to approval by the accredited certification agency. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60097, filed 12/11/84.]

WAC 296-56-60098 Examination and inspection of cranes and derricks. An examination shall be carried out in conjunction with each annual unit proof load test. The accredited person, or his authorized representative, shall

make a determination as to correction of deficiencies found. The examination shall cover the following points as applicable: (Refer to WAC 296-56-60093 for definition of accredited person.)

(1) All functional operating mechanisms shall be examined for improper function, maladjustment, and excessive component wear, with particular attention to sheaves, pins, and drums. The examinations shall include operation with partial load, in which all functions and movements, including, where applicable, maximum possible rotation in both directions, are performed.

(2) All safety devices shall be examined for malfunction.

(3) Lines, tanks, valves, drains, pumps, and other parts of air or hydraulic systems shall be examined for deterioration or leakage.

(4) Rope reeving shall comply with the manufacturer's recommendations.

(5) Deformed, cracked, or excessively corroded members in crane structure and boom shall be repaired or replaced as necessary.

(6) Loose bolts, rivets, or other connections shall be corrected.

(7) Worn, cracked, or distorted parts affecting safe operation shall be corrected.

(8) All brakes, used to control the load, boom or travel of the crane, shall be tested. Air, hydraulic, or electrically operated brakes shall be of such design as to set and stop the load if the source of power fails.

(9) Brake and clutch system parts, linings, pawls, and ratchets shall be examined for excessive wear and free operation.

(10) Load, boom angle, or other indicators shall be checked over their full range. Defects in such indicators shall be immediately corrected.

(11) Where used, clamshell buckets or other similar equipment, such as magnets, etc., shall be carefully examined in all respects, with particular attention to closing line wires and sheaves. The accredited person may supplement such examination by requesting any operational tests as may be appropriate.

(12) Careful examination of the junction areas of removable boom sections, particularly for proper seating, cracks, deformities, or other defects in securing bolts and in the vicinity of such bolts, shall be made.

(13) All platforms, steps and footwalks located on cranes where workers are exposed to the hazard of slipping shall be of a nonslip material. Wire rope used for railings on cranes shall be kept taut at all times.

NOTE: In critical areas such as footwalks along booms, a grating material should be used.

(14) It shall be ascertained that no counterweights in excess weight of the manufacturer's specifications shall be fitted or used.

(15) Such other examination or supplemental functional tests shall be made as may be deemed necessary by the accredited person under the circumstances.

(16) Wire rope.

(a) All wire rope shall be inspected once a month, dependent upon conditions to which the wire ropes are subjected, and at intervals not exceeding a twelve-month

period. Records of inspection of wire rope shall be kept and shall be available to the department of labor and industries representative. Records shall be kept for one year. Refer to the general safety and health standards, WAC 296-24-240.

(b) Wire rope shall not be used if in any length of eight diameters, the total number of visible broken wires exceeds ten percent of the total number of wires, or if the rope shows other signs of excessive wear, corrosion, or defect. Particular attention shall be given to the condition of those sections of wire rope adjacent to any terminal connections, those sections exposed to abnormal wear, and those sections not normally exposed for examination.

(c) Documentation, available for inspection, shall include wire rope test certificates relating to any replacements made since the last unit test or annual examination as required.

(d) Wire rope and replacement wire rope shall be of the same size, same or better grade, and same construction as originally furnished by the equipment manufacturer or contemplated in the design, unless otherwise recommended by the equipment or wire rope manufacturer due to actual working condition requirements. In the absence of specific requirements as noted, wire rope shall be of a size and construction suitable for the purpose, and shall have the capacity to handle four times the heaviest expected load and verified by wire rope test certificate.

(e) Wire rope in use on equipment previously constructed and prior to initial certification of said equipment shall not be required to be tested but shall be subject to thorough examination at the time of initial certification of the equipment.

(17)(a) Accessory components, such as hooks. Container spreader bar twist locks shall be carefully examined periodically and at the time of annual examination and inspection. Cracked or deformed hooks shall be discarded immediately and not reused on any equipment subject to the provisions of this chapter.

(b) Crane hooks and container spreader bar twist lock. Magnetic particle or other suitable crack detecting inspection shall be performed at least once each year. When testing by x-ray, the pertinent provisions of the Nuclear Regulatory Commission's standards for protection against radiation, relating to protection against occupational radiation exposure, shall apply.

(18) In the event that heat treatment of any loose gear is recommended by the manufacturer, the latest heat treatment certificate, attesting to compliance with the manufacturer's specifications shall be part of the available documentation. Heat treatment shall be carried out in accordance with the specifications of the manufacturer by persons competent to perform such work.

(19) Replacement parts shall be of equal or better quality than the original equipment and suitable for the purpose. Repairs or modifications shall be such as to render the equipment equal to or better than the original construction or design.

(20) In cases of foreign manufactured cranes, there shall be an owner's warranty that the design is adequate for the intended use. The warranty shall be based on a thorough examination of the design specifications by a registered professional engineer familiar with the equipment.

(21) The certifications required by this section shall be performed in accordance with WAC 296-56-60093 by persons accredited by the assistant director of industrial safety and health.

(22) The marine terminal material handling devices listed below shall be certificated in the following manner:

(a) Each crane and derrick shall be tested and examined as a unit annually. A copy of the certificate of tests and examinations shall be posted in the crane operators cab.

(b) Bulk cargo spouts and suckers, together with any portable extensions and rigging or outriggers supporting them vertically, shall be examined annually. Certificates attesting to the required examination shall be made readily available for inspection.

(c) Vertical pocket or bucket conveyors such as banana, sugar, and grain marine legs (other than those within a grain elevator structure) used within a marine terminal facility shall be examined annually. The annual examination shall include all supporting structures, rigging and mechanical components and observation of all steps of operations. Certificates attesting to the required examinations shall be readily available for inspection.

(d)(i) House fall cargo-handling gear in use shall be proof load tested as a unit upon initial certification and every fourth year thereafter. An examination shall be carried out in conjunction with each unit proof load test and annually thereafter. The unit test shall consist of a proof load of twenty-five percent in excess of the rated safe working load. Examinations shall include all supporting structures and components. Certificates attesting to the required tests and examinations shall be readily available for inspection.

(ii) House fall span beams or other house fall block supports shall be marked with the safe working load, which shall not be exceeded.

(e) Special gear.

(i) Special stevedoring gear provided by the employer, the strength of which depends upon components other than commonly used stock items such as shackles, ropes or chains, shall be tested as a unit in accordance with the following table before initially being put into use.

Safe working load	Proof load
Up to 20 short tons.....	25 percent in excess
Over 20 to 50 short tons.....	5 short tons in excess
Over 50 short tons	10 percent in excess

(ii) Every spreader not a part of ship's gear and used for hoisting intermodal containers shall be tested to a proof load equal to twenty-five percent in excess of its rated capacity. Additionally, any spreader which suffers

damage necessitating structural repair shall be retested after repair and before being returned to service.

(iii) Certificates attesting to the required tests shall be available for inspection.

(f) Wire rope and loose gear obtained after October 3, 1983, and used for material handling shall have been tested and certificated before being placed into use in accordance with the provisions of WAC 296-56-60097 as applicable. Certificates attesting to the required tests, inspections and examinations shall be available.

(23) Disassembly and reassembly of equipment does not require recertification of the equipment provided that the equipment is reassembled and used in a manner consistent with its certification.

(24) For equipment certificated in accordance with subsection (21)(b) of this section and transferred to a job site in another state, the current certification shall remain valid until the next inspection or examination becomes due.

(25) Certification procedures shall not be construed as a substitute for, or cause for elimination of, normal operational inspection and maintenance routine throughout the year.

(26)(a) Every unit of equipment requiring annual certification shall have had such annual certification within the previous twelve months. Equipment requiring annual certification shall have had such annual certification within the previous twelve months, except that no annual certification is required within twelve months after any required certification. Annual examinations for certification may be accomplished up to one month early without effect on subsequent due dates.

(b) When certificated equipment is out of service for six months or more beyond the due date of a certification inspection, an examination equivalent to an initial certification, including unit proof load test, shall be performed before the equipment reenters service.

(27) Loose gear obtained after October 3, 1983, shall bear a legible mark indicating that it has been tested (see WAC 296-56-60097 (22)(f)). Single sheave blocks shall be marked with safe working loads and proof test loads. Marks relating to testing shall be identifiable on the related certificates, which shall be available.

(28) The certification requirements of this section do not apply to the following equipment:

(a) Industrial trucks and small industrial crane trucks; and

(b) Any straddle truck not capable of straddling two or more intermodal containers sixteen feet (4.88 m) in width. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-10-004 (Order 85-09), § 296-56-60098, filed 4/19/85; 85-01-022 (Order 84-24), § 296-56-60098, filed 12/11/84.]

WAC 296-56-60099 Hand tools. (1) Hand tools used by employees shall be maintained in safe operating condition.

(2)(a) Hand-held portable electric tools shall be equipped with switches that must be manually held in a closed position to operate the tool.

(b) Portable power-driven circular saws shall be equipped with guards above and below the base plate or shoe. The upper guard shall cover the saw to the depth of the teeth, except for the minimum arc needed to permit the base to be tilted for bevel cuts. The lower guard shall cover the saw to the depth of the teeth, except for the minimum arc needed to allow proper retraction and contact with the work. When the tool is withdrawn from the work, the lower guard shall automatically and instantly return to the covering position.

(3) Only cutting tools shall be used to cut metal strapping or banding used to secure cargo. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-10-004 (Order 85-09), § 296-56-60099, filed 4/19/85; 85-01-022 (Order 84-24), § 296-56-60099, filed 12/11/84.]

SPECIALIZED TERMINALS

WAC 296-56-60101 General. The provisions of this section shall apply to specialized terminals in addition to any other applicable requirements of this part. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60101, filed 12/11/84.]

WAC 296-56-60103 Terminals handling intermodal containers or roll-on roll-off operations. (1) Every intermodal container shall be legibly and permanently marked with:

(a) The weight of the container when empty, in pounds;

(b) The maximum cargo weight the container is designed to carry, in pounds; and

(c) The sum of the weight of the container and the cargo, in pounds.

(2) No container shall be hoisted by any crane or derrick unless the following conditions have been met:

(a) The employer shall ascertain from the carrier whether a container to be hoisted is loaded or empty. Empty containers shall be identified before loading or discharge in such a manner as will inform every supervisor and foreman on the site and in charge of loading or discharging, or every crane or other hoisting equipment operator and signalman, if any, that such container is empty. Methods of identification may include cargo plans, manifests or markings on the container.

(b) In the case of a loaded container:

(i) The actual gross weight shall be plainly marked so as to be visible to the crane or other hoisting equipment operator or signalman, or to every supervisor and foreman on the site and in charge of the operation; or

(ii) The cargo stowage plan or equivalent permanently recorded display serving the same purpose, containing the actual gross weight and the serial number or other positive identification of that specific container, shall be provided to the crane or other hoisting equipment operator and signalman, if any, and to every supervisor and foreman on the site and in charge of the operation.

(c) Every outbound loaded container which is received at a marine terminal ready to load aboard a vessel without further consolidation or loading shall be weighed to

obtain the actual gross weight, either at the terminal or elsewhere, before being hoisted.

(d)(i) When container weighing scales are located at a marine terminal, any outbound container with a load consolidated at that terminal shall be weighed to obtain an actual weight before being hoisted.

(ii) If the terminal has no scales, the actual gross weight may be calculated on the basis of the container's contents and the container's empty weight. The weights used in the calculation shall be posted conspicuously on the container, with the name of the person making the calculation and the date.

(e) Open type vehicle carrying containers and those built specifically and used solely for the carriage of compressed gases are excepted from subsection (2)(c) and (d) of this section.

(f) The weight of loaded inbound containers from foreign ports shall be determined by weighing or by the method of calculation described in (d)(ii) of this subsection or by shipping documents.

(g) Any scale used within the United States to weigh containers for the purpose of the requirements of this section shall meet the accuracy standards of the state or local public authority in which the scale is located.

(3) No container or containers shall be hoisted if its actual gross weight exceeds the weight marked as required in subsection (1)(c) of this section, or if it exceeds the capacity of the crane or other hoisting device intended to be used.

(4)(a) Marked or designated areas shall be set aside within a container or roll-on roll-off terminal for passage of employees to and from active cargo transfer points, except where transportation to and from those points is provided by the employer.

(b) The employer shall direct employees to stay clear of the area beneath a suspended container.

(5) Employees working in the immediate area of container handling equipment or in the terminal's traffic lanes shall wear high visibility vests, decals, reflectors or equivalent protection.

(6) Containers shall be handled using lifting fittings or other arrangements suitable and intended for the purpose as set forth in (a) (i) through (iii) of this subsection, except when damage to an intermodal container makes special means of handling necessary.

(a) Loaded intermodal containers of twenty feet (6.1 m) or more in length shall be hoisted as follows:

(i) When hoisting by the top fittings, the lifting forces shall be applied vertically from at least four such fittings or by means which will safely do so without damage to the container, and using the lifting fittings provided.

(ii) If hoisted from bottom fittings, the hoisting connections shall bear on the fittings only, making no other contact with the container. The angles of the four bridle legs shall not be less than thirty degrees to the horizontal in the case of forty foot (12.2 m) containers, thirty-seven degrees in the case of thirty foot (9.1 m) containers, and forty-five degrees in the case of twenty foot (6.1 m) containers.

(iii) Lifting containers by fork lift trucks or by grapples from above or from one side may be done only if the container is designed for this type of handling.

(iv) Other means of hoisting may be used only if the containers and hoisting means are designed for such use.

(b)(i) When using intermodal container spreaders that employ lanyards for activation of load-disengagement, all possible precautions shall be taken to prevent accidental release of the load.

(ii) Intermodal container spreader twistlock systems shall be designed and used so that a suspended load cannot accidentally be released.

(c) Flat bed trucks or container chassis used to move intermodal containers shall be equipped with pins, flanges, or other means to prevent the container from shifting.

(7)(a) Intermodal containers shall be inspected for defects in structural members or fittings before handling.

(b) Any intermodal container found to be unsafe shall be identified as such, promptly removed from service and repaired before being returned to service.

(8) Containers shall not be hoisted unless all engaged chassis twist locks are released.

(9) Such list of contents may refer to cartons, cases, or other means of packaging but need not specifically identify the commodity or commodities involved except as otherwise required by law. Container weights so arrived at shall be subject to random sample weight checks at the nearest weighing facility. In cases where such weight checks or experience otherwise indicate consistently inaccurate weights arrived at by this means, the weight of containers so calculated at the source from which the inaccurate weights originated may no longer be recognized as true gross weights, in which case such containers may not be loaded aboard a vessel unless actual gross weights have been obtained by weighing. This procedure shall be continued until the Washington state department of labor and industries, division of industrial safety and health is satisfied by reasonable experience thereunder that correct weights will be furnished.

(10) All loaded inbound containers from foreign ports shall be subject to random sample weight checks at a time satisfactory to the Washington state department of labor and industries, division of industrial safety and health, which may be at any time up to unloading the contents of the container at the terminal or until the container is delivered unopened to the land carrier. When such checks indicate a pattern of significant and continuing inaccuracy or when the provisions of this section are not met, such suitable means as are acceptable to the division of industrial safety and health to protect the safety of the workers involved shall be taken during discharge to assure safety and such means shall be continued until the division of industrial safety and health is satisfied by experience thereunder that correct weights will be furnished. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60103, filed 12/11/84.]

WAC 296-56-60105 Grain elevator terminals. Reserved. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60105, filed 12/11/84.]

WAC 296-56-60107 Terminal facilities handling menhaden and similar species of fish. (1)(a) Tanks in terminal areas used for receiving or storing brailwater for recirculating into vessel holds in discharging operations shall be opened or ventilated to minimize contamination of water circulated to the vessel. Brailwater tanks shall be thoroughly drained upon completion of each day's operations and shall be left open to the air. Drainage is unnecessary when brailwater has been treated to remove hydrogen sulfide-producing contaminants and the efficiency of such treatment has been established by the employer.

(b) Before employees enter a dock tank, it shall first be drained, rinsed and tested for hydrogen sulfide and oxygen deficiency. Employees shall not enter the tank when the hydrogen sulfide level exceeds twenty ppm or oxygen content is less than nineteen and one-half percent, except in emergencies.

(c) Tests shall be conducted by designated personnel with suitable test equipment and respiratory protective equipment complying with the provisions of this chapter.

(2) Pipelines and hoses on the dock or terminal used for receiving and circulating used brailwater shall be completely drained upon completion of each day's operation and left open to the air.

(3) At least four units of respiratory protective equipment consisting of supplied-air respirators or self-contained breathing apparatus complying with the requirements of chapter 296-62 WAC shall be available in a suitably labeled cabinet for immediate use in case of an emergency caused by oxygen deficiency or hydrogen sulfide. Any employee entering a tank in an emergency shall, in addition to respiratory protective equipment, wear a lifeline and safety harness to facilitate rescue. At least two other employees, similarly equipped, shall be continuously stationed outside the tank to observe and to provide rescue services.

(4) The plant superintendent and foremen shall be trained and knowledgeable about the hazards of hydrogen sulfide and oxygen deficiency. They shall be trained in the use of appropriate respiratory and other protective equipment, and in rescue procedures. Other supervisory plant personnel shall be informed of these hazards and instructed in the necessary safety measures, including use of respiratory and rescue equipment.

(5) Supervisory personnel shall be on hand at dockside to supervise discharging of brailwater from vessels. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60107, filed 12/11/84.]

PERSONAL PROTECTION

WAC 296-56-60109 Eye protection. (1)(a) When employees perform work hazardous to the eyes, the employer shall provide eye protection equipment marked or

labeled as meeting the manufacturing specifications of American National Standards Practice for Occupational and Educational Eye and Face Protection, current ANSI Z87.1, and shall direct that it be used.

(b) For employees wearing corrective spectacles, eye protection equipment required by (a) of this subsection must be of a type which can be worn over spectacles. Prescription ground safety lenses may be substituted if they provide equivalent protection.

(c) For additional requirements covering eye protection against radiant energy, see WAC 296-56-60235(8).

(2) Eye protection equipment shall be maintained in good condition.

(3) Used eye protection equipment shall be cleaned and disinfected before reissuance to another employee. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60109, filed 12/11/84.]

WAC 296-56-60110 Respiratory protection. The respiratory protection requirements of the general occupational health standards, chapter 296-62 WAC, shall apply. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60110, filed 12/11/84.]

WAC 296-56-60111 Head protection. (1) The employer shall direct that employees exposed to impact, falling or flying objects, or electric shocks or burns wear protective hats.

(2) Protective hats shall bear identifying marks or labels indicating compliance with the manufacturing provisions of American National Standard Safety Requirements for Industrial Head Protection, current ANSI Z89.1.

(3) Protective hats previously worn shall be cleaned and disinfected before issuance by the employer to another employee. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60111, filed 12/11/84.]

WAC 296-56-60113 Foot protection. (1) The employer shall direct that employees exposed to impact, falling objects, or puncture hazards wear safety shoes, or equivalent protection.

(2) Protective shoes shall bear identifying marks or labels indicating compliance with the manufacturing provisions of American National Standard for Men's Safety Toe Footwear, current ANSI Z41.1.

(3) The employer shall arrange through means, such as vendors or local stores, or otherwise, to make safety shoes readily available to all employees. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60113, filed 12/11/84.]

WAC 296-56-60115 Other protective measures. (1) Protective clothing.

(a) Employees performing work that requires special protective clothing shall be directed by the employer to wear the necessary special protective clothing.

(b) When necessary, protective clothing previously worn shall be cleaned and disinfected before reissuance.

(2) Personal floatation devices.

(a) The employer shall provide, and shall direct the wearing of personal floatation devices for those employees, such as line handlers, who are engaged in work in which they may be pulled into the water:

(i) When such employees are working in isolation; or

(ii) Where physical limitations of available working space creates a hazard of falling into the water; or

(iii) Where the work area is obstructed by cargo or other obstacles so as to prevent employees from obtaining safe footing for their work.

(b) Employees working on, over or along water, where the danger of drowning exists, shall be provided with and shall wear approved personal floatation devices.

(i) Employees are not considered exposed to the danger of drowning when:

(A) The water depth is known to be less than chest deep on the exposed individual;

(B) Working behind standard height and strength guardrails;

(C) Working inside operating cabs or stations which eliminate the possibility of accidentally falling into the water;

(D) Wearing approved safety belts with lifeline attached so as to preclude the possibility of falling into the water.

(ii) Prior to and after each use, personal floatation devices shall be inspected for defects which would reduce their designed effectiveness. Defective personal floatation devices shall not be used.

(iii) To meet the approved criteria required by (b) of this subsection, a personal floatation device shall be approved by the United States Coast Guard as a Type I PFD, Type II PFD, Type III PFD, or Type V PFD, or their equivalent, pursuant to 46 CFR 160 (Coast Guard Lifesaving Equipment Specifications) and 33 CFR 175.23 (Coast Guard table of devices equivalent to personal floatation devices). Ski belt or inflatable type personal floatation devices are specifically prohibited.

(c) Life ring.

(i) Along docks, walkways or other fixed installations on or adjacent to open water more than five feet deep, approved life rings with line attached shall be provided. The life rings shall be spaced at intervals not to exceed two hundred feet and shall be kept in easily visible and readily accessible locations.

(ii) When employees are assigned work at other casual locations where exposure to drowning exists, at least one approved life ring with line attached shall be provided in the immediate vicinity of the work assigned.

(iii) Work assigned over water where the vertical drop from an accidental fall would exceed fifty feet, shall be subject to specific procedures as approved by the department.

(iv) Lines attached to life rings shall be at least ninety feet in length, at least one-quarter inch in diameter and have a minimum breaking strength of five hundred pounds.

(v) Life rings must be United States Coast Guard approved thirty inch size.

(vi) Life rings and attached lines must be maintained to retain at least seventy-five percent of their designed buoyance and strength.

(3) Emergency facilities. When employees are exposed to hazardous substances which may require emergency bathing, eye washing or other facilities, the employer shall provide such facilities and maintain them in good working order. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-10-004 (Order 85-09), § 296-56-60115, filed 4/19/85; 85-01-022 (Order 84-24), § 296-56-60115, filed 12/11/84.]

WAC 296-56-60117 Maintenance and load limits.

(1) The structural integrity of docks, piers, wharves, terminals and working surfaces shall be maintained.

(2) Maximum safe load limits, in pounds per square foot (kilograms per square meter), of floors elevated above ground level, and pier structures over the water shall be conspicuously posted in all cargo areas.

EXCEPTION: Pier structures used primarily for vehicle traffic may be posted in maximum pounds per axle weight.

(3) Maximum safe load limits shall not be exceeded.

(4) All walking and working surfaces in the terminal area shall be maintained in good repair.

(5) All steel plates, boards, etc., used to temporarily cover small holes or weakened surfaces shall be secured in such a manner as to prevent accidental movement.

(6) All large openings or weakened surfaces shall be barricaded on all exposed sides with barricades equipped with blinkers, flashing lights, or reflectors.

(7) Areas around bits or cleats where workers perform their duties shall be lighted as required in this section and have a nonslip surface around each bitt or cleat. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-10-004 (Order 85-09), § 296-56-60117, filed 4/19/85; 85-01-022 (Order 84-24), § 296-56-60117, filed 12/11/84.]

WAC 296-56-60119 Protection from falling.

Employees doing maintenance work on cranes, spouts or similar types of equipment, eight feet from the ground or surface and not in an area that is protected by any standard safeguards such as walkways with standard railings, or ladders with protective cages, shall wear a safety belt and lanyard which can be attached to the structure for their protection from falling. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60119, filed 12/11/84.]

WAC 296-56-60121 Minimum safety requirements for docks and dock facilities. Nothing contained in this section shall be construed to mean that the direct employer or employees are responsible for the repair, construction of or otherwise bringing into compliance, facilities over which they have no control.

(1) Working prohibited on unsafe docks or dock facilities. Employers shall not require employees to perform

work on docks or dock facilities which said direct employer knows or should have known do not meet the minimum safety requirements outlined in this section, except for maintenance workers.

(2) Known unsafe conditions by employees. Employees shall not work on docks or dock facilities which they know or should have known do not meet the minimum safety requirements outlined in this section.

(3) Bulletin boards. At each dock, pier, warehouse or designated area at the job site, there shall be installed a safety bulletin board.

(4) Posting of notices. It shall be the responsibility of the employer to post at prominent places in or adjacent to the work area, legible notices stating:

(a) The location of stretchers, blankets and first-aid equipment and telephones. (Where possible, directional arrows should point to locations.)

(b) The phone numbers of doctors, ambulance services and hospitals within the area and the phone numbers of the police department or other law enforcement agencies. (Where possible, the emergency phone numbers shall be posted adjacent to telephones which would be used for emergency calls and on or inside the cover of first-aid cabinets.)

(5) Ventilation. All areas where employees are required to work shall be ventilated as required by the "general occupational health standards," chapter 296-62 WAC.

(6) Power outlets. Power outlets installed to supply power to vessels shall be located in such a manner that the workers will not be in contact with supply lines. Unprotected power lines shall not be driven over by equipment. If located on the underside or waterside of the bull rail, a well lighted walkway with hand rails shall be provided to the power outlets. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60121, filed 12/11/84.]

WAC 296-56-60123 Guarding of edges. (1) Vehicle protection.

(a) Vehicle curbs, bull rails, or other effective barriers at least six inches (13.74 cm) in height, shall be provided at the waterside edges of aprons and bulkheads, except where vehicles are prohibited. Curbs or bull rails installed after (effective date of standard) shall be at least ten inches (22.9 cm) in height.

(b) The provisions of (a) of this subsection also apply at the edge of any fixed level above the common floor area from which vehicles may fall, except at loading docks, platforms and skids where cargo is moved by vehicles.

(2) Employee protection.

(a) Guardrails shall be provided at locations where employees are exposed to floor or wall openings or waterside edges, including bridges or gangway-like structures leading to pilings or vessel mooring or berthing installations, which present a hazard of falling more than four feet (1.22 m) or into the water, except as specified in (b) of this subsection.

(b) Guardrails are not required:

(i) At loading platforms and docks;

(ii) At waterside edges used for cargo handling;

(iii) On the working sides of work platforms, skids, or similar workplaces; or

(iv) On railroad rolling stock, highway vehicles, intermodal containers, or similar equipment.

(c) Where guardrails are impracticable due to machinery requirements or work processes, an alternate means of protecting employees from falling, such as nets, shall be used.

(3) Criteria for guardrails. Guardrails shall meet the following criteria:

(a) They shall be capable of withstanding a force of at least two hundred pounds (890 N) applied in any direction at mid-span of the top rail (when used), or at the uppermost point if there is no top rail.

(b) If not of solid baluster, grillwork, slatted, or similar construction, guardrails shall consist of top rails and midrails. Midrails, when used, shall be positioned at approximately half the height of the top rail.

(c) The top surface of guardrails installed before October 3, 1983, shall be at least thirty-six inches (.091 m) high. Those installed after October 3, 1983, shall be forty-two inches (1.07 m), plus or minus two inches (5.1 cm), high.

(d) Any nonrigid railing such as chain or wire rope shall have a maximum sag limit at the mid-point between posts of not more than six inches (15.2 cm).

(e) Top rails shall be free of puncture and laceration hazards.

(f) Rail ends shall not overhang to constitute a hazard, but this does not prohibit scrollwork, boxed ends or similar nonhazardous projections.

(4) Toeboards. Toeboards shall be provided when employees below could be exposed to falling objects such as tools. Toeboards shall be at least three and one-half inches (8.9 cm) in height from top edge to floor level, and be capable of withstanding a force of fifty pounds (220 N) applied in any direction. Drainage clearance under toeboards is permitted.

(5) Stair railings. Stair railings shall be capable of withstanding a force of at least two hundred pounds (890 N) applied in any direction, and shall not be more than thirty-six inches (0.9 m) nor less than thirty-two inches (0.8 m) in height from the upper top rail surface to the tread surface in line with the leading edge of the tread. Railings and midrails shall be provided at any stairway having four or more risers, as follows:

(a) For stairways less than forty-four inches (1.12 m) wide, at least one railing; and

(b) For stairways more than forty-four inches (1.12 m) but less than eighty-eight inches (2.24 m) wide, a stair rail or handrail on each side, and if eighty-eight or more inches wide, an additional intermediate handrail.

(6) Condition. Railings shall be maintained free of sharp edges and in good repair. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60123, filed 12/11/84.]

WAC 296-56-60125 Clearance heights. Clearance heights shall be prominently posted where the height is

insufficient for vehicles and equipment. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60125, filed 12/11/84.]

WAC 296-56-60127 Cargo doors. (1) Mechanically operated.

(a) Cargo door counterweights shall be guarded.

(b) Lift trucks and cranes shall not be used to move mechanically operated doors except when necessary during repair on the doors, in which case ropes or other guarding shall be provided to prevent entry into the area where the door may fall or slide.

(c) Vertically operated doors partially opened for work or ventilation shall be secured to prevent accidental closing.

(2) Tackle operated.

(a) The door shall be connected to its lifting tackle with shackles or equally secure means.

(b) Lifting bridles and tackles shall have a safety factor of five, based upon maximum anticipated static loading conditions.

(c) Devices shall be provided to hold overhead doors in the open position and to secure them when closed.

(d) Lifting gear and hardware shall be maintained in safe condition.

(e) Lifting ropes, when used, shall be placed out of the work area and off the floor.

(3) Horizontal sliding.

(a) Horizontal sliding door rollers shall be constructed to prevent the door from jumping from overhead tracks.

(b) Sliding doors shall be secured to prevent them from swinging. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60127, filed 12/11/84.]

WAC 296-56-60129 Platforms and skids. (1) Platforms and skids extending from piers, transit sheds, or lofts and used for landing or hooking on drafts shall be provided at the open sides with guardrails meeting the requirements of WAC 296-56-60123(3) or alternate means, such as nets, to protect employees against falls.

(2) Any employee working below a second-story platform or skid shall be protected from falling objects by a net stretched from the platform or skid to the vessel.

(3) Platforms and skids shall be strong enough to bear the loads handled and shall be maintained in safe condition. Safe working loads, which shall be posted or marked on or adjacent to platforms and skids, shall have a minimum safety factor of five for any part, based upon maximum anticipated static loading conditions and the ultimate strength of the construction material.

(4) The employer shall provide and maintain platform and skid attachments that will prevent accidental movement of the skid or platform. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60129, filed 12/11/84.]

WAC 296-56-60131 Elevators and escalators. (1) "Elevator" means a permanent hoisting and lowering mechanism with a car or platform moving vertically in guides and serving two or more floors of a structure. The

term excludes such devices as conveyors, tiering or piling machines, material hoists, skip or furnace hoists, wharf ramps, lift bridges, car lifts, and dumpers.

(2) "Escalator" means a power-driven continuous moving stairway principally intended for the use of persons.

(3) No elevator or escalator with a defect which affects safety shall be used.

(4) Elevator safety devices shall not be overridden or made inoperable.

(5) Elevators and escalators shall be thoroughly inspected at intervals not exceeding one year. Additional monthly inspections for satisfactory operation shall be conducted by designated persons. Records of the results of the latest annual elevator inspections shall be posted in elevators. Records of annual escalator inspections shall be posted in the vicinity of the escalator or be available at the terminal.

(6) Elevator landing openings shall be provided with doors, gates, or equivalent protection which shall be in place when the elevator is not at that landing, to prevent employees from falling into the shaft.

(7) The elevator's or escalator's maximum load limits shall be posted and not exceeded. Elevator load limits shall be posted conspicuously both inside and outside of the car.

(8) Elevators shall be operated only by designated persons except for automatic or door interlocking elevators which provide full shaft door closing and automatic car leveling. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60131, filed 12/11/84.]

WAC 296-56-60133 Manlifts. (1) Inspection. Manlifts shall be inspected monthly by a designated person. Safety switches shall be checked weekly. Manlifts found to be unsafe shall not be operated until repaired. Inspections shall include at least the following:

(a) Step fastenings;

(b) Rails;

(c) Rail supports and fastenings;

(d) Roller and slides;

(e) Belt and belt tension;

(f) Handholds and fastenings;

(g) Floor landings;

(h) Guardrails;

(i) Lubrication;

(j) Safety switches;

(k) Warning signs and lights;

(l) Illumination;

(m) Drive pulley;

(n) Bottom (boot) pulley and clearance;

(o) Pulley supports;

(p) Motor;

(q) Drive mechanism;

(r) Brake;

(s) Electrical switches;

(t) Vibration and misalignment;

(u) "Skip" on up or down run when mounting the step (indicating worn gears); and

(v) Emergency exit ladders.

(2) Inspection records. Inspection records shall be kept for at least one year. The record of the most recent inspection shall be posted in the vicinity of the manlift or in the terminal.

(3) Emergency stop. An emergency stop device shall be available within easy reach from any position on the belt.

(4) Instructions. Manlift use instructions shall be conspicuously posted.

(5) Top floor warning sign and light. An illuminated sign and red light that are visible to the user shall be provided under the top floor opening of the manlift to warn the user to get off at that floor.

(6) Bottom floor warning sign. A sign visible to descending passengers shall be provided to warn them to get off at the bottom floor.

(7) Upper limit stop. An automatic stop device shall be provided to stop the manlift when a loaded step passes the top landing, except that manlifts installed after October 3, 1983, shall have two such devices.

(8) Handholds and steps. Each step shall be provided with a corresponding handhold.

(9) Emergency ladder. A fixed emergency ladder accessible from any position on the lift and in accordance with the requirements of WAC 296-56-60209 shall be provided for the entire run of the manlift.

(10) Landings.

(a) Clear and unobstructed landing spaces shall be provided at each level. Manlifts constructed after October 3, 1983, and that have a distance of fifty feet (15.24 m) or more between floor landings shall have an emergency landing every twenty-five feet (7.62 m) or less of manlift travel.

(b) Open sides of emergency landings shall be protected by guardrails.

(c) Floor landing entrances and exits shall be guarded by mazes, self-closing gates, or equivalent devices.

(d) Landings shall be of sufficient size and strength to support two hundred fifty pounds (1120 N).

(11) Floor opening guards. The ascending sides of manlift floor openings shall be provided with cones or bevel guards to direct the user through the openings.

(12) Maintenance. Manlifts shall be equipped, maintained, and used in accordance with the manufacturer's specifications, which shall be available at the terminal.

(13) Bottom pulley.

(a) The lower pulley shall be supported by the lowest landing.

(b) Sides of the bottom pulley support shall be guarded to prevent contact with the pulley or the steps.

(14) Top clearance. A clearance of at least eleven feet (3.3 m) shall be provided between the top landing and the ceiling.

(15) Brakes. Manlifts shall be equipped with brakes that are:

(a) Self-engaging;

(b) Electrically released; and

(c) Capable of stopping and holding the manlift when the descending side is loaded with the maximum rated

load. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60133, filed 12/11/84.]

MANLIFTS--ELECTRIC

WAC 296-56-60135 Manlifts. Reserved. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-10-004 (Order 85-09), § 296-56-60135, filed 4/19/85; 85-01-022 (Order 84-24), § 296-56-60135, filed 12/11/84.]

WAC 296-56-60137 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-56-60139 Hoistway enclosures and landings. Hoistways shall be fully enclosed or enclosed on all landings to a height of six feet above the landing floor or six feet above highest working level or stair level adjacent to the hoistway. Perforated hoistway enclosures can be used where fire resistivity is not required provided it conforms to the following:

(1) Steel wire grill or expanded metal grill shall be at least thirteen U.S. gauge steel wire.

(2) Opening in the enclosure shall reject a one inch steel ball.

(3) All hoistway landings shall be properly and adequately lighted. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60139, filed 12/11/84.]

WAC 296-56-60141 Scope and application. The following requirements shall apply to the installation, design, and use of all one man capacity, electric elevators, subject to inspections as required by RCW 49.16.120. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60141, filed 12/11/84.]

WAC 296-56-60143 Hoistway gates. (1) Hoistway gates may be constructed of wood slat, steel wire grill, expanded metal or solid material, providing all openings reject a two inch ball and will resist a two hundred fifty pound horizontal thrust.

(a) Steel wire and expanded metal gates shall be of at least thirteen gauge steel.

(b) Wood slats must be not less than two inches wide and one-half inch thick, nominal size.

(c) Solid material shall be not less than one-eighth inch reinforced sheet steel or one-half inch plywood.

(2) Hoistway gates can be horizontal swinging, vertical or horizontal sliding or biparting gates.

(a) Hoistway gates shall extend the full width of the elevator car and from one inch above the landing floor to six feet or more above the floor.

(b) Horizontal swinging gates shall be full stopped from swinging into hoistway.

(3) Gates shall be equipped with interlocks or mechanical locks and electric contacts designed so that hoistway gates cannot be opened when the car is away from the landing. [Statutory Authority: RCW 49.17.040

and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60143, filed 12/11/84.]

WAC 296-56-60145 Elevator car. (1) Elevator cars will be fully enclosed to height of car or to a height of not less than six feet six inches. Elevator cars can be of perforated or solid material provided material will withstand a horizontal thrust of seventy-five pounds without deflecting one-quarter inch and all openings will reject a one inch ball.

(a) Car frames shall be of substantial metal or wood construction with a safety factor of four on metal and six on wood.

(b) Wood frames shall be gusseted and bolted or otherwise secured with large washers and lock washers.

(c) Car platform cannot exceed thirty inches inside dimension on each side (6.25 square foot area).

(2) Every car shall have a substantial protective top. The front half may be hinged. The protective top may be made from number nine U.S. wire gauge screen, eleven gauge expanded metal, fourteen gauge sheet steel or three-quarter inch or heavier plywood. If made of wire screen or metal, the openings shall reject a one-half inch diameter ball. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60145, filed 12/11/84.]

WAC 296-56-60147 Elevator doors. Elevator car doors shall be provided on all elevators except on fully enclosed hoistways equipped with hoistway gates and hoistways enclosed from the top of the hoistway opening to the ceiling on the landing side.

(1) Car doors can be of solid or perforated construction capable of resisting a seventy-five pound thrust without deflecting one-quarter inch.

(2) Car doors may be biparting or otherwise horizontal swung provided the door swings within the elevator car.

(3) A positive locking latch device shall be provided to resist a two hundred fifty pound thrust.

(4) Interlocks or mechanical locks and electric contacts must be provided on cars operating in open hoistways. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60147, filed 12/11/84.]

WAC 296-56-60149 Counterweight, enclosures, and fastenings. All counterweights shall be fully enclosed for their full length of travel except in closed hoistways where counterweight guide rails have been provided.

(1) Counterweight enclosures shall provide an inspection opening in the bottom of the enclosure large enough to provide for the inspection of cable fastenings, counterweight and buffer. Counterweights of rectangular shape shall be secured by not less than two one-half inch mild steel bolts with locknuts. Round counterweights shall be fastened with a center bolt not less than three-quarter inch diameter and secured with a locknut.

(2) Bolt eyes shall be welded closed.

(3) Cable fastenings shall be not less than three U-shaped clamps with U's on the dead side of the rope or

babbitted tapered elevator sockets. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60149, filed 12/11/84.]

WAC 296-56-60151 Guide rails. A minimum of two car guide rails shall be provided and they shall:

(1) Extend at least six inches beyond the maximum travel of the car with buffers compressed.

(2) Be securely fastened to a vertical supporting member for the full length of elevator travel.

(3) Be not less than one and one-half inch by one and one-half inch vertical grain fir or equivalent or one-quarter inch by two inch by two inch angle iron or equivalent.

(4) Not vary more than three-sixteenths inch thickness on brake surfaces for wood guide rails.

(5) Be secured to resist more than one-half inch total deflection on car safety application and resist a two hundred fifty pound horizontal thrust. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60151, filed 12/11/84.]

WAC 296-56-60153 Hoisting ropes. Hoisting ropes shall be of good grade elevator traction wire rope and shall:

(1) Be not less than two ropes of not less than three-eighths inch diameter and provide a safety factor of five.

(2) Be fastened by at least three U-type cable clamps with the U on the dead return end of the rope or by approved elevator sockets of the babbitted type.

(3) Hoisting rope shall be of such length that the car platform will not be more than six inches above the top landing when the counterweight buffer is fully compressed and the counterweight shall be six inches or more away from the counterbalance sheave when the car buffer is fully compressed. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60153, filed 12/11/84.]

WAC 296-56-60155 Space under hoistway. There shall be no habitable space below the elevator hoistway and counterweight shaft unless the floor is designed to withstand and impact one hundred twenty-five percent greater than the impact generated by a free fall of either the car or counterweight from the full height of the hoistway. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60155, filed 12/11/84.]

WAC 296-56-60157 Car safeties. All cars suspended or operated from overhead machinery shall be equipped with an approved car safety capable of stopping and holding the car with rated load.

(1) Car safeties shall operate mechanically and be independent of interruption of any electrical circuit.

(2) Car safeties will automatically operate and control circuit will be broken in the event of cable breakage and on governor controlled safeties. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60157, filed 12/11/84.]

WAC 296-56-60159 Brakes. All elevators shall be equipped with brakes designed to engage mechanically and release electrically.

(1) Brakes shall be located on the final drive of all elevator machines.

(2) The brake actuating circuit will be so designed that interruption of power by slack cable switch, control switch, and limit switches, will actuate the brake.

(3) The brakes shall actuate under short circuit, phase failure, or reverse phase conditions. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60159, filed 12/11/84.]

WAC 296-56-60161 Car controls and safety devices. (1) Car controls may be automatic pushbutton, constant pressure pushbutton or momentary pushbutton types. Hand rope and car switch controls shall not be used.

(2) Manually operated emergency stop switches shall be installed in all cars not equipped with constant pressure pushbutton controls. Switch shall be clearly marked "emergency stop."

(3) Terminal limiting devices shall operate independently of the car controls and automatically stop the car at the top and bottom terminal landings.

(4) All winding drum machine type elevators shall be equipped with top and bottom final limit switches.

(5) A slack rope device of the manual reset design shall be required on all winding drum type machines. The device shall be designed to de-energize the circuit to the drive motor and brake.

(6) All new installations shall be equipped with an overspeed governor. This governor shall be set not to exceed one hundred seventy-five feet per minute and shall be designed to de-energize the brake control and motor drive circuits simultaneously with the activation of the car safeties mechanism. Car speeds for these types of installations shall not exceed a speed of one hundred twenty-five feet per minute. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60161, filed 12/11/84.]

WAC 296-56-60167 Hoisting machine mechanisms.

(1) Elevator machines shall be driven by approved type units.

(a) On direct drive or approved worm gear driven type, a mechanically actuated, electrically released brake shall be installed on the driving unit.

(b) On V belt driven types, a minimum of four belts, one-half inch minimum size, shall be used to transmit power from the motor to the drive shaft and a mechanically actuated, electrically released brake shall be installed on the final drive shaft.

(2) Wherever practical, elevator machines shall be installed on the top side of their supporting structure.

(3) All components of the driving mechanism or parts subject to stress involved in suspending the load or related equipment shall be designed to withstand eight times the total weight to be suspended, which would include load, counterweight, car and cables.

(4) Gears shall be made of steel or equivalent material. Cast iron gears are prohibited. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60167, filed 12/11/84.]

WAC 296-56-60169 Elevator car and counterweight buffers. (1) On new installations, elevator cars shall be provided with adequate car buffers.

(2) All elevators using a counterweight shall be provided with adequate counterweight buffers. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60169, filed 12/11/84.]

WAC 296-56-60171 General requirements. (1) Adequate lighting shall be provided at each landing and in the shaftway.

(2) A sign bearing the following information shall be conspicuously posted within the car:

- (a) Maximum capacity one person;
- (b) Total load limit in pounds;
- (c) For authorized personnel use only.

(3) A fire extinguisher in proper working condition shall be attached to the car structure. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60171, filed 12/11/84.]

MANLIFTS--HAND POWER

WAC 296-56-60180 Scope and application. The following requirements shall apply to the installation, design, and use of all one man capacity, hand power counterweighted elevators subject to inspection as required by RCW 49.16.120. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60180, filed 12/11/84.]

WAC 296-56-60182 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-56-60183 Hoistway landings. (1) Every hoistway landing shall be protected on sides other than the landing opening side with a standard guard rail and intermediate guard rail. All landings except the bottom landing shall have a toe board installed on all sides except the landing opening side.

(2) All hoistway entrances shall be not less than six feet six inches in height and in no case shall the width exceed the corresponding car dimensions.

(3) All hoistway entrances must be provided with an approved maze or with a hoistway gate which shall:

(a) Be at least thirty-six inches in height.

(b) Extend downward to within one inch of the landing sill.

(c) Be of the self-closing type, designed to swing horizontally out from the hoistway and closing against a full jam stop.

(d) Be located within four inches of the hoistway edge of the landing sill.

(e) Have a "DANGER" sign conspicuously posted on the landing side of the hoistway gate.

(f) Withstand a two hundred fifty pound horizontal thrust.

(4) For any new installation, all projections extending inwardly from the hoistway enclosure at the entrance side of the car platform shall be bevelled and substantially guarded on the underside by smooth solid material set at an angle of not less than sixty degrees, nor more than seventy-five degrees from the horizontal when cars are not equipped with gates. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60183, filed 12/11/84.]

WAC 296-56-60185 Hoistway clearances. (1) The minimum clearance between the side of the car and a hoistway enclosure shall be one inch.

(2) The clearance between the car platform and the landing sill shall not be less than one-half inch and not more than one and one-half inches. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60185, filed 12/11/84.]

WAC 296-56-60187 Habitable space under hoistways. There shall be no habitable space below the elevator hoistway or counterweight shaft unless the floor is supported to withstand any impact caused by the car or counterweight dropping freely onto the floor. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60187, filed 12/11/84.]

WAC 296-56-60189 Hoistway guide rails. (1) There shall be a minimum of two opposing guide rails extending to a point six inches beyond the full height of travel of the car when the counterweight buffer is fully compressed.

(2) All rails shall be supported by bolts, lag screws or other approved methods to a vertical supporting member which shall not exceed one-half inch deflection with the application of a two hundred fifty pound horizontal thrust at any point.

(3) Wood guide rails shall be at least one and one-half inch by one and one-half inch vertical grain fir or equivalent and shall not vary more than three-sixteenth inch in thickness on the sides to which the brakes make contact. All joints shall be kept smooth and even. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60189, filed 12/11/84.]

WAC 296-56-60191 Buffer springs and overtravel of car. Substantial spring buffers shall be installed below the car and also below the counterweight on all new installations. All installations shall have spring buffers attached below the counterweight. The hoisting rope shall be of such length that the car platform will not be more than eight inches above the top landing when the counterweight buffer spring is fully compressed. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60191, filed 12/11/84.]

WAC 296-56-60193 Car specifications. (1) The car shall be built to the following specifications:

(a) The car platform shall be not greater than thirty inches on either side (6.25 square feet area).

(b) The car frame and platform shall be of steel or sound seasoned wood construction and be designed with a factor of safety of not less than four for metal and six for wood, based on a maximum capacity of two hundred fifty pounds.

(c) All frame members shall be securely bolted, riveted or welded and braced. If bolted, lock washers or lock nuts must be used.

(d) Where wooden frame members are bolted, large washers or metal plates shall be used to minimize the possibility of splitting or cracking the wood.

(2) The sides of the car shall be enclosed by a minimum of two safety guard rails with the top rail not less than thirty-six inches nor more than forty-two inches from the car floor and with the intermediate bar bisecting the height. Rails shall sustain a horizontal thrust of two hundred fifty pounds. If solid material is used it shall be smooth surfaced and not less than one-half inch thickness, if wood; and not less than sixteen gauge thickness, if steel; and shall be constructed from the car floor to a height of not less than three feet.

(a) Where the hoistway is not enclosed on the entrance side of the car, a self-locking or drop bar positive stop type car gate must be provided. Car gate may be of the folding type, horizontally swung, provided it swings into the car enclosure. Drop bar gates must be of two bar construction, parallelogram type, and conform to requirements specified for car guard rails.

(b) The car gate shall drop into locking slots or be provided with a positive locking type latch capable of withstanding two hundred fifty pounds horizontal thrust.

(3) Every car shall have a substantial protective top. The front half may be hinged. The protective top may be made from number nine U.S. wire gauge screen, eleven gauge expanded metal, fourteen gauge sheet steel or three-quarter inch or heavier plywood. If made of wire screen or metal, the openings shall reject a one-half inch diameter ball.

(4) Every car shall have a proper rack to hold the balance weights.

(5) A sign bearing the following information shall be conspicuously posted within the car:

(a) Maximum capacity one person;

(b) Total load limit in pounds;

(c) For authorized personnel use only.

(6) Every car shall be equipped with a spring loaded foot brake which:

(a) Will operate independently of the car safeties;

(b) Will operate in both directions and will stop and hold the car and its load;

(c) Will lock the car in its position automatically whenever the operator releases the pressure on the foot pedal.

(7) Every car shall be equipped with a car safety device which will:

(a) Apply to the sides of the main guide rails;

(b) Stop and hold the car and its load immediately when the hoisting rope breaks.

(8) Every car shall have a minimum clearance of six feet six inches from the top of the car platform to the bottom edge of the crosshead or any other obstruction.

(9) A tool box with minimum dimensions of four inches wide by sixteen inches long by three inches in depth shall be provided and firmly attached to the car structure. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60193, filed 12/11/84.]

WAC 296-56-60195 Counterweights. (1) The assembly of sectional counterweight shall conform to the following requirements:

(a) Rectangular type shall be held together by at least two tie rods one-half inch in diameter fastened with lock washers and double nuts or other approved means.

(b) One three-quarter inch rod may be used to hold the sections of a round counterweight together. Any additional sections or weights shall be secured by an approved means.

(2) The eye bolt for the rope hitch shall be attached to the counterweight in a manner that will prevent the eye bolt from coming loose. The eye of eye bolts shall be welded to prevent them from opening.

(3) Every counterweight runway shall be enclosed with substantial unperforated material for its full distance of travel. Inspection openings shall be provided at either the top or bottom of the counterweight runway. These openings shall be substantially covered at all times except when actually engaged in inspection of counterweight fastenings.

(4) Workmen shall load the counterweight for the proper balance of the heaviest person using the elevator and others shall use compensating weights, which shall be available, to maintain a balance suitable for their needs.

(5) On elevators with travel of seventy-five feet or more, a compensating chain or cable shall be installed to maintain the proper balance of the counterweight to the car and load in all positions. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60195, filed 12/11/84.]

WAC 296-56-60197 Sheaves. The minimum sheave diameter shall be forty times the diameter of the ropes used, i.e., fifteen inch for three-eighths inch rope. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60197, filed 12/11/84.]

WAC 296-56-60199 Hoisting ropes. (1) Hoisting rope shall be of good grade traction elevator wire rope, and shall:

(a) Be not less than three-eighths inches in diameter.

(b) Provide a factor of safety of five based on the maximum weight supported.

(c) Be of such length to prevent the counterweight from striking the overhead structure when car is at bottom landing, and prevent the car from striking the overhead before the counterweight is at its lower limit of travel.

(d) Be fastened at each end by at least three or more clamps, the "U" of the clamp bearing on the dead end of the rope.

(e) Where passed around a metal or other object less than three times the diameter of the cable, have a thimble of the correct size inserted in the eye.

(2) Approved sockets or fittings with the wire properly turned back and babbitted may be used in place of clamps noted in subsection (1)(d) of this section. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60199, filed 12/11/84.]

WAC 296-56-60201 Operating rope. The operating rope shall be of soft hemp or cotton at least three-quarter inch in diameter, and be securely fastened at each end and shall be in proper vertical alignment to prevent bending or cutting where it passes through the openings in the platform or the protective top of the car. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60201, filed 12/11/84.]

WAC 296-56-60203 Lighting. Adequate lighting shall be provided at each landing and in the shaftway. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60203, filed 12/11/84.]

WAC 296-56-60205 Overhead supports. The overhead supporting members shall be designed, based upon impact loads, with a factor of safety of:

(1) Nine if wood;

(2) Five if steel. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60205, filed 12/11/84.]

WAC 296-56-60207 General requirements. (1) No person other than an employee or duly authorized person shall ride or be permitted to ride in the car.

(2) Escape ladders shall be installed to extend the full length of the hoistway and shall be located in a position whereby, in an emergency, a person can safely transfer from the car platform to the ladder. "IMPAIRED CLEARANCE" sign to be posted at bottom of ladders when face of ladder is less than thirty inches from any structure.

(3) An automatic safety dog or device shall be installed at the bottom landing which will prevent the car from leaving the landing until manually released by the operator.

(4) A fire extinguisher in proper working condition shall be attached to the car structure. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60207, filed 12/11/84.]

WAC 296-56-60209 Fixed ladders. (1) Scope and applicability. This section applies to all fixed ladders except:

(a) Ladders forming an integral part of railway cars, highway carriers, cargo containers, or other transportation carrier equipment;

(b) Climbing devices such as step bolts or structural members of tanks and towers;

(c) Ladders built into or vertically attached to tubular scaffold framing; and

(d) Ladders used only for fire fighting or emergency purposes are exempt from the provisions of subsection (5) of this section. All other requirements of this section apply.

(2) Definitions.

(a) "Cage" (basket guard) means a barrier enclosing or nearly enclosing a ladder's climbing space and fastened to one or both of the ladder's side rails or to another structure.

(b) "Fixed ladder" means a ladder, including individual rung ladders, permanently attached to a structure, building, or piece of equipment.

(c) "Ladder safety device" means a support system limiting an employee's drop or fall from the ladder, and which may incorporate friction brakes, lifelines and lanyards, or sliding attachments.

(d) "Well" means a permanent complete enclosure around a fixed ladder, which is attached to the walls of the well.

(3) Defects.

(a) Ladders with broken, split, or missing rungs, steps or rails, broken welds or connections, corrosion or wastage, or other defect which may affect safe use shall be removed from service.

(b) Ladder repairs shall provide strength at least equivalent to that of the original ladder.

(4) Ladder specifications.

(a)(i) Ladders installed before October 3, 1983, shall be capable of withstanding without damage a minimum concentrated load, applied uniformly over a three and one-half inch (8.8 cm) width at the rung center, of two hundred pounds (890 N).

(ii) Ladders installed after October 3, 1983, shall be capable of withstanding two hundred fifty pounds (1120 N) applied as described in (a)(i) of this subsection. If used by more than one employee simultaneously, the ladder as a unit shall be capable of simultaneous additional loading in two hundred fifty pound (1120 N) increments for each additional employee, applied to a corresponding number of rungs. The unit shall have a safety factor of four based on ultimate strength, in the designed service.

(b)(i) Ladders installed before October 3, 1983, shall have rungs evenly spaced from nine to sixteen and one-half inches (22.9 to 41.9 cm) apart, center to center.

(ii) Ladders installed after October 3, 1983, shall have rungs evenly spaced 12 inches, plus or minus 2 inches, (30 cm, plus or minus 5 cm) from center to center.

(c)(i) Ladders installed before October 3, 1983, shall have a width between side rails of at least ten inches (25.4 cm).

(ii) Ladders installed after October 3, 1983, shall have a width between side rails of at least twelve inches (30.48 cm).

(d) The minimum distance between the rung center line and the nearest permanent object behind the rung

shall be four inches (10.2 cm), except that in ladders installed after October 3, 1983, the minimum distance shall be seven inches (17.8 cm) unless physical limitations make a lesser distance, not less than four and one-half inches (11.5 cm), necessary.

(e) When a ladder passes through an opening or past overhead obstructions, a minimum twenty-four inch (.61 m) clearance shall exist between the climbing side and any obstruction. Where this distance is less than thirty inches (0.76 m), a deflection device shall be installed for guidance through the opening.

(f) The side rails of ladders shall extend at least thirty-six inches (0.91 m) above the top landing surface, unless grab bars or equivalent holds are provided.

(g) Ladders whose pitch exceeds ninety degrees to the horizontal (slanting backward on the climbing side) shall not be used.

(5) Protection against falls.

(a) Fixed ladders more than twenty feet (6.1 m) in height shall be provided with a cage, well, or ladder safety device.

(b) When a well or cage is used, ladders with length of climb exceeding thirty feet (9.14 m) shall comply with the following provisions:

(i) The ladder shall consist of multiple sections not exceeding thirty feet (9.14 m) each;

(ii) Each section shall be horizontally offset from adjacent sections, except as specified in (b)(iv) of this subsection; and

(iii) A landing platform capable of supporting a load of one hundred pounds per square foot (4.79 kPa) and fitted with guardrails complying with WAC 296-56-60123(3) shall be provided at least every thirty feet, except as specified in (b)(iv) of this subsection;

(iv) For ladders installed after October 3, 1983, offset sections and landing platforms are not required if hinged platforms capable of supporting one hundred pounds per square foot (4.79 kPa), and which are kept closed except when opened for passage, are within the cage or well at intervals not exceeding thirty feet (9.14 m).

(c) Ladders equipped with ladder safety devices shall have rest platforms:

(i) Capable of supporting a load of one hundred pounds per square foot (4.79 kPa);

(ii) Located at intervals of one hundred fifty feet (46 m) or less; and

(iii) Protected by guardrails complying with WAC 296-56-60123(3) of three sides.

(d) Where used, ladder safety devices shall:

(i) Be installed and maintained in accordance with the manufacturer's instructions, which shall be available for inspection;

(ii) Be repaired only with replacement parts having performance capability at least equal to that of the original parts;

(iii) Have a connection length between carrier centerlines and safety belts of 10 ± 2 inches (25.4 \pm 5.08 cm); and

(iv) Be installed in a manner that does not reduce the ladder's structural capability.

(e) Ladder cages or wells shall:

(i) Be of rigid construction that allows unobstructed use but prevents an employee from falling through or dislodging the cage or well by falling against it;

(ii) Have smooth inner surfaces;

(iii) Extend at least thirty-six inches (0.9 m) above landings; and

(iv) Extend to within eight feet (2.4 m) above the ground or base, except that a maximum of twenty feet (6.1 m) is permitted where the cage or well would extend into traffic lanes.

(f) Ladders installed after (effective date of standard) on radio, microwave communications, electrical power and similar towers, poles and structures, including stacks and chimneys, shall meet the requirements of this subsection.

(6) Individual rung ladders. Ladders consisting of individual rungs that are attached to walls, conical man-hole sections or river cells shall:

(a) Be capable of supporting a load of three hundred fifty pounds (1557 N) without deformation;

(b) Form a continuous ladder, uniformly spaced vertically from twelve inches to sixteen inches (30.5 to 41 cm) apart, with a minimum width of ten inches (25.4 cm), and projecting at least four and one-half inches (1 cm) from the wall;

(c) Be so constructed that an employee's foot cannot slide off the ends; and

(d) Be firmly attached and without sharp edges. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-10-004 (Order 85-09), § 296-56-60209, filed 4/19/85; 85-01-022 (Order 84-24), § 296-56-60209, filed 12/11/84.]

WAC 296-56-60211 Portable ladders. (1) Scope and applicability. This section applies to all portable ladders, including job-made ladders for temporary use, unless otherwise specified.

(2) Standards for existing manufactured portable ladders.

(a) Rungs of manufactured portable ladders obtained before October 3, 1983, shall be capable of supporting a two hundred pound (896 N) load without deformation.

(b) Rungs shall be evenly spaced from nine to sixteen and one-half inches (22.9 to 41.9 cm), center to center.

(c) Rungs shall be continuous members between rails. Each rung of a double-rung ladder (two side rails and a center rail) shall extend the full width of the ladder.

(d) Width between side rails at the base of the ladder shall be at least twelve inches (30 cm) for ladders ten feet (3.05 m) or less in overall length, and shall increase at least one-fourth inch (0.6 cm) for each additional two feet (0.61 m) of ladder length.

(3) Standards for manufactured portable ladders. Portable manufactured ladders obtained after October 3, 1983, shall bear identification indicating that they meet the appropriate ladder construction requirements of the following standards:

ANSI A14.1-Current Safety Requirements for Portable Wood Ladders

ANSI A14.2-Current Safety Requirements for Portable Metal Ladders

ANSI A14.5-Current Safety Requirements for Portable Reinforced Plastic Ladders

(4) Standards for job-made portable ladders. Job-made ladders shall:

(a) Have a minimum and uniform distance between rungs of twelve inches (30 cm), center to center;

(b) Are capable of supporting a two hundred fifty pound (1100 N) load without deformation; and

(c) Have a minimum width between side rails of twelve inches (30 cm) for ladders ten feet (3.05 m) in height. Width between rails shall increase at least one-fourth inch (0.6 cm) for each additional two feet (0.61 m) of ladder length.

(5) Maintenance and inspection.

(a) The employer shall maintain portable ladders in safe condition. Ladders with the following defects shall not be used and either shall be tagged as unusable if kept on the premises or shall be removed from the worksite:

(i) Broken, split or missing rungs, cleats, or steps;

(ii) Broken or split side rails;

(iii) Missing or loose bolts, rivets, or fastenings;

(iv) Defective ropes; or

(v) Any other structural defect.

(b) Ladders shall be inspected for defects prior to each day's use, and after any occurrence, such as a fall, which could damage the ladder.

(6) Ladder usage.

(a) Ladders made by fastening rungs or devices across a single rail are prohibited.

(b) Ladders shall not be used:

(i) As guys, braces, or skids; or

(ii) As platforms, runways, or scaffolds.

(c) Metal and wire-reinforced ladders with wooden side rails shall not be used when employees on the ladder might come into contact with energized electrical conductors.

(d) Individual sections from different multisectional ladders or two or more single straight ladders shall not be tied or fastened together to achieve additional length.

(e) Except for combination ladders, self-supporting ladders shall not be used as single straight ladders.

(f) Unless intended for cantilever operation, nonself-supporting ladders shall not be used to climb above the top support point.

(g) Ladders shall extend at least thirty-six inches (0.91 m) above the upper support level if employees are to leave or mount the ladder at that level, except that where such extension is impractical other equivalent means such as grab bars may be used to provide a hand grip.

(h) Ladders shall be securely positioned on a level and firm base.

(i) Ladders shall be fitted with slip-resistant bases and secured at top or bottom to prevent the ladder from slipping.

(j) The employer shall direct that ladders shall be placed so that employees climbing are not exposed to injury from projecting objects or doors that open toward the ladder. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-10-004 (Order 85-09), § 296-56-60211,

filed 4/19/85; 85-01-022 (Order 84-24), § 296-56-60211, filed 12/11/84.]

WAC 296-56-60213 Jacob's ladders. (1) Jacob's ladders shall be of the double rung or flat tread type. They shall be well maintained and properly secured to the dock.

(2) A Jacob's ladder shall either hang without slack from its lashings or be pulled up entirely. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60213, filed 12/11/84.]

WAC 296-56-60215 Fixed stairways. (1) Definition. "Fixed stairway" means interior and exterior stairs serving machinery, tanks, and equipment, and stairs to or from floors, platforms, or pits. The term does not apply to stairs intended only for fire exit purposes, to articulated stairs (the angle of which changes with the rise and fall of the base support) or to stairs forming an integral part of machinery.

(2) New installations.

(a) Fixed stairs installed after October 3, 1983, shall be positioned within the range of thirty degrees to fifty degrees to the horizontal with uniform riser height and tread width throughout each run and be capable of a minimum loading of one hundred pounds per square foot (448 N) and a minimum concentrated load of three hundred pounds (1344 N) at the center of any treads. Riser height shall be from six to seven and one-half inches (15.2 to 19.0 cm), stair width a minimum of twenty-two inches (56 cm) between vertical barriers, tread depth a minimum of 12±2 inches (30.48±5.08 cm), and tread nosing shall be straight leading edges.

(b) Stair landings shall be at least twenty inches (51 cm) in depth. Where doors or gates open on a stairway, a landing platform shall be provided. Door swing shall not reduce effective standing area on the landing to less than eighteen inches (45.7 cm) in depth.

(c) Fixed stairs having four or more risers shall have stair railings or handrails complying with WAC 296-56-60123 (3)(a).

(d) Railing height from tread surface at the riser face shall be 33±3 inches (83±7.6 cm).

(e) Restricted areas. When physical features require stairs steeper than those provided for by (a) of this subsection, stairs at angles of fifty degrees to seventy-five degrees from the horizontal may be used if they:

(i) Are capable of a single concentrated load of two hundred pounds (890 N) at the tread centers;

(ii) Have open treads at least four inches (10.2 cm) in depth and eighteen inches (45.7 cm) in width with a uniformly spaced vertical rise between treads of six to nine and one-half inches (15.2 to 24.1 cm); and

(iii) Have handrails that meet the requirements of WAC 296-56-60123 (3)(a) on both sides and that are not less than thirty inches (76.2 cm) in height from the tread surface at the riser face.

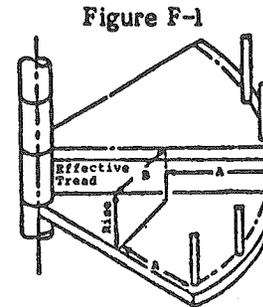
(f) Maintenance. Fixed stairways shall be maintained in safe condition and shall not be obstructed. [Statutory

Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60215, filed 12/11/84.]

WAC 296-56-60217 Spiral stairways. (1) Definition. "Spiral stairway" means one with closed circular form, uniform sector-shaped treads and a supporting column.

(2) Requirements. Spiral stairways shall meet the following requirements:

(a) Stairways shall conform to the minimum dimensions of Figure F-1;



Spiral Stairway—Minimum Dimensions

	A (Half-tread width)	B
Normal use by employees ...	11 inches (27.9 cm)	6 inches (15.2 cm)
Limited access ...	9 inches (22.9 cm)	5 inches (12.7 cm)

(b) Stairway risers shall be uniform and shall range from six and one-half to ten and one-half inches (16.5 to 26.7 cm) in height;

(c) Minimum loading capability shall be one hundred pounds per square foot (448 N), and minimum tread center concentrated loading shall be three hundred pounds (1344 N);

(d) Railing shall conform to the requirements of WAC 296-56-60123 (3)(a). If balusters are used, there shall be a minimum of one per tread. Handrails shall be a minimum of one and one-fourth inches (3.3 cm) in outside diameter; and

(e) Vertical clearance shall be at least six feet, six inches (1.98 m) above the top step.

(3) Maintenance. Spiral stairways shall be maintained in safe condition. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-10-004 (Order 85-09), § 296-56-60217, filed 4/19/85; 85-01-022 (Order 84-24), § 296-56-60217, filed 12/11/84.]

WAC 296-56-60219 Employee exits. (1) Employee exits shall be clearly marked.

(2) If an employee exit is not visible from employees' work stations, directional signs indicating routes to the exit shall be posted.

(3) Exits shall be readily accessible and sufficient in number to provide employees with a convenient means of escape in emergencies. A clear passage to the exit shall be maintained.

(4) The minimum width of any employee exit shall be twenty-eight inches (71.1 cm).

(5) All fire exits and aiseways of all docks and warehouses shall be clearly marked and kept clear. All main aiseways shall be wide enough to permit passage of a fire truck.

(6) There shall be a twenty-eight inch clearance maintained where employees use a passageway to an exit.

(7) Every building, structure or crane, new or old, shall be provided with an emergency means of egress to permit the prompt escape of occupants in case of fire or other emergency, at all locations with a vertical height of thirty feet or more. Crane, building or structure installed prior to the effective date of this standard will have until July 1, 1986, to comply. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-10-004 (Order 85-09), § 296-56-60219, filed 4/19/85; 85-01-022 (Order 84-24), § 296-56-60219, filed 12/11/84.]

WAC 296-56-60221 Illumination. Lighting. All areas shall be adequately lighted to meet the requirements of this code.

(1) Active work areas shall be lighted in such a manner the general area being worked will be illuminated at a minimum intensity of approximately five foot candles measured thirty inches above the dock floor. Supplemental lighting shall be utilized for conditions where more than the minimum intensity is necessary for a safe operation.

(2) A minimum of three foot candles illumination measured in the manner described above shall be maintained at all points along the bull rail.

(3) The quality of light shall be such that it is reasonably free from glare, and has correct direction, diffusion, and distribution.

(4) Lighting shall not be obstructed by any placement of cargo, structures or other objects which will create a shadow in the work area. Portable lighting shall be provided in these areas that do not meet minimum requirements of this subsection.

(5) Portable illumination.

(a) All walking and working areas shall be illuminated.

(b) Portable lights shall meet the following requirements:

(i) Portable lights shall be equipped with reflectors and guards to prevent flammable and other material from coming in contact with the bulb, except that guards are not required where the construction of the reflector is such that the bulb is recessed.

(ii) Portable lights shall be equipped with heavy duty electric cords and may be suspended by such cords only when the means of attachment of the cord to the light is

such as to prevent the light from being suspended by the electrical connections.

All connections and insulation shall be maintained.

(iii) Lighting wires and fixtures for portable lights shall be so arranged as to be free from contact with drafts, running gear, or other moving equipment. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60221, filed 12/11/84.]

WAC 296-56-60223 Passage between levels and across openings. (1) General. The employer shall provide safe means of passage between different surface levels and across openings.

(2) Definitions. "Dockboards (car and bridge plates)" mean devices for spanning short distances between rail cars or highway vehicles and loading platforms which do not expose employees to falls greater than four feet (1.2 m).

"Ramps" mean other flat-surface devices for passage between levels and across openings not covered under "dockboards."

(3) Dockboards (car and bridge plates).

(a) Dockboards shall be strong enough to support the loads imposed on them.

(b) Portable dockboards shall be anchored in position or be equipped with devices to prevent their movement.

(c) Hand holds or other effective means shall be provided on portable dockboards to permit safe handling.

(d) Positive means shall be used to prevent railcars or highway vehicles from being moved while dockboards or bridge plates are in position.

(4) Ramps.

(a) Ramps shall be strong enough to support the loads imposed on them, provided with sideboards, properly secured and well maintained.

(b) Ramps shall be equipped with guardrails meeting the requirements of WAC 296-56-60123 (3)(a) if the slope is more than twenty degrees to the horizontal or if employees could fall more than four feet (1.2 m).

(c) Ramps shall have slip-resistant surfaces.

(d) When necessary to prevent displacement by vehicle wheels, steel plates or similar devices used to temporarily bridge or cover uneven surfaces or tracks, shall be anchored. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60223, filed 12/11/84.]

WAC 296-56-60225 Guarding temporary hazards. Ditches, pits, excavations, and surfaces in poor repair shall be guarded by readily visible barricades, rails or other equally effective means. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60225, filed 12/11/84.]

WAC 296-56-60227 River banks. (1) This section applies to temporary installations or temporary operations near a river bank.

(2) Where working surfaces at river banks slope so steeply that an employee could slip or fall into the water, the employer shall ensure that the outer perimeter of the working surface is protected by posting or other portable

protection such as roping off, and that employees wear a personal flotation device meeting the requirements of WAC 296-56-60115(2). [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-10-004 (Order 85-09), § 296-56-60227, filed 4/19/85; 85-01-022 (Order 84-24), § 296-56-60227, filed 12/11/84.]

WAC 296-56-60229 Sanitation. (1) Washing and toilet facilities.

(a) The employer shall provide accessible washing and toilet facilities sufficient for the sanitary requirements of employees. The facilities shall have:

(i) Running water, including hot and cold or tepid water at a minimum of one accessible location (when cargo handling is conducted at locations without permanent facilities, potable water may be provided in lieu of running water);

(ii) Soap;

(iii) Individual hand towels, clean individual sections of continuous toweling or warm air blowers; and

(iv) Fixed or portable toilets in separate compartments with latch-equipped doors. Separate toilet facilities shall be provided for male and female employees except when toilet rooms will be occupied by only one person at a time. A means of locking shall be provided.

(b) Washing and toilet facilities shall be regularly cleaned and maintained in good order.

(2) Drinking water.

(a) Potable drinking water shall be accessible to employees at all times.

(b) Potable drinking water containers shall be clean, containing only water and ice, and shall be fitted with covers.

(c) Common drinking cups are prohibited.

(3) Prohibited eating areas. Consumption of food or beverages in areas where hazardous materials are being stored or handled shall be prohibited.

(4) Garbage and overboard discharges. Work shall not be conducted in the immediate vicinity of uncovered garbage or in the way of overboard discharges from the vessel's sanitary lines unless employees are protected from the garbage or discharge by a baffle or splash boards.

(5) Washroom facilities. All docks, warehouses, or similar working areas shall be equipped with clean, ventilated washroom facilities with hot running water provided.

(6) Toilet and sanitary facilities. All docks, warehouses, or similar working areas shall be provided with proper toilet and sanitary facilities. Such facilities shall be kept in good repair and in a sanitary condition. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60229, filed 12/11/84.]

WAC 296-56-60231 Signs and marking. (1) General. Signs required by this section shall be clearly worded and legible, and shall contain a key word or legend indicating the reason for the sign.

(a) Key words are such words as danger, warning, caution.

(b) Legends are more specific explanations such as high voltage, close clearance, pedestrian crossing.

(2) Specific. Every marine terminal shall have conspicuously posted signs as follows:

(a) Locations of first-aid facilities;

(b) Locations of telephones;

(c) Telephone numbers of the closest ambulance service, hospital or other source of medical attention, police, fire department, and emergency squad (if any); and

(d) Locations of fire fighting and emergency equipment and fire exits. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60231, filed 12/11/84.]

WAC 296-56-60233 Related terminal operations and equipment—Machine guarding. (1) Definition. "Guarded" means shielded, fenced, or enclosed by covers, casings, shields, troughs, spillways or railings, or guarded by position or location. Examples of guarding methods are guarding by location (positioning hazards so they are inaccessible to employees) and point of operation guarding (using barrier guards, two-hand tripping devices, electronic safety devices, or other such devices).

(2) General.

(a) Danger zones on machines and equipment used by employees shall be guarded.

(b) Where chips and dust produced by machine operation may result in a hazard to the operator, the machinery shall be equipped with an effective exhaust system at the point of origin, or other equally effective means shall be provided to protect the operator.

(c) Fixed machinery shall be secured to prevent shifting.

(d) A power cut-off device for machinery and equipment shall be provided at the operator's working position.

(e) Machines driven by belts and shafting shall be fitted with a belt-locking or equivalent protective device if the belt can be shifted.

(f) In operations where injury to the operator might result if motors were to restart after power failures, provisions shall be made to prevent machines from automatically restarting upon restoration of power.

(g) The power supply to machines shall be turned off, locked out, and tagged out during repair, adjustment, or servicing.

(h) Machines shall be maintained in a safe working condition.

(i) Only designated employees shall maintain or repair machinery and equipment.

(j) Machines with defects that affect the safety of operation shall not be used.

(3) Hand-fed circular rip saws and hand-fed circular crosscut table saws. Unless fixed or manually adjustable enclosures or guarding provides equivalent protection, hand-fed circular rip saws and hand-fed circular crosscut table saws shall be guarded as follows to keep employees clear of any danger zones:

(a) They shall be equipped with hoods completely enclosing those portions of the saw above the table and the material being cut;

(b) They shall have spreaders to prevent material from squeezing the saw. Spreaders shall be in true alignment with the saw. Spreaders may be removed only during grooving, dadoing, or rabbeting operations, and shall be replaced at the completion of such operations; and

(c) They shall have nonkickback fingers or dogs to oppose the tendency of the saw to pick up material or throw material toward the operator.

(4) Swing cutoff saws.

(a) Swing cutoff saws shall have hoods completely enclosing the upper half of the saw, the arbor end and the point of operation at all saw positions to protect the operator from material thrown up by the saw. The hood shall automatically cover the lower portion of the blade, so that when the saw returns to the back of the table the hood rises on top of the fence, and when the saw is moved forward the hood drops on top, remaining in contact with the table or the material.

(b) Swing cutoff saws shall have a device to return the saw automatically to the back of the table without rebound. The device shall not be dependent upon rope, cord or springs.

(c) Devices shall be provided to prevent saws from swinging beyond the front or back edges of the table.

(d) Inverted swing cutoff saws shall have hoods covering the part of the saw protruding above the table top or the material being cut. Hoods shall automatically adjust to the thickness of, and remain in contact with, material being cut.

(5) Radial saws. Unless fixed or manually adjustable enclosures or guards provide equivalent protection, radial saws shall be guarded as follows:

(a) The upper hood of radial saws shall enclose the upper portion of the blade up to and including the end of the saw arbor and shall protect the operator from being struck by debris. The sides of the lower exposed portion of the blade shall be guarded to the blade diameter by a device automatically adjusting to the thickness of the stock and remaining in contact with the stock. The lower guard may be removed only when the saw is used for bevel cuts;

(b) Radial saws used for ripping shall have nonkickback fingers or dogs on both sides to oppose the thrust or tendency of the saw to pick up material or throw material toward the operator;

(c) Adjustable stop shall be provided to prevent travel of radial saw blades beyond the table's edge;

(d) Radial saws shall be installed so that the cutting head returns to the starting position without rebound when released; and

(e) The employer shall direct that employees perform ripping and ploughing against the saw turning direction. Rotation direction and an indication of the end of the saw to be used shall be conspicuously marked on the hood.

(6) Band saws and band resaws.

(a) Saw blades and band saw wheels shall be enclosed or guarded, except for the working portion of the blade between the bottom of the guide rolls and the table, to

protect employees from point-of-operation hazards and flying debris.

(b) Band saws shall be equipped with brakes to stop the band saw wheel if the blade breaks.

(c) Band saws shall be equipped with a tension control device to keep the blade taut.

(7) Abrasive wheels and machinery.

(a) Abrasive wheels shall be used only on machines having enclosure guards to restrain pieces of grinding wheels and to protect employees if the wheel breaks, except as provided in (b) and (c) of this subsection. Where the operator must stand in front of the safety guard opening, the safety guard shall be adjustable or have an adjustable tongue or piece at the top of the opening. The safety guard or the tongue shall be adjusted so that they are always close to the periphery of the wheel. Guards shall be aligned with the wheel and the strength of fastenings shall be greater than the strength of the guard.

(b) When the work provides equivalent protection, or when the machine is designed as a portable saw, guards may be constructed with the spindle end, nut and outer flange exposed. When the work entirely covers the side of the wheel, the side covers of the guard may be removed.

(c) Guarding is not required:

(i) For wheels used for internal work while the wheel is contained within the work being ground; or

(ii) For mounted wheels two inches (5 cm) and smaller in diameter used in portable operations.

(d) Work rests shall be used on fixed grinding machines. Work rests shall be rigidly constructed and adjustable for wheel wear. They shall be adjusted closely to the wheel with a maximum opening of one-eighth inch (3.2 mm) and shall be securely clamped. Adjustment shall not be made while the wheel is in motion.

(e) Grinding wheels shall fit freely on the spindle. The spindle nut shall be tightened only enough to hold the wheel in place.

(f) Grinding machine wheels shall turn at a speed that is compatible with the rated speed of the wheel.

(g) Flanges and blotters shall be used only with wheels designed for their use. Flanges shall be of a type ensuring retention of pieces of the wheel in case of breakage.

(h) Abrasive wheels with operational defects shall not be used.

(8) Rotating parts, drives and connections.

(a) Rotating parts, such as gears and pulleys, that are located seven feet (2.1 m) or less above working surfaces shall be guarded to prevent employee contact with moving parts.

(b) Belt, rope and chain drives shall be guarded to prevent employees from coming into contact with moving parts.

(c) Gears, sprockets and chains shall be guarded to prevent employees coming into contact with moving parts. This requirement does not apply to manually operated sprockets. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-10-004 (Order 85-09), § 296-56-60233, filed 4/19/85; 85-01-022 (Order 84-24), § 296-56-60233, filed 12/11/84.]

WAC 296-56-60235 Welding, cutting and heating (hot work). (1) Definition. "Hot work" means riveting, welding, flame cutting or other fire or spark-producing operation.

(2) Hot work in confined spaces. Hot work shall not be performed in a confined space until a designated person has tested the atmosphere and determined that it is not hazardous.

(3) Fire protection.

(a) To the extent possible, hot work shall be performed in designated locations that are free of fire hazards.

(b) When hot work must be performed in a location that is not free of fire hazards, all necessary precautions shall be taken to confine heat, sparks, and slag so that they cannot contact flammable or combustible material.

(c) Fire extinguishing equipment suitable for the location shall be immediately available and shall be maintained in readiness for use at all times.

(d) When the hot work operation is such that normal fire prevention precautions are not sufficient, additional personnel shall be assigned to guard against fire during hot work and for a sufficient time after completion of the work to ensure that no fire hazard remains. The employer shall instruct all employees involved in hot work operations as to potential fire hazards and the use of fire fighting equipment.

(e) Drums and containers which contain or have contained flammable or combustible liquids shall be kept closed. Empty containers shall be removed from the hot work area.

(f) When openings or cracks in flooring cannot be closed, precautions shall be taken to ensure that no employees or flammable or combustible materials on the floor below are exposed to sparks dropping through the floor. Similar precautions shall be taken regarding cracks or holes in walls, open doorways and open or broken windows.

(g) Hot work shall not be performed:

(i) In flammable or potentially flammable atmospheres;

(ii) On or in equipment or tanks that have contained flammable gas or liquid or combustible liquid or dust-producing material, until a designated person has tested the atmosphere inside the equipment or tanks and determined that it is not hazardous; or

(iii) Near any area in which exposed readily ignitable materials such as bulk sulphur, baled paper or cotton are stored. Bulk sulphur is excluded from this prohibition if suitable precautions are followed, the person in charge is knowledgeable and the person performing the work has been instructed in preventing and extinguishing sulphur fires.

(h)(i) Drums, containers or hollow structures that have contained flammable or combustible substances shall either be filled with water or cleaned, and shall then be ventilated. A designated person shall test the atmosphere and determine that it is not hazardous before hot work is performed on or in such structures.

(ii) Before heat is applied to a drum, container or hollow structure, an opening to release built-up pressure during heat application shall be provided.

(4) Gas welding and cutting.

(a) Compressed gas cylinders:

(i) Shall have valve protection caps in place except when in use, hooked up or secured for movement. Oil shall not be used to lubricate caps;

(ii) Shall be hoisted only while secured, as on a cradle or pallet, and shall not be hoisted by magnet, choker sling or cylinder caps;

(iii) Shall be moved only by tilting or rolling on their bottom edges;

(iv) Shall be secured when moved by vehicle;

(v) Shall be secured while in use;

(vi) Shall have valves closed when cylinders are empty, being moved or stored;

(vii) Shall be secured upright except when hoisted or carried;

(viii) Shall not be freed when frozen by prying the valves or caps with bars or by hitting the valve with a tool;

(ix) Shall not be thawed by boiling water;

(x) Shall not be exposed to sparks, hot slag, or flame;

(xi) Shall not be permitted to become part of electrical circuits or have electrodes struck against them to strike arcs;

(xii) Shall not be used as rollers or supports;

(xiii) Shall not have contents used for purposes not authorized by the supplier;

(xiv) Shall not be used if damaged or defective;

(xv) Shall not have gases mixed within, except by gas suppliers;

(xvi) Shall be stored so that oxygen cylinders are separated from fuel gas cylinders and combustible materials by either a minimum distance of twenty feet (6 m) or a barrier having a fire-resistance rating of thirty minutes; and

(xvii) Shall not have objects that might either damage the safety device or obstruct the valve placed on top of the cylinder when in use.

(b) Use of fuel gas. Fuel gas shall be used only as follows:

(i) Before regulators are connected to cylinder valves, the valves shall be opened slightly (cracked) and closed immediately to clear away dust or dirt. Valves shall not be cracked if gas could reach possible sources of ignition;

(ii) Cylinder valves shall be opened slowly to prevent regulator damage and shall not be opened more than one and one-half turns. Any special wrench required for emergency closing shall be positioned on the valve stem during cylinder use. For manifolded or coupled cylinders, at least one wrench shall be immediately available. Nothing shall be placed on top of a cylinder or associated parts when the cylinder is in use;

(iii) Pressure-reducing regulators shall be attached to cylinder valves when cylinders are supplying torches or devices equipped with shut-off valves;

(iv) Cylinder valves shall be closed and gas released from the regulator or manifold before regulators are removed;

(v) Leaking fuel gas cylinder valves shall be closed and the gland nut tightened. If the leak continues, the cylinder shall be tagged, removed from service, and moved to a location where the leak will not be hazardous. If a regulator attached to a valve stops a leak, the cylinder need not be removed from the workplace but shall be tagged and may not be used again before it is repaired; and

(vi) If a plug or safety device leaks, the cylinder shall be tagged, removed from service, and moved to a location where the leak will not be hazardous.

(c) Hose.

(i) Fuel gas and oxygen hoses shall be easily distinguishable from each other by color or sense of touch. Oxygen and fuel hoses shall not be interchangeable. Hoses having more than one gas passage shall not be used.

(ii) When oxygen and fuel gas hoses are taped together, not more than four of each twelve inches (10.2 cm of each 30.5 cm) shall be taped.

(iii) Hose shall be inspected before use. Hose subjected to flashback or showing evidence of severe wear or damage shall be tested to twice the normal working pressure but not less than two hundred p.s.i. (1378.96 kPa) before reuse. Defective hose shall not be used.

(iv) Hose couplings shall not unlock or disconnect without rotary motion.

(v) Hose connections shall be clamped or securely fastened to withstand twice the normal working pressure but not less than three hundred p.s.i. (2068.44 kPa) without leaking.

(vi) Gas hose storage boxes shall be ventilated.

(d) Torches.

(i) Torch tip openings shall only be cleaned with devices designed for that purpose.

(ii) Torches shall be inspected before each use for leaking shut-off valves, hose couplings and tip connections. Torches shall be inspected before each use for leaking shut-off valves, hose couplings and tip connections. Torches with such defects shall not be used.

(iii) Torches shall not be lighted from matches, cigarette lighters, other flames or hot work.

(e) Pressure regulators. Pressure regulators, including associated gauges, shall be maintained in safe working order.

(f) Operational precaution. Gas welding equipment shall be maintained free of oil and grease.

(5) Arc welding and cutting.

(a) Manual electrode holders.

(i) The employer shall ensure that only manual electrode holders intended for arc welding and cutting and capable of handling the maximum current required for such welding or cutting shall be used.

(ii) Current-carrying parts passing through those portions of the holder gripped by the user and through the outer surfaces of the jaws of the holder shall be insulated against the maximum voltage to ground.

(b) Welding cables and connectors.

(i) Arc welding and cutting cables shall be insulated, flexible and capable of handling the maximum current required by the operations, taking into account the duty cycles.

(ii) Only cable free from repair or splice for ten feet (3 m) from the electrode holder shall be used unless insulated connectors or splices with insulating quality equal to that of the cable are provided.

(iii) When a cable other than the lead mentioned in (b)(ii) of this subsection wears and exposes bare conductors, the portion exposed shall not be used until it is protected by insulation equivalent in performance capacity to the original.

(iv) Insulated connectors of equivalent capacity shall be used for connecting or splicing cable. Cable lugs, where used as connectors, shall provide electrical contact. Exposed metal parts shall be insulated.

(c) Ground returns and machine grounding.

(i) Ground return cables shall have current-carrying capacity equal to or exceeding the total maximum output capacities of the welding or cutting units served.

(ii) Structures or pipelines, other than those containing gases or flammable liquids or conduits containing electrical circuits, may be used in the ground return circuit if their current-carrying capacity equals or exceeds the total maximum output capacities of the welding or cutting units served.

(iii) Structures or pipelines forming a temporary ground return circuit shall have electrical contact at all joints. Arcs, sparks or heat at any point in the circuit shall cause rejection as a ground circuit.

(iv) Structures or pipelines acting continuously as ground return circuits shall have joints bonded and maintained to ensure that no electrolysis or fire hazard exists.

(v) Arc welding and cutting machine frames shall be grounded, either through a third wire in the cable containing the circuit conductor or through a separate wire at the source of the current. Grounding circuits shall have resistance low enough to permit sufficient current to flow to cause the fuse or circuit breaker to interrupt the current.

(vi) Ground connections shall be mechanically and electrically adequate to carry the current.

(d) When electrode holders are left unattended, electrodes shall be removed and holders placed to prevent employee injury.

(e) Hot electrode holders shall not be dipped in water.

(f) The employer shall ensure that when arc welders or cutters leave or stop work or when machines are moved, the power supply switch shall be kept in the off position.

(g) Arc welding or cutting equipment having a functional defect shall not be used.

(h) (i) Arc welding and cutting operations shall be separated from other operations by shields, screens, or curtains to protect employees in the vicinity from the direct rays and sparks of the arc.

(ii) Employees in areas not protected from the arc by screening shall be protected by appropriate filter lenses in accordance with subsection (8) of this section. When

welders are exposed to their own arc or to each other's arc, they shall wear filter lenses complying with the requirements of subsection (8) of this section.

(i) The control apparatus of arc welding machines shall be enclosed, except for operating wheels, levers, and handles.

(j) Input power terminals, top change devices and live metal parts connected to input circuits shall be enclosed and accessible only by means of insulated tools.

(k) When arc welding is performed in wet or high-humidity conditions, employees shall use additional protection, such as rubber pads or boots, against electric shock.

(6) Ventilation and employee protection in welding, cutting and heating.

(a) Mechanical ventilation requirements. The employer shall ensure that general mechanical ventilation or local exhaust systems shall meet the following requirements:

(i) General mechanical ventilation shall maintain vapors, fumes and smoke below a hazardous level;

(ii) Local exhaust ventilation shall consist of movable hoods positioned close to the work and shall be of such capacity and arrangement as to keep breathing zone concentrations below hazardous levels;

(iii) Exhausts from working spaces shall be discharged into the open air, clear of intake air sources;

(iv) Replacement air shall be clean and respirable; and

(v) Oxygen shall not be used for ventilation, cooling or cleaning clothing or work areas.

(b) Hot work in confined spaces. Except as specified in (c) (ii) and (iii) of this subsection, when hot work is performed in a confined space the employer shall ensure that:

(i) General mechanical or local exhaust ventilations shall be provided; or

(ii) Employees in the space shall wear supplied air respirators in accordance with WAC 296-62-071 and a standby on the outside shall maintain communication with employees inside the space and shall be equipped and prepared to provide emergency aid.

(c) Welding, cutting or heating of toxic metals.

(i) In confined or enclosed spaces, hot work involving the following metals shall only be performed with general mechanical or local exhaust ventilation that ensures that employees are not exposed to hazardous levels of fumes:

(A) Lead base metals;

(B) Cadmium-bearing filler materials; and

(C) Chromium-bearing metals or metals coated with chromium-bearing materials.

(ii) In confined or enclosed spaces, hot work involving the following metals shall only be performed with local exhaust ventilation meeting the requirements of this subsection or by employees wearing supplied air respirators in accordance with chapter 296-62 WAC;

(A) Zinc-bearing base or filler metals or metals coated with zinc-bearing materials;

(B) Metals containing lead other than as an impurity, or coated with lead-bearing materials;

(C) Cadmium-bearing or cadmium-coated base metals; and

(D) Metals coated with mercury-bearing materials.

(iii) Employees performing hot work in confined or enclosed spaces involving beryllium-containing base or filler metals shall be protected by local exhaust ventilation and wear supplied air respirators or self-contained breathing apparatus, in accordance with the requirements of chapter 296-62 WAC.

(iv) The employer shall ensure that employees performing hot work in the open air that involves any of the metals listed in (c) (i) and (ii) of this subsection shall be protected by respirators in accordance with the requirements of chapter 296-62 WAC and those working on beryllium-containing base or filler metals shall be protected by supplied air respirators, in accordance with the requirements of chapter 296-62 WAC.

(v) Any employee exposed to the same atmosphere as the welder or burner shall be protected by the same type of respiratory and other protective equipment as that worn by the welder or burner.

(d) Inert-gas metal-arc welding. Employees shall not engage in and shall not be exposed to the inert-gas metal-arc welding process unless the following precautions are taken:

(i) Chlorinated solvents shall not be used within two hundred feet (61 m) of the exposed arc. Surfaces prepared with chlorinated solvents shall be thoroughly dry before welding is performed on them.

(ii) Employees in areas not protected from the arc by screening shall be protected by appropriate filter lenses in accordance with the requirements of subsection (8) of this section. When welders are exposed to their own arc or to each other's arc, filter lenses complying with the requirements of subsection (8) of this section shall be worn to protect against flashes and radiant energy.

(iii) Employees exposed to radiation shall have their skin covered completely to prevent ultraviolet burns and damage. Helmets and hand shields shall not have leaks, openings or highly reflective surfaces.

(iv) Inert-gas metal-arc welding on stainless steel shall not be performed unless exposed employees are protected either by local exhaust ventilation or by wearing supplied air respirators.

(7) Welding, cutting and heating on preservative coatings.

(a) Before hot work is commenced on surfaces covered by a preservative coating of unknown flammability, a test shall be made by a designated person to determine the coating's flammability. Preservative coatings shall be considered highly flammable when scrapings burn with extreme rapidity.

(b) Appropriate precaution shall be taken to prevent ignition of highly flammable hardened preservative coatings. Highly flammable coatings shall be stripped from the area to be heated. An uncoiled fire hose with fog nozzle, under pressure, shall be immediately available in the hot work area.

(c) Surfaces covered with preservative coatings shall be stripped for at least four inches (10.2 cm) from the area of heat application or employees shall be protected

by supplied air respirators in accordance with the requirements of chapter 296-62 WAC.

(8) Protection against radiant energy.

(a) Employees shall be protected from radiant energy eye hazards by spectacles, cup goggles, helmets, hand shields or face shields with filter lenses complying with the requirements of this subsection.

(b) Filter lenses shall have an appropriate shade number, as indicated in Table G-1, for the work performed. Variations of one or two shade numbers are permissible to suit individual preferences.

(c) If filter lenses are used in goggles worn under the helmet, the shade numbers of both lenses equals the value shown in Table G-1 for the operation.

Table G-1.—Filter Lenses for Protection Against Radiant Energy

Operation	Shade No.
Soldering	2
Torch Brazing	3 or 4
Light cutting, up to 1 inch	3 or 4
Medium cutting, 1-6 inches	4 or 5
Heavy cutting, over 6 inches	5 or 6
Light gas welding, up to 1/8 inch	4 or 5
Medium gas welding, 1/8-1/2 inch	5 or 6
Heavy gas welding, over 1/2 inch	6 or 8
Shielded Metal-Arc Welding 1/16 to 5/32-inch electrodes	10
Inert gas Metal-Arc Welding (non-ferrous) 1/16 to 5/32-inch electrodes	11
Shielded Metal-Arc Welding: 3/16 to 1/4-inch electrodes	12
5/16 and 3/8-inch electrodes	14

[Statutory Authority: RCW 49.17.040 and 49.17.050. 85-10-004 (Order 85-09), § 296-56-60235, filed 4/19/85; 85-01-022 (Order 84-24), § 296-56-60235, filed 12/11/84.]

WAC 296-56-60237 Spray painting. (1) Scope. This section covers painting operations connected with maintenance of structures, equipment and gear at the marine terminal and of transient equipment serviced at the terminal. It does not apply to overall painting of terminal structures under construction, major repair or rebuilding of terminal structures, or portable spraying apparatus not used regularly in the same location.

(2) Definitions.

(a) "Spraying area" means any area where flammable vapors, mists or combustible residues, dusts or deposits may be present due to paint spraying operations.

(b) "Spray booth" means an enclosure containing a flammable or combustible spraying operation and confining and limiting the escape of paint, vapor and residue by means of a powered exhaust system.

(c) "Approved" means, for the purpose of this section, that the equipment has been approved for the specified use by a nationally recognized testing laboratory.

(3) Spray painting requirements for indoor and outdoor spraying areas and booths.

(a) Shut-off valves, containers or piping with attached hoses or flexible connections shall have shut-off valves closed at the connection when not in use.

(b) Pumps used to transfer paint supplies shall have automatic pressure-relieving devices.

(c) Hoses and couplings shall be inspected before use. Hoses showing deterioration, leakage or weakness in the carcass or at the couplings shall be removed from service.

(d)(i) No open flame or spark-producing equipment shall be within twenty feet (6 m) of a spraying area unless it is separated from the spraying area by a fire-retardant partition.

(ii) Hot surfaces shall not be located in spraying areas.

(iii) Whenever combustible residues may accumulate on electrical installations, wiring shall be in rigid conduit or in boxes containing no taps, splices or connections.

(iv) Portable electric lights shall not be used during spraying operations. Lights used during cleaning or repairing operations shall be approved for the location in which they are used.

(e) When flammable or combustible liquids are being transferred between containers, both containers shall be bonded and grounded.

(f)(i) Spraying shall be performed only in designated spray booths or spraying areas.

(ii) Spraying areas shall be kept as free from combustible residue accumulations as practicable.

(iii) Residue scrapings, debris, rags, and waste shall be removed from the spraying area as they accumulate.

(g) Spraying with organic peroxides and other dual-component coatings shall only be conducted in sprinker-equipped spray booths.

(h) Only the quantity of flammable or combustible liquids required for the operation shall be allowed in the spraying area, and in no case shall the amount exceed a one-day supply.

(i) Smoking shall be prohibited and "No Smoking" signs shall be posted in spraying and paint storage areas.

(4) Additional requirements for spraying areas and spray booths.

(a) Distribution or baffle plates shall be of noncombustible material and shall be removable or accessible for cleaning. They shall not be located in exhaust ducts.

(b) Any discarded filter shall be removed from the work area or placed in water.

(c) Filters shall not be used when the material being sprayed is highly susceptible to spontaneous heating and ignition.

(d) Filters shall be noncombustible or of an approved type. The same filter shall not be used when spraying with different coating materials if the combination of materials may spontaneously ignite.

(e) Spraying areas shall be mechanically ventilated for removal of flammable and combustible vapor and mist.

(f) Mechanical ventilation shall be in operation during spraying operations and long enough thereafter to exhaust hazardous vapor concentrations.

(g) Rotating fan elements shall be nonsparking or the casing shall consist of or be lined with nonsparking material.

(h) Piping systems conveying flammable or combustible liquids to the spraying booth or area shall be made of metal and be both bonded and grounded.

(i) Air exhausted from spray operations shall not contaminate makeup air or other ventilation intakes. Exhausted air shall not be recirculated unless it is first cleaned of any hazardous contaminants.

(j) Original closed containers, approved portable tanks, approved safety cans or a piping system shall be used to bring flammable or combustible liquids into spraying areas.

(k) If flammable or combustible liquids are supplied to spray nozzles by positive displacement pumps, the pump discharge line shall have a relief valve discharging either to a pump section or detached location, or the line shall be equipped with a device to stop the prime mover when discharge pressure exceeds the system's safe operating pressure.

(l) Wiring, motors and equipment in a spray booth shall be of approved explosion-proof type for Class I, Group D locations and conform to WAC 296-24-956 through 296-24-960 for Class I, Division 1, Hazardous locations. Wiring, motors and equipment within twenty feet (6 m) of any interior spraying area and not separated by vapor-tight partitions shall not produce sparks during operation and shall conform to the requirements of WAC 296-24-956 through 296-24-960 for Class I, Division 2, Hazardous locations.

(m) Outside electrical lights within ten feet (3 m) of spraying areas and not separated from the areas by partitions shall be enclosed and protected from damage.

(5) Additional requirements for spray booths.

(a) Spray booths shall be substantially constructed of noncombustible material and have smooth interior surfaces. Spray booth floors shall be covered with noncombustible material. As an aid to cleaning, paper may be used to cover the floor during painting operations if it is removed after the painting is completed.

(b) Spray booths shall be separated from other operations by at least three feet (0.91 m) or by fire-retardant partitions or walls.

(c) A space of at least three feet (0.91 m) on all sides of the spray booth shall be maintained free of storage or combustible materials.

(d) Metal parts of spray booths, exhaust ducts, piping and airless high-pressure spray guns and conductive objects being sprayed shall be grounded.

(e) Electric motors driving exhaust fans shall not be located inside booths or ducts.

(f) Belts shall not enter ducts or booths unless the belts are completely enclosed.

(g) Exhaust ducts shall be made of steel, shall have sufficient access doors to permit cleaning, and shall have

a minimum clearance of eighteen inches (0.46 m) from combustible materials. Any installed dampers shall be fully opened when the ventilating system is operating.

(h) Spray booths shall not be alternately used to spray different types of coating materials if the combination of the materials may spontaneously ignite unless deposits of the first material are removed from the booth and from exhaust ducts before spraying of the second material begins. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-10-004 (Order 85-09), § 296-56-60237, filed 4/19/85; 85-01-022 (Order 84-24), § 296-56-60237, filed 12/11/84.]

WAC 296-56-60239 Compressed air. Employees shall be protected by chip guarding and personal protective equipment complying with the provisions of chapter 296-62 WAC during cleaning with compressed air. Compressed air used for cleaning shall not exceed a pressure of thirty p.s.i. Compressed air shall not be used to clean employees. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60239, filed 12/11/84.]

WAC 296-56-60241 Air receivers. (1) Application. This section applies to compressed air receivers and equipment used for operations such as cleaning, drilling, hoisting and chipping. It does not apply to equipment used to convey materials or in such transportation applications as railways, vehicles or cranes.

(2) Gauges and valves.

(a) Air receivers shall be equipped with indicating pressure gauges and spring-loaded safety valves. Safety valves shall prevent receiver pressure from exceeding one hundred ten percent of the maximum allowable working pressure.

(b) No other valves shall be placed between air receivers and their safety valves. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60241, filed 12/11/84.]

WAC 296-56-60243 Fuel handling and storage. (1) Liquid fuel. See also WAC 296-24-475.

(a) Only designated persons shall conduct fueling operations.

(b) In case of spillage, filler caps shall be replaced and spillage disposed of before engines are started.

(c) Engines shall be stopped and operators shall not be on the equipment during refueling operations.

(d) Smoking and open flames shall be prohibited in areas used for fueling, fuel storage or enclosed storage of equipment containing fuel.

(e) Equipment shall be refueled only at designated locations.

(f) Liquid fuels not handled by pump shall be handled and transported only in portable containers or equivalent means designed for that purpose. Portable containers shall be metal, have tight closures with screw or spring covers and shall be equipped with spouts or other means to allow pouring without spilling. Leaking containers shall not be used.

(g) Flammable liquids may be dispensed in the open from a tank or from other vehicles equipped for delivering fuel to another vehicle only if:

(i) Dispensing hoses do not exceed fifty feet (15.2 m) in length; and

(ii) Any powered dispensing nozzles used are of the automatic-closing type.

(h) Liquid fuel dispensing devices shall be provided with an easily accessible and clearly identified shut-off device, such as a switch or circuit breaker, to shut off the power in an emergency.

(i) Liquid fuel dispensing devices, such as pumps, shall be mounted either on a concrete island or be otherwise protected against collision damage.

(2) Liquefied gas fuels.

(a) Fueling locations.

(i) Liquefied gas powered equipment shall be fueled only at designated locations.

(ii) Equipment with permanently mounted fuel containers shall be charged outdoors.

(iii) Equipment shall not be fueled or stored near underground entrances, elevator shafts or other places where gas or fumes might accumulate.

(b) Fuel containers.

(i) When removable fuel containers are used, the escape of fuel when containers are exchanged shall be minimized by:

(A) Automatic quick-closing couplings (closing in both directions when uncoupled) in fuel lines; or

(B) Closing fuel container valves and allowing engines to run until residual fuel is exhausted.

(ii) Pressure-relief valve openings shall be in continuous contact with the vapor space (top) of the cylinder.

(iii) Fuel containers shall be secured to prevent their being jarred loose, slipping or rotating.

(iv) Containers shall be located to prevent damage to the container. If located within a compartment, that compartment shall be vented. Containers near the engine or exhaust system shall be shielded against direct heat radiation.

(v) Container installation shall provide the container with at least the vehicle's road clearance under maximum spring deflection, which shall be to the bottom of the container or to the lowest fitting on the container or housing, whichever is lower.

(vi) Valves and connections shall be protected from contact damage. Permanent protection shall be provided for fittings on removable containers.

(vii) Defective containers shall be removed from service.

(c) Fueling operations. See also WAC 296-24-47517.

(i) To the extent applicable, fueling operations for liquefied gas fuels shall also comply with subsection (1) of this section.

(ii) Using matches or flames to check for leaks is prohibited.

(iii) Containers shall be examined before recharging and again before reuse for the following:

(A) Dents, scrapes and gouges of pressure vessels;

(B) Damage to valves and liquid level gauges;

(C) Debris in relief valves;

(D) Leakage at valves or connection; and

(E) Deterioration or loss of flexible seals in filling or servicing connections.

(d) Fuel storage. See also WAC 296-24-47517(6).

(i) Stored fuel containers shall be located to minimize exposure to excessive temperatures and physical damage.

(ii) Containers shall not be stored near exits, stairways or areas normally used or intended for egress.

(iii) Outlet valves of containers in storage or transport shall be closed. Relief valves shall connect with vapor spaces.

(e) Vehicle storage and servicing.

(i) Liquefied gas fueled vehicles may be stored or serviced inside garages or shops only if there are no fuel system leaks.

(ii) Liquefied gas fueled vehicles under repair shall have container shut-off valves closed unless engine operation is necessary for repairs.

(iii) Liquefied gas fueled vehicles shall not be parked near open flames, sources of ignition or unventilated open pits. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60243, filed 12/11/84.]

WAC 296-56-60245 Battery charging and changing. (1) Only designated persons shall change or charge batteries.

(2) Battery charging and changing shall be performed only in areas designated by the employer.

(3) Smoking and other ignition sources are prohibited in charging areas.

(4) Filler caps shall be in place when batteries are being moved.

(5) Parking brakes shall be applied before batteries are charged or changed.

(6) When a jumper battery is connected to a battery in a vehicle, the ground lead shall connect to ground away from the vehicle's battery. Ignition, lights and accessories on the vehicle shall be turned off before connections are made.

(7) Batteries shall be free of corrosion buildup and cap vent holes shall be open.

(8) Adequate ventilation shall be provided during charging.

(9) Facilities for flushing the eyes, body and work area with water shall be provided wherever electrolyte is handled, except that this requirement does not apply when employees are only checking battery electrolyte levels or adding water.

(10) Carboy tilters or siphons shall be used to handle electrolyte in large containers.

(11) Battery handling equipment which could contact battery terminals or cell connectors shall be insulated or otherwise protected.

(12) Metallic objects shall not be placed on uncovered batteries.

(13) When batteries are being charged, the vent caps shall be in place.

(14) Charges shall be turned off when leads are being connected or disconnected.

(15) Installed batteries shall be secured to avoid physical or electrical contact with compartment walls or components. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60245, filed 12/11/84.]

WAC 296-56-60247 Prohibited operations. (1) Spray painting and abrasive blasting operations shall not be conducted in the vicinity of cargo handling operations.

(2) Welding and burning operations shall not be conducted in the vicinity of cargo handling operations unless such hot work is part of the cargo operation. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60247, filed 12/11/84.]

WAC 296-56-60249 Petroleum docks. (1) Pipe lines which transport petroleum liquids from or to a wharf shall be equipped with valves on shore so located as to be readily accessible and not endangered by a fire on the wharf.

(2) Drip pans, buckets, or other means shall be provided and shall be used to prevent oil spillage upon wharves during loading, disconnecting and draining hoses. After transfer is completed the contents of drip pans and buckets shall be removed and taken to a place of disposal.

(3) Package goods, freight or ship stores shall not be loaded or discharged during the bulk handling of oils or other inflammable liquids, in such a manner that the sling loads will endanger the hose.

(4) Water lights for use at petroleum wharves shall not be a type which create a source of ignition. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60249, filed 12/11/84.]

WAC 296-56-60251 Boat marinas. (1) All hoisting equipment including derricks, cranes, or other devices used for boat launching, handling cargo, or supplies shall be inspected once a month and the records of this inspection be made available to the marine dock inspector upon request.

(2) Floating docks will not be required to have bull rails unless lift trucks or other power driven equipment is used on the dock.

(3) No smoking signs shall be posted in areas where fueling or inflammable material is present.

(4) Inflammable material or petroleum products shall be stored in a fireproof storage room or shed.

(5) Slippery surfaces shall be cleaned up and nonslip material shall be used if necessary. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60251, filed 12/11/84.]

WAC 296-56-60253 Canneries and cold storage docks. (1) Hoisting equipment used to load or unload cargo or supplies or fishing vessels shall be inspected once a month and the record of inspection be made available to the marine dock inspector upon request.

(2) Slippery surfaces shall be cleaned up and nonslip material shall be used if necessary. [Statutory Authority:

RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60253, filed 12/11/84.]

WAC 296-56-60255 Excerpts from Revised Code of Washington. (1) RCW 49.28.100 Hours of operators of power equipment in waterfront operations. It shall be unlawful for any employer to permit any of his employees to operate on docks, in warehouses and/or in or on other waterfront properties any power driven mechanical equipment for the purpose of loading cargo on, or unloading cargo from, ships, barges, or other watercraft, or of assisting in such loading or unloading operations, for a period in excess of twelve and one-half hours at any one time without giving such person an interval of eight hours' rest: *Provided, however,* The provisions of this section and RCW 49.28.110 shall not be applicable in cases of emergency, including fire, violent storms, leaking or sinking ships or services required by the armed forces of the United States.

(2) RCW 51.28.010 Notice of accident—Notification of worker's rights. Whenever any accident occurs to any worker it shall be the duty of such worker or someone in his or her behalf to forthwith report such accident to his or her employer, superintendent or foreman or forewoman in charge of the work, and of the employer to at once report such accident and the injury resulting therefrom to the department pursuant to RCW 51.28.025, as now or hereafter amended, where the worker has received treatment from a physician, has been hospitalized, disabled from work, or has died as the apparent result of such accident and injury.

Upon receipt of such notice of accident, the department shall immediately forward to the worker or his or her beneficiaries or dependents notification, in nontechnical language, of their rights under this title. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-56-60255, filed 12/11/84.]

Chapter 296-62 WAC

OCCUPATIONAL HEALTH STANDARDS—SAFETY STANDARDS FOR CARCINOGENS

WAC

296-62-054	Hazard communication purpose.
296-62-05403	Scope and application.
296-62-05405	Definitions applicable to this section.
296-62-05407	Hazard determination.
296-62-05409	Written hazard communication program.
296-62-05411	Labels and other forms of warning.
296-62-05413	Material safety data sheets.
296-62-05415	Employee information and training.
296-62-05417	Trade secrets.
296-62-05419	Effective dates.
296-62-05421	Appendix A—Health hazard definitions (mandatory).
296-62-05423	Appendix B—Hazard determination (mandatory).
296-62-05425	Appendix C—Information sources (advisory).
296-62-07302	List of carcinogens.
296-62-07306	Requirements for areas containing carcinogens listed in WAC 296-62-07302.
296-62-07353	Ethylene oxide.
296-62-07515	Control of chemical agents.
296-62-09001	Definitions.
296-62-09004	Ionizing radiation.
296-62-09005	Nonionizing radiation.

296-62-130 Emergency washing facilities.

WAC 296-62-054 Hazard communication purpose.

(1) The purpose of this section is to ensure that the hazards of all chemicals produced or imported by chemical manufacturers or importers are evaluated, and that information concerning their hazards is transmitted to affected employers and employees. This transmittal of information is to be accomplished by means of comprehensive hazard communication programs, which are to include container labeling and other forms of warning, material safety data sheets and employee training.

(2) This occupational safety and health standard is intended to address comprehensively the issue of evaluating and communicating chemical hazards to employees. [Statutory Authority: RCW 49.17.040 and 49.17.050. 84-22-012 (Order 84-22), § 296-62-054, filed 10/30/84; 84-13-001 (Order 84-14), § 296-62-054, filed 6/7/84.]

WAC 296-62-05403 Scope and application. (1)

This section requires chemical manufacturers or importers to assess the hazards of chemicals which they produce or import, and all employers except those in agriculture (SIC Codes 01, 02 and 07) to provide information to their employees about the hazardous chemicals to which they are exposed, by means of a hazard communication program, labels and other forms of warning, material safety data sheets, and information and training. In addition, this section requires distributors to transmit the required information to employers.

(2) This section applies to any chemical which is known to be present in the workplace in such a manner that employees may be exposed under normal conditions of use or in a foreseeable emergency.

(3) This section applies to laboratories only as follows:

(a) Employers shall ensure that labels on incoming containers of hazardous chemicals are not removed or defaced;

(b) Employers shall maintain any material safety data sheets that are received with incoming shipments of hazardous chemicals, and ensure that they are readily accessible to laboratory employees; and,

(c) Employers shall ensure that laboratory employees are apprised of the hazards of the chemicals in their workplaces in accordance with WAC 296-62-05415.

(4) This section does not require labeling of the following chemicals:

(a) Any pesticide as such term is defined in the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. 136 et seq.), when subject to the labeling requirements of that act and labeling regulations issued under that act by the Environmental Protection Agency;

(b) Any food, food additive, color additive, drug, or cosmetic, including materials intended for use as ingredients in such products (e.g., flavors and fragrances), as such terms are defined in the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 301 et seq.) and regulations

issued under the act, when they are subject to the labeling requirements of that act and labeling regulations issued under that act by the Food and Drug Administration;

(c) Any distilled spirits (beverage alcohols), wine, or malt beverages intended for nonindustrial use, as such terms are defined in the Federal Alcohol Administration Act (27 U.S.C. 201 et seq.) and regulations issued under that act, when subject to the labeling requirements of that act and labeling regulations issued under that act by the Bureau of Alcohol, Tobacco, and Firearms; and,

(d) Any consumer product or hazardous substance as such terms are defined in the Consumer Product Safety Act (15 U.S.C. 2051 et seq.) and Federal Hazardous Substances Act (15 U.S.C. 1261 et seq.) respectively, when subject to a consumer product safety standard or labeling requirement of those acts, or regulations issued under those acts by the Consumer Product Safety Commission.

(5) This section does not apply to:

(a) Any hazardous waste as such term is defined by the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, as amended (42 U.S.C. 6901 et seq.) when subject to regulations issued under that act by the Environmental Protection Agency;

(b) Tobacco or tobacco products;

(c) Wood or wood products;

(d) Articles; and,

(e) Foods, drugs, or cosmetics intended for personal consumption by employees while in the workplace.

(f) Any transportation of a hazardous chemical or substance, provided such transportation is subject to regulations issued by the United States Department of Transportation or the Washington utilities and transportation commission.

(g) Any distributor who makes retail sales to the general public of consumer products packaged for distribution to, and used by, the general public, shall not be required to disseminate material safety data sheets to the retail purchasers of such products.

(6) Where there are two or more employers at the same workplace, each employer shall be solely responsible under the provisions of WAC 296-62-054 through 296-62-05425 for his or her own employees. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-10-004 (Order 85-09), § 296-62-05403, filed 4/19/85; 84-22-012 (Order 84-22), § 296-62-05403, filed 10/30/84; 84-13-001 (Order 84-14), § 296-62-05403, filed 6/7/84.]

WAC 296-62-05405 Definitions applicable to this section. (1) Article – a manufactured item:

(a) Which is formed to a specific shape or design during manufacture;

(b) Which has end use function(s) dependent in whole or in part upon its shape or design during end use; and

(c) Which does not release, or otherwise result in exposure to, a hazardous chemical under normal conditions of use.

(2) Chemical – any element, chemical compound or mixture of elements and/or compounds.

(3) Chemical manufacturer – an employer in SIC Codes 20 through 39 with a workplace where chemical(s) are produced for use or distribution.

(4) Chemical name – the scientific designation of a chemical in accordance with the nomenclature system developed by the International Union of Pure and Applied Chemistry (IUPAC) or the Chemical Abstracts Service (CAS) rules of nomenclature, or a name which will clearly identify the chemical for the purpose of conducting a hazard evaluation.

(5) Combustible liquid – any liquid having a flashpoint at or above 100°F (37.8°C), but below 200°F (93.3°C), except any mixture having components with flashpoints of 200°F (93.3°C), or higher, the total volume of which make up 99 percent or more of the total volume of the mixture.

(6) Common name – any designation or identification such as code name, code number, trade name, brand name or generic name used to identify a chemical other than by its chemical name.

(7) Compressed gas

(a) A gas or mixture of gases having, in a container, an absolute pressure exceeding 40 psi at 70°F (21.1°C); or

(b) A gas or mixture of gases having, in a container, an absolute pressure exceeding 104 psi at 130°F (54.4°C) regardless of the pressure at 70°F (21.1°C); or

(c) A liquid having a vapor pressure exceeding 40 psi at 100°F (37.8°C) as determined by ASTM D-323-72.

(8) Container – any bag, barrel, bottle, box, can, cylinder, drum, reaction vessel, storage tank, or the like that contains a hazardous chemical. For purposes of this section, pipes or piping systems are not considered to be containers.

(9) Designated representative – any individual or organization to whom an employee gives written authorization to exercise such employee's rights under this section. A recognized or certified collective bargaining agent shall be treated automatically as a designated representative without regard to written employee authorization.

(10) Director – the director of the department of labor and industries or his/her designee.

(11) Distributor – a business, other than a chemical manufacturer or importer, which supplies hazardous chemicals to other distributors or to purchasers.

(12) Employee – a worker employed by an employer who may be exposed to hazardous chemicals under normal operating conditions or foreseeable emergencies, including, but not limited to production workers, line supervisors, and repair or maintenance personnel. Office workers, grounds maintenance personnel, security personnel or nonresident management are included if their job performance routinely involves potential exposure to hazardous chemicals.

(13) Employer – a person engaged in a business where chemicals are either used, or are produced for use or distribution.

(14) Explosive – a chemical that causes a sudden, almost instantaneous release of pressure, gas, and heat when subjected to sudden shock, pressure, or high temperature.

(15) Exposure or exposed – an employee that is subjected to a hazardous chemical in the course of employment through any route of entry (inhalation, ingestion, skin contact or absorption, etc.), and includes potential (e.g. accidental or possible) exposure.

(16) Flammable – a chemical that falls into one of the following categories:

(a) Aerosol flammable – an aerosol that, when tested by the method described in 16 CFR 1500.45, yields a flame projection exceeding 18 inches at full valve opening, or a flashback (a flame extending back to the valve) at any degree of valve opening;

(b) Gas, flammable:

(i) A gas that, at ambient temperature and pressure, forms a flammable mixture with air at a concentration of thirteen percent by volume or less; or

(ii) A gas that, at ambient temperature and pressure, forms a range of flammable mixtures with air wider than twelve percent by volume, regardless of the lower limit;

(c) Liquid, flammable – any liquid having a flashpoint below 100°F (37.8°C), except any mixture having components with flashpoints of 100°F (37.8°C) or higher, the total of which make up 99 percent or more of the total volume of the mixture.

(d) Solid, flammable – a solid, other than a blasting agent or explosive as defined in 29 CFR s1910.109(a), that is liable to cause fire through friction, absorption of moisture, spontaneous chemical change, or retained heat from manufacturing or processing, or which can be ignited readily and when ignited burns so vigorously and persistently as to create a serious hazard. A chemical shall be considered to be a flammable solid if, when tested by the method described in 16 CFR 1500.44, it ignites and burns with a self-sustained flame at a rate greater than one-tenth of an inch per second along its major axis.

(17) Flashpoint – the minimum temperature at which a liquid gives off a vapor in sufficient concentration to ignite when tested as follows:

(a) Tagliabue closed tester – (see American National Standard Method of Test for Flash Point by Tag Closed Tester, Z11.24-1979 (ASTM D 56-79)) for liquids with a viscosity of less than 45 Saybolt Universal Seconds (SUS) at 100°F (37.8°C), that do not contain suspended solids and do not have a tendency to form a surface film under test; or

(b) Pensky-Martens closed tester – (see American National Standard Method of Test for Flash Point by Pensky-Martens Closed Tester, Z11.7-1979 (ASTM D 93-79)) for liquids with a viscosity equal to or greater than 45 SUS at 100°F (37.8°C), or that contain suspended solids, or that have a tendency to form a surface film under test; or

(c) Setaflash closed tester – (see American National Standard Method of Test for Flash Point by Setaflash Closed Tester (ASTM D 3278-78)).

Organic peroxides, which undergo autoaccelerating thermal decomposition, are excluded from any of the flashpoint determination methods specified above.

(18) Foreseeable emergency – any potential occurrence such as, but not limited to, equipment failure, rupture of containers, or failure of control equipment which could result in an uncontrolled release of a hazardous chemical into the workplace.

(19) Hazardous chemical – any chemical which is a physical hazard or a health hazard.

(20) Hazard warning – any words, pictures, symbols, or combination thereof appearing on a label or other appropriate form of warning which convey the hazards of the chemical(s) in the container(s).

(21) Health hazard – a chemical for which there is statistically significant evidence based on at least one study conducted in accordance with established scientific principles that acute or chronic health effects may occur in exposed employees. The term "health hazard" includes chemicals which are carcinogens, toxic or highly toxic agents, reproductive toxins, irritants, corrosives, sensitizers, hepatotoxins, nephrotoxins, neurotoxins, agents which act on the hematopoietic system, and agents which damage the lungs, skin, eyes, or mucous membranes. Appendix A provides further definitions and explanations of the scope of health hazards covered by this section, and Appendix B describes the criteria to be used to determine whether or not a chemical is to be considered hazardous for purposes of this standard.

(22) Identify – any chemical or common name which is indicated on the material safety data sheet (MSDS) for the chemical. The identity used shall permit cross-references to be made among the required list of hazardous chemicals, the label and the MSDS.

(23) Immediate use – that the hazardous chemical will be under the control of and used only by the person who transfers it from a labeled container and only within the work shift in which it is transferred.

(24) Importer – the first business with employees within Washington which receives hazardous chemicals produced in other states or countries, for the purpose of supplying them to distributors or purchasers within Washington.

(25) Label – any written, printed, or graphic material displayed on or affixed to containers of hazardous chemicals.

(26) Material safety data sheet (MSDS) – written or printed material concerning a hazardous chemical which is prepared in accordance with WAC 296-62-05413.

(27) Mixture – any combination of two or more chemicals if the combination is not, in whole or in part, the result of a chemical reaction.

(28) Organic peroxide – an organic compound that contains the bivalent-O-O-structure and which may be considered to be a structural derivative of hydrogen peroxide where one or both of the hydrogen atoms has been replaced by an organic radical.

(29) Oxidizer – a chemical other than a blasting agent or explosive as defined in WAC 296-52-030, that initiates or promotes combustion in other materials,

thereby causing fire either of itself or through the release of oxygen or other gases.

(30) Physical hazard – a chemical for which there is scientifically valid evidence that it is a combustible liquid, a compressed gas, explosive, flammable, an organic peroxide, an oxidizer, pyrophoric, unstable (reactive) or water-reactive.

(31) Produce – to manufacture, process, formulate, or repackage.

(32) Purchaser – an employer with a workplace who purchases a hazardous chemical for use within that workplace.

(33) Pyrophoric – a chemical that will ignite spontaneously in air at a temperature of 130°F (54.4°C) or below.

(34) Responsible party – someone who can provide additional information on the hazardous chemical and appropriate emergency procedures, if necessary.

(35) Specific chemical identity – the chemical name, Chemical Abstracts Service (CAS) registry number, or any other information that reveals the precise chemical designation of the substance.

(36) Trade secret – any confidential formula, pattern, process, device, information or compilation of information (including chemical name or other unique chemical identifier) that is used in an employer's business, and that gives the employer an opportunity to obtain an advantage over competitors who do not know or use it.

(37) Unstable (reactive) – a chemical which in the pure state, or as produced or transported, will vigorously polymerize, decompose, condense, or will become self-reactive under conditions of shocks, pressure or temperature.

(38) Use – to package, handle, react, or transfer.

(39) Water-reactive – a chemical that reacts with water to release a gas that is either flammable or presents a health hazard.

(40) Work area – a room or defined space in a workplace where hazardous chemicals are produced or used, and where employees are present.

(41) Workplace – an establishment at one geographical location containing one or more work areas. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-10-004 (Order 85-09), § 296-62-05405, filed 4/19/85; 84-22-012 (Order 84-22), § 296-62-05405, filed 10/30/84; 84-13-001 (Order 84-14), § 296-62-05405, filed 6/7/84.]

WAC 296-62-05407 Hazard determination. (1) Chemical manufacturers and importers shall evaluate chemicals produced in their workplaces or imported by them to determine if they are hazardous. Employers are not required to evaluate chemicals unless they choose not to rely on the evaluation performed by the chemical manufacturer or importer for the chemical to satisfy this requirement.

(2) Chemical manufacturers, importers or employers evaluating chemicals shall identify and consider the available scientific evidence concerning such hazards. For health hazards, evidence which is statistically significant and which is based on at least one positive study

conducted in accordance with established scientific principles is considered to be sufficient to establish a hazardous effect if the results of the study meet the definitions of health hazards in this section. WAC 296-62-05421, Appendix A, shall be consulted for the scope of health hazards covered, and WAC 296-62-05423, Appendix B, shall be consulted for the criteria to be followed with respect to the completeness of the evaluation, and the data to be reported.

(3) The chemical manufacturer, importer or employer evaluating chemicals shall treat the following sources as establishing that the chemicals listed in them are hazardous:

(a) Chapter 296-62 WAC, General occupational health standards; or,

(b) Threshold Limit Values for Chemical Substances and Physical Agents in the Work Environment, American Conference of Governmental Industrial Hygienists (ACGIH) (latest edition).

The chemical manufacturer, importer, or employer is still responsible for evaluating the hazards associated with the chemicals in these source lists in accordance with the requirements of this standard.

(4) Chemical manufacturers, importers and employers evaluating chemicals shall treat the following sources as establishing that a chemical is a carcinogen or potential carcinogen for hazard communication purposes:

(a) National Toxicology Program (NTP), Annual Report on Carcinogens (latest edition);

(b) International Agency for Research on Cancer (IARC) Monographs (latest editions); or

(c) Chapter 296-62 WAC, General occupational health standards.

NOTE: The Registry of Toxic Effects of Chemical Substances published by the National Institute for Occupational Safety and Health indicates whether a chemical has been found by NTP or IARC to be potential carcinogen.

(5) The chemical manufacturer, importer or employer shall determine the hazards of mixtures or chemicals as follows:

(a) If a mixture has been tested as a whole to determine its hazards, the results of such testing shall be used to determine whether the mixture is hazardous;

(b) If a mixture has not been tested as a whole to determine whether the mixture is a health hazard, the mixture shall be assumed to present the same health hazards as do the components which comprise one percent (by weight or volume) or greater of the mixture, except that the mixture shall be assumed to present a carcinogenic hazard if it contains a component in concentrations of 0.1 percent or greater which is considered to be a carcinogen under WAC 296-62-05407(4);

(c) If a mixture has not been tested as a whole to determine whether the mixture is a physical hazard, the chemical manufacturer, importer, or employer may use whatever scientifically valid data is available to evaluate the physical hazard potential of the mixture; and,

(d) If the employer has evidence to indicate that a component present in the mixture in concentrations of

less than one percent (or in the case of carcinogens, less than 0.1 percent) could be released in concentrations which would exceed an established WISHA permissible exposure limit or ACGIH threshold limit value, or could present a health hazard to employees in those concentrations, the mixture shall be assumed to present the same hazard.

(6) Chemical manufacturers, importers, or employers evaluating chemicals shall describe in writing the procedures they use to determine the hazards of the chemical they evaluate. The written procedures are to be made available, upon request, to employees, their designated representatives, the director or his/her designee. The written description may be incorporated into the written hazard communication program required under WAC 296-62-05409. [Statutory Authority: RCW 49.17.040 and 49.17.050. 84-13-001 (Order 84-14), § 296-62-05407, filed 6/7/84.]

WAC 296-62-05409 Written hazard communication program. (1) Employers shall develop and implement a written hazard communication program for their workplaces which at least describes how the criteria specified in WAC 296-62-05411, 296-62-05413 and 296-62-05415, for labels and other forms of warning, material safety data sheets, and employee information and training will be met, and which also includes the following:

(a) A list of the hazardous chemicals known to be present using an identity that is referenced on the appropriate material safety data sheet (the list may be compiled for the workplace as a whole or for individual work areas);

(b) The methods the employer will use to inform employees of the hazards of nonroutine tasks (for example, the cleaning of reactor vessels), and the hazards associated with chemicals contained in unlabeled pipes in their work areas; and,

(c) The methods the employer will use to inform any contractor employers with employees working at the employer's workplace of the hazardous chemicals their employees may be exposed to while performing their work, and any suggestions for appropriate protective measures.

(2) The employer may rely on an existing hazard communication program to comply with these requirements, provided that it meets the criteria established in this section.

(3) The employer shall make the written hazard communication program available, upon request, to employees, their designated representatives, and the director or his/her designee in accordance with the requirements of WAC 296-62-05209. [Statutory Authority: RCW 49.17.040 and 49.17.050. 84-13-001 (Order 84-14), § 296-62-05409, filed 6/7/84.]

WAC 296-62-05411 Labels and other forms of warning. (1) The chemical manufacturer, importer, or distributor shall ensure that each container of hazardous chemicals leaving the workplace is labeled, tagged or marked with the following information:

(a) Identity of the hazardous chemical(s);

- (b) Appropriate hazard warnings; and
- (c) Name and address of the chemical manufacturer, importer, or other responsible party.

(2) Chemical manufacturers, importers, or distributors shall ensure that each container of hazardous chemicals leaving the workplace is labeled, tagged, or marked in accordance with this section in a manner which does not conflict with the requirements of the Hazardous Materials Transportation Act (18 U.S.C. 1801 et seq.) and regulations issued under that act by the department of transportation.

(3) If the hazardous chemical is regulated by WISHA in a substance-specific health standard, the chemical manufacturer, importer, distributor or employer shall ensure that the labels or other forms of warning used are in accordance with the requirements of that standard.

(4) Except as provided in subsection (5) and (6) of this section, the employer shall ensure that each container of hazardous chemicals in the workplace is labeled, tagged or marked with the following information:

(a) Identity of the hazardous chemical(s) contained therein; and

(b) Appropriate hazard warnings.

(5) The employer may use signs, placards, process sheets, batch tickets, operating procedures, or other such written materials in lieu of affixing labels to individual stationary process containers, as long as the alternative method identifies the containers to which it is applicable and conveys the information required by subsection (4) of this section to be on a label. The written materials shall be readily accessible to the employees in their work area throughout each work shift.

(6) The employer is not required to label portable containers into which hazardous chemicals are transferred from labeled containers, and which are intended only for the immediate use of the employee who performs the transfer.

(7) The employer shall not remove or deface existing labels on incoming containers of hazardous chemicals, unless the container is immediately marked with the required information.

(8) The employer shall ensure that labels or other forms of warning are legible, in English, and prominently displayed on the container, or readily available in the work area throughout each work shift. Employers having employees who speak other languages may add the information in their language to the material presented, as long as the information is presented in English as well.

(9) The chemical manufacturer, importer, distributor or employer need not affix new labels to comply with this section if existing labels already convey the required information. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-10-004 (Order 85-09), § 296-62-05411, filed 4/19/85; 84-13-001 (Order 84-14), § 296-62-05411, filed 6/7/84.]

WAC 296-62-05413 Material safety data sheets.

(1) Chemical manufacturers and importers shall obtain or develop a material safety data sheet for each hazardous chemical they produce or import. Employers shall

have a material safety data sheet for each hazardous chemical which they use.

(2) Each material safety data sheet shall be in English and shall contain at least the following information:

(a) The identity used on the label, and, except as provided for in WAC 296-62-05417 on trade secrets:

(i) If the hazardous chemical is a single substance, its chemical and common name(s);

(ii) If the hazardous chemical is a mixture which has been tested as a whole to determine its hazards, the chemical and common name(s) of the ingredients which contribute to these known hazards, and the common name(s) of the mixture itself; or,

(iii) If the hazardous chemical is a mixture which has not been tested as a whole:

(A) The chemical and common name(s) of all ingredients which have been determined to be health hazards, and which comprise 1% or greater of the composition, except that chemicals identified as carcinogens under WAC 296-62-05407(4) shall be listed if the concentrations are 0.1% or greater; and,

(B) The chemical and common name(s) of all ingredients which have been determined to present a physical hazard when present in the mixture;

(b) Physical and chemical characteristics of the hazardous chemical (such as vapor pressure, flash point);

(c) The physical hazards of the hazardous chemical, including the potential for fire, explosion, and reactivity;

(d) The health hazards of the hazardous chemical, including signs and symptoms of exposure, and any medical conditions which are generally recognized as being aggravated by exposure to the chemical;

(e) The primary route(s) of entry;

(f) The WISHA permissible exposure limit, ACGIH threshold limit value, and any other exposure limit used or recommended by the chemical manufacturer, importer, or employer preparing the material safety data sheet, where available;

(g) Whether the hazardous chemical is listed in the National Toxicology Program (NTP) Annual Report on Carcinogens (latest edition) or has been found to be a potential carcinogen in the International Agency for Research on Cancer (IARC) Monographs (latest editions), or by WISHA;

(h) Any generally applicable precautions for safe handling and use which are known to the chemical manufacturer, importer or employer preparing the material safety data sheet, including appropriate hygienic practices, protective measures during repair and maintenance of contaminated equipment, and procedures for clean-up of spills and leaks;

(i) Any generally applicable control measures which are known to the chemical manufacturer, importer or employer preparing the material safety data sheet, such as appropriate engineering controls, work practices, or personal protective equipment;

(j) Emergency and first aid procedures;

(k) The date of preparation of the material safety data sheet or the last change to it; and,

(1) The name, address and telephone number of the chemical manufacturer, importer, employer or other responsible party preparing or distributing the material safety data sheet, who can provide additional information on the hazardous chemical and appropriate emergency procedures, if necessary.

(3) If no relevant information is found for any given category on the material safety data sheet, the chemical manufacturer, importer or employer preparing the material safety data sheet shall mark it to indicate that no applicable information was found.

(4) Where complex mixtures have similar hazards and contents (i.e. the chemical ingredients are essentially the same, but the specific composition varies from mixture to mixture), the chemical manufacturer, importer or employer may prepare one material safety data sheet to apply to all of these similar mixtures.

(5) The chemical manufacturer, importer or employer preparing the material safety data sheet shall ensure that the information recorded accurately reflects the scientific evidence used in making the hazard determination. If the chemical manufacturer, importer or employer becomes newly aware of any significant information regarding the hazards of a chemical, or ways to protect against the hazards, this new information shall be added to the material safety data sheet within three months. If the chemical is not currently being produced or imported the chemical manufacturer or importer shall add the information to the material safety data sheet before the chemical is introduced into the workplace again.

(6) Chemical manufacturers or importers shall ensure that distributors and purchasers of hazardous chemicals are provided an appropriate material safety data sheet with their initial shipment, and with the first shipment after a material safety data sheet is updated. The chemical manufacturer or importer shall either provide material safety data sheets with the shipped containers or send them to the purchaser prior to or at the time of the shipment. If the material safety data sheet is not provided with the shipment, the purchaser shall obtain one from the chemical manufacturer, importer, or distributor as soon as possible.

(7) Distributors shall ensure that material safety data sheets, and updated information, are provided to other distributors and purchasers of hazardous chemicals.

(8) The employer shall maintain copies of the required material safety data sheets for each hazardous chemical in the workplace, and shall ensure that they are readily accessible during each work shift to employees when they are in their work area(s).

(9) Material safety data sheets may be kept in any form, including operating procedures, and may be designed to cover groups of hazardous chemicals in a work area where it may be more appropriate to address the hazards of a process rather than individual hazardous chemicals. However, the employer shall ensure that in all cases the required information is provided for each hazardous chemical, and is readily accessible during each work shift to employees when they are in their work area(s).

(10) Material safety data sheets shall also be made readily available, upon request, to designated representatives and to the director or his/her designee in accordance with the requirements of WAC 296-62-05209.

(11) If a purchaser has not received a material safety data sheet within twenty calendar days after making a written request to the chemical manufacturer, importer, or distributor in accordance with WAC 296-62-05413(6), he/she may make a written request for assistance to the Department of Labor and Industries, Right-to-Know Program, Industrial Hygiene Section, P.O. Box 207, Olympia, Washington 98504. Such written request shall include:

(a) A copy of the purchaser's written request to the chemical manufacturer, importer, or distributor;

(b) The name of the product suspected of containing a hazardous chemical;

(c) The identification number of the product if available;

(d) A copy of the product label if available; and

(e) The name and address of the chemical manufacturer, importer, or distributor from whom the product was obtained.

Upon receipt of a written request for material safety data sheet, the department shall attempt to procure the material safety data sheet from the chemical manufacturer, importer or distributor and upon procurement, shall forward a copy of the material safety data sheet at no cost to the purchaser. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-10-004 (Order 85-09), § 296-62-05413, filed 4/19/85; 84-22-012 (Order 84-22), § 296-62-05413, filed 10/30/84; 84-13-001 (Order 84-14), § 296-62-05413, filed 6/7/84.]

WAC 296-62-05415 Employee information and training. Employers shall provide employees with information and training on hazardous chemicals in their work area at the time of their initial assignment, and whenever a new hazard is introduced into their work area.

(1) Information. Employees shall be informed of:

(a) The requirements of this section;

(b) Any operations in their work area where hazardous chemicals are present; and,

(c) The location and availability of the written hazard communication program, including the required list(s) of hazardous chemicals, and material safety data sheets required by this section.

(2) Training. Employee training shall include at least:

(a) Methods and observations that may be used to detect the presence or release of a hazardous chemical in the work area (such as monitoring conducted by the employer, continuous monitoring devices, visual appearance or odor of hazardous chemicals when being released, etc.);

(b) The physical and health hazards of the chemicals in the work area;

(c) The measures employees can take to protect themselves from these hazards, including specific procedures the employer has implemented to protect employees from exposure to hazardous chemicals, such as

appropriate work practices, emergency procedures, and personal protective equipment to be used; and,

(d) The details of the hazard communication program developed by the employer, including an explanation of the labeling system and the material safety data sheet, and how employees can obtain and use the appropriate hazard information. [Statutory Authority: RCW 49.17-.040 and 49.17.050. 84-13-001 (Order 84-14), § 296-62-05415, filed 6/7/84.]

WAC 296-62-05417 Trade secrets. (1) The chemical manufacturer, importer or employer may withhold the specific chemical identity including the chemical name and other specific identification of a hazardous chemical, from the material safety data sheet, provided that:

(a) The claim that the information withheld is a trade secret can be supported;

(b) Information contained in the material safety data sheet concerning the properties and effects of the hazardous chemical is disclosed;

(c) The material safety data sheet indicates that the specific chemical identity is being withheld as a trade secret; and,

(d) The specific chemical identity is made available to health professionals, in accordance with the applicable provisions of this section.

(2) Where a treating physician or nurse determines that a medical emergency exists and the specific chemical identity of a hazardous chemical is necessary for emergency or first-aid treatment, the chemical manufacturer, importer, or employer shall immediately disclose the specific chemical identity of a trade secret chemical to that treating physician or nurse, regardless of the existence of a written statement of need or a confidentiality agreement. The chemical manufacturer, importer, or employer may require a written statement of need and confidentiality agreement, in accordance with the provisions of subsections (3) and (4) of this section, as soon as circumstances permit.

(3) In nonemergency situations, a chemical manufacturer, importer, or employer shall, upon request, disclose a specific chemical identity, otherwise permitted to be withheld under subsection (1) of this section, to a health professional (i.e. physician, registered nurse, industrial hygienist, toxicologist, or epidemiologist) providing medical or other occupational health services to exposed employee(s) if:

(a) The request is in writing;

(b) The request describes with reasonable detail one or more of the following occupational health needs for the information:

(i) To assess the hazards of the chemicals to which employees will be exposed;

(ii) To conduct or assess sampling of the workplace atmosphere to determine employee exposure levels;

(iii) To conduct preassignment or periodic medical surveillance of exposed employees;

(iv) To provide medical treatment to exposed employees;

(v) To select or assess appropriate personal protective equipment for exposed employees;

(vi) To design or assess engineering controls or other protective measures for exposed employees; and,

(vii) To conduct studies to determine the health effects of exposure.

(c) The request explains in detail why the disclosure of the specific chemical identity is essential and that, in lieu thereof, the disclosure of the following information would not enable the health professional to provide the occupational health services described in subdivision (3)(b) of this section:

(i) The properties and effects of the chemical;

(ii) Measures for controlling workers' exposure to the chemical;

(iii) Methods of monitoring and analyzing worker exposure to the chemical; and,

(iv) Methods of diagnosing and treating harmful exposures to the chemical;

(d) The request includes a description of the procedures to be used to maintain the confidentiality of the disclosed information; and,

(e) The health professional, and the employer or contractor of the health professional's services (i.e., downstream employer, labor organization, or individual employer), agree in a written confidentiality agreement that the health professional will not use the trade secret information for any purpose other than the health need(s) asserted and agree not to release the information under any circumstances other than to the department, as provided in subsection (6) of this section, except as authorized by the terms of the agreement or by the chemical manufacturer, importer, or employer.

(4) The confidentiality agreement authorized by subdivision (3)(d) of this section:

(a) May restrict the use of the information to the health purposes indicated in the written statement of need;

(b) May provide for appropriate legal remedies in the event of a breach of the agreement, including stipulation of a reasonable preestimate of likely damages; and,

(c) May not include requirements for the posting of a penalty bond.

(5) Nothing in this standard is meant to preclude the parties from pursuing noncontractual remedies to the extent permitted by law.

(6) If the health professional receiving the trade secret information decides that there is a need to disclose it to the department, the chemical manufacturer, importer, or employer who provided the information shall be informed by the health professional prior to, or at the same time as, such disclosure.

(7) If the chemical manufacturer, importer, or employer denies a written request for disclosure of a specific chemical identity, the denial must:

(a) Be provided to the health professional within thirty days of the request;

(b) Be in writing;

(c) Include evidence to support the claim that the specific chemical identity is a trade secret;

(d) State the specific reasons why the request is being denied; and,

(e) Explain in detail how alternative information may satisfy the specific medical or occupational health need without revealing the specific chemical identity.

(8) The health professional whose request for information is denied under subsection (3) of this section may refer the request and the written denial of the request to the department for consideration.

(9) When a health professional refers the denial to the department under subsection (8) of this section, the director or his/her designee shall consider the evidence to determine if:

(a) The chemical manufacturer, importer, or employer has supported the claim that the specific chemical identity is a trade secret;

(b) The health professional has supported the claim that there is a medical or occupational health need for the information; and,

(c) The health professional has demonstrated adequate means to protect the confidentiality.

(10)(a) If the director or his/her designee determines that the specific chemical identity requested under subsection (3) of this section is not a bona fide trade secret, or that it is a trade secret but the requesting health professional has a legitimate medical or occupational health need for the information, has executed a written confidentiality agreement, and has shown adequate means to protect the confidentiality of the information, the chemical manufacturer, importer, or employer will be subject to citation by the department.

(b) If a chemical manufacturer, importer, or employer demonstrates to the department that the execution of a confidentiality agreement would not provide sufficient protection against the potential harm from the unauthorized disclosure of a trade secret specific chemical identity, the director or his/her designee may issue such orders or impose such additional limitations or conditions upon the disclosure of the requested chemical information as may be appropriate to assure that the occupational health services are provided without an undue risk of harm to the chemical manufacturer, importer, or employer.

(11) If, following the issuance of a citation and any protective orders, the chemical manufacturer, importer, or employer continues to withhold the information, further action may be taken by the department in accordance with chapter 49.17 RCW.

(12) Notwithstanding the existence of a trade secret claim, a chemical manufacturer, importer, or employer shall, upon request, disclose to the director or his/her designee any information which this section requires the chemical manufacturer, importer, or employer to make available. Where there is a trade secret claim, such claim shall be made no later than at the time the information is provided to the director or his/her designee so that suitable determinations of trade secret status can be made and the necessary protections can be implemented.

(13) Nothing in this section shall be construed as requiring the disclosure under any circumstances of process or percentage of mixture information which is trade

secret. [Statutory Authority: RCW 49.17.040 and 49.17.050. 84-22-012 (Order 84-22), § 296-62-05417, filed 10/30/84; 84-13-001 (Order 84-14), § 296-62-05417, filed 6/7/84.]

WAC 296-62-05419 Effective dates. Employers shall be in compliance with this section within the following time periods:

(1) Chemical manufacturers and importers shall label containers of hazardous chemicals leaving their workplaces, and provide material safety data sheets with initial shipments by November 25, 1985.

(2) Distributors shall be in compliance with all provisions of this section applicable to them by November 25, 1985.

(3) Employers shall be in compliance with all provisions of this section by May 25, 1986, including initial training for all current employees. [Statutory Authority: RCW 49.17.040 and 49.17.050. 84-13-001 (Order 84-14), § 296-62-05419, filed 6/7/84.]

WAC 296-62-05421 Appendix A--Health hazard definitions (mandatory). Although safety hazards related to the physical characteristics of a chemical can be objectively defined in terms of testing requirements (e.g. flammability), health hazard definitions are less precise and more subjective. Health hazards may cause measurable changes in the body—such as decreased pulmonary function. These changes are generally indicated by the occurrence of signs and symptoms in the exposed employees—such as shortness of breath, a nonmeasurable, subjective feeling. Employees exposed to such hazards must be apprised of both the change in body function and the signs and symptoms that may occur to signal that change.

The determination of occupational health hazards is complicated by the fact that many of the effects or signs and symptoms occur commonly in nonoccupationally exposed populations, so that effects of exposure are difficult to separate from normally occurring illnesses. Occasionally, a substance causes an effect that is rarely seen in the population at large, such as angiosarcomas caused by vinyl chloride exposure, thus making it easier to ascertain that the occupational exposure was the primary causative factor. More often, however, the effects are common, such as lung cancer. The situation is further complicated by the fact that most chemicals have not been adequately tested to determine their health hazard potential, and data do not exist to substantiate these effects.

There have been many attempts to categorize effects and to define them in various ways. Generally, the terms "acute" and "chronic" are used to delineate between effects on the basis of severity or duration. "Acute" effects usually occur rapidly as a result of short-term exposures, and are of short duration. "Chronic" effects generally occur as a result of long-term exposure, and are of long duration.

The acute effects referred to most frequently are those defined by the American National Standards Institute

(ANSI) standard for Precautionary Labeling of Hazardous Industrial Chemicals (Z129.1-1982) — irritation, corrosivity, sensitization and lethal dose. Although these are important health effects, they do not adequately cover the considerable range of acute effects which may occur as a result of occupational exposure, such as, for example, narcosis.

Similarly, the term chronic effect is often used to cover only carcinogenicity, teratogenicity, and mutagenicity. These effects are obviously a concern in the workplace, but again, do not adequately cover the area of chronic effects, excluding, for example, blood dyscrasias (such as anemia), chronic bronchitis and liver atrophy.

The goal of defining precisely, in measurable terms, every possible health effect that may occur in the workplace as a result of chemical exposures cannot realistically be accomplished. This does not negate the need for employees to be informed of such effects and protected from them.

Appendix B, which is also mandatory, outlines the principles and procedures of hazard assessment.

For purposes of this section, any chemicals which meet any of the following definitions, as determined by the criteria set forth in Appendix B are health hazards:

(1) Carcinogen. A chemical is considered to be a carcinogen if:

(a) It has been evaluated by the International Agency for Research on Cancer (IARC), and found to be a carcinogen or potential carcinogen; or

(b) It is listed as a carcinogen or potential carcinogen in the Annual Report on Carcinogens published by the National Toxicology Program (NTP) (latest edition); or

(c) It is regulated by WISHA as a carcinogen.

(2) Corrosive. A chemical that causes visible destruction of, or irreversible alterations in, living tissue by chemical action at the site of contact. For example, a chemical is considered to be corrosive if, when tested on the intact skin of albino rabbits by the method described by the U.S. Department of Transportation in Appendix A to 49 CFR Part 173, it destroys or changes irreversibly the structure of the tissue at the site of contact following an exposure period of four hours. This term shall not refer to action on inanimate surfaces.

(3) Highly toxic. A chemical falling within any of the following categories:

(a) A chemical that has a median lethal dose (LD_{50}) of 50 milligrams or less per kilogram of body weight when administered orally to albino rats weighing between 200 and 300 grams each.

(b) A chemical that has a median lethal dose (LD_{50}) of 200 milligrams or less per kilogram of body weight when administered by continuous contact for 24 hours (or less if death occurs within 24 hours) with the bare skin of albino rabbits weighing between two and three kilograms each.

(c) A chemical that has a median lethal concentration (LC_{50}) in air of 200 parts per million by volume or less of gas or vapor, or 2 milligrams per liter or less of mist, fume, or dust, when administered by continuous inhalation for one hour (or less if death occurs within one

hour) to albino rats weighing between 200 and 300 grams each.

(4) Irritant. A chemical, which is not corrosive, but which causes a reversible inflammatory effect on living tissue by chemical action at the site of contact. A chemical is a skin irritant if, when tested on the intact skin of albino rabbits by the methods of 16 CFR 1500.41 for four hours exposure or by other appropriate techniques, it results in an empirical score of five or more. A chemical is an eye irritant if so determined under the procedure listed in 16 CFR 1500.42 or other appropriate techniques.

(5) Sensitizer. A chemical that causes a substantial proportion of exposed people or animals to develop an allergic reaction in normal tissue after repeated exposure to the chemical.

(6) Toxic. A chemical falling within any of the following categories:

(a) A chemical that has a median lethal dose (LD_{50}) of more than 50 milligrams per kilogram but not more than 500 milligrams per kilogram of body weight when administered orally to albino rats weighing between 200 and 300 grams each.

(b) A chemical that has a median lethal dose (LD_{50}) of more than 200 milligrams per kilogram but not more than 1,000 milligrams per kilogram of body weight when administered by continuous contact for 24 hours (or less if death occurs within 24 hours) with the bare skin of albino rabbits weighing between two and three kilograms each.

(c) A chemical that has a median lethal concentration (LC_{50}) in air of more than 200 parts per million but not more than 2,000 parts per million by volume of gas or vapor, or more than two milligrams per liter but not more than 20 milligrams per liter of mist, fume, or dust, when administered by continuous inhalation for one hour (or less if death occurs within one hour) to albino rats weighing between 200 and 300 grams each.

(7) Target organ effects. The following is a target organ categorization of effects which may occur, including examples of signs and symptoms and chemicals which have been found to cause such effects. These examples are presented to illustrate the range and diversity of effects and hazards found in the workplace, and the broad scope employers must consider in this area, but are not intended to be all-inclusive.

(a) Hepatotoxins:	Chemicals which produce liver damage.
Signs & symptoms:	Jaundice, liver enlargement
Chemicals:	Carbon tetrachloride, nitrosamines.
(b) Nephrotoxins:	Chemicals which produce kidney damage.
Signs & symptoms:	Edema; proteinuria
Chemicals:	Halogenated hydrocarbons; uranium.
(c) Neurotoxins:	Chemicals which produce their primary toxic effects on the nervous system.
Signs & symptoms:	Narcosis; behavioral changes; decrease in motor functions.
Chemicals:	Mercury, carbon disulfide.

- | | |
|---|--|
| (d) Agents which act on the blood or hematopoietic system:
Signs & symptoms:
Chemicals: | Decrease hemoglobin function; deprive the body tissues of oxygen.
Cyanosis; loss of consciousness
Carbon monoxide; cyanides. |
| (e) Agents which damage the lung:
Signs & symptoms:
Chemicals: | Chemicals which irritate or damage the pulmonary tissue.
Cough; tightness in chest; shortness of breath.
Silica; asbestos. |
| (f) Reproductive toxins:
Signs & symptoms:
Chemicals: | Chemicals which affect the reproductive capabilities including chromosomal damage (mutations) and effects on fetuses (teratogenesis).
Birth defects; sterility
Lead; DBCP. |
| (g) Cutaneous hazards:
Signs & symptoms:
Chemicals: | Chemicals which affect the dermal layer of the body.
Defatting of the skin; rashes; irritation
Ketones; chlorinated compounds. |
| (h) Eye hazards:
Signs & symptoms:
Chemicals: | Chemicals which affect the eye or visual capacity.
Conjunctivitis; corneal damage.
Organic solvents; acids. |

[Statutory Authority: RCW 49.17.040 and 49.17.050. 85-10-004 (Order 85-09), § 296-62-05421, filed 4/19/85; 84-22-012 (Order 84-22), § 296-62-05421, filed 10/30/84; 84-13-001 (Order 84-14), § 296-62-05421, filed 6/7/84.]

WAC 296-62-05423 Appendix B--Hazard determination (mandatory). The quality of a hazard communication program is largely dependent upon the adequacy and accuracy of the hazard determination. The hazard determination requirement of this standard is performance-oriented. Chemical manufacturers, importers, and employers evaluating chemicals are not required to follow any specific methods for determining hazards, but they must be able to demonstrate that they have adequately ascertained the hazards of the chemicals produced or imported in accordance with the criteria set forth in this appendix.

Hazard evaluation is a process which relies heavily on the professional judgment of the evaluator, particularly in the area of chronic hazards. The performance-orientation of the hazard determination does not diminish the duty of the chemical manufacturer, importer or employer to conduct a thorough evaluation, examining all relevant data and producing a scientifically defensible evaluation. For purposes of this standard, the following criteria shall be used in making hazard determinations that meet the requirements of this standard.

(1) Carcinogenicity. As described in paragraph (d)(4) and Appendix A of this section, a determination by the National Toxicology Program, the International Agency for Research on Cancer, or WISHA that a chemical is a carcinogen or potential carcinogen will be considered conclusive evidence for purposes of this section.

(2) Human data. Where available, epidemiological studies and case reports of adverse health effects shall be considered in the evaluation.

(3) Animal data. Human evidence of health effects in exposed populations is generally not available for the majority of chemicals produced or used in the workplace. Therefore, the available results of toxicological testing in animal populations shall be used to predict the health effects that may be experienced by exposed workers. In particular, the definitions of certain acute hazards refer to specific animal testing results (see Appendix A).

(4) Adequacy and reporting of data. The results of any studies which are designed and conducted according to established scientific principles, and which report statistically significant conclusions regarding the health effects of a chemical, shall be a sufficient basis for a hazard determination and reported on any material safety data sheet.

The chemical manufacturer, importer, or employer may also report the results of other scientifically valid studies which tend to refute the findings of hazard. [Statutory Authority: RCW 49.17.040 and 49.17.050. 84-13-001 (Order 84-14), § 296-62-05423, filed 6/7/84.]

WAC 296-62-05425 Appendix C--Information sources (advisory). The following is a list of available data sources which the chemical manufacturer, importer, or employer may wish to consult to evaluate the hazards of chemicals they produce or import:

(1) Any information in their own company files such as toxicity testing results or illness experience of company employees.

(2) Any information obtained from the supplier of the chemical, such as material safety data sheets or product safety bulletins.

(3) Any pertinent information obtained from the following source list (latest editions should be used):

Condensed Chemical Dictionary

Van Nostrand Reinhold Co.
135 West 50th Street
New York, NY 10020

The Merck Index: An Encyclopedia of Chemicals and Drugs

Merck and Company, Inc.
126 E. Lincoln Avenue
Rahway, NJ 07065

IARC Monographs on the Evaluation of the Carcinogenic Risk of Chemicals to Man

Geneva: World Health Organization
International Agency for Research on Cancer, 1972-1977
(Multivolume work)
49 Sheridan Street
Albany, New York

Industrial Hygiene and Toxicology, by F.A. Patty

John Wiley & Sons, Inc.
New York, NY
(Five volumes)

Clinical Toxicology of Commercial Products

Gleason, Gosselin and Hodge

Casarett and Doull's Toxicology; The Basic Science of Poisons

Doull, Klaassen, and Amdur
Macmillan Publishing Co., Inc.
New York, NY

Industrial Toxicology, by Alice Hamilton and Harriet L. Hardy
Publishing Sciences Group, Inc.
Action, MA

Toxicology of the Eye, by W. Morton Grant
Charles C. Thomas
301-327 East Lawrence Avenue
Springfield, IL

Recognition of Health Hazards in Industry
William A. Burgess
John Wiley and Sons
605 Third Avenue
New York, NY 10158

Chemical Hazards of the Workplace
Nick H. Proctor and James P. Hughes
J.P. Lipincott Company
6 Winchester Terrace
New York, NY 10022

Handbook of Chemistry and Physics
Chemical Rubber Company
18901 Cranwood Parkway
Cleveland, OH 44128

Threshold Limit Values for Chemical Substances and Physical Agents in the Workroom Environment with Intended Changes
American Conference of Governmental Industrial Hygienists
6500 Glenway Avenue, Bldg. D-5
Cincinnati, OH 45211

NOTE: The following documents are on sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402

Occupational Health Guidelines
NIOSH/OSHA (NIOSH Pub. No. 81-123)

NIOSH/OSHA Pocket Guide to Chemical Hazards
NIOSH Pub. NO. 78-210

Registry of Toxic Effects of Chemical Substances
U.S. Department of Health and Human Services
Public Health Service
Center for Disease Control
National Institute for Occupational Safety and Health
(NIOSH Pub. No. 80-102)

The Industrial Environment - Its Evaluation and Control
U.S. Department of Health and Human Services
Public Health Service
Center for Disease Control
National Institute for Occupational Safety and Health
(NIOSH Pub. No. 74-117)

Miscellaneous Documents - National Institute for Occupational Safety and Health

- (1) Criteria for a recommended standard... Occupational Exposure to "_____"
- (2) Special Hazard Reviews
- (3) Occupational Hazard Assessment
- (4) Current Intelligence Bulletins

BIBLIOGRAPHIC DATA BASES

Service Provider	File Name
Bibliographic Retrieval Services (BRS) Corporation Park, Bldg. 702 Scotia, New York 12302	AGRICOLA BIOSIS PREVIEWS CA CONDENSATES CA SEARCH DRUG INFORMATION MEDLARS MEDOC NTIS POLLUTION ABSTRACTS SCIENCE CITATION INDEX SSIE

Lockheed - DIALOG
Lockheed Missiles & Space
Company, Inc.
P.O. Box 44481
San Francisco, CA 94144

SDC - ORBIT
SDC Search Service
Department No. 2230
Pasadena, CA 91051

Chemical Information System (CIS)
Chemical Information Systems, Inc.
7215 Yorke Road
Baltimore, MD 21212

National Library of Medicine
Department of Health and
Human Services
Public Health Service
National Institutes of Health
Bethesda, MD 20209

[Statutory Authority: RCW 49.17.040 and 49.17.050. 85-10-004 (Order 85-09), § 296-62-05425, filed 4/19/85; 84-13-001 (Order 84-14), § 296-62-05425, filed 6/7/84.]

WAC 296-62-07302 List of carcinogens. (1) The following substances are deemed to be carcinogens for the purposes of WAC 296-62-073 through 296-62-07316.

(2) Any reference to carcinogens in WAC 296-62-07304 through 296-62-07316 shall mean only those carcinogens listed in WAC 296-62-07302.

(a) 4-Nitrobiphenyl - Chemical Abstracts Registry Number 92933.

(b) Alpha-Naphthylamine - Chemical Abstracts Registry Number 134327.

(c) 4,4' Methylene bis (2 - chloroaniline) - Chemical Abstracts Service Registry Number 101144.

(d) Methyl chloromethyl ether - Chemical Abstracts Service Registry Number 107302.

(e) 3,3'-Dichlorobenzidine (and its salts) - Chemical Abstracts Service Registry Number 91941.

(f) Bis-Chloromethyl ether - Chemical Abstracts Service Registry Number 542881.

AGRICOLA
BIOSIS PREV. 1972-PRESENT
BIOSIS PREV. 1969-71
CA CONDENSATES 1970-71
CA SEARCH 1972-76
CA SEARCH 1977-PRESENT
CHEMNAME
CONFERENCE PAPERS INDEX
FOOD SCIENCE & TECH. ABSTR.
FOODS ADLIBRA
INTL. PHARMACEUTICAL
ABSTR.
NTIS
POLLUTION ABSTRACTS
SCISEARCH 1978-PRESENT
SCISEARCH 1974-77
SSIE CURRENT RESEARCH

AGRICOLA
BIOCODES
BIOSIS/BIO6973
CAS6771/CAS7276
CAS77
CHEMDEX
CONFERENCE
ENVIROLINE
LABORDOC
NTIS
POLLUTION
SSIE

Structure & Nomenclature
Search system
Acute Toxicity (RTECS)
Clinical Toxicology of
Commercial Products
Oil and Hazardous Materials
Technical Assistance Data
System

Toxicology Data Bank (TDB)
MEDLINE
TOXLINE
CANCERLIT
RTECS

(g) Beta-Naphthylamine – Chemical Abstracts Service Registry Number 91598.

(h) Benzidine – Chemical Abstracts Service Registry Number 92875.

(i) 4-Aminodiphenyl – Chemical Abstracts Service Registry Number 92671.

(j) Ethyleneimine – Chemical Abstracts Service Registry Number 151564.

(k) Beta-Propiolactone – Chemical Abstracts Service Registry Number 57578.

(l) 2-Acetylaminofluorene – Chemical Abstracts Service Registry Number 53963.

(m) 4-Dimethylaminoazobenzene – Chemical Abstract Service Registry Number 60117.

(n) N-Nitrosodimethylamine – Chemical Abstracts Service Registry Number 62759. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-10-004 (Order 85-09), § 296-62-07302, filed 4/19/85; 82-13-045 (Order 82-22), § 296-62-07302, filed 6/11/82; 81-07-048 (Order 81-4), § 296-62-07302, filed 3/17/81. Statutory Authority: RCW 49.17.040, 49.17.050, 49.17.240, chapters 42.30 and 43.22 RCW. 80-17-014 (Order 80-20), § 296-62-07302, filed 11/13/80.]

WAC 296-62-07306 Requirements for areas containing carcinogens listed in WAC 296-62-07302. (1) A regulated area shall be established by an employer where listed carcinogens are manufactured, processed, used, repackaged, released, handled or stored.

(2) All such areas shall be controlled in accordance with the requirements for the following category or categories describing the operation involved:

(a) Isolated systems. Employees working with carcinogens within an isolated system such as a "glove box" shall wash their hands and arms upon completion of the assigned task and before engaging in other activities not associated with the isolated system.

(b) Closed system operation. Within regulated areas where carcinogens are stored in sealed containers, or contained in a closed system including piping systems with any sample ports or openings closed while carcinogens are contained within:

(i) Access shall be restricted to authorized employees only;

(ii) Employees shall be required to wash hands, forearms, face and neck upon each exit from the regulated areas, close to the point of exit and before engaging in other activities.

(c) Open vessel system operations. Open vessel system operations as defined in WAC 296-62-07304 (2)(l) are prohibited.

(d) Transfer from a closed system. Charging or discharging point operations, or otherwise opening a closed system. In operations involving "laboratory-type hoods," or in locations where a carcinogen is contained in an otherwise "closed system," but is transferred, charged, or discharged into other normally closed containers, the provisions of this section shall apply.

(i) Access shall be restricted to authorized employees only;

(ii) Each operation shall be provided with continuous local exhaust ventilation so that air movement is always from ordinary work areas to the operation. Exhaust air shall not be discharged to regulated areas, nonregulated areas or the external environment unless decontaminated. Clean makeup air shall be introduced in sufficient volume to maintain the correct operation of the local exhaust system.

(iii) Employees shall be provided with, and required to wear, clean, full body protective clothing (smocks, coveralls, or long-sleeved shirt and pants), shoe covers and gloves prior to entering the regulated area.

(iv) Employees engaged in a carcinogen handling operation shall be provided with and required to wear and use a half-face, filter-type respirator for dusts, mists, and fumes, in accordance with chapter 296-62 WAC, of the general safety and health standards. A respirator affording higher levels of protection may be substituted.

EXCEPTION: N-Nitrosodimethylamine is not a dust, mist, or fume at normal temperatures and a positive-pressure supplied-air respirator shall be used.

(v) Prior to each exit from a regulated area, employees shall be required to remove and leave protective clothing and equipment at the point of exit and at the last exit of the day, to place used clothing and equipment in impervious containers at the point of exit for purposes of decontamination or disposal. The contents of such impervious containers shall be identified, as required under WAC 296-62-07310 (2), (3) and (4).

(vi) Employees shall be required to wash hands, forearms, face and neck on each exit from the regulated area, close to the point of exit, and before engaging in other activities.

(vii) Employees shall be required to shower after the last exit of the day.

(viii) Drinking fountains are prohibited in the regulated area.

(e) Maintenance and decontamination activities. In clean up of leaks or spills, maintenance or repair operations on contaminated systems or equipment, or any operations involving work in an area where direct contact with carcinogens could result, each authorized employee entering the area shall:

(i) Be provided with and required to wear, clean, impervious garments, including gloves, boots and continuous-air supplied hood in accordance with chapter 296-24 WAC, the general safety and health standards;

(ii) Be decontaminated before removing the protective garments and hood;

(iii) Be required to shower upon removing the protective garments and hood.

(f) Laboratory activities. The requirements of this subdivision shall apply to research and quality control activities involving the use of carcinogens listed in WAC 296-62-07302.

(i) Mechanical pipetting aids shall be used for all pipetting procedures.

(ii) Experiments, procedures and equipment which could produce aerosols shall be confined to laboratory-type hoods or glove boxes.

(iii) Surfaces on which carcinogens are handled shall be protected from contamination.

(iv) Contaminated wastes and animal carcasses shall be collected in impervious containers which are closed and decontaminated prior to removal from the work area. Such wastes and carcasses shall be incinerated in such a manner that no carcinogenic products are released.

(v) All other forms of listed carcinogens shall be inactivated prior to disposal.

(vi) Laboratory vacuum systems shall be protected with high efficiency scrubbers or with disposable absolute filters.

(vii) Employees engaged in animal support activities shall be:

(A) Provided with, and required to wear, a complete protective clothing change, clean each day, including coveralls or pants and shirt, foot covers, head covers, gloves, and appropriate respiratory protective equipment or devices; and

(B) Prior to each exit from a regulated area, employees shall be required to remove and leave protective clothing and equipment at the point of exit and at the last exit of the day, to place used clothing and equipment in impervious containers at the point of exit for purposes of decontamination or disposal. The contents of such impervious containers shall be identified as required under WAC 296-62-07310 (2), (3) and (4).

(C) Required to wash hands, forearms, face and neck upon each exit from the regulated area close to the point of exit, and before engaging in other activities; and

(D) Required to shower after the last exit of the day.

(viii) Employees, other than those engaged only in animal support activities, each day shall be:

(A) Provided with and required to wear a clean change of appropriate laboratory clothing, such as a solid front gown, surgical scrub suit, or fully buttoned laboratory coat.

(B) Prior to each exit from a regulated area, employees shall be required to remove and leave protective clothing and equipment at the point of exit and at the last exit of the day, to place used clothing and equipment in impervious containers at the point of exit for purposes of decontamination or disposal. The contents of such impervious containers shall be identified as required under WAC 296-62-07310 (2), (3) and (4).

(C) Required to wash hands, forearms, face and neck upon each exit from the regulated area close to the point of exit, and before engaging in other activities.

(ix) Air pressure in laboratory areas and animal rooms where carcinogens are handled and bioassay studies are performed shall be negative in relation to the pressure in surrounding areas. Exhaust air shall not be discharged to regulated areas, nonregulated areas or the external environment unless decontaminated.

(x) There shall be no connection between regulated areas and any other areas through the ventilation system.

(xi) A current inventory of the carcinogens shall be maintained.

(xii) Ventilated apparatus such as laboratory-type hoods, shall be tested at least semi-annually or immediately after ventilation modification or maintenance operations, by personnel fully qualified to certify correct containment and operation. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-10-004 (Order 85-09), § 296-62-07306, filed 4/19/85. Statutory Authority: RCW 49.17.040, 49.17.050 and 49.17.240. 81-16-015 (Order 81-20), § 296-62-07306, filed 7/27/81. Statutory Authority: RCW 49.17.040, 49.17.050, 49.17.240, chapters 42.30 and 43.22 RCW. 80-17-014 (Order 80-20), § 296-62-07306, filed 11/13/80.]

WAC 296-62-07353 Ethylene oxide. (1) Scope and application.

(a) This section applies to all occupational exposures to ethylene oxide (EtO), Chemical Abstracts Service Registry No. 75-21-8, except as provided in (b) of this subsection.

(b) This section does not apply to the processing, use, or handling of products containing EtO where objective data are reasonably relied upon that demonstrate that the product is not capable of releasing EtO in airborne concentrations at or above the action level under the expected conditions of processing, use, or handling that will cause the greatest possible release.

(c) Where products containing EtO are exempted under (b) of this subsection, the employer shall maintain records of the objective data supporting that exemption and the basis for the employer's reliance on the data, as provided in subsection (1)(a) of this section.

(2) Definitions: For the purpose of this section, the following definitions shall apply:

(a) "Action level" means a concentration of airborne EtO of 0.5 ppm calculated as an eight-hour time-weighted average.

(b) "Authorized person" means any person specifically authorized by the employer whose duties require the person to enter a regulated area, or any person entering such an area as a designated representative of employees for the purpose of exercising the right to observe monitoring and measuring procedures under subsection (12) of this section, or any other person authorized by chapter 49.17 RCW or regulations issued under chapter 49.17 RCW.

(c) "Director" means the director of the department of labor and industries, or designee.

(d) "Emergency" means any occurrence such as, but not limited to, equipment failure, rupture of containers, or failure of control equipment that is likely to or does result in an unexpected significant release of EtO.

(e) "Employee exposure" means exposure to airborne EtO which would occur if the employee were not using respiratory protective equipment.

(f) "Ethylene oxide" or "EtO" means the three-membered ring organic compound with chemical formula C_2H_4O .

(3) Permissible exposure limits (PEL). Eight-hour time-weighted average (TWA). The employer shall ensure that no employee is exposed to an airborne concentration of EtO in excess of one part EtO per million

parts of air (1 ppm) as an eight-hour time-weighted average. (Eight-hour TWA).

(4) Exposure monitoring.

(a) General.

(i) Determinations of employee exposure shall be made from breathing zone air samples that are representative of the eight-hour TWA of each employee.

(ii) Representative eight-hour TWA employee exposure shall be determined on the basis of one or more samples representing full-shift exposure for each shift for each job classification in each work area.

(iii) Where the employer can document that exposure levels are equivalent for similar operations in different work shifts, the employer need only determine representative employee exposure for that operation during one shift.

(b) Initial monitoring.

(i) Each employer who has a workplace or work operation covered by this standard, except as provided in subsection (1)(b) or (4)(b)(ii) of this section, shall perform initial monitoring to determine accurately the airborne concentrations of EtO to which employees may be exposed.

(ii) Where the employer has monitored after June 15, 1983, and the monitoring satisfies all other requirements of this section, the employer may rely on such earlier monitoring results to satisfy the requirements of (b)(i) of this subsection.

(c) Monitoring frequency (periodic monitoring).

(i) If the monitoring required by (b) of this subsection reveals employee exposure at or above the action level but at or below the eight-hour TWA, the employer shall repeat such monitoring for each such employee at least every six months.

(ii) If the monitoring required by (b)(i) of this subsection reveals employee exposure above the eight-hour TWA, the employer shall repeat such monitoring for each such employee at least every three months.

(iii) The employer may alter the monitoring schedule from quarterly to semiannually for any employee for whom two consecutive measurements taken at least seven days apart indicate that the employee's exposure has decreased to or below the eight-hour TWA.

(d) Termination of monitoring.

(i) If the initial monitoring required by (b)(i) of this subsection reveals employee exposure to be below the action level, the employer may discontinue the monitoring for those employees whose exposures are represented by the initial monitoring.

(ii) If the periodic monitoring required by (c) of this subsection reveals that employee exposures, as indicated by at least two consecutive measurements taken at least seven days apart, are below the action level, the employer may discontinue the monitoring for those employees whose exposures are represented by such monitoring.

(e) Additional monitoring. Notwithstanding the provisions of (d) of this subsection, the employer shall institute the exposure monitoring required under (b)(i) and (c) of this subsection whenever there has been a change in the production, process, control equipment, personnel

or work practices that may result in new or additional exposures to EtO or when the employer has any reason to suspect that a change may result in new or additional exposures.

(f) Accuracy of monitoring. Monitoring shall be accurate, to a confidence level of ninety-five percent, to within plus or minus twenty-five percent for airborne concentrations of EtO at the 1 ppm TWA and to within plus or minus thirty-five percent for airborne concentrations of EtO at the action level of 0.5 ppm.

(g) Employee notification of monitoring results.

(i) The employer shall, within fifteen working days after the receipt of the results of any monitoring performed under this standard, notify the affected employee of these results in writing either individually or by posting of results in an appropriate location that is accessible to affected employees.

(ii) The written notification required by (g)(i) of this subsection shall contain the corrective action being taken by the employer to reduce employee exposure to or below the PEL, wherever monitoring results indicated that the PEL has been exceeded.

(5) Regulated areas.

(a) The employer shall establish a regulated area wherever occupational exposures to airborne concentrations of EtO may exceed the TWA.

(b) Access to regulated areas shall be limited to authorized persons.

(c) Regulated areas shall be demarcated in any manner that minimizes the number of employees within the regulated area.

(6) Methods of compliance.

(a) Engineering controls and work practices.

(i) The employer shall institute engineering controls and work practices to reduce and maintain employee exposure to or below the TWA, except to the extent that such controls are not feasible.

(ii) Wherever the feasible engineering controls and work practices that can be instituted are not sufficient to reduce employee exposure to or below the TWA, the employer shall use them to reduce employee exposure to the lowest levels achievable by these controls and shall supplement them by the use of respiratory protection that complies with the requirements of subsection (7) of this section.

(iii) Engineering controls are generally infeasible for the following operations: Collection of quality assurance sampling from sterilized materials removal of biological indicators from sterilized materials: Loading and unloading of tank cars; changing of ethylene oxide tanks on sterilizers; and vessel cleaning. For these operations, engineering controls are required only where the director demonstrates that such controls are feasible.

(b) Compliance program.

(i) Where the TWA is exceeded, the employer shall establish and implement a written program to reduce employee exposure to or below the TWA by means of engineering and work practice controls, as required by (a) of this subsection, and by the use of respiratory protection where required or permitted under this section.

(ii) The compliance program shall include a schedule for periodic leak detection surveys and a written plan for emergency situations, as specified in subsection (8)(a)(i) of this section.

(iii) Written plans for a program required in (b) of this subsection shall be developed and furnished upon request for examination and copying to the director, affected employees and designated employee representatives. Such plans shall be reviewed at least every twelve months, and shall be updated as necessary to reflect significant changes in the status of the employer's compliance program.

(iv) The employer shall not implement a schedule of employee rotation as a means of compliance with the TWA.

(7) Respiratory protection and personal protective equipment.

(a) General. The employer shall provide respirators, and ensure that they are used, where required by this section. Respirators shall be used in the following circumstances.

(i) During the interval necessary to install or implement feasible engineering and work practice controls;

(ii) In work operations, such as maintenance and repair activities, vessel cleaning, or other activities for which engineering and work practice controls are not feasible;

(iii) In work situations where feasible engineering and work practice controls are not yet sufficient to reduce exposure to or below the TWA; and

(iv) In emergencies.

(b) Respirator selection.

(i) Where respirators are required under this section, the employer shall select and provide, at no cost to the employee, the appropriate respirator as specified in Table 1, and shall ensure that the employee uses the respirator provided.

(ii) The employer shall select respirators from among those jointly approved as being acceptable for protection against EtO by the Mine Safety and Health Administration (MSHA) and by the National Institute for Occupational Safety and Health (NIOSH) under the provisions of 30 CFR Part 11.

(c) Respirator program. Where respiratory protection is required by this section, the employer shall institute a respirator program in accordance with WAC 296-62-071.

(d) Protective clothing and equipment. Where eye or skin contact with liquid EtO or EtO solutions may occur, the employer shall select and provide, at no cost to the employee, appropriate protective clothing or other equipment in accordance with WAC 296-24-07501 and 296-24-07801 and to protect any area of the body that may come in contact with liquid EtO or EtO in solution, and shall ensure that the employee wears the protective clothing and equipment provided.

(8) Emergency situations.

(a) Written plan.

(i) A written plan for emergency situations shall be developed for each workplace where there is a possibility

of an emergency. Appropriate portions of the plan shall be implemented in the event of an emergency.

(ii) The plan shall specifically provide that employees engaged in correcting emergency conditions shall be equipped with respiratory protection as required by subsection (7) of this section until the emergency is abated.

(iii) The plan shall include the elements prescribed in WAC 296-24-567, "Employee emergency plans and fire prevention plans."

(b) Alerting employees. Where there is the possibility of employee exposure to EtO due to an emergency, means shall be developed to alert potentially affected employees of such occurrences promptly. Affected employees shall be immediately evacuated from the area in the event that an emergency occurs.

Table 1.—Minimum Requirements for Respiratory Protection for Airborne EtO

Condition of use or concentration of airborne EtO (ppm)	Minimum required respirator
Equal to or less than 50.	(a) Full facepiece respirator with EtO approved canister, front- or back-mounted.
Equal to or less than 2,000.	(a) Positive-pressure supplied air respirator, equipped with full facepiece, hood, or helmet, or (b) Continuous-flow supplied air respirator (positive pressure) equipped with hood, helmet or suit.
Concentration above 2,000 or unknown concentration (such as in emergencies).	(a) Positive-pressure self-contained breathing apparatus (SCBA), equipped with full facepiece, or (b) Positive-pressure full facepiece supplied air respirator equipped with an auxiliary positive-pressure self-contained breathing apparatus.
Firefighting	(a) Positive pressure self-contained breathing apparatus equipped with full facepiece.
Escape.....	(a) Any respirator described above.

Note.—Respirators approved for use in higher concentrations are permitted to be used in lower concentrations.

(9) Medical surveillance.

(a) General.

(i) Employees covered.

(A) The employer shall institute a medical surveillance program for all employees who are or may be exposed to EtO at or above the action level, without regard to the use of respirators, for at least thirty days a year.

(B) The employer shall make available medical examinations and consultations to all employees who have been exposed to EtO in an emergency situation.

(ii) Examination by a physician. The employer shall ensure that all medical examinations and procedures are performed by or under the supervision of a licensed physician, and are provided without cost to the employee, without loss of pay, and at a reasonable time and place.

(b) Medical examinations and consultations.

(i) Frequency. The employer shall make available medical examinations and consultations to each employee covered under (a)(i) of this subsection on the following schedules:

(A) Prior to assignment of the employee to an area where exposure may be at or above the action level for at least thirty days a year.

(B) At least annually each employee exposed at or above the action level for at least thirty days in the past year.

(C) At termination of employment or reassignment to an area where exposure to EtO is not at or above the action level for at least thirty days a year.

(D) As medically appropriate for any employee exposed during an emergency.

(E) As soon as possible, upon notification by an employee either (I) that the employee has developed signs or symptoms indicating possible overexposure to EtO, or (II) that the employee desires medical advice concerning the effects of current or past exposure to EtO on the employee's ability to produce a healthy child.

(F) If the examining physician determines that any of the examinations should be provided more frequently than specified, the employer shall provide such examinations to affected employees at the frequencies recommended by the physician.

(ii) Content.

(A) Medical examinations made available pursuant to (b)(i)(A) through (D) of this subsection shall include:

(I) A medical and work history with special emphasis directed to symptoms related to the pulmonary, hematologic, neurologic, and reproductive systems and to the eyes and skin.

(II) A physical examination with particular emphasis given to the pulmonary, hematologic, neurologic, and reproductive systems and to the eyes and skin.

(III) A complete blood count to include at least a white cell count (including differential cell count), red cell count, hematocrit, and hemoglobin.

(IV) Any laboratory or other test which the examining physician deems necessary by sound medical practice.

(B) The content of medical examinations or consultation made available pursuant to (b)(i)(E) of this subsection shall be determined by the examining physician, and shall include pregnancy testing or laboratory evaluation of fertility, if requested by the employee and deemed appropriate by the physician.

(c) Information provided to the physician. The employer shall provide the following information to the examining physician:

(i) A copy of this standard and Appendices A, B, and C.

(ii) A description of the affected employee's duties as they relate to the employee's exposure.

(iii) The employee's representative exposure level or anticipated exposure level.

(iv) A description of any personal protective and respiratory equipment used or to be used.

(v) Information from previous medical examinations of the affected employee that is not otherwise available to the examining physician.

(d) Physician's written opinion.

(i) The employer shall obtain a written opinion from the examining physician. This written opinion shall contain the results of the medical examination and shall include:

(A) The physician's opinion as to whether the employee has any detected medical conditions that would place the employee at an increased risk of material health impairment from exposure to EtO;

(B) Any recommended limitations on the employee or upon the use of personal protective equipment such as clothing or respirators; and

(C) A statement that the employee has been informed by the physician of the results of the medical examination and of any medical conditions resulting from EtO exposure that require further explanation or treatment.

(ii) The employer shall instruct the physician not to reveal in the written opinion given to the employer specific findings or diagnoses unrelated to occupational exposure to EtO.

(iii) The employer shall provide a copy of the physician's written opinion to the affected employee within fifteen days from its receipt.

(10) Communication of EtO hazards to employees.

(a) Signs and labels.

(i) The employer shall post and maintain legible signs demarcating regulated areas and entrances or accessways to regulated areas that bear the following legend:

DANGER
ETHYLENE OXIDE
CANCER HAZARD AND REPRODUCTIVE HAZARD
AUTHORIZED PERSONNEL ONLY
RESPIRATORS AND PROTECTIVE CLOTHING MAY BE
REQUIRED
TO BE WORN IN THIS AREA

(ii) The employer shall ensure that precautionary labels are affixed to all containers of EtO whose contents are capable of causing employee exposure at or above the action level, and that the labels remain affixed when the containers of EtO leave the workplace. For the purposes of this subsection, reaction vessels, storage tanks, and pipes or piping systems are not considered to be containers. The labels shall comply with the requirements of WAC 296-62-05411 of WISHA's hazard communication standard, and shall include the following legend:

(A)

CAUTION
CONTAINS ETHYLENE OXIDE
CANCER AND REPRODUCTIVE HAZARD; and

(B) A warning statement against breathing airborne concentrations of EtO.

(b) Material safety data sheets. Employers who are manufacturers or importers of EtO shall comply with the requirements regarding development of material safety data sheets as specified in WAC 296-62-05413 of the hazard communication standard.

(c) Information and training.

(i) The employer shall provide employees who are potentially exposed to EtO at or above the action level with information and training on EtO at the time of initial assignment and at least annually thereafter.

(ii) Employees shall be informed of the following:

(A) The requirements of this section with an explanation of its contents, including Appendices A and B;

(B) Any operations in their work area where EtO is present;

(C) The location and availability of the written EtO final rule; and

(D) The medical surveillance program required by subsection (9) of this section with an explanation of the information in Appendix C.

(iii) Employee training shall include at least:

(A) Methods and observations that may be used to detect the presence or release of EtO in the work area (such as monitoring conducted by the employer, continuous monitoring devices, etc.);

(B) The physical and health hazards of EtO;

(C) The measures employees can take to protect themselves from hazards associated with EtO exposure, including specific procedures the employer has implemented to protect employees from exposure to EtO, such as work practices, emergency procedures, and personal protective equipment to be used; and

(D) The details of the hazard communication program developed by the employer, including an explanation of the labeling system and how employees can obtain and use the appropriate hazard information.

(11) Recordkeeping.

(a) Objective data for exempted operations.

(i) Where the processing, use, or handling of products made from or containing EtO are exempted from other requirements of this section under subsection (1)(b) of this section, or where objective data have been relied on in lieu of initial monitoring under subsection (4)(b)(ii) of this section, the employer shall establish and maintain an accurate record of objective data reasonably relied upon in support of the exemption.

(ii) This record shall include at least the following information:

(A) The product qualifying for exemption;

(B) The source of the objective data;

(C) The testing protocol, results of testing, and/or analysis of the material for the release of EtO;

(D) A description of the operation exempted and how the data support the exemption; and

(E) Other data relevant to the operations, materials, processing, or employee exposures covered by the exemption.

(iii) The employer shall maintain this record for the duration of the employer's reliance upon such objective data.

(b) Exposure measurements.

(i) The employer shall keep an accurate record of all measurements taken to monitor employee exposure to EtO as prescribed in subsection (4) of this section.

(ii) This record shall include at least the following information:

(A) The date of measurement;

(B) The operation involving exposure to EtO which is being monitored;

(C) Sampling and analytical methods used and evidence of their accuracy;

(D) Number, duration, and results of samples taken;

(E) Type of protective devices worn, if any; and

(F) Name, social security number and exposure of the employees whose exposures are represented.

(iii) The employer shall maintain this record for at least thirty years, in accordance with WAC 296-62-05207.

(c) Medical surveillance.

(i) The employer shall establish and maintain an accurate record for each employee subject to medical surveillance by subsection (9)(a)(i) of this section, in accordance with WAC 296-62-05207.

(ii) The record shall include at least the following information:

(A) The name and social security number of the employee;

(B) Physicians' written opinions;

(C) Any employee medical complaints related to exposure to EtO; and

(D) A copy of the information provided to the physician as required by subsection (9)(c) of this section.

(iii) The employer shall ensure that this record is maintained for the duration of employment plus thirty years, in accordance with WAC 296-62-05207.

(d) Availability.

(i) The employer, upon written request, shall make all records required to be maintained by this section available to the director for examination and copying.

(ii) The employer, upon request, shall make any exemption and exposure records required by subsection (12)(a) and (b) of this section available for examination and copying to affected employees, former employees, designated representatives and the director, in accordance with WAC 296-62-05201 through 296-62-05209 and 296-62-05213 through 296-62-05217.

(iii) The employer, upon request, shall make employee medical records required by (c) of this subsection available for examination and copying to the subject employee, anyone having the specific written consent of the subject employee, and the director, in accordance with WAC 296-62-052.

(e) Transfer of records.

(i) The employer shall comply with the requirements concerning transfer of records set forth in WAC 296-62-05207.

(ii) Whenever the employer ceases to do business and there is no successor employer to receive and retain the records for the prescribed period, the employer shall notify the director at least ninety days prior to disposal and transmit them to the director.

(12) Observation of monitoring.

(a) Employee observation. The employer shall provide affected employees or their designated representatives an opportunity to observe any monitoring of employee exposure to EtO conducted in accordance with subsection (4) of this section.

(b) Observation procedures. When observation of the monitoring of employee exposure to EtO requires entry into an area where the use of protective clothing or equipment is required, the observer shall be provided with and be required to use such clothing and equipment and shall comply with all other applicable safety and health procedures.

(13) Dates.

(a) Effective date. This section shall become effective thirty days after filing with the code reviser.

(b) Start-up dates.

(i) The requirements of subsections (3) through (12) of this section, including feasible work practice controls but not including engineering controls specified in subsection (6)(a) of this section, shall be complied with within one hundred eighty days after the effective date of this section.

(ii) Engineering controls specified by subsection (6)(a) of this section shall be implemented within one year after the effective date of this section.

(14) Appendices. The information contained in the appendices is not intended by itself to create any additional obligations not otherwise imposed or to detract from any existing obligation. Appendices are available from:

Support Services
 Division of Industrial
 Safety and Health
 P.O. Box 207
 Olympia, WA 98504
 (206) 753-6381

[Statutory Authority: RCW 49.17.040 and 49.17.050. 85-10-004 (Order 85-09), § 296-62-07353, filed 4/19/85; 85-01-022 (Order 84-24), § 296-62-07353, filed 12/11/84.]

WAC 296-62-07515 Control of chemical agents. Chemical agents shall be controlled in such a manner that the workers exposure shall not exceed the applicable limits in WAC 296-62-075 through 296-62-07515.

TABLE 1

PERMISSIBLE EXPOSURE LIMITS (PEL)

Substance	ppm (See note a)	mg/M ³ (See note b)
2-Aminoethanol, see Ethanolamine	—	—
2-Aminopyridine	0.5	2
Ammonia	50	35
Ammonium chloride, fume	—	10
Ammonium sulfamate (Ammate)	—	10
n-Amyl acetate	100	525
sec-Amyl acetate	125	650
Aniline—Skin	5	19
Anisidine (o, p-isomers)—Skin	—	0.5
Antimony & Compounds (as Sb)	—	0.5
ANTU (alpha Naphthyl thiourea)	—	0.3
Argon	Simple	Asphyxiant
Arsenic & Compounds (as As) which are exempt from WAC 296-62-07347	—	0.5
Arsine	0.05	0.2
Asphalt (petroleum) fumes	—	5
Azinphos methyl—Skin	—	0.2
Barium (soluble compounds)	—	0.5
p-Benzoquinone, see Quinone	—	5
Benzoyl peroxide	—	5
Benzyl chloride	1	5
Biphenyl, see Diphenyl	—	10
Boron oxide	—	10
Boron tribromide	1	10
C Boron trifluoride	1	3
Bromine	0.1	0.7
Bromine pentafluoride	0.1	0.7
Bromoform—Skin	0.5	5.0
Butadiene (1,3-butadiene)	1,000	2,200
Butanethiol, see Butyl mercaptan	—	—
2-Butanone	200	590
2-Butoxy ethanol (Butyl Cello-solve)—Skin	50	240
Butyl acetate (n-butyl acetate)	150	710
sec-Butyl acetate	200	950
tert-Butyl acetate	200	950
Butyl alcohol	100	300
sec-Butyl alcohol	150	450
tert-Butyl alcohol	100	300
C Butylamine—Skin	5	15
C tert-Butyl chromate (as CrO ₃)—Skin	—	0.1
n-Butyl glycidyl ether (BGE)	50	270
Butyl mercaptan	0.5	1.5
p-tert-Butyl-toluene	10	60
C Cadmium oxide fume (as Cd)	—	0.1
Calcium carbonate	—	10
Calcium arsenate See WAC 296-62-07347	—	—
Calcium oxide	—	5
Camphor (synthetic)	2	12
Carbaryl (Sevin [®])	—	5
Carbon black	—	3.5
Carbon dioxide	5,000	9,000
Carbon monoxide	50	55
Cellulose (paper fiber)	—	10
Chlordane—Skin	—	0.5
Chlorinated camphene—Skin	—	0.5
Chlorinated diphenyl oxide	—	0.5
C Chlorine	1	3
Chlorine dioxide	0.1	0.3
C Chlorine tri-fluoride	0.1	0.4
C Chloroacetaldehyde	1	3
α-Chloroacetophenone (Phenacetylchloride)	0.05	0.03
Chlorobenzene (Monochlorobenzene)	75	350
o-Chlorobenzylidene malononitrile (OCBM)—Skin	0.05	0.4
Chlorobromomethane	200	1,050
2-Chloro-1,3-butadiene, see Chloroprene	—	—
Chlorodiphenyl (42% Chlorine)—Skin	—	1
Chlorodiphenyl (54% Chlorine)—Skin	—	0.5

TABLE 1

PERMISSIBLE EXPOSURE LIMITS (PEL)

Substance	ppm (See note a)	mg/M ³ (See note b)
Abate	—	10
Acetaldehyde	200	360
Acetic acid	10	25
Acetic anhydride	5	20
Acetone	1,000	2,400
Acetonitrile	40	70
Acetylene	Simple	Asphyxiant
Acetylene dichloride, see 1,2-Dichloroethylene	—	—
Acetylene tetrabromide	1	14
Acrolein	0.1	0.25
Acrylamide—Skin	—	0.3
Aldrin—Skin	—	0.25
Allyl alcohol—Skin	2	3
Allyl chloride	1	5
C Allyl glycidyl ether (AGE)	10	45
Allyl propyl disulfide	2	12
Alundum (Al ₂ O ₃)	—	10

TABLE 1

PERMISSIBLE EXPOSURE LIMITS (PEL)

Substance	ppm (See note a)	mg/M ³ (See note b)
1-Chloro,2,3-epoxy propane, see Epichlorhydrin		
2-Chloroethanol, see Ethylene chlorohydrin		
Chloroform (Tri-chloromethane)	50	240
1-Chloro-1-nitropropane	20	100
Chloropicrin	0.1	0.7
Chloroprene (2-chloro-1,3-butadiene)—Skin	25	90
Chromium, sol. chromic, chromous salts as Cr.	—	0.5
Chromium Metal & insol. salts	—	1
Coal tar pitch volatiles (benzene soluble fraction anthracene, BaP, phenanthrene, acridine, chrysene, pyrene)	—	0.2
Cobalt, metal fume & dust	—	0.1
Copper fume	—	0.1
Dusts and Mists	—	1.0
Corundum (Al ₂ O ₃)	—	10
Cotton Dust (raw)	—	1
Crag ^[R] herbicide	—	10
Cresol (all isomers)—Skin	5	22
Crotonaldehyde	2	6
Cumene—Skin	50	245
Cyanide (as CN)—Skin	—	5
Cyanogen	10	—
Cyclohexane	300	1,050
Cyclohexanol	50	200
Cyclohexanone	50	200
Cyclohexene	300	1,015
Cyclopentadiene	75	200
2,4-D	—	10
DDT	—	1
DDVP, see Dichlorvos	—	—
Decaborane—Skin	0.05	0.3
Demeton ^[R] —Skin	—	0.1
Diacetone alcohol (4-hydroxy-4-methyl-2-pentanone)	50	240
1,2-Diaminoethane, see Ethylenediamine	—	—
Diazinon—skin	—	0.1
Diazomethane	0.2	0.4
Diborane	0.1	0.1
Dibrom ^[R]	—	3
2-N Dibutylamino-ethanol—Skin	2	14
Dibutyl phosphate	1	5
Dibutylphthalate	—	5
C Dichloroacetylene	0.1	0.4
C o-Dichlorobenzene	50	300
p-Dichlorobenzene	75	450
Dichlorodifluoromethane	1,000	4,950
1,3-Dichloro-5,5-dimethyl hydantoin	—	0.2
1,1-Dichloroethane	100	400
1,2-Dichloro-ethylene	200	790
C Dichloroethyl ether—Skin	15	90
Dichloromethane, see Methylene-chloride	—	—
Dichloromonofluoro-methane	1,000	4,200
C 1,1-Dichloro-1-nitroethane	10	60
1,2-Dichloropropane, see Propylene-dichloride	—	—
Dichlorotetra-fluoroethane	1,000	7,000
Dichlorvos (DDVP)—Skin	—	1
Dieldrin—Skin	—	0.25
Diethylamine	25	75
Diethylamino ethanol—Skin	10	50
C Diethylene triamine—Skin	1	4
Diethylether, see Ethyl ether	—	—
Difluorodibromomethane	100	860
C Diglycidyl ether (DGE)	0.5	2.8
Dihydroxybenzene, see Hydroquinone	—	—
Diisobutyl ketone	50	290
Diisopropylamine—Skin	5	20
Dimethoxymethane, see Methylal	—	—
Dimethyl acetamide—Skin	10	35
Dimethylamine	10	18

TABLE 1

PERMISSIBLE EXPOSURE LIMITS (PEL)

Substance	ppm (See note a)	mg/M ³ (See note b)
Dimethylaminobenzene, see Xylidene		
Dimethylaniline (N-Dimethylaniline)—Skin	5	25
Dimethylbenzene, see Xylene		
Dimethyl,1,2-dibromo-2,2-dichloroethyl phosphate, see DiBrom		
Dimethylformamide—Skin	10	30
2,6-Dimethylheptanone, see Diisobutyl ketone		
1,1-Dimethylhydrazine—Skin	0.5	1
Dimethylphthalate	—	5
Dimethylsulfate—Skin	1	5
Dinitrobenzene (all isomers)—Skin	—	1
Dinitro-o-cresol—Skin	—	0.2
Dinitrotoluene—Skin	—	1.5
Dioxane (Diethylene dioxide)—Skin	100	360
Diphenyl	0.2	1
Diphenyl amine	—	10
Diphenylmethane diisocyanate (see Methylene bisphenyl isocyanate (MDI))		
Dipropylene glycol methyl ether—Skin	100	600
Di-sec.octyl phthalate (Di-2-ethylhexyl-phthalate)	—	5
Emery	—	10
Endosulfan (Thiodan ^[R])—skin	—	0.1
Endrin—Skin	—	0.1
Epichlorhydrin—Skin	5	19
EPN—Skin	—	0.5
1,2-Epoxypropane, see Propylene-oxide		
2,3-Epoxy-1-propanol, see Glycidol		
Ethane	Simple	Asphyxiant
Ethanethiol, see Ethylmercaptan		
Ethanolamine	3	6
2-Ethoxyethanol—Skin	200	740
2-Ethoxyethylacetate (Cellosolve acetate)—Skin	100	540
Ethyl acetate	400	1,400
Ethyl acrylate—Skin	25	100
Ethyl alcohol (ethanol)	1,000	1,900
Ethylamine	10	18
Ethyl sec-amyl ketone (5-methyl-3-heptanone)	25	130
Ethyl benzene	100	435
Ethyl bromide	200	890
Ethyl butyl ketone (3-Heptanone)	50	230
Ethyl chloride	1,000	2,600
Ethyl ether	400	1,200
Ethyl formate	100	300
Ethyl mercaptan	0.5	1
Ethyl silicate	100	850
Ethylene	Simple	Asphyxiant
Ethylene chlorohydrin—Skin	5	16
Ethylenediamine	10	25
C Ethylene glycol dinitrate and/or Nitroglycerin—Skin	0.2 (See note d)	—
Ethylene glycol monomethyl ether acetate (Methyl cellosolve acetate)—Skin	25	120
Ethylene imine—Skin	0.5	1
Ethylene oxide (See WAC 296-62-07353)	1	—
Ethylidene chloride, see 1,1-Dichloroethane		
n-Ethylmorpholine—Skin	20	94
Ferbam	—	15
Ferrovandium dust	—	1
Fluoride as dust	—	2.5
Fluorine	0.1	0.2
Fluorotrichloromethane	1,000	5,600

TABLE 1

PERMISSIBLE EXPOSURE LIMITS (PEL)

Substance	ppm (See note a)	mg/M ³ (See note b)
C Formaldehyde	2	3
Formic acid	5	9
Furfuryl-Skin	5	20
Furfuryl alcohol	50	200
Glass, fibrous or dust (See note e)	—	10
Glycerin mist	—	10
Glycidol (2,3-Epoxy-1-propanol)	50	150
Glycol monoethyl ether, see 2-Ethoxyethanol	—	—
Graphite (Synthetic)	—	10
Guthion [®] , see Azinphosmethyl	—	—
Gypsum	—	10
Hafnium	—	0.5
Helium	Simple	Asphyxiant
Heptachlor—Skin	—	0.5
Heptane (n-heptane)	500	2,000
Hexachloroethane—Skin	1	10
Hexachloronaphthalene—Skin	—	0.2
Hexane (n-hexane)	500	1,800
2-Hexanone	100	410
Hexone (Methyl isobutyl ketone)	100	410
156 sec-Hexyl acetate	50	300
Hydrazine—Skin	1	1.3
Hydrogen	Simple	Asphyxiant
Hydrogen bromide	3	10
C Hydrogen chloride	5	7
Hydrogen cyanide—Skin	10	11
Hydrogen fluoride	3	2
Hydrogen peroxide	1	1.4
Hydrogen selenide	0.05	0.2
Hydroquinone	—	2
Indene	10	45
Indium and compounds, as In	—	0.1
C Iodine	0.1	1
Iron oxide fume	—	10
Iron pentacarbonyl	0.01	0.08
Iron salts, soluble, as Fe	—	1
Isoamyl acetate	100	525
Isoamyl alcohol	100	360
Isobutyl acetate	150	700
Isobutyl alcohol	100	300
Isophorone	10	55
Isopropyl acetate	250	950
Isopropyl alcohol	400	980
Isopropylamine	5	12
Isopropylether	250	1,050
Isopropyl glycidyl ether (IGE)	50	240
Kaolin	—	10
Ketene	0.5	0.9
Lead and its inorganic compounds which are exempt from WAC 296-62-07521	—	0.2
Lead arsenate—See WAC 296-62-07347	—	0.15
Limestone	—	10
Lindane	—	0.5
Lithium hydride	—	0.025
L.P.G. (Liquified petroleum gas)	1,000	1,800
Magnesite	—	10
Magnesium oxide fume	—	10
Malathion—Skin	—	10
Maleic anhydride	0.25	1
C Manganese and compounds, as Mn	—	5
Marble	—	10
Mesityl oxide	25	100
Methane	Simple	Asphyxiant
Methanethiol, see Methyl mercaptan	—	—
Methoxychlor	—	10
2-Methoxyethanol—skin (Methyl cellosolve)	25	80
Methyl acetate	200	610
Methyl acetylene (propyne)	1,000	1,650
Methyl acetylene-propadiene mixture (MAPP)	1,000	1,800
Methyl acrylate—Skin	10	35
Methylal (dimethoxy-methane)	1,000	3,100

TABLE 1

PERMISSIBLE EXPOSURE LIMITS (PEL)

Substance	ppm (See note a)	mg/M ³ (See note b)
Methyl alcohol (methanol)	200	260
Methylamine	10	12
Methyl amyl alcohol, see Methyl isobutyl carbinol	—	—
Methyl 2-cyano-acrylate	2	8
Methyl isoamyl ketone	100	475
Methyl (n-amyl) ketone (2-Heptanone)	100	465
Methyl bromide—Skin	15	60
Methyl butyl ketone, see 2-Hexanone	—	—
Methyl cellosolve—skin, see 2-Methoxyethanol	—	—
Methyl cellosolve acetate—Skin, see Ethylene glycol monomethyl ether acetate	—	—
Methyl chloride	100	210
Methyl chloroform	350	1,900
Methylcyclohexane	500	2,000
Methylcyclohexanol	100	470
o-Methylcyclo-hexanone—Skin	100	460
Methylcyclopentadienyl manganese tricarbonyl (as Mn)—skin	0.1	0.2
Methyl demeton—skin	—	0.5
Methyl ethyl ketone (MEK), see 2-Butanone	—	—
Methyl formate	100	250
Methyl iodide—Skin	5	28
Methyl isobutyl carbinol—Skin	25	100
Methyl isobutyl ketone, see Hexone	—	—
Methyl isocyanate—Skin	0.02	0.05
Methyl mercaptan	0.5	1
Methyl methacrylate	100	410
Methyl parathion—skin	—	0.2
Methyl propyl ketone, see 2-Pentanone	—	—
C Methyl silicate	5	30
C α-Methyl styrene	100	480
C Methylene bisphenyl isocyanate (MDI)	0.02	0.2
Molybdenum (soluble compounds)	—	5
(insoluble compounds)	—	10
Monomethyl aniline—Skin	2	9
C Monomethyl hydrazine—Skin	0.2	0.35
Morpholine—Skin	20	70
Naphtha (coal tar)	100	400
Naphthalene	10	50
Neon	Simple	Asphyxiant
Nickel carbonyl	0.001	0.007 (See note a)
Nickel, metal and soluble compounds, as Ni	—	1
Nicotine—Skin	—	0.5
Nitric acid	2	5
Nitric oxide	25	30
p-Nitroaniline—Skin	1	6
Nitrobenzene—Skin	1	5
p-Nitrochlorobenzene—Skin	—	1
Nitroethane	100	310
Nitrogen	Simple	Asphyxiant
C Nitrogen dioxide	5	9
Nitrogen trifluoride	10	29
C Nitroglycerin—Skin	0.2	2
Nitromethane	100	250
1-Nitropropane	25	90
2-Nitropropane	25	90
Nitrotoluene—Skin	5	30
Nitrotrichloromethane, see Chloropicrin	—	—
Nitrous Oxide	Simple	Asphyxiant
Octachloronaphthalene—Skin	—	0.1
Octane	400	1,900
Oil mist, particulate	—	5 (See note f)
Osmium tetroxide	—	0.002
Oxalic acid	—	1
Oxygen difluoride	0.05	0.1

TABLE 1

PERMISSIBLE EXPOSURE LIMITS (PEL)

Substance	ppm (See note a)	mg/M ³ (See note b)
Ozone	0.1	0.2
Paraquat—Skin	—	0.5
Parathion—Skin	—	0.1
Pentaborane	0.005	0.01
Pentachloronaphthalene—Skin	—	0.5
Pentachlorophenol—Skin	—	0.5
Pentaerythritol	—	10
Pentane	500	1,500
2-Pentanone	200	700
Perchloromethyl mercaptan	0.1	0.8
Perchloryl fluoride	3	14
Phenol—Skin	5	19
p-Phenylene diamine—Skin	—	0.1
Phenyl ether (vapor)	1	7
Phenyl ether—Diphenyl mixture (vapor)	1	7
Phenylethylene, see Styrene		
Phenyl glycidyl ether (PGE)	10	60
Phenyldiazine—Skin	5	22
Phenothiazine—skin	—	5
Phosdrin (Mevinphos ^[R])—Skin	—	0.1
Phosgene (carbonyl chloride)	0.1	0.4
Phosphine	0.3	0.4
Phosphoric acid	—	1
Phosphorus (yellow)	—	0.1
Phosphorus pentachloride	—	1
Phosphorus pentasulfide	—	1
Phosphorus trichloride	0.5	3
Phthalic anhydride	2	12
Picric acid—Skin	—	0.1
Pival ^[R] (2-Pivalyl-1,3- indandione)	—	0.1
Plaster of Paris	—	10
Platinum (Soluble Salts) as Pt	—	0.002
Polychlorobiphenyls, see Chlorodiphenyls		
Propane	Simple	Asphyxiant
Propargyl alcohol—Skin	1	—
n-Propyl acetate	200	840
Propyl alcohol	200	500
n-Propyl nitrate	25	110
Propylene dichloride (1,2- Dichloropropane)	75	350
Propylene glycol monomethyl ether	100	360
Propylene imine—Skin	2	5
Propylene oxide	100	240
Propyne, see Methylacetylene		
Pyrethrum	—	5
Pyridine	5	15
Quinone	0.1	0.4
RDX—Skin	—	1.5
Rhodium, Metal fume and dusts, as Rh	—	0.1
Soluble salts	—	0.001
Ronnel	—	10
Rosin Core Solder, pyrolysis pro- ducts (as formaldehyde)	—	0.1
Rotenone (commercial)	—	5
Rouge	—	10
Selenium compounds (as Se)	—	0.2
Selenium hexafluoride	0.05	0.4
Silicon Carbide	—	10
Silver, metal and soluble com- pounds	—	0.01
Sodium fluoroacetate (1080)— Skin	—	0.05
Sodium hydroxide	—	2
Starch	—	10
Stibine	0.1	0.5
Stoddard solvent	200	1,150
Strychnine	—	0.15
Sucrose	—	10
Sulfur dioxide	5	13
Sulfur hexafluoride	1,000	6,000
Sulfuric acid	—	1
Sulfur monochloride	1	6
Sulfur pentafluoride	0.025	0.25
Sulfuryl fluoride	5	20

TABLE 1

PERMISSIBLE EXPOSURE LIMITS (PEL)

Substance	ppm (See note a)	mg/M ³ (See note b)
Systox, see Demeton ^[R]	—	—
2,4,5 T	—	10
Tantalum	—	5
TEDP—Skin	—	0.2
Tellurium	—	0.1
Tellurium hexafluoride	0.02	0.2
TEPP—Skin	—	0.05
C Terphenyls	1	9
1,1,1,2-Tetrachloro-2,2- difluoroethane	500	4,170
1,1,2,2-Tetrachloro-1,2- difluoroethane	500	4,170
1,1,2,2-Tetrachloroethane—Skin	5	35
Tetrachloromethane, see Carbon tetrachloride		
Tetrachloronaphthalene—Skin	—	2
Tetraethyl lead (as Pb)—Skin	—	0.100 (See note h)
Tetrahydrofuran	200	590
Tetramethyl lead (as Pb)—Skin	—	0.150 (See note h)
Tetramethyl succinonitrile—Skin	0.5	3
Tetranitromethane	1	8
Tetryl (2,4,6-trinitrophenyl- methylnitramine)—Skin	—	1.5
Thallium (soluble compounds)— Skin (as Tl)	—	0.1
Thiram ^R	—	5
Tin (inorganic compounds, except SnH ₄ and SnO ₂) as Sn	—	2
Tin (organic compounds)—skin (as Sn)	—	0.1
Tin oxide	—	10
Titanium dioxide	—	10
C Toluene-2,4-diisocyanate	0.02	0.14
o-Toluidine—Skin	5	22
Toxaphene, see Chlorinated camphene		
Tributyl phosphate	—	5
1,1,1-Trichloroethane, see Methyl chloroform		
1,1,2-Trichloroethane—Skin	10	45
Trichloromethane, see Chloroform		
Trichloronaphthalene—Skin	—	5
1,2,3-Trichloropropane	50	300
1,1,2-Trichloro 1,2,2- trifluoroethane	1,000	7,600
Triethylamine	25	100
Trifluoromono-bromomethane	1,000	6,100
Trimethyl benzene	25	120
2,4,6-Trinitrophenol, see Picric acid		
2,4,6-Trinitrophenyl- methylnitramine, see Tetryl		
Trinitrotoluene—Skin	—	1.5
Triorthocresyl phosphate	—	0.1
Triphenyl phosphate	—	3
Tungsten & Compounds, as W		
Soluble	—	1
Insoluble	—	5
Turpentine	100	560
Uranium (natural) sol. & insol. compounds as U	—	0.2
Vanadium (V ₂ O ₅), as V Dust	—	0.5
Vinyl acetate	10	30
Vinyl bromide	250	1,100
Vinyl toluene	100	480
Warfarin	—	0.1
Xylene (xylol)	100	435
Xylidine—Skin	5	25
Yttrium	—	1
Zinc chloride fume	—	1
Zinc oxide fume	—	5
Zirconium compounds (as Zr)	—	5

a) Parts of vapor or gas per million parts of contaminated air by volume at 25°C and 760 mm. Hg. pressure.

b) Approximate milligrams of substance per cubic meter of air.

- d) An atmospheric concentration of not more than 0.02 ppm, or personal protection may be necessary to avoid headache.
- e) <5-7 μm in diameter.
- f) As sampled by method that does not collect vapor.
- g) According to analytically determined composition.
- h) For control of general room air, biologic monitoring is essential for personnel control.

+ TABLE 2
(See note ^a)

Material	8-hour time-weighted average	Acceptable ceiling concentration	Acceptable maximum peak above the acceptable ceiling concentration for an 8-hour shift.	
			Concentration	Maximum duration
Benzene (Z37.4-1969)	10 ppm	25 ppm	50 ppm	10 minutes.
Beryllium and beryllium compounds (Z37.29-1970)	2 μg/M ³	5 μg/M ³	25 μg/M ³	30 minutes.
Cadmium dust (Z37.5-1970)	0.2 mg/M ³	0.6 mg/M ³		
Carbon disulfide (Z37.3-1968)	20 ppm	30 ppm	100 ppm	30 minutes.
Carbon Tetrachloride (Z37.17-1967)	10 ppm	25 ppm	200 ppm	5 minutes in any 4 hours.
Ethylene dibromide (Z37.31-1970)	20 ppm	30 ppm	50 ppm	5 minutes.
Ethylene dichloride (Z37.21-1969)	50 ppm	100 ppm	200 ppm	5 minutes in any 3 hours.
Methylene Chloride (Z37.23-1969)	500 ppm	1,000 ppm	2,000 ppm	5 minutes in any 2 hours.
Organo (alkyl) mercury (Z37.30-1969)	0.01 mg/M ³	0.04 mg/M ³		
Styrene (Z37.15-1969)	100 ppm	200 ppm	600 ppm	5 minutes in any 3 hours.
Trichloroethylene (Z37.19-1967)	100 ppm	200 ppm	300 ppm	5 minutes in any 2 hours.
Tetrachloroethylene (Z37.22-1967)	100 ppm	200 ppm	300 ppm	5 minutes in any 3 hours.
Toluene (Z37.12-1967)	200 ppm	300 ppm	500 ppm	10 minutes.
Hydrogen sulfide (Z37.2-1966)	10 ppm	20 ppm	50 ppm	10 minutes once only if no measurable exposure occurs.
Mercury (Z37.8-1971)	0.05 mg/M ³	0.1 mg/M ³		
Chromic acid and chromates (Z37.7-1973)	0.1 mg/M ³	0.3 mg/M ³		

NOTE: ^a **Acceptable ceiling concentrations.** An employee's exposure to a material listed in Table 2 shall not exceed at any time during an 8-hour shift the acceptable ceiling concentration limit given for the material in the table, except for a time period, and up to a concentration not exceeding the maximum duration and concentration allowed in the column under "acceptable maximum peak above the acceptable ceiling concentration for an 8-hour shift."

Example. During an 8-hour work shift, an employee may be exposed to a concentration of Benzene above 25 ppm (but never above 50 ppm) only for a maximum period of 10 minutes. Such exposure must be compensated by exposures to concentrations less than 10 ppm so that the cumulative exposure for the entire 8-hour work shift does not exceed a weighted average of 10 ppm.

+ TABLE 3

PARTICULATES

Substance	Mppcf (See note e)	mg/M ³
Silica:		
Crystalline: (See note f)		
Quartz (respirable)		10mg/M ³ m
		%SiO ₂ +2
Quartz (total dust)		30mg/M ³
		%SiO ₂ +3
Crystobalite: Use 1/2 the value calculated from the mass formulae for quartz.		
Tridymite: Use 1/2 the value calculated from the formulae for quartz.		
Amorphous, including natural diatomaceous earth	20	80mg/M ³
		%SiO ₂
Silicates (less than 1% crystalline silica):		
Mica	20	
Soapstone	20	
Talc	20	
Portland cement	50	
Graphite (natural)	15	
Coal dust (respirable fraction less than 5% SiO ₂)		2.4mg/M ³ or 10mg/M ³
For more than 5% SiO ₂		%SiO ₂ +2
Inert or nuisance dust:		
Respirable fraction		5mg/M ³
Total dust		10mg/M ³
Total particulates (less than 1% SiO ₂)		10mg/M ³
Respirable fraction		5mg/M ³

NOTE: Conversion factors—
mppcf X 35.3 = million particles per cubic meter
= particles per c.c.

e Millions of particles per cubic foot of air, based on impinger samples counted by light-field techniques.

f The percentage of crystalline silica in the formula is the amount determined from airborne samples, except in those instances in which other methods have been shown to be applicable.

m Both concentration and percent quartz for the application of this limit are to be determined from the fraction passing a size-selector with the following characteristics:

Aerodynamic diameter (unit density sphere)	Percent passing selector
2	90
2.5	75
3.5	50
5.0	25
10	0

The measurements under this note refer to the use of an AEC instrument. If the respirable fraction of coal dust is determined with a MRE the figure corresponding to that of a 2.4 mg/M³ in the table for coal dust is 4.5 mg/M³.

[Statutory Authority: RCW 49.17.040 and 49.17.050, 85-01-022 (Order 84-24), § 296-62-07515, filed 12/11/84; 82-13-045 (Order 82-22), § 296-62-07515, filed 6/11/82. Statutory Authority: RCW 49.17.040, 49.17.050 and 49.17.240, 81-16-015 (Order 81-20), § 296-62-07515, filed 7/27/81; 80-11-010 (Order 80-14), § 296-62-07515, filed 8/8/80. Statutory Authority:

RCW 49.17.040, 49.17.150 and 49.17.240. 79-08-115 (Order 79-9), § 296-62-07515, filed 7/31/79; Order 73-3, § 296-62-07515, filed 5/7/73.]

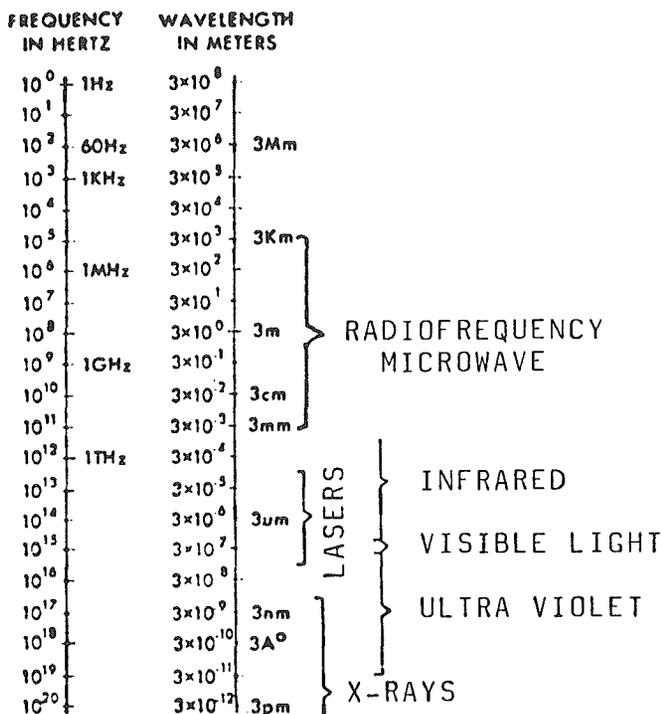
WAC 296-62-09001 Definitions. (1) "Physical agents" shall mean, but are not limited to: Illumination, ionizing radiation, nonionizing radiation, pressure, vibration, temperature and humidity, and noise.

(2) "Illumination" means radiant energy evaluated according to its capacity to produce visual sensation.

(3) "Nonionizing radiation" as related to industrial sources, means electromagnetic radiation within the spectral range of approximately 200 nanometers to 3 kilometers including ultraviolet, visible, infrared and radiofrequency/microwave radiation. The electromagnetic spectrum is shown graphically in Figure 1 below.

ELECTROMAGNETIC SPECTRUM

Figure 1



(4) Pressure is a barometric force. Positive pressure would be that above 14.7 lbs. per square inch absolute and negative pressure would be that below 14.7 lbs. per square inch absolute. 14.7 lbs. per square inch equals 760 mm. mercury.

(5) "Vibration" means rapid movement to and fro or oscillating movement.

(6) "Noise" means unwanted sound or loud discordant or disagreeable sound or sounds.

(7) "Temperature" means the degree of hotness or coldness measured by use of a thermometer.

(8) "Radiant heat" means infrared radiation emitted from hot surfaces.

(9) "Relative humidity" means the percent of moisture in the air compared to the maximum amount of

moisture the air could contain at the same temperature. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-62-09001, filed 12/11/84; Order 73-3, § 296-62-09001, filed 5/7/73.]

WAC 296-62-09004 Ionizing radiation. (1) Definitions applicable to this section.

NOTE: Definitions also appear in some subsections.

(a) "Radiation" includes alpha rays, beta rays, gamma rays, x-rays, neutrons, high-speed electrons, high-speed protons, and other atomic particles; but such term does not include sound or radio waves, or visible light, or infrared or ultraviolet light.

(b) "Radioactive material" means any material which emits, by spontaneous nuclear disintegration, corpuscular or electromagnetic emanations.

(c) "Restricted area" means any area access to which is controlled by the employer for purposes of protection of individuals from exposure to radiation or radioactive materials.

(d) "Unrestricted area" means any area access to which is not controlled by the employer for purposes of protection of individuals from exposure to radiation or radioactive materials.

(e) "Dose" means the quantity of ionizing radiation absorbed, per unit of mass, by the body or by any portion of the body. When the provisions in this section specify a dose during a period of time, the dose is the total quantity of radiation absorbed, per unit of mass, by the body or by any portion of the body during such period of time. Several different units of dose are in current use. Definitions of units used in this section are set forth in subdivisions (f) and (g) of this subsection.

(f) "Rad" means a measure of the dose of any ionizing radiation to body tissues in terms of the energy absorbed per unit of mass of the tissue. One rad is the dose corresponding to the absorption of 100 ergs per gram of tissue (1 millirad (mrad) = 0.001 rad).

(g) "Rem" means a measure of the dose of any ionizing radiation to body tissue in terms of its estimated biological effect relative to a dose of 1 roentgen (r) of x-rays (1 millirem (mrem) = 0.001 rem). The relation of the rem to other dose units depends upon the biological effect under consideration and upon the conditions for irradiation. Each of the following is considered to be equivalent to a dose of 1 rem:

(i) A dose of 1 roentgen due to x- or gamma radiation;

(ii) A dose of 1 rad due to x-, gamma, or beta radiation;

(iii) A dose of 0.1 rad due to neutrons or high energy protons;

(iv) A dose of 0.05 rad due to particles heavier than protons and with sufficient energy to reach the lens of the eye;

(v) If it is more convenient to measure the neutron flux, or equivalent, than to determine the neutron dose in rads, as provided in item (iii) of this subdivision, 1 rem of neutron radiation may, for purposes of the provisions in this section be assumed to be equivalent to 14

million neutrons per square centimeter incident upon the body; or, if there is sufficient information to estimate with reasonable accuracy the approximate distribution in energy of the neutrons, the incident number of neutrons per square centimeter equivalent to 1 rem may be estimated from the following table:

Neutron Flux Dose Equivalents

Neutron energy (million electron volts (Mev))	Number of neutrons per square centimeter equivalent to a dose of 1 rem (neutrons/cm ²)	Average flux to deliver 100 millirem in 40 hours (neutrons/cm ² per sec.)
Thermal --	970 X 10 ⁶	670
0.0001 - - -	720 X 10 ⁶	500
0.005 - - - -	820 X 10 ⁶	570
0.02 - - - - -	400 X 10 ⁶	280
0.1 - - - - -	120 X 10 ⁶	80
0.5 - - - - -	43 X 10 ⁶	30
1.0 - - - - -	26 X 10 ⁶	18
2.5 - - - - -	29 X 10 ⁶	20
5.0 - - - - -	26 X 10 ⁶	18
7.5 - - - - -	24 X 10 ⁶	17
10 - - - - -	24 X 10 ⁶	17
10 to 30 --	14 X 10 ⁶	10

(h) For determining exposures to x- or gamma rays up to 3 Mev., the dose limits specified in this section may be assumed to be equivalent to the "air dose." For the purpose of this section "air dose" means that the dose is measured by a properly calibrated appropriate instrument in air at or near the body surface in the region of the highest dosage rate.

(i) "Curie" means a unit of measurement of radioactivity. One curie (Ci) is that quantity of radioactive material which decays at the rate of 2.2 x 10¹² disintegrations per minute (dpm).

- (i) One millicurie (mCi) = 10⁻³Ci
- (ii) One microcurie (uCi) = 10⁻⁶Ci
- (iii) One nanocurie (nCi) = 10⁻⁹Ci
- (iv) One picocurie (pCi) = 10⁻¹²Ci

(2) Nuclear Regulatory Commission licensees—NRC contractors operating NRC plants and facilities. (a) Any employer who possesses or uses source material, byproduct material, or special nuclear material, as defined in the Atomic Energy Act of 1954, as amended, under a license issued by the Nuclear Regulatory Commission and in accordance with the requirements of chapter 402-24 WAC shall be deemed to be in compliance with the requirements of this section with respect to such possession and use.

(b) NRC contractors operating NRC plants and facilities: Any employer who possesses or uses source material, byproduct material, special nuclear material, or other radiation sources under a contract with the Nuclear Regulatory Commission for the operation of NRC plants and facilities and in accordance with the standards, procedures, and other requirements for radiation

protection established by the commission for such contract pursuant to the Atomic Energy Act of 1954 as amended (42 U.S.C. 2011 et seq.) shall be deemed to be in compliance with the requirements of this section with respect to such possession and use.

(c) State licensees or registrants:

(i) Atomic Energy Act sources. Any employer who possesses or uses source material, byproduct material, or special nuclear material, as defined in the Atomic Energy Act of 1954, as amended (42 U.S.C. 2011 et seq.), and has registered such sources with the state shall be deemed to be in compliance with the radiation requirements of this section, insofar as his possession and use of such material is concerned.

(ii) Other sources. Any employer who possesses or uses radiation sources other than source material, byproduct material, or special nuclear material, as defined in the Atomic Energy Act of 1954, as amended (42 U.S.C. 2011 et seq.), and has registered such sources with the state shall be deemed to be in compliance with the radiation requirements of this section insofar as his possession and use of such material is concerned.

(3) Exposure of individuals to radiation in restricted areas. (a) Except as provided in subdivision (b) of this subsection, no employer shall possess, use, or transfer sources of ionizing radiation in such a manner as to cause any individual in a restricted area to receive in any period of one calendar quarter from sources in the employer's possession or control a dose in excess of the limits specified in the following table:

	Rems per Calendar Quarter
EXPOSURE IN RESTRICTED AREAS	
Whole body: Head and trunk; active blood-forming organs; lens of eyes; or gonads - - - - -	1 1/4
Hand and forearms; feet and ankles - - - - -	18 3/4
Skin of whole body - - - - -	7 1/2

(b) An employer may permit an individual in a restricted area to receive doses to the whole body greater than those permitted under subdivision (a) of this subsection, so long as:

(i) During any calendar quarter the dose to the whole body shall not exceed 3 rems; and

(ii) The dose to the whole body, when added to the accumulated occupational dose to the whole body, shall not exceed 5 (N-18) rems, where "N" equals the individual's age in years at his last birthday; and

(iii) The employer maintains adequate past and current exposure records which show that the addition of such a dose will not cause the individual to exceed the amount authorized in this subdivision. As used in this subdivision "Dose to the whole body" shall be deemed to include any dose to the whole body, gonad, active blood-forming organs, head and trunk, or lens of the eye.

(c) No employer shall permit any employee who is under 18 years of age to receive in any period of one calendar quarter a dose in excess of 10 percent of the limits specified in the preceding table entitled "exposure in restricted areas."

(d) "Calendar quarter" means any 3-month period determined as follows:

(i) The first period of any year may begin on any date in January: *Provided*, That the second, third and fourth periods accordingly begin on the same date in April, July, and October, respectively, and that the fourth period extends into January of the succeeding year, if necessary to complete a 3-month quarter. During the first year of use of this method of determination, the first period for that year shall also include any additional days in January preceding the starting date for the first period; or

(ii) The first period in a calendar year of 13 complete, consecutive calendar weeks; the second period in a calendar year of 13 complete consecutive weeks; the third period in a calendar year of 13 complete, consecutive calendar weeks; the fourth period in a calendar year of 13 complete, consecutive calendar weeks. If at the end of a calendar year there are any days not falling within a complete calendar week of that year, such days shall be included within the last complete calendar week of that year. If at the beginning of any calendar year there are days not falling within a complete calendar week of that year, such days shall be included within the last complete calendar week of the previous year; or

(iii) The four periods in a calendar year may consist of the first 14 complete, consecutive calendar weeks; the next 12 complete, consecutive calendar weeks, the next 14 complete, consecutive calendar weeks, and the last 12 complete, consecutive calendar weeks. If at the end of a calendar year there are any days not falling within a complete calendar week of that year, such days shall be included (for purposes of this section) within the last complete calendar week of the year. If at the beginning of any calendar year there are days not falling within a complete calendar week of that year, such days shall be included (for purposes of this section) within the last complete week of the previous year.

(e) No employer shall change the method used by him to determine calendar quarters except at the beginning of a calendar year.

(4) Exposure to airborne radioactive material. (a) No employer shall possess, use or transport radioactive material in such a manner as to cause any employee, within a restricted area, to be exposed to airborne radioactive material in an average concentration in excess of the limits specified in Table I of WAC 402-24-220, Appendix A. The limits given in Table I are for exposure to the concentrations specified for 40 hours in any workweek of 7 consecutive days. In any such period where the number of hours of exposure is less than 40 the limits specified in the table may be increased proportionately. In any such period where the number of hours of exposure is greater than 40, the limits specified in the table shall be decreased proportionately.

(b) No employer shall possess, use, or transfer radioactive material in such a manner as to cause any individual within a restricted area, who is under 18 years of age, to be exposed to airborne radioactive material in an

average concentration in excess of the limits specified in Table II of WAC 402-24-220, Appendix A.

For purposes of this subdivision, concentrations may be averaged over periods not greater than 1 week.

(c) "Exposed" as used in this subdivision means that the individual is present in an airborne concentration. No allowance shall be made for the use of protective clothing or equipment, or particle size.

(5) Precautionary procedures and personal monitoring. (a) Every employer shall make such surveys as may be necessary for him to comply with the provisions in this section. "Survey" means an evaluation of the radiation hazards incident to the production, use, release, disposal, or presence of radioactive materials or other sources of radiation under a specific set of conditions. When appropriate, such evaluation includes a physical survey of the location of materials and equipment, and measurements of levels of radiation or concentrations of radioactive material present.

(b) Every employer shall supply appropriate personnel monitoring equipment, such as film badges, pocket chambers, pocket dosimeters, or film rings, to, and shall require the use of such equipment by:

(i) Each employee who enters a restricted area under such circumstances that he receives, or is likely to receive, a dose in any calendar quarter in excess of 25 percent of the applicable value specified in subsection (3)(a) of this section; and

(ii) Each employee under 18 years of age who enters a restricted area under such circumstances that he receives, or is likely to receive a dose in any calendar quarter in excess of 5 percent of the applicable value specified in subsection (3)(a) of this section; and

(iii) Each employee who enters a high radiation area.

(c) As used in this section:

(i) "Personnel monitoring equipment" means devices designed to be worn or carried by an individual for the purpose of measuring the dose received (e.g., film badges, pocket chambers, pocket dosimeters, film rings, etc.);

(ii) "Radiation area" means any area, accessible to personnel, in which there exists radiation at such levels that a major portion of the body could receive in any 1 hour a dose in excess of 5 millirem, or in any 5 consecutive days a dose in excess of 100 millirem; and

(iii) "High radiation area" means any area, accessible to personnel, in which there exists radiation at such levels that a major portion of the body could receive in any one hour a dose in excess of 100 millirem.

(6) Caution signs, labels and signals. (a) General. (i) Symbols prescribed by this subsection shall use the conventional radiation caution colors (magenta or purple on yellow background). The symbol prescribed by this subsection is the conventional three-bladed design:

RADIATION SYMBOL

1. Cross-hatched area is to be magenta or purple.
2. Background is to be yellow.

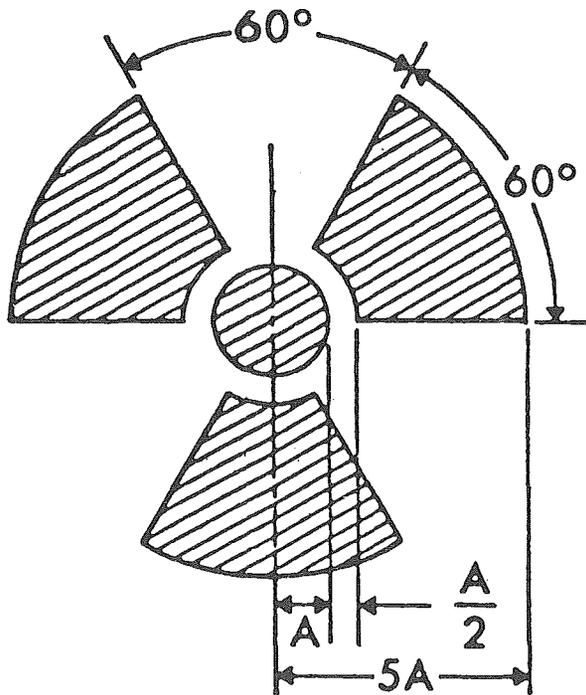


FIGURE G-10

(ii) In addition to the contents of signs and labels prescribed in this subsection, employers may provide on or near such signs and labels any additional information which may be appropriate in aiding individuals to minimize exposure to radiation or to radioactive material.

(b) Radiation area. Each radiation area shall be conspicuously posted with a sign or signs bearing the radiation caution symbol described in subdivision (a) of this subsection and the words:

CAUTION
RADIATION AREA

(c) High radiation area. (i) Each high radiation area shall be conspicuously posted with a sign or signs bearing the radiation caution symbol and the words:

CAUTION
HIGH RADIATION AREA

(ii) Each high radiation area shall be equipped with a control device which shall either cause the level of radiation to be reduced below that at which an individual might receive a dose of 100 millirems in 1 hour upon entry into the area or shall energize a conspicuous visible or audible alarm signal in such a manner that the individual entering and the employer or a supervisor of the activity are made aware of the entry. In the case of a

high radiation area established for a period of 30 days or less, such control device is not required.

(d) Airborne radioactivity area. (i) As used in the provisions of this section, "airborne radioactivity area" means:

(A) Any room, enclosure, or operating area in which airborne radioactive materials, composed wholly or partly of radioactive material, exist in concentrations in excess of the amounts specified in column 1 of Table I of WAC 402-24-220, Appendix A.

(B) Any room, enclosure, or operating area in which airborne radioactive materials exist in concentrations which, averaged over the number of hours in any week during which individuals are in the area, exceed 25 percent of the amounts specified in column 1 of Table I of WAC 402-24-220, Appendix A.

(ii) Each airborne radioactivity area shall be conspicuously posted with a sign or signs bearing the radiation caution symbol described in subdivision (a) of this subsection and the words:

CAUTION
AIRBORNE RADIOACTIVITY AREA

(e) Additional requirements. (i) Each area or room in which radioactive material is used or stored and which contains any radioactive material (other than natural uranium or thorium) in any amount exceeding 10 times the quantity of such material specified in WAC 402-24-230, Appendix B shall be conspicuously posted with a sign or signs bearing the radiation caution symbol described in subdivision (a) of this subsection and the words:

CAUTION
RADIOACTIVE MATERIALS

(ii) Each area or room in which natural uranium or thorium is used or stored in an amount exceeding 100 times the quantity of such material specified in chapter 402-24 WAC shall be conspicuously posted with a sign or signs bearing the radiation caution symbol described in subdivision (a) of this subsection and the words:

CAUTION
RADIOACTIVE MATERIALS

(f) Containers. (i) Each container in which is transported, stored, or used a quantity of any radioactive material (other than natural uranium or thorium) greater than the quantity of such material specified in WAC 402-24-230, Appendix B shall bear a durable, clearly visible label bearing the radiation caution symbol described in subdivision (a) of this subsection and the words:

CAUTION
RADIOACTIVE MATERIALS

(ii) Each container in which natural uranium or thorium is transported, stored, or used in a quantity greater than 10 times the quantity specified in WAC 402-24-

230, Appendix B shall bear a durable, clearly visible label bearing the radiation caution symbol described in subdivision (a) of this subsection and the words:

CAUTION

RADIOACTIVE MATERIALS

(iii) Notwithstanding the provisions of items (i) and (ii) of this subdivision a label shall not be required:

(A) If the concentration of the material in the container does not exceed that specified in column 2 of Table I of WAC 402-24-220, Appendix A.

(B) For laboratory containers, such as beakers, flasks, and test tubes, used transiently in laboratory procedures, when the user is present.

(iv) Where containers are used for storage, the labels required in this subdivision shall state also the quantities and kinds of radioactive materials in the containers and the date of measurement of the quantities.

(7) Immediate evacuation warning signal. (a) Signal characteristics. (i) The signal shall be a midfrequency complex sound wave amplitude modulated at a subsonic frequency. The complex sound wave in free space shall have a fundamental frequency f^1 between 450 and 500 hertz (Hz) modulated at a subsonic rate between 4 and 5 hertz.

(ii) The signal generator shall not be less than 75 decibels at every location where an individual may be present whose immediate, rapid, and complete evacuation is essential.

(iii) A sufficient number of signal units shall be installed such that the requirements of item (i) of this subdivision are met at every location where an individual may be present whose immediate, rapid, and complete evacuation is essential.

(iv) The signal shall be unique in the plant or facility in which it is installed.

(v) The minimum duration of the signal shall be sufficient to insure that all affected persons hear the signal.

(vi) The signal-generating system shall respond automatically to an initiating event without requiring any human action to sound the signal.

(b) Design objectives. (i) The signal-generating system shall be designed to incorporate components which enable the system to produce the desired signal each time it is activated within one-half second of activation.

(ii) The signal-generating system shall be provided with an automatically activated secondary power supply which is adequate to simultaneously power all emergency equipment to which it is connected, if operation during power failure is necessary, except in those systems using batteries as the primary source of power.

(iii) All components of the signal-generating system shall be located to provide maximum practicable protection against damage in case of fire, explosion, corrosive atmosphere, or other environmental extremes consistent with adequate system performance.

(iv) The signal-generating system shall be designed with the minimum number of components necessary to make it function as intended, and should utilize components which do not require frequent servicing such as lubrication or cleaning.

(v) Where several activating devices feed activating information to a central signal generator, failure of any activating device shall not render the signal-generator system inoperable to activating information from the remaining devices.

(vi) The signal-generating system shall be designed to enhance the probability that alarm occurs only when immediate evacuation is warranted. The number of false alarms shall not be so great that the signal will come to be disregarded and shall be low enough to minimize personal injuries or excessive property damage that might result from such evacuation.

(c) Testing. (i) Initial tests, inspections, and checks of the signal-generating system shall be made to verify that the fabrication and installation were made in accordance with design plans and specifications and to develop a thorough knowledge of the performance of the system and all components under normal and hostile conditions.

(ii) Once the system has been placed in service, periodic tests, inspections, and checks shall be made to minimize the possibility of malfunction.

(iii) Following significant alterations or revisions to the system, tests and checks similar to the initial installation tests shall be made.

(iv) Tests shall be designed to minimize hazards while conducting the tests.

(v) Prior to normal operation the signal-generating system shall be checked physically and functionally to assure reliability and to demonstrate accuracy and performance. Specific tests shall include:

(A) All power sources.

(B) Calibration and calibration stability.

(C) Trip levels and stability.

(D) Continuity of function with loss and return of required services such as AC or DC power, air pressure, etc.

(E) All indicators.

(F) Trouble indicator circuits and signals, where used.

(G) Air pressure (if used).

(H) Determine that sound level of the signal is within the limit of item (a)(ii) of this subsection at all points that require immediate evacuation.

(vi) In addition to the initial startup and operating tests, periodic scheduled performance tests and status checks must be made to insure that the system is at all times operating within design limits and capable of the required response. Specific periodic tests or checks or both shall include:

(A) Adequacy of signal activation device.

(B) All power sources.

(C) Function of all alarm circuits and trouble indicator circuits including trip levels.

(D) Air pressure (if used).

(E) Function of entire system including operation without power where required.

(F) Complete operational tests including sounding of the signal and determination that sound levels are adequate.

(vii) Periodic tests shall be scheduled on the basis of need, experience, difficulty, and disruption of operations.

The entire system should be operationally tested at least quarterly.

(viii) All employees whose work may necessitate their presence in an area covered by the signal shall be made familiar with the actual sound of the signal—preferably as it sounds at their work location. Before placing the system into operation, all employees normally working in the area shall be made acquainted with the signal by actual demonstration at their work locations.

(8) Exceptions from posting requirements. Notwithstanding the provisions of subsection (6) of this section:

(a) A room or area is not required to be posted with a caution sign because of the presence of a sealed source, provided the radiation level 12 inches from the surface of the source container or housing does not exceed 5 millirem per hour.

(b) Rooms or other areas in onsite medical facilities are not required to be posted with caution signs because of the presence of patients containing radioactive material, provided that there are personnel in attendance who shall take the precautions necessary to prevent the exposure of any individual to radiation or radioactive material in excess of the limits established in the provisions of this section.

(c) Caution signs are not required to be posted at areas or rooms containing radioactive materials for periods of less than 8 hours: *Provided, That*

(i) The materials are constantly attended during such periods by an individual who shall take the precautions necessary to prevent the exposure of any individual to radiation or radioactive materials in excess of the limits established in the provisions of this section; and

(ii) Such area or room is subject to the employer's control.

(9) Exemptions for radioactive materials packaged for shipment. Radioactive materials packaged and labeled in accordance with regulations of the Department of Transportation published in 49 CFR Chapter I, are exempt from the labeling and posting requirements of this section during shipment, provided that the inside containers are labeled in accordance with the provisions of subsection (6) of this section.

(10) Instruction of personnel, posting. (a) Employers regulated by the Nuclear Regulatory Commission shall be governed by 10 CFR Part 20 standards. Employers conducting business in Washington state shall be governed by the requirements of the laws and regulations of the state. All other employers shall be regulated by the following:

(b) All individuals working in or frequenting any portion of a radiation area shall be informed of the occurrence of radioactive materials or of radiation in such portions of the radiation area; shall be instructed in the safety problems associated with exposure to such materials or radiation and in precautions or devices to minimize exposure; shall be instructed in the applicable provisions of this section for the protection of employees from exposure to radiation or radioactive materials; and shall be advised of reports of radiation exposure which employees may request pursuant to the regulations in this section.

(c) Each employer to whom this section applies shall post a current copy of its provisions and a copy of the operating procedures applicable to the work conspicuously in such locations as to insure that employees working in or frequenting radiation areas will observe these documents on the way to and from their place of employment, or shall keep such documents available for examination of employees upon request.

(11) Storage of radioactive materials. Radioactive materials stored in a nonradiation area shall be secured against unauthorized removal from the place of storage.

(12) Waste disposal. No employer shall dispose of radioactive material except as provided for in WAC 402-24-130.

(13) Notification of incidents. (a) Immediate notification. Each employer shall immediately notify the industrial hygiene section, division of industrial safety and health for employees not protected by the Nuclear Regulatory Commission by means of 10 CFR Part 20; subsection (2)(b) of this section by telephone or telegraph of any incident involving radiation which may have caused or threatens to cause:

(i) Exposure of the whole body of any individual to 25 rems or more of radiation; exposure of the skin of the whole body of any individual to 150 rems or more of radiation; or exposure of the feet, ankles, hands, or forearms of any individual to 375 rems or more of radiation; or

(ii) The release of radioactive material in concentrations which, if averaged over a period of 24 hours, would exceed 5,000 times the limit specified for such materials in Table II of WAC 402-24-220, Appendix A.

(iii) A loss of 1 working week or more of the operation of any facilities affected; or

(iv) Damage to property in excess of \$100,000.

(b) Twenty-four hour notification. Each employer shall within 24 hours following its occurrence notify the industrial hygiene section, division of industrial safety and health, for employees not protected by the Nuclear Regulatory Commission by means of 10 CFR Part 20; subsection (2)(b) of this section, by telephone or telegraph of any incident involving radiation which may have caused or threatens to cause:

(i) Exposure of the whole body of any individual to 5 rems or more of radiation; exposure of the skin of the whole body of any individual to 30 rems or more of radiation; or exposure of the feet, ankles, hands, or forearms to 75 rems or more of radiation; or

(ii) A loss of 1 day or more of the operation of any facilities; or

(iii) Damage to property in excess of \$10,000.

(14) Reports of overexposure and excessive levels and concentrations. (a) In addition to any notification required by subsection (13) of this section each employer shall make a report in writing within 30 days to the industrial hygiene section division of industrial safety and health, for employees not protected by the Nuclear Regulatory Commission by means of 10 CFR Part 20; or under subsection (2)(b) of this section, of each exposure of an individual to radiation or concentrations of radioactive material in excess of any applicable limit in this

section. Each report required under this subdivision shall describe the extent of exposure of persons to radiation or to radioactive material; levels of radiation and concentration of radioactive material involved, the cause of the exposure, levels of concentrations; and corrective steps taken or planned to assure against a recurrence.

(b) In any case where an employer is required pursuant to the provisions of this subsection to report to the industrial hygiene section, division of industrial safety and health, any exposure of an individual to radiation or to concentrations of radioactive material, the employer shall also notify such individual of the nature and extent of exposure. Such notice shall be in writing and shall contain the following statement: "You should preserve this report for future reference."

(15) Records. (a) Every employer shall maintain records of the radiation exposure of all employees for whom personnel monitoring is required under subsection (5) of this section and advise each of his employees of his individual exposure on at least an annual basis.

(b) Every employer shall maintain records in the same units used in tables in subsection (2) of this section and WAC 402-24-220, Appendix A.

(16) Disclosure to former employee of individual employee's record. (a) At the request of a former employee an employer shall furnish to the employee a report of the employee's exposure to radiation as shown in records maintained by the employer pursuant to subdivision (15)(a) of this section. Such report shall be furnished within 30 days from the time the request is made, and shall cover each calendar quarter of the individual's employment involving exposure to radiation or such lesser period as may be requested by the employee. The report shall also include the results of any calculations and analysis of radioactive material deposited in the body of the employee. The report shall be in writing and contain the following statement: "You should preserve this report for future reference."

(b) The former employee's request should include appropriate identifying data, such as social security number and dates and locations of employment.

(17) [Reserved]

(18) Radiation standards for mining. (a) For the purpose of this subsection, a "working level" is defined as any combination of radon daughters in 1 liter of air which will result in the ultimate emission of 1.3×10^5 million electron volts of potential alpha energy. The numerical value of the "working level" is derived from the alpha energy released by the total decay of short-lived radon daughter products in equilibrium with 100 picocuries of radon 222 per liter of air. A working level month is defined as the exposure received by a worker breathing air at one working level concentration for $4\frac{1}{3}$ weeks of 40 hours each.

(b) Occupational exposure to radon daughters in mines shall be controlled so that no individual will receive an exposure of more than 2 working level months in any calendar quarter and no more than 4 working level months in any calendar year. Actual exposures shall be kept as far below these values as practicable.

(c)(i) For uranium mines, records of environmental concentrations in the occupied parts of the mine, and of the time spent in each area by each person involved in an underground work shall be established and maintained. These records shall be in sufficient detail to permit calculations of the exposures, in units of working level months, of the individuals and shall be available for inspection by the industrial hygiene section, division of safety and health or their authorized representatives.

(ii) For other than uranium mines and for surface workers in all mines, item (i) of this subdivision will be applicable: *Provided, however,* That if no environmental sample shows a concentration greater than 0.33 working level in any occupied part of the mine, the maintenance of individual occupancy records and the calculation of individual exposures will not be required.

(d)(i) At the request of an employee (or former employee) a report of the employee's exposure to radiation as shown in records maintained by the employer pursuant to subdivision (c) of this subsection shall be furnished to him. The report shall be in writing and contain the following statement:

"This report is furnished to you under the provisions of the state of Washington, Ionizing Radiation Safety and Health Standards (chapter 296-62 WAC). You should preserve this report for future reference."

(ii) The former employee's request should include appropriate identifying data, such as Social Security number and dates and locations of employment. See tables in WAC 402-24-220, Appendix A and 402-24-230, Appendix B. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-62-09004, filed 12/11/84; Order 75-15, § 296-62-09004, filed 4/18/75.]

WAC 296-62-09005 Nonionizing radiation. (1) Introduction. Employees shall be protected from exposure to hazardous levels of nonionizing radiation. Health standards have been established for ultraviolet, radiofrequency/microwave, and laser radiations which shall be used to promote a healthful working environment. These standards refer to levels of nonionizing radiation and represent conditions under which it is believed that nearly all workers may be repeatedly exposed day after day without adverse effects. They are based on the best available information from experimental studies. Because of the wide variations in individual susceptibility, exposure of an occasional individual at, or even below, the permissible limit, may result in discomfort, aggravation of a preexisting condition, or physiological damage.

(a) Permissible exposure limits (PELs) refer to a time weighted average (TWA) of exposure for an 8-hour work day within a 40-hour workweek. Exceptions are those limits which are given a ceiling value.

(b) These PELs should be interpreted and applied only by technically qualified persons.

(c) Ceiling value. There are nonionizing radiations which produce physiological responses from short intense exposure and the PELs for these radiations are more

appropriately based on this particular hazard. Nonionizing radiations with this type of hazard are best controlled by a ceiling value which is a maximum level of exposure which shall not be exceeded.

(2) The employer shall establish and maintain a program for the control and monitoring of nonionizing radiation hazards. This program shall provide employees adequate supervision, training, facilities, equipment, and supplies, for the control and assessment of nonionizing radiation hazards.

(3) Radiofrequency/microwave radiation permissible exposure limits.

(a) Definition: "Partial body exposure" means the case in which only the hands and forearms or the feet and legs below the knee are exposed.

(b) Warning symbol.

(i) The warning symbol for radiofrequency/microwave radiation shall consist of a red isosceles triangle above an inverted black isosceles triangle, separated and outlined by an aluminum color border. The words "Warning - Radiofrequency/microwave radiation hazard" shall appear in the upper triangle. See Figure 1.

(ii) All areas where entry may result in an exposure to radiofrequency/microwave radiation in excess of the PEL shall have a warning symbol prominently displayed at their entrance.

(iii) American National Standard Safety Color Code for Marking Physical Hazards and the Identification of Certain Equipment, Z53.1-1953, shall be used for color specification. All lettering and the border shall be of aluminum color.

(iv) The inclusion and choice of warning information or precautionary instructions is at the discretion of the user. If such information is included it shall appear in the lower triangle of the warning symbol.

(c) These PELs refer to radiofrequency/microwave radiation exposures in the frequency range of 300 kHz to 100 GHz. Based on current knowledge, it is believed that workers may be exposed at these PELs without adverse health effects.

(i) Table I gives the PELs in terms of the mean squared electric (E^2) and magnetic (H^2) field strengths and in terms of the equivalent plane-wave free-space power density, as a function of frequency.

(ii) The average exposure for any 6 minute (0.1 hour) period shall not exceed the PEL.

(iii) Measurements shall be made at distances of 5 cm or greater from any object.

(iv) For mixed or broadband fields at a number of frequencies for which there are different PELs, the fraction of the PEL incurred within each frequency interval shall be determined and the sum of these fractions shall not exceed unity.

(v) PELs given in Table I for frequencies between 300 kHz and 1 GHz may be exceeded for partial body exposures if the output power of the radiating device is 7 watts or less.

Table I. Radiofrequency/Microwave Radiation Permissible Exposure Limits (PELs).

Frequency(f)	Power Density*	Electric Field Strength Squared*	Magnetic Field Strength Squared*
	mW/cm ²	V ² /m ²	A ² /m ²
0.3 to 3 MHz	100	400,000	2.5
3 to 30 MHz	900/f ²	4000(900/f ²)	0.025(900/f ²)
30 to 300 MHz	1.0	4000	0.025
300 to 1500 MHz	f/300	4000(f/300)	0.025(f/300)
1.5 to 100 GHz	5.0	20,000	0.125

Note: f=frequency (MHz)

* Ceiling value

(4) Laser radiation permissible exposure limits.

(a) Definitions.

(i) "Diffuse reflection" means a change of the spatial distribution of a beam of radiation when it is reflected in many directions by a surface or medium.

(ii) "Specular reflection" means a mirrorlike reflection.

(iii) "Accessible radiation" means laser radiation to which human access is possible.

(b) All lasers and laser systems shall be classified in accordance with the Federal Laser Product Performance Standards (21 CFR 1040.10) or, if manufactured prior to August 2, 1976, in accordance with ANSI Z136.1-1980.

(i) Class I. Laser systems that are considered to be incapable of producing damaging radiation levels and are thereby exempt from control measures. This is a no hazard category.

(ii) Class II. Visible wavelength laser systems that have a low hazard potential because of the expected aversion response. There is some possibility of injury if stared at. This is a low hazard category.

(iii) Class III. Laser systems in which intrabeam viewing of the direct beam or specular reflections of the beam may be hazardous. This class is further subdivided into IIIa and IIIb. This is a moderate hazard category.



- Place handling and mounting instructions on reverse side.
- D = Scaling Unit.
- Lettering: Ratio of letter height to thickness of letter lines.
 Upper triangle: 5 to 1 Large
 6 to 1 Medium
 Lower triangle: 4 to 1 Small
 6 to 1 Medium
- Symbol is square, triangles are right-angle isosceles.

Figure 1

Radiofrequency/Microwave Radiation Hazard Warning Symbol

(iv) Class IV. Laser systems whose direct or diffusely reflected radiation may be hazardous and where the beam may constitute a fire hazard. Class IV systems require the use of controls that prevent exposure of the eye and skin to specular or diffuse reflections of the beam. This is a high hazard category.

(c) Warning signs and classification labels shall be prepared in accordance with 21 CFR 1040.10 when classifying lasers and laser systems, and ANSI Z136.1 - 1980 when using classified lasers and laser systems. All signs and labels shall be conspicuously displayed.

(i) The signal word "CAUTION" shall be used with all signs and labels associated with Class II and Class IIIa lasers and laser systems.

(ii) The signal word "DANGER" shall be used with all signs and labels associated with Class IIIb and Class IV lasers and laser systems.

(d) Personal protective equipment shall be provided at no cost to the employee and shall be worn whenever operational conditions or maintenance of lasers may result in a potentially hazardous exposure.

(i) Protective eyewear shall be specifically designed for protection against radiation of the wavelength and radiant energy of the laser or laser system. Ocular exposure shall not exceed the recommendations of ANSI Z136.1 - 1980.

(ii) For Class IV lasers and laser systems protective eyewear shall be worn for all operational conditions or maintenance which may result in exposures to laser radiation.

(e) Engineering controls shall be used whenever feasible to reduce the accessible radiation levels for Class IV lasers and laser systems to a lower classification level. These controls may include, but are not limited to: Protective housings, interlocks, optical system attenuators, enclosed beam paths, remote controls, beam stops, and emission delays with audible warnings.

(f) All employees who may be exposed to laser radiation shall receive laser safety training. The training shall ensure that the employees are knowledgeable of the potential hazards and control measures for the laser equipment in use.

(5) Ultraviolet radiation.

(a) These permissible exposure limits refer to ultraviolet radiation in the spectral region between 200 and 400 nanometer (nm) and represent conditions under which it is believed that nearly all workers may be repeatedly exposed without adverse effect. These values for exposure of the eye or the skin apply to ultraviolet radiation from arcs, gas, and vapor discharges, and incandescent sources, but do not apply to ultraviolet lasers or solar radiation. These levels should not be used for determining exposure of photosensitive individuals to ultraviolet radiation. These values shall be used in the control of exposure to continuous sources where the exposure relation shall not be less than 0.1 sec.

(b) The permissible exposure limit for occupational exposure to ultraviolet radiation incident upon skin or eye where irradiance values are known and exposure time is controlled are as follows:

(i) For the near ultraviolet spectral region (320 to 400 nanometer (nm)) total irradiance incident upon the unprotected skin or eye shall not exceed milliwatt/sq. centimeter for periods greater than 10^3 seconds (approximately 16 minutes) and for exposure times less than 103 seconds shall not exceed one Joules/sq. centimeter.

(ii) For the actinic ultraviolet spectral region (200 - 315 nm), radiant exposure incident upon the unprotected skin or eye shall not exceed the values given in Table 4 within an 8-hour period.

(iii) To determine the effective irradiance of a broadband source weighted against the peak of the spectral effectiveness curve (270 nanometer (nm)), the following weighting formulas shall be used.

$$E_{\text{eff}} = \sum \frac{(E-\text{Lambda})}{(\text{Delta}-\text{Lambda})} (S-\text{Lambda})$$

Where:

E_{eff} = effective irradiance relative to a monochromatic source at 270nm

$E-\text{Lambda}$ = spectral irradiance in Watts/sq. centimeter/nanometer.

$S-\text{Lambda}$ = relative spectral effectiveness (unitless)

$\text{Delta}-\text{Lambda}$ = band width in nanometers

(iv) Permissible exposure time in seconds for exposure to actinic ultraviolet radiation incident upon the unprotected skin or eye may be computed by dividing 0.003 Joules/sq. centimeter by E_{eff} in Watts/sq. centimeter. The exposure time may also be determined using Table 5 which provides exposure times corresponding to effective irradiances in $\mu\text{W}/\text{cm}^2$.

TABLE 4

Wavelength nanometer	PEL millijoules/sq. centimeters	Relative Spectral Effectiveness S Lambda
200	100	0.03
210	40	0.075
220	25	0.12
230	16	0.19
240	10	0.30
250	7.0	0.43
254	6.0	0.5
260	4.6	0.65
270	3.0	1.0
280	3.4	0.88
290	4.7	0.64
300	10	0.30
305	50	0.06
310	200	0.015
315	1000	0.003

TABLE 5

Duration of Exposure Per Day	Effective Irradiance E_{eff} ($\mu W/cm^2$)
8 hrs.	0.1
4 hrs.	0.2
2 hrs.	0.4
1 hr.	0.8
1/2 hr.	1.7
15 min.	3.3
10 min.	5
5 min.	10
1 min.	50
30 sec.	100
10 sec.	300
1 sec.	3,000
0.5 sec.	6,000
0.1 sec.	30,000

TABLE 6

Densities and Transmissions (in Percent); also Tolerances in Densities and Transmissions of Various Shades of Glasses for Protection Against Injurious Rays

(Shades 3 to 8, inclusive, are for use in goggles, shades 10 to 14, inclusive, for welder's helmets and face shields)

[CODIFICATION NOTE: The graphic presentation of this table has been varied slightly in order that it would fall within the printing specifications for the Washington Administrative Code. In the following table, the original table had columns relating to (1) "Optical Density" which is now "Part 1," (2) "Total Visible Luminous Transmittance" and "Maximum total Infrared" which are now "Part 2," (3) "Maximum Ultraviolet Transmission" which is now "Part 3," and (4) "Recommended Uses" which is now "Part 4." These columns were all positioned side by side. In the new WAC format these are split up into four separate tables.]

TABLE 6--Part 1

Shade No.	Optical Density		
	Minimum O.D.	Standard O.D.	Maximum O.D.
3.0	.64	.857	1.06
4.0	1.07	1.286	1.49
5.0	1.50	1.714	1.92
6.0	1.93	2.143	2.35
7.0	2.36	2.572	2.78
8	2.79	3.000	3.21
9	3.22	3.429	3.63
10	3.64	3.857	4.06
11	4.07	4.286	4.49
12	4.50	4.715	4.92
13	4.93	5.143	5.35

TABLE 6--Part 1

Shade No.	Optical Density		
	Minimum O.D.	Standard O.D.	Maximum O.D.
14	5.36	5.571	5.78

TABLE 6--Part 2

Shade No.	Total Visible Luminous Transmittance			Maximum Total Infrared %
	Maximum %	Standard %	Minimum %	
3.0	22.9	13.9	8.70	9.0
4.0	8.51	5.18	3.24	5.0
5.0	3.16	1.93	1.20	2.5
6.0	1.18	.72	.45	1.5
7.0	.44	.27	.17	1.3
8	.162	.100	.062	1.0
9	.060	.037	.023	.8
10	.0229	.0139	.0087	.6
11	.0085	.0052	.0033	.5
12	.0032	.0019	.0012	.5
13	.00118	.00072	.00045	.4
14	.00044	.00027	.00017	.3

TABLE 6--Part 3

Shade No.	Maximum Ultraviolet Transmission			
	313mu %	334mu %	365mu %	405mu %
3.0	.2	.2	.5	1.0
4.0	.2	.2	.5	1.0
5.0	.2	.2	.2	.5
6.0	.1	.1	.1	.5
7.0	.1	.1	.1	.5
8	.1	.1	.1	.5
9	.1	.1	.1	.5

TABLE 6--Part 3

Shade No.	Maximum Ultraviolet Transmission			
	313mu %	334mu %	365mu %	405mu %
10	.1	.1	.1	.5
11	.05	.05	.05	.1
12	.05	.05	.05	.1
13	.05	.05	.05	.1
14	.05	.05	.05	.1

TABLE 6--Part 4

Shade No.	Recommended Uses
3.0	Glare of reflected sunlight from snow, water, sand, etc., stray light from cutting and welding metal pouring and work around furnaces and foundries.
4.0	
5.0	Light acetylene cutting and welding; light electric spot welding.
6.0	
7.0	Acetylene cutting and medium welding; arc welding up to 30 amperes.
8	
9	Heavy acetylene welding; arc cutting and welding between 30 and 75 amperes.
10	
11	Arc cutting and welding between 75 and 200 amperes.
12	
13	Arc cutting and welding between 200 and 400 amperes.
14	Arc cutting and welding above 400 amperes.

- a. American Standard Safety Code for the Protection of Heads, Eyes, and Respiratory Organs.
- b. Standard density is defined as the logarithms (base 10) of the reciprocal of the transmission. Shade number is determined by the density according to the relations:

$$\text{Shade number} = 7/3 \text{ density} + 1 \text{ with tolerances as given in the table.}$$

NOTE: Safety glasses are available with lenses which protect the eyes against ultraviolet radiation.

[Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-62-09005, filed 12/11/84. Statutory Authority: RCW 49.17.040. 80-16-029 (Order 80-22), § 296-62-09005, filed 10/31/80. Statutory Authority: RCW 49.17.040, 49.17-.050 and 49.17.240. 80-11-010 (Order 80-14), § 296-62-09005, filed 8/8/80; Order 73-3, § 296-62-09005, filed 5/7/73.]

WAC 296-62-130 Emergency washing facilities. (1) Definitions.

(a) "Emergency washing facilities" means emergency showers, eyewashes, eye/face washes, or other similar units.

(b) "Emergency shower" means a unit that enables a user to have water cascading over the entire body. It shall deliver a minimum of 113.6 liters (30 gallons) per minute of water.

(c) "Eye/face wash" means a device used to irrigate and flush both the face and eyes. It shall deliver not less than 11.4 liters (3 gallons) per minute of water for at least fifteen minutes.

(d) "Eyewash" means a device to irrigate and flush the eyes. It shall deliver not less than 1.5 liters (0.4 gallons) per minute for at least fifteen minutes.

(e) "Personal eyewash" means a portable, supplementary eyewash that supports plumbed units, self-contained units, or both, by delivering immediate flushing for less than fifteen minutes.

(f) "Contact chemical agents" are defined in WAC 296-62-07003.

(2) Facilities required.

(a) Emergency washing facilities shall be readily available in the immediate work area for workers who may be exposed to harmful concentrations of contact chemical agents. To be readily available, emergency washing facilities shall require no more than ten seconds to reach. They should be within a travel distance no greater than 15.25 meters (50 feet).

(b) Personal eyewash equipment may be used to supplement the requirement for emergency washing facilities, however, in no event shall it be used as a substitute. Such units shall deliver potable water or other medically approved eye flushing solution.

(c) All emergency washing facilities, including personal eyewash equipment, shall be periodically inspected to ensure that they function correctly and that the quality and quantity of water is satisfactory for emergency washing purposes.

(3) All emergency washing facilities using nonpotable water shall have signs stating water is nonpotable. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-10-004 (Order 85-09), § 296-62-130, filed 4/19/85; Order 73-3, § 296-62-130, filed 5/7/73; Order 70-8, § 296-62-130, filed 7/31/70, effective 9/1/70; Rule 13.010, effective 8/1/63.]

Chapter 296-65 WAC

ASBESTOS REMOVAL AND ENCAPSULATION

WAC

296-65-001	Purpose and scope.
296-65-003	Definitions.
296-65-005	Training course content.
296-65-010	Asbestos worker certification.
296-65-015	Training course certification.
296-65-020	Notification requirements.
296-65-025	Certificate fee.
296-65-030	Methods of compliance.
296-65-040	Appeals—Notice and filing.
296-65-045	Appeals—Procedure.

WAC 296-65-001 Purpose and scope. This standard regulates asbestos removal and encapsulation, requires minimum training for asbestos workers and establishes a training certification and notification program for asbestos projects. [Statutory Authority: SSB 4209, 1985 c 387, 85-21-080 (Order 85-30), § 296-65-001, filed 10/22/85.]

WAC 296-65-003 Definitions. Unless the context clearly requires otherwise, the definitions in this section apply throughout this chapter.

- (1) "Approved" means approved by the department.
- (2) "Asbestos" includes different forms of chrysotile, amosite, crocidolite, tremolite, anthophyllite and actinolite.
- (3) "Asbestos fibers" means asbestos fibers longer than 5 micrometers.
- (4) "Asbestos project" includes the construction, demolition, repair, maintenance or renovation of any public or private building or structure, mechanical piping equipment or system involving the demolition, removal, encapsulation, salvage, or disposal of material releasing or likely to release asbestos fibers into the air.
- (5) "Auxiliary project" means a work activity which does not directly involve an asbestos project but which may disturb or expose asbestos or asbestos-containing materials.
- (6) "Certificate" means the certificate issued by the department.
- (7) "Certified asbestos worker" means an individual who has successfully completed an approved asbestos training course and has received the certificate.
- (8) "Contractor" includes any partnership, firm, association, corporation or sole proprietorship that contracts to perform the removal or encapsulation of asbestos.
- (9) "Department" means the department of labor and industries.
- (10) "Demolition" includes the wrecking or removal of any load-supporting structural member of a facility including any related handling operations.
- (11) "Direct on-site supervision" means the supervision of no more than three workers by a certified asbestos worker who is physically present at all times at the asbestos project. It includes the authority to immediately correct any deficiencies on the project.
- (12) "Encapsulation" means the application of an encapsulant to asbestos containing materials to control

the release of asbestos fibers into the air. The encapsulant creates a membrane over the surface (bridging encapsulant) or penetrates the material and binds its components together (penetrating encapsulant).

(13) "HEPA filtration" means high efficiency particulate air filtration found in respirators and vacuum systems capable of filtering 0.3 micron particles with 99.97% efficiency.

(14) "NESHAP" means the National Emission Standards for Hazardous Air Pollutants.

(15) "Person" means any partnership, firm, association, corporation, sole proprietorship or the state of Washington or its political subdivisions.

(16) "Removal" includes the stripping of any asbestos containing materials from the surface or components of a facility.

(17) "Renovation" includes altering in any way one or more facility components. Operations in which load-supporting structural members are wrecked or removed are excluded.

(18) "Repair" includes the restoration of asbestos containing insulation that has been damaged, usually located on pipes, boilers, tanks, turbines, ducts or other facility components. Repair usually consists of the application of duct tape, rewettable glass cloth, canvas, cement or other suitable material to seal exposed areas where asbestos fibers may be released. Repair of previously encapsulated asbestos containing materials may involve filling damaged areas with nonasbestos substitutes and reencapsulating. Repair of enclosures around asbestos containing materials is contemplated by this term.

(19) "Structural component" includes any pipe, duct, boiler, tank, reactor, turbine or furnace at or in a facility or any structural member of a facility.

(20) "Structural member" means any load-supporting or non-load-supporting member of a facility such as beams, walls, and ceilings.

(21) "Structure" means an entire facility, building or major portion thereof, such as a building wing. [Statutory Authority: SSB 4209, 1985 c 387, 85-21-080 (Order 85-30), § 296-65-003, filed 10/22/85.]

WAC 296-65-005 Training course content. An approved basic asbestos course shall consist of at least 30 hours of training. The initial training course shall provide, at a minimum, information on the following topics:

- (1) The physical characteristics of asbestos including types, fiber size, aerodynamic characteristics and physical appearance.
- (2) Examples of different types of asbestos and asbestos containing materials. Real asbestos shall be used only for observation by trainees and shall be enclosed in sealed unbreakable containers.
- (3) The health hazards of asbestos including the nature of asbestos related diseases, routes of exposure, dose-response relationships, synergism between cigarette smoking and asbestos exposure, latency period of diseases, hazards to immediate family, and the health basis for asbestos standards.

(4) Employee personal protective equipment including the classes and characteristics of respirator types, limitations of respirators, proper selection, inspection, donning, use, maintenance and storage procedure, methods for field checking of the facepiece-to-face seal (positive and negative pressure checks), qualitative and quantitative fit testing procedures, variability between field and laboratory protection factors, factors that alter respirator fit (e.g. eye glasses and facial hair), the components of a proper respiratory protection program, respirator program administrator, requirements on oil lubricated reciprocating piston compressors for breathing air, and selection and use of personal protective clothing.

(5) Use, storage and handling of launderable clothing, nonslip footwear, gloves, eye protection and hard hats.

(6) Medical monitoring procedures and requirements, including the provisions of WAC 296-62-071 through 296-62-07121 and 296-62-07517, any additional recommended procedures and tests, benefits of medical monitoring and employee access to records.

(7) Air monitoring procedures and requirements, including the requirements of WAC 296-62-07517, including a description of equipment, sampling methods and strategies, reasons for air monitoring, types of samples, including area, personal and clearance samples, current standards with proposed changes if any, employee observation and notification, recordkeeping and employee access to records, interpretation of air monitoring results, and analytical methods for bulk and air samples.

(8) State-of-the-art work practices for asbestos removal and encapsulation activities including purpose, proper construction and maintenance of barriers and decontamination enclosure systems, posting of warning signs, electrical and ventilation system lock-out, proper working techniques and tools with vacuum attachments for minimizing fiber release, use of wet methods and surfactants, use of negative pressure ventilation equipment for minimizing employee exposure to asbestos fibers and contamination prevention, scoring and breaking techniques for rigid asbestos products, glove bag techniques, use of HEPA vacuums and proper clean-up and disposal procedures. Work practice requirements for removal, encapsulation, enclosure and repair shall be discussed individually. Appropriate work practices for both indoor and outdoor asbestos projects shall be included.

(9) Personal hygiene including entry and exit procedures for the work area, use of showers and prohibition of eating, drinking, smoking and chewing (gum or tobacco) in the work area.

(10) Additional safety hazards that may be encountered during asbestos removal and encapsulation activities and hazard abatement; including electrical hazards, scaffold and ladder hazards, slips, trips and falls, confined spaces, noise, and heat stress.

(11) The requirements, procedures and standards established by:

(a) The Environmental Protection Agency, 40 CFR Part 61, Subparts A and M.

(b) Washington state department of ecology.

(c) Local air pollution control agencies.

(d) Washington state department of labor and industries, division of industrial safety and health, chapter 49.17 RCW (Washington Industrial Safety and Health Act), chapter 387, Laws of 1985 (Asbestos removal and encapsulation), and ensuing regulations.

(12) Actual worksite considerations.

(13) The instruction required by this section shall include, at a minimum, hands-on training for the following:

(a) Glove bag techniques;

(b) The opportunity to don respirators including half facepiece and full facepiece air purifying respirators, powered air purifying respirators (PAPR), and Type-C supplied-air respirators. Qualitative or quantitative fit testing shall be performed on each student in accordance with WAC 296-62-071 through 296-62-07121;

(c) Removal and repair of sprayed-on material, troweled-on material and pipe lagging;

(d) Basic construction of a decontamination unit, and proper entry and exit;

(e) Suit-up in protective clothing consisting of coveralls, foot coverings and head coverings.

(14) Asbestos containing materials shall not be used for hands-on training. [Statutory Authority: SSB 4209, 1985 c 387. 85-21-080 (Order 85-30), § 296-65-005, filed 10/22/85.]

WAC 296-65-010 Asbestos worker certification. (1) For the purposes of this section "individual" means any natural person.

(2) Individuals shall pass, in a manner approved by the department, a written examination relevant to the safe performance of asbestos related activities.

(a) Upon successful completion of an approved training course the department will issue a certificate.

(b) To be considered timely, an application for an asbestos worker certificate must be received by the department no later than 60 days after the completion date of an approved training course.

(3) Individuals shall not perform any asbestos project work prior to issuance of the certificate. The certificate shall be valid for two years from the date of issuance.

(4) Certified asbestos workers shall attend a 7-hour refresher course prior to certificate renewal.

(a) The course shall, at a minimum, adequately review the subjects required by WAC 296-65-005, update information on state-of-the-art procedures and equipment, and review regulatory changes and interpretations. Specific subjects may be required by the department.

(b) An application for renewal of the certificate must be accompanied by proof of attendance in an approved refresher training course.

(c) To be considered timely, the certificate renewal application must be received by the department no later than 60 days after the certificate expiration date.

(5) The certificate shall be available for inspection at all times during an asbestos project.

(6) The department may suspend or revoke a certificate for failure of the holder to comply with any applicable health or safety standards. [Statutory Authority:

SSB 4209, 1985 c 387. 85-21-080 (Order 85-30), § 296-65-010, filed 10/22/85.]

WAC 296-65-015 Training course certification.

Basic and refresher asbestos training courses may be provided by any person, environmental health consulting firm, union, trade association, educational institution, public health organization, individual, governmental agency, or other entity.

(1) Each course shall be evaluated by the department for the breadth of knowledge and experience required to properly train asbestos workers. Course content shall be carefully scrutinized for adequacy and accuracy. Training techniques will be evaluated by the department.

(2) Sponsors of basic and refresher training courses proposed for approval must submit:

(a) Background information about course sponsors;

(b) Course locations and fees;

(c) Copies of course handouts;

(d) A detailed description of course content and the amount of time allotted to each major topic;

(e) A description of teaching methods to be utilized and a list of all audio-visual materials; the department may, in its discretion, request that copies of the materials be provided for review. Any audio-visual materials provided to the department will be returned to the applicant;

(f) A list of all personnel involved in course preparation and presentation and a description of the background, special training and qualifications of each;

(g) A description of student evaluation methods and a copy of the required written examination including the scoring methodology to be used in grading the examination;

(h) A description of course evaluation methods; and

(i) Any restrictions on attendance (language, class size, affiliation, etc.).

(3) Application for training course approval and course materials shall be submitted to the department at least 45 days prior to the requested approval date. Materials may be mailed to:

Asbestos Certification Program
Department of Labor and
Industries, AX-31hy
814 E. 4th Avenue
P.O. Box 207
Olympia, Washington 98504

(4) Upon approval of a basic or refresher asbestos training course, the department will issue the course sponsor a certificate. The certificate is valid for one year from the date of issuance. Application for renewal must follow the procedures described in subsections (2) and (3) of this section.

(5) To be considered timely, the training course certificate renewal must be received by the department no later than 60 days after the certificate expiration date.

(6) Any changes to a training course must be approved by the department in advance.

(7) The course sponsor shall provide the department with a list of all persons who have completed a basic or

refresher training course. The list must be provided no later than ten days after a course is completed and must include the name and address of each trainee.

(8) The course sponsor must notify the department at least one week before a training course is scheduled to begin. The notification must include the date, time and address where the training will be conducted.

(9) A representative of the department may, at the department's discretion, attend a training course as an observer to verify that the training course is conducted in accordance with the program approved by the department.

(10) The department may suspend or revoke the certification of a training course if its sponsor fails to maintain the course content and quality as initially approved.

(11) The training course sponsor shall limit each class to a maximum of thirty participants unless granted an exception in writing by the department. To apply for an exception allowing class size to exceed thirty, the course sponsor must submit the following information in writing to the department for evaluation and approval prior to expanding class size beyond thirty participants.

(a) The class attendance limit;

(b) The teaching methods and techniques for training the proposed larger class; and

(c) The protocol for conducting the written examination.

(12) The instructor to student ratio shall not exceed one-to-ten for any of the training required by WAC 296-65-005(13). [Statutory Authority: SSB 4209, 1985 c 387. 85-21-080 (Order 85-30), § 296-65-015, filed 10/22/85.]

WAC 296-65-020 Notification requirements.

A copy of any notice of intention to demolish or renovate a facility required to be filed with an air pollution control agency in accordance with NESHAP (40 CFR Part 61) shall be sent directly to the department by each person whose employees, if any, are renovating or demolishing any structure. Notices must be received within the same time periods required under NESHAP and may be mailed to:

Asbestos Certification Program
Department of Labor and
Industries, AX-31hy
814 E. 4th Avenue
P.O. Box 207
Olympia, Washington 98504.

[Statutory Authority: SSB 4209, 1985 c 387. 85-21-080 (Order 85-30), § 296-65-020, filed 10/22/85.]

WAC 296-65-025 Certificate fee. (1) A nonrefundable administrative fee of twenty-five dollars shall be assessed for each initial or renewal certificate application. The fee (check or money order) must accompany the certificate application and be made payable to the department. An application form may be obtained from any approved training course instructor or directly from the department.

(2) A nonrefundable administrative fee of one hundred fifty dollars shall be assessed for each initial or renewal application for an approved training course certificate. A check or money order shall accompany any application made under the provisions of WAC 296-65-015 and be made payable to the department. [Statutory Authority: SSB 4209, 1985 c 387. 85-21-080 (Order 85-30), § 296-65-025, filed 10/22/85.]

WAC 296-65-030 Methods of compliance. (1) No contractor, employee, or other individual is eligible to work on an asbestos project unless properly issued a certificate by the department, except in the case of an asbestos project undertaken by any partnership, firm, corporation or sole proprietorship in its own facility and by its own employees under the direct on-site supervision of a certified asbestos worker.

(2) No person may assign any employee, contract with or permit any individual or person to remove or encapsulate asbestos in any facility unless performed by a certified asbestos worker except in the case of an asbestos project undertaken by any partnership, firm, corporation or sole proprietorship in its own facility and by its own employees under the direct on-site supervision of a certified asbestos worker.

(3)(a) In cases excepted under subsections (1) and (2) of this section, the partnership, firm, corporation or sole proprietorship shall annually submit a written description to the department which includes at least the following information:

(i) The kinds of asbestos projects expected to be undertaken during a period of time not to exceed one year from the date of submission;

(ii) The procedures to be used in undertaking asbestos projects;

(iii) Methods of compliance with chapters 296-65 and 296-62 WAC;

(iv) Methods of compliance with any additional procedures required by law for the safe demolition, removal, encapsulation, salvage, and disposal of asbestos; and

(v) The name, address and certification number of the supervising certified asbestos worker.

(b) The written description required by this section shall be submitted to the department prior to commencement of work.

(4) A further written description must be submitted to the department prior to commencing a project, if during the one year period covered by the written description submitted to the department in accordance with WAC 296-65-030(3), previously unidentified or new asbestos projects are proposed.

(5) Written descriptions, shall be mailed to:

Asbestos Certification Program,
Department of Labor and
Industries, AX-31hy
814 E. 4th Avenue
P.O. Box 207
Olympia, Washington 98504.

[Statutory Authority: SSB 4209, 1985 c 387. 85-21-080 (Order 85-30), § 296-65-030, filed 10/22/85.]

WAC 296-65-040 Appeals--Notice and filing. (1) Any final correction order issued by the department citing a violation of the provisions of chapter 387, Laws of 1985 or this chapter shall only be appealed to the department. Any appeal from such an order shall be communicated in writing to the department within 30 calendar days of receipt of such order by the appealing party.

(2) The written notice of appeal shall indicate:

(a) The specific correction order being appealed;

(b) The name and address of the appealing party;

(c) The grounds upon which the appealing party considers the correction order to be unjust or unlawful;

(d) A statement of the facts asserted in support of each of the grounds for the appeal;

(e) The specific relief sought; and

(f) A statement that the person signing the notice of appeal has read it and to the best of his or her knowledge, information and belief there are good grounds to support the appeal.

(3) The written notice of appeal shall be delivered to:

Asbestos Certification Program
Department of Labor and
Industries, AX-31hy
814 E. 4th Avenue
P.O. Box 207
Olympia, Washington 98504.

[Statutory Authority: SSB 4209, 1985 c 387. 85-21-080 (Order 85-30), § 296-65-040, filed 10/22/85.]

WAC 296-65-045 Appeals--Procedure. Any appeal of a final correction order of the department shall be heard and ruled upon in accordance with the provisions of the Washington Administrative Procedure Act, chapter 34.04 RCW, and chapter 296-08 WAC. [Statutory Authority: SSB 4209, 1985 c 387. 85-21-080 (Order 85-30), § 296-65-045, filed 10/22/85.]

**Chapter 296-80 WAC
SAFETY RULES GOVERNING THE
CONSTRUCTION, OPERATION, MAINTENANCE
AND INSPECTION OF INCLINED PASSENGER
LIFTS**

WAC
296-80-010 through 296-80-290 Repealed.

**DISPOSITION OF SECTIONS FORMERLY CODIFIED IN THIS
CHAPTER**

296-80-010 Scope. [Order 71-16, § 296-80-010, filed 12/7/71.] Repealed by 84-23-001 (Order 84-21), filed 11/8/84. Statutory Authority: RCW 70.87.030 and 70.87.185.
296-80-020 Definitions. [Order 71-16, § 296-80-020, filed 12/7/71.] Repealed by 84-23-001 (Order 84-21), filed 11/8/84. Statutory Authority: RCW 70.87.030 and 70.87.185.
296-80-030 Approval of plans and specifications. [Order 71-16, § 296-80-030, filed 12/7/71.] Repealed by 84-23-001 (Order 84-21), filed 11/8/84. Statutory Authority: RCW 70.87.030 and 70.87.185.

- 296-80-040 Runway enclosures. [Order 71-16, § 296-80-040, filed 12/7/71.] Repealed by 84-23-001 (Order 84-21), filed 11/8/84. Statutory Authority: RCW 70.87-.030 and 70.87.185.
- 296-80-050 Landing enclosure. [Order 71-16, § 296-80-050, filed 12/7/71.] Repealed by 84-23-001 (Order 84-21), filed 11/8/84. Statutory Authority: RCW 70.87.030 and 70.87.185.
- 296-80-060 Enclosure clearances. [Order 71-16, § 296-80-060, filed 12/7/71.] Repealed by 84-23-001 (Order 84-21), filed 11/8/84. Statutory Authority: RCW 70.87-.030 and 70.87.185.
- 296-80-070 Machine rooms. [Order 71-16, § 296-80-070, filed 12/7/71.] Repealed by 84-23-001 (Order 84-21), filed 11/8/84. Statutory Authority: RCW 70.87.030 and 70.87.185.
- 296-80-080 Machine supports and factors of safety. [Order 71-16, § 296-80-080, filed 12/7/71.] Repealed by 84-23-001 (Order 84-21), filed 11/8/84. Statutory Authority: RCW 70.87.030 and 70.87.185.
- 296-80-090 Car clearances. [Order 71-16, § 296-80-090, filed 12/7/71.] Repealed by 84-23-001 (Order 84-21), filed 11/8/84. Statutory Authority: RCW 70.87.030 and 70.87.185.
- 296-80-100 Counterweights when used. [Order 71-16, § 296-80-100, filed 12/7/71.] Repealed by 84-23-001 (Order 84-21), filed 11/8/84. Statutory Authority: RCW 70.87.030 and 70.87.185.
- 296-80-110 Landing doors or gates. [Order 71-16, § 296-80-110, filed 12/7/71.] Repealed by 84-23-001 (Order 84-21), filed 11/8/84. Statutory Authority: RCW 70.87-.030 and 70.87.185.
- 296-80-120 Landing sills. [Order 71-16, § 296-80-120, filed 12/7/71.] Repealed by 84-23-001 (Order 84-21), filed 11/8/84. Statutory Authority: RCW 70.87.030 and 70.87.185.
- 296-80-130 Guide rails. [Order 71-16, § 296-80-130, filed 12/7/71.] Repealed by 84-23-001 (Order 84-21), filed 11/8/84. Statutory Authority: RCW 70.87.030 and 70.87.185.
- 296-80-140 Car enclosure. [Order 71-16, § 296-80-140, filed 12/7/71.] Repealed by 84-23-001 (Order 84-21), filed 11/8/84. Statutory Authority: RCW 70.87.030 and 70.87.185.
- 296-80-150 Safeties. [Order 71-16, § 296-80-150, filed 12/7/71.] Repealed by 84-23-001 (Order 84-21), filed 11/8/84. Statutory Authority: RCW 70.87.030 and 70.87.185.
- 296-80-160 Car speed governors. [Order 71-16, § 296-80-160, filed 12/7/71.] Repealed by 84-23-001 (Order 84-21), filed 11/8/84. Statutory Authority: RCW 70.87-.030 and 70.87.185.
- 296-80-170 Machines. [Order 71-16, § 296-80-170, filed 12/7/71.] Repealed by 84-23-001 (Order 84-21), filed 11/8/84. Statutory Authority: RCW 70.87.030 and 70.87.185.
- 296-80-180 Terminal stopping and safety devices. [Order 71-16, § 296-80-180, filed 12/7/71.] Repealed by 84-23-001 (Order 84-21), filed 11/8/84. Statutory Authority: RCW 70.87.030 and 70.87.185.
- 296-80-190 Operation and control. [Order 71-16, § 296-80-190, filed 12/7/71.] Repealed by 84-23-001 (Order 84-21), filed 11/8/84. Statutory Authority: RCW 70.87-.030 and 70.87.185.
- 296-80-200 Limits of speed. [Order 71-16, § 296-80-200, filed 12/7/71.] Repealed by 84-23-001 (Order 84-21), filed 11/8/84. Statutory Authority: RCW 70.87.030 and 70.87.185.
- 296-80-210 Ropes. [Order 71-16, § 296-80-210, filed 12/7/71.] Repealed by 84-23-001 (Order 84-21), filed 11/8/84. Statutory Authority: RCW 70.87.030 and 70.87.185.
- 296-80-220 Fastening car and counterweight ends of ropes. [Order 71-16, § 296-80-220, filed 12/7/71.] Repealed by 84-23-001 (Order 84-21), filed 11/8/84. Statutory Authority: RCW 70.87.030 and 70.87.185.
- 296-80-230 Rope tags. [Order 71-16, § 296-80-230, filed 12/7/71.] Repealed by 84-23-001 (Order 84-21), filed 11/8/84. Statutory Authority: RCW 70.87.030 and 70.87.185.
- 296-80-240 Buffers. [Order 71-16, § 296-80-240, filed 12/7/71.] Repealed by 84-23-001 (Order 84-21), filed 11/8/84. Statutory Authority: RCW 70.87.030 and 70.87.185.
- 296-80-250 Electrical equipment. [Order 71-16, § 296-80-250, filed 12/7/71.] Repealed by 84-23-001 (Order 84-21), filed 11/8/84. Statutory Authority: RCW 70.87-.030 and 70.87.185.
- 296-80-260 Inspections and tests. [Order 71-16, § 296-80-260, filed 12/7/71.] Repealed by 84-23-001 (Order 84-21), filed 11/8/84. Statutory Authority: RCW 70.87-.030 and 70.87.185.
- 296-80-270 Maintenance. [Order 71-16, § 296-80-270, filed 12/7/71.] Repealed by 84-23-001 (Order 84-21), filed 11/8/84. Statutory Authority: RCW 70.87.030 and 70.87.185.
- 296-80-280 Rack and pinion drive. [Order 71-16, § 296-80-280, filed 12/7/71.] Repealed by 84-23-001 (Order 84-21), filed 11/8/84. Statutory Authority: RCW 70.87-.030 and 70.87.185.
- 296-80-290 Variances from requirements—How granted. [Order 71-16, § 296-80-290, filed 12/7/71.] Repealed by 84-23-001 (Order 84-21), filed 11/8/84. Statutory Authority: RCW 70.87.030 and 70.87.185.

WAC 296-80-010 through 296-80-290 Repealed.
See Disposition Table at beginning of this chapter.

Chapter 296-81 WAC

SAFETY RULES GOVERNING EXISTING ELEVATORS, DUMBWAITERS, ESCALATORS AND OTHER LIFTING DEVICES—MOVING WALKS

WAC

- 296-81-007 National Elevator Code adopted.
- EXISTING INSTALLATIONS
- 296-81-340 Handrails.
- 296-81-360 Hall lantern.
- 296-81-991 Civil penalties.

WAC 296-81-007 National Elevator Code adopted.

(1) The American National Standard Safety Code for Elevators, Dumbwaiters, Escalators and Moving Walks, American National Standards Institute A17.1, as amended or revised through 1971, is adopted as the standards in this state for elevators, dumbwaiters, escalators, and moving walks installed from February 25, 1972, through June 30, 1982.

(2) The American National Standard Safety Code for Elevators, Dumbwaiters, Escalators, and Moving Walks, ANSI A17.1, 1981 edition, is adopted as the standard for elevators, dumbwaiters, escalators, and moving walks installed on or after July 1, 1982. This 1981 edition of ANSI A17.1 is supplemented by the ANSI A17.1a – 1982 supplement for elevators, dumbwaiters, escalators, and moving walks installed on or after March 1, 1984. The 1981 edition of ANSI A17.1 and the 1982 edition of ANSI A17.1a is supplemented by the ANSI/ASME A17.1b – 1983 supplement for elevators, dumbwaiters, escalators, and moving walks installed on or after December 1, 1984, with the exception of portable escalators that are covered by Part VIII of ANSI/ASME

A17.1b - 1983. [Statutory Authority: RCW 70.87.030 and 70.87.185. 84-23-001 (Order 84-21), § 296-81-007, filed 11/8/84. Statutory Authority: RCW 70.87.185 and 70.87.034. 84-05-005 (Order 83-37), § 296-81-007, filed 2/6/84. Statutory Authority: RCW 70.87.030. 82-12-005 (Order 82-18), § 296-81-007, filed 5/20/82; Order 72-2, § 296-81-007, filed 2/25/72.]

EXISTING INSTALLATIONS

WAC 296-81-340 Handrails. A handrail shall be provided on all walls of the car that are not used for normal exits. There shall be a space of one and one-half inches between the wall and the rail. The rail shall be at a nominal height of thirty-five inches from the floor. The hand grip portion of handrails shall be not less than one and one-quarter inches or more than two inches in width, shall be basically oval or round in cross-section, and shall have smooth surfaces with no sharp corners. Handrails that approach each other or a blank car wall in the interior corners of the car need not be returned to the wall. If the end of the handrail presents an abrupt end on the closing jamb wall to persons entering a car that has a single-slide or two-speed entrance, the handrail end shall be returned to the wall. [Statutory Authority: RCW 70.87.185 and 70.87.034. 84-05-005 (Order 83-37), § 296-81-340, filed 2/6/84. Statutory Authority: RCW 70.87.030. 81-01-034 (Order 80-26), § 296-81-340, filed 12/10/80.]

WAC 296-81-360 Hall lantern. A visual and audible signal shall be provided at each hoistway entrance, indicating to the prospective passenger which car is answering the call and its direction of travel.

The visual signal for each direction shall be at least two and one-half inches in size and visible from the vicinity of the hall call button. The audible signal shall sound once for the up direction and twice for the down direction.

The centerline of the fixture shall be located at least six feet from the floor.

The lanterns may be located in the jamb or in the car. [Statutory Authority: RCW 70.87.185 and 70.87.034. 84-05-005 (Order 83-37), § 296-81-360, filed 2/6/84. Statutory Authority: RCW 70.87.030. 81-01-034 (Order 80-26), § 296-81-360, filed 12/10/80.]

WAC 296-81-991 Civil penalties. (1) An owner or operator of a conveyance that violates a provision of chapter 70.87 RCW, or of the rules adopted under that chapter, is liable for a civil penalty based on the following schedule.

- (a) Operation of a conveyance without a permit:
First violation \$150.00
Second violation \$300.00
Each additional violation \$500.00

- (b) Installation of a conveyance without a permit:
First violation \$150.00
Second violation \$300.00
Each additional violation \$500.00
(c) Relocation of a conveyance without a permit:
First violation \$150.00
Second violation \$300.00
Each additional violation \$500.00
(d) Alteration of a conveyance without a permit:
First violation \$150.00
Second violation \$300.00
Each additional violation \$500.00
(e) Operation of a conveyance for which the department has issued a red tag or has revoked or suspended an operating permit: \$500.00
(f) Failure to comply with a correction notice:
Within 90 days \$100.00
Within 91-180 days \$250.00
Within 181-270 days \$400.00
Within 271-360 days \$500.00

(2) A violation will be a "second" or "additional" violation only if it occurs within one year of the first violation.

(3) The department shall by certified mail notify a person of its determination that the person has violated this section.

(4) A person aggrieved by a notice of the department under this section may request a hearing to contest the department's determination that a violation has occurred or to contest the penalty. The request for hearing must be in writing, and must be accompanied by a certified or cashier's check for two hundred dollars payable to the department. The request for hearing must be post-marked, or must be received by the department, within fifteen days after the person receives the order of the department. [Statutory Authority: RCW 70.87.030 and 70.87.185. 84-23-001 (Order 84-21), § 296-81-991, filed 11/8/84. Statutory Authority: RCW 70.87.185 and 70.87.034. 84-05-005 (Order 83-37), § 296-81-991, filed 2/6/84.]

Chapter 296-93 WAC MATERIAL LIFTS

- WAC
296-93-010 Hoistway enclosures.
296-93-020 Hoistway enclosure gates and doors.
296-93-030 Hoistways that do not extend to the lowest area of a building or structure.
296-93-040 Driving machines and equipment.
296-93-050 Hydraulic material lifts.
296-93-060 Car enclosures.
296-93-070 Running clearance.
296-93-080 Car and counterweight guides.
296-93-090 Car loading.
296-93-100 Car doors and gates.
296-93-110 Car operating and terminal stopping devices and electrical protective devices.
296-93-120

296-93-130	Stop switch.
296-93-140	Car safeties.
296-93-150	Brakes.
296-93-160	Ropes and chains—Rope connections, data, and records.
296-93-170	Controls.
296-93-180	Pipes and ducts.
296-93-190	When material lift pit is provided.
296-93-200	Illumination of pits and landings.
296-93-210	Capacity posting and no-riders sign.
296-93-220	Electrical wiring.
296-93-230	Guarding of exposed equipment.
296-93-240	Maintenance.
296-93-250	Installation permit.
296-93-260	New installation—Alteration or relocation.
296-93-270	Yearly inspections.
296-93-280	Operating permit.
296-93-290	Five-year tests.
296-93-300	Submission of plans for new installations.
296-93-320	Construction, alteration, and relocation fees.
296-93-330	Annual operating permit fee.

WAC 296-93-010 Scope. This chapter sets the requirements for construction, installation, and operation of material lifts. The purpose of this chapter is to allow certain conveyances that meet the definition of "elevator" in chapter 70.87 RCW, but that are designed solely to transport materials and equipment, to be constructed in accordance with standards less stringent and costly than those contained in ANSI A17.1. The standards contained in this chapter ensure, to the extent possible, that no persons will ride material lifts, and that persons working near the material lifts are free from dangers posed by the operation or failure of the material lifts.

"Material lift" means a fixed stationary conveyance that:

- (1) Has a car or platform that moves in guides;
- (2) Serves two or more floors or landings of a building or structure;
- (3) Has a vertical rise of at least five feet and no more than sixty feet;
- (4) Has a maximum speed of fifty feet per minute;
- (5) Is an isolated self-contained lift and is not a part of a conveying system;
- (6) Travels in an inclined or vertical, but not horizontal, direction;
- (7) Is operated only by, or under the direct supervision of an individual designated by the employer; and
- (8) Is installed in a commercial or industrial area, and not in an area that is open to access by the general public.

This chapter does not cover conveyances described in ANSI B20 that do not have a car or platform but instead are provided with rollers, belts, tracks, power conveyors, or similar carrying surfaces or means of loading. [Statutory Authority: RCW 70.87.030. 84-10-025 (Order 84-7), § 296-93-010, filed 4/27/84.]

WAC 296-93-020 Hoistway enclosures. (1) Local codes and ordinances, where they exist, govern the fire-resistance requirements for hoistway enclosures.

(2) Unless a local jurisdiction's fire-resistance codes or ordinances otherwise require, a hoistway shall be enclosed to a height of seven feet above each floor or landing and above the treads of any adjacent stairways.

Adjacent to any counterweights, the enclosure must extend the full height of the floor and extend eight inches past the counterweight raceway. The enclosing material shall be solid or have openings that do not exceed two inches in diameter.

(3) A hoistway enclosure shall be supported and braced so that it does not deflect over one inch when it is subjected to a force of one hundred pounds applied perpendicularly at any point. [Statutory Authority: RCW 70.87.030. 84-10-025 (Order 84-7), § 296-93-020, filed 4/27/84.]

WAC 296-93-030 Hoistway enclosure gates and doors. The openings at each material lift landing must have gates or doors that guard the full width of the opening. A hoistway door shall be vertically sliding, bi-parting, counter-balanced, or horizontally swinging or sliding. Gates and doors must meet the following requirements:

(1) A balanced type vertically sliding hoistway gate must extend from not more than two inches from the landing threshold to not less than sixty-six inches above the landing threshold.

(2) A gate must be solid or openwork of a design that will reject a ball two inches in diameter. A gate shall be located so that the distance from the hoistway face of the gate to the hoistway edge of the landing sill is not more than two and one-half inches. A gate shall be designed and guided so that it will withstand a lateral pressure of one hundred pounds applied at approximately its center without breaking or being permanently deformed and without displacing the gate from its guides or tracks.

(3) Hoistway gates or doors shall have a combination mechanical lock and electric contact, which shall prevent operation of the material lift by the normal operating devices unless the door or gate is closed. [Statutory Authority: RCW 70.87.030. 84-10-025 (Order 84-7), § 296-93-030, filed 4/27/84.]

WAC 296-93-040 Hoistways that do not extend to the lowest area of a building or structure. If the space directly below a material lift hoistway is not permanently secured against access, the following requirements apply:

(1) The material lift counterweights shall be provided with safeties.

(2) The cars and counterweights shall be provided with spring or oil buffers that conform to the following:

(a) Spring buffers shall be provided for material lifts.

(b) Spring buffers shall be designed and installed so that they will not be fully compressed when struck either by the car carrying its rated load or by the counterweight when the car or the counterweight is moving at the following speeds:

(i) The tripping speed of the governor if the safety is operated by a governor.

(ii) One hundred twenty-five percent of the rated speed if the safety is not operated by a governor.

(3) The car and counterweight-buffer supports shall be sufficiently strong to withstand, without permanent

deformation, the impact resulting from engagement of the buffer at the following speeds:

(a) The tripping speed of the governor with the rated capacity, if the safety is operated by a governor.

(b) One hundred twenty-five percent of the rated speed if the safety is not operated by a governor. [Statutory Authority: RCW 70.87.030. 84-10-025 (Order 84-7), § 296-93-040, filed 4/27/84.]

WAC 296-93-050 Driving machines and equipment.

A material hoist shall use a winding drum, traction, direct plunger, hydraulic, roped or chained hydraulic, rack and pinion, roller chain drive, scissors, or screw-type driving machine.

(1) Driving machines located overhead shall be secured to and supported on or from the top of overhead beams or floor. Suspension of a driving machine by hooks, cables, chains, or similar devices is prohibited.

(2) The diameter of drive sheaves for traction machines may not be less than thirty times the diameter of the hoisting cables. The diameter of all other sheaves of a traction machine may be not less than twenty-one times the diameter of the hoisting cables.

(3) The driving machine and hoisting equipment for each material lift shall be inside enclosures and accessible for maintenance. A safe means of access shall be provided to each material lift's driving machine and equipment. [Statutory Authority: RCW 70.87.030. 84-10-025 (Order 84-7), § 296-93-050, filed 4/27/84.]

WAC 296-93-060 Hydraulic material lifts. Hydraulic material lifts shall be equipped with automatically operated anti-creep leveling devices. These leveling devices shall maintain the floor of the material lift car to within one inch of the floor level of the landing. [Statutory Authority: RCW 70.87.030. 84-10-025 (Order 84-7), § 296-93-060, filed 4/27/84.]

WAC 296-93-070 Car enclosures. A material lift car that serves more than one landing shall be enclosed with solid panels or openwork that will reject a two-inch ball. The enclosure must extend to a height of at least six feet from the floor on each side on which there is no hoistway door or gate, except that on the side of the car that is next to the counterweight runway, the enclosure shall extend to the car top or underside of car crosshead and shall extend six inches on each side of the counterweight runway. [Statutory Authority: RCW 70.87.030. 84-10-025 (Order 84-7), § 296-93-070, filed 4/27/84.]

WAC 296-93-080 Running clearance. The running clearance between the car sill and a hoistway face shall not exceed two inches. [Statutory Authority: RCW 70.87.030. 84-10-025 (Order 84-7), § 296-93-080, filed 4/27/84.]

WAC 296-93-090 Car and counterweight guides. Car and counterweight guides shall be securely fastened and may not deflect more than one-eighth inch. Guide rails must be sufficiently strong to withstand, without deformation, the application of the safety when stopping

the car at the rated speed with the rated load. [Statutory Authority: RCW 70.87.030. 84-10-025 (Order 84-7), § 296-93-090, filed 4/27/84.]

WAC 296-93-100 Car loading. Car frame and platforms shall be designed to withstand the impact of the gross loading imposed during loading and unloading. [Statutory Authority: RCW 70.87.030. 84-10-025 (Order 84-7), § 296-93-100, filed 4/27/84.]

WAC 296-93-110 Car doors and gates. (1) Car doors or gates are required at each entrance to a material lift car.

(2) Car doors or gates may be collapsible, horizontal sliding, or vertical sliding.

(3) Gates, except collapsible gates, shall be solid or openwork of a design that rejects a ball two inches in diameter. A gate shall be sufficiently strong to withstand a lateral pressure of one hundred pounds applied at approximately its center, without breaking or being permanently deformed and without being displaced from the guides or tracks.

(4) Car doors and gates when fully closed shall protect the full width of the car entrance opening. When closed, a car door shall extend from the car floor to a height of not less than sixty-six inches above the car floor. A vertically sliding gate shall extend from a point not more than one inch above the car floor to a point not less than sixty-six inches above the car floor.

(5) Car doors and gates of material lifts shall be equipped with approved electric contacts attached to the car doors or gates that will prevent operation of the material lift by the normal operating devices unless the car doors or gates are closed. [Statutory Authority: RCW 70.87.030. 84-10-025 (Order 84-7), § 296-93-110, filed 4/27/84.]

WAC 296-93-120 Car operating and terminal stopping devices and electrical protective devices. (1) All devices that operate by electricity shall be enclosed.

(2) Phase reversal and failure protection. A material lift, other than a hydro-electric material lift, that is powered by polyphase alternating current must have a means to prevent the starting of the material lift motor if the phase rotation is in the wrong direction, or any phase fails.

(3) A material lift that is driven by a winding drum machine shall have a slack rope device with an enclosed electric switch, of the manually reset type, that will remove the electric power from the driving machine and brake if the hoisting ropes become slack. [Statutory Authority: RCW 70.87.030. 84-10-025 (Order 84-7), § 296-93-120, filed 4/27/84.]

WAC 296-93-130 Stop switch. There shall be, at the bottom of each hoistway, a stop switch. When opened, the stop switch shall remove the electrical power from the driving machine and brake. The stop switch shall:

- (1) Be manually operated;
- (2) Have red operating handles or buttons;

- (3) Be conspicuously and permanently marked "STOP";
- (4) Indicate the stop and run positions;
- (5) Be positively opened mechanically. The switch opening may not depend solely on springs;
- (6) Be accessible from the access door; and
- (7) Not be overridden from other locations. [Statutory Authority: RCW 70.87.030. 84-10-025 (Order 84-7), § 296-93-130, filed 4/27/84.]

WAC 296-93-140 Car safeties. (1) Every material lift that is suspended by wire ropes or chains must have car safeties. The car safeties must be able to stop and sustain the car with one hundred twenty-five percent of its rated load if the hoisting means fails.

(2) Material lifts driven by rack and pinion machines have safeties consisting of a freely rotating safety pinion, an overspeed governor, and a safety device that may form an integral unit mounted on the car. The freely rotating pinion travels on a stationary rack mounted vertically in the hoistway. The rotating pinion drives the overspeed governor. When the downward speed of the car reaches the tripping speed, the rotating overspeed governor actuates the safety device which, in turn, brings the car to a gradual stop. [Statutory Authority: RCW 70.87.030. 84-10-025 (Order 84-7), § 296-93-140, filed 4/27/84.]

WAC 296-93-150 Brakes. Each electric material lift shall be equipped with effective brakes that are released electrically and applied by springs. The brakes must have a capacity sufficient to stop the car, and hold the car at rest, with one hundred twenty-five percent of its rated load. At least one brake shall be mounted on the worm shaft of the driving machine. The brakes on each indirectly-driven material lift must set if the driving means fails. [Statutory Authority: RCW 70.87.030. 84-10-025 (Order 84-7), § 296-93-150, filed 4/27/84.]

WAC 296-93-160 Ropes and chains—Rope connections, data, and records. (1) Only iron (low carbon steel) or steel wire ropes with fibre cores shall be used for the suspension of material lift cars and for the suspension of counterweights.

(2) At least three hoisting ropes shall be used for a traction material lift and at least two shall be used for a drum material lift, or a secondary as well as primary load path to the hoist.

(3) The minimum factor of safety for suspension ropes shall be six times the manufacturer's rated breaking strength per rope.

(4) The owner, operator, and installer of a material lift that is suspended by hoisting chains shall comply with the chain manufacturer's specifications for maintenance, inspection, and application. On material lifts using lifting chains of the roller chain type, the chains must have a six-to-one factor of safety, based on the A.N.S.I. minimum chain strength, not on average chain strength.

(5) The car and the counterweight ends of the car, and counterweight wire ropes or the stationary hitch

ends where multiple roping is used, shall be fastened so that the looped ends of the turned back portion in the rope sockets shall be readily visible. Fastenings shall be:

- (a) Individual tapered, babbitted rope sockets; or
- (b) Other types of rope fastenings that meet the approval of the department.

(6) The rope sockets must develop at least eighty percent of the breaking strength of the strongest rope to be used in the sockets. U-bolt rope clips (clamps) may not be used for load fastenings.

(7) A metal or plastic data tag shall be securely attached to one of the wire rope fastenings each time the ropes are replaced or reshackled. The data tag shall include the diameter of the rope in inches and the manufacturer's rated breaking strength.

(8) All replacements of wire rope or chain must be in accordance with the specifications of the manufacturer of the material lift.

(9) The cable secured to the winding drum shall not be less than one and one-half turns around the drum when the carrier is at the extreme limit of travel. [Statutory Authority: RCW 70.87.030. 84-10-025 (Order 84-7), § 296-93-160, filed 4/27/84.]

WAC 296-93-170 Controls. (1) The control station shall be remotely mounted so that it is inaccessible from the material lift car.

(2) Controls shall be clearly marked or labeled to indicate the function of control.

(3) All control stations shall have a stop switch. When opened, the stop switch shall remove the electrical power from the driving machine and brake. The stop switch shall:

- (a) Be manually operated;
- (b) Have red operating handles or buttons;
- (c) Be conspicuously and permanently marked "STOP";
- (d) Indicate the stop and run position; and
- (e) Be arranged to be locked in the open position.

[Statutory Authority: RCW 70.87.030. 84-10-025 (Order 84-7), § 296-93-170, filed 4/27/84.]

WAC 296-93-180 Pipes and ducts. Pipes and ducts that convey gases, vapors, or liquids may not be installed in any hoistway, machine room, or machinery space unless they are necessary for the operation of the material lift. [Statutory Authority: RCW 70.87.030. 84-10-025 (Order 84-7), § 296-93-180, filed 4/27/84.]

WAC 296-93-190 When material lift pit is provided. (1) A material lift pit that extends to or into the ground shall have noncombustible floors, and shall be designed to prevent entry of ground water into the pit. The floor of the pit shall be approximately level. Drains connected directly to sewers may not be installed in material lift pits. Safe and convenient access shall be provided to all pits. An approved ladder shall be provided for pits that are over three feet deep.

(2) Unperforated metal guards shall be installed in the pit on the open sides of the counterweights to which spring or solid-type buffers or oil buffers are attached.

Guards shall extend from a point not more than twelve inches above the pit floor to a point not less than seven feet nor more than eight feet above the floor, and shall be fastened to a metal frame properly reinforced and braced to be at least equal in strength and stiffness to No. 14 U.S. gauge sheet steel. If compensating chains or ropes are attached to the counterweight on the side facing the material lift car, the guard may be omitted on the side facing the material lift car. [Statutory Authority: RCW 70.87.030. 84-10-025 (Order 84-7), § 296-93-190, filed 4/27/84.]

WAC 296-93-200 Illumination of pits and landings.

(1) All pits shall have illumination of not less than five foot-candles at the pit floor.

(2) All landings shall be illuminated. [Statutory Authority: RCW 70.87.030. 84-10-025 (Order 84-7), § 296-93-200, filed 4/27/84.]

WAC 296-93-210 Capacity posting and no-riders sign. (1) Each material lift shall have a capacity sign permanently and securely fastened in place in the material lift car and on the landings. The sign shall indicate the rated load of the material lift in pounds. The sign shall be metal with black letters two inches high on yellow background.

(2) A sign stating, "NO PERSONS PERMITTED TO RIDE THIS DEVICE," shall be conspicuously and securely posted on the landing side of all hoistway gates and doors and in the enclosure of each material lift car. The sign shall be metal with black letters two inches high on red background. [Statutory Authority: RCW 70.87.030. 84-10-025 (Order 84-7), § 296-93-210, filed 4/27/84.]

WAC 296-93-220 Electrical wiring. All electrical wiring, installations, and equipment in hoistways and machine rooms shall conform to the requirements of the 1984 edition of the National Electrical Code, including section 620 NEC. A material lift shall be provided with a single means of disconnecting all ungrounded main power connectors for each unit. The disconnecting means shall be an enclosed, externally operable fused motor circuit switch or circuit breaker arranged to be locked in the open position. No provision may be made to close this disconnecting means from any other part of the premises. The disconnecting means shall be located inside the controllers. [Statutory Authority: RCW 70.87.030. 84-10-025 (Order 84-7), § 296-93-220, filed 4/27/84.]

WAC 296-93-230 Guarding of exposed equipment.

(1) Guards to protect against accidental contact shall be provided for gears, sprockets, sheaves, drums, ropes, and chains in machine rooms and machinery spaces in accordance with Washington Industrial Safety and Health Act standards. See WAC 296-24-150.

(2) The machine room door shall be self-closing, and provided with a spring lock that permits the doors to be opened from inside without a key and that does not depend on a key or other device for locking. The door must be kept closed and locked except when an attendant is

on duty in the machine room. [Statutory Authority: RCW 70.87.030. 84-10-025 (Order 84-7), § 296-93-230, filed 4/27/84.]

WAC 296-93-240 Maintenance. All material lifts covered under this chapter, both existing and new, and all parts of the material lifts shall be maintained in a safe condition. All devices and safeguards that are required by this chapter shall be maintained in good working order. The owner of a material lift, or his or her designated agent, is responsible for the maintenance of the material lift and its parts. [Statutory Authority: RCW 70.87.030. 84-10-025 (Order 84-7), § 296-93-240, filed 4/27/84.]

WAC 296-93-250 Installation permit. (1) An installation permit shall be obtained from the department before erecting, installing, relocating, or altering a material lift.

(2) The installer of the material lift shall submit an application for permit in duplicate, in a form that the department shall prescribe.

(3) The permit issued by the department shall be kept posted conspicuously at the site of installation.

(4) No permit is required for repairs and replacement normally necessary for maintenance and made with parts of equivalent materials, strength, and design. [Statutory Authority: RCW 70.87.030. 84-10-025 (Order 84-7), § 296-93-250, filed 4/27/84.]

WAC 296-93-260 New installation--Alteration or relocation. Each new installation, alteration, or relocation shall, on its completion and before being placed in service, be inspected to determine that the installation complies with this chapter. The inspection shall include tests of the safety devices with one hundred twenty-five percent of the capacity load. [Statutory Authority: RCW 70.87.030. 84-10-025 (Order 84-7), § 296-93-260, filed 4/27/84.]

WAC 296-93-270 Yearly inspections. The department shall cause all material lifts to be inspected and tested at least once each year. Inspectors have the right during reasonable hours to enter into and upon any building or premises in the discharge of their official duties, for the purpose of making any inspection or testing any conveyance contained thereon or therein. Inspections and tests shall conform with this chapter. [Statutory Authority: RCW 70.87.030. 84-10-025 (Order 84-7), § 296-93-270, filed 4/27/84.]

WAC 296-93-280 Operating permit. An operating permit is required for each material lift operated in the state of Washington except during its erection by the person or firm responsible for its installation. A permit issued by the department shall be kept conspicuously posted near the conveyance. [Statutory Authority: RCW 70.87.030. 84-10-025 (Order 84-7), § 296-93-280, filed 4/27/84.]

WAC 296-93-290 Five-year tests. A five-year test of the car and counterweight safety devices shall be

conducted with capacity load and a report of the test results shall be submitted to the department for approval.

Persons who are qualified to test a material lift are:

- (1) A representative of a firm or manufacturer that is regularly engaged in installing or servicing material lifts.
- (2) A person who has demonstrated to the department his or her ability to inspect and test a material lift. [Statutory Authority: RCW 70.87.030. 84-10-025 (Order 84-7), § 296-93-290, filed 4/27/84.]

WAC 296-93-300 Submission of plans for new installations. Plans shall be submitted in duplicate for approval to the conveyance section of the department before construction. The fee for checking plans is twenty dollars for each installation. [Statutory Authority: RCW 70.87.030. 84-10-025 (Order 84-7), § 296-93-300, filed 4/27/84.]

WAC 296-93-320 Construction, alteration, and relocation fees. The construction, alteration, and relocation fees are:

<u>TOTAL COST</u>	<u>FEE</u>
\$250.00 to and including \$1,000.....	\$25.00
\$1,001 to and including \$15,000	
For first \$1,001	35.00
For each additional \$1,000 or fraction.	7.00
\$15,001 to and including \$100,000	
For first \$15,001	133.00
For each additional \$1,000 or fraction.	5.00
Over \$100,001	
For first \$100,001	558.00
For each additional \$1,000 or fraction.	4.00

[Statutory Authority: RCW 70.87.030. 84-10-025 (Order 84-7), § 296-93-320, filed 4/27/84.]

WAC 296-93-330 Annual operating permit fee. The fee for an annual operating permit is sixty dollars for each material lift. No operating permit shall be issued for the operation of a material lift until the department has received the fee. [Statutory Authority: RCW 70.87.030. 84-10-025 (Order 84-7), § 296-93-330, filed 4/27/84.]

Chapter 296-104 WAC

BOARD OF BOILER RULES--SUBSTANTIVE

WAC	
296-104-010	Definitions.
296-104-015	Board meetings.
296-104-200	Standards for new construction.
296-104-201	Repealed.
296-104-500	Nonnuclear repairs--Alterations.
296-104-515	Repairs--Safety devices.
296-104-700	Inspection fees--Certificate fees--Expenses.

DISPOSITION OF SECTIONS FORMERLY CODIFIED IN THIS CHAPTER

296-104-201	Inspection of systems--Standard for water chillers. [Statutory Authority: RCW 70.79.030. 80-14-015
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(Order 80-12), § 296-104-201, filed 9/23/80.] Repealed by 86-01-088 (Order 85-26), filed 12/19/85. Statutory Authority: RCW 70.79.040 and 70.79.050.

WAC 296-104-010 Definitions. (1) "Director" shall mean the director of the department of labor and industries.

(2) "Board of boiler rules" shall mean the board created by law and empowered to make, alter, amend, and interpret rules and regulations for the safe and proper construction, installation, repair, and use of boilers and for the proper construction, installation, and repair of unfired pressure vessels in this state.

(3) "Chief inspector" shall mean the chief boiler inspector appointed under RCW 70.79.100.

(4) "Deputy inspector" shall mean a deputy inspector of boilers and unfired pressure vessels appointed by the chief boiler inspector of Washington under the provisions of RCW 70.79.120.

(5) "Special inspector" shall mean an inspector holding a Washington commission, who is regularly employed by an insurance company authorized to insure against loss from explosion of boilers and unfired pressure vessels in this state, or who is continuously employed by any company operating unfired pressure vessels in this state for the purpose of making inspections of unfired pressure vessels used or to be used by such company.

(6) "Inspector" shall mean the chief boiler inspector, a deputy inspector, or a special inspector.

(7) "Certificate of competency" shall mean a certificate issued to a person who has passed an examination prescribed by the board of boiler rules.

(8) "Department" as used herein shall mean the department of labor and industries of the state of Washington.

(9) "Owner" or "user" shall mean a person, firm, or corporation owning or operating any boiler or unfired pressure vessel within the state.

(10) "ASME Code" shall mean the boiler and pressure vessel code of the American Society of Mechanical Engineers with amendments and interpretations thereto made and approved by the council of the society which have been regularly adopted by the board of boiler rules in accordance with the provisions of RCW 70.79.030.

(11) "Existing installations" shall mean any boiler or unfired pressure vessel constructed, installed, placed in operation, or contracted for before January 1, 1952.

(12) "Approved" shall mean approved by the chief boiler inspector as evidenced by his issuance of an inspection certificate.

(13) "Standard boiler or unfired pressure vessel" shall mean a boiler or unfired pressure vessel which bears the ASME stamp.

(14) "Nonstandard boiler or unfired pressure vessel" shall mean a boiler or unfired pressure vessel that does not bear the ASME stamp.

(15) "Boiler" shall mean a closed vessel used for heating water or liquid or for generating steam or vapor by the direct application of heat.

(16) "Direct application of heat" shall mean the firing of any fuel, solid, liquid, or gaseous, including electrical elements of any description.

(17) "Power boiler" shall mean a boiler used to produce steam or vapor at a pressure exceeding 15 lbs. per square inch gage, or a boiler used for heating water or liquid to a pressure exceeding 160 psi. or to a temperature exceeding 250°F.

(18) "Low pressure heating boiler" shall mean a boiler operated at a pressure not exceeding 15 lbs. per square inch gage steam, or at a pressure not exceeding 160 lbs. per square inch and a temperature not exceeding 250°F. for water.

(19) "Hot water supply boiler" shall mean a low pressure boiler used to heat water to a temperature not exceeding 200°F.

(20) "Unfired steam boiler" shall mean a pressure vessel in which steam is generated by an indirect application of heat.

(21) "Unfired pressure vessel" shall mean a closed vessel in which pressure is obtained from an external source, or from an indirect application of heat, including steam or hot water coils, converters or heat exchangers.

(22) "Reinstalled boiler or unfired pressure vessel" shall mean a boiler or unfired pressure vessel removed from its original setting and reerected at the same location or at a new location without change of ownership.

(23) "Second hand boiler or unfired pressure vessel" shall mean a boiler or unfired pressure vessel of which both the location and ownership have changed after primary use.

(24) "Condemned boiler or unfired pressure vessel" shall mean a boiler or unfired pressure vessel that has been inspected and declared unsafe or disqualified by legal requirements by an inspector who has applied a stamping or marking designating its condemnation.

(25) "Internal inspection" shall mean an inspection made when a boiler or unfired pressure vessel is shut down and handholes, manholes, or other inspection openings are open or removed for inspection of the interior.

(26) "External inspection" shall mean an inspection made while a boiler or unfired pressure vessel is in operation and includes the inspection and demonstration of controls and safety devices.

(27) "Place of public assembly" shall mean a building used in whole or in part for occupation by persons for such purposes as worship, hospitals, education, instruction, entertainment, amusement, waiting transportation, or child care centers.

Child care centers include those agencies which operate facilities for the care of thirteen children or more. No such center shall be located in a private family residence. The substantive rules of this code shall apply to all child care centers operated in the state of Washington.

(28) "Fusion welding" shall mean a process of welding metals in a molten, or molten and vaporous state, without the application of mechanical pressure or blows. Such welding may be accomplished by the oxy-acetylene

or oxy-hydrogen flame or by the electric arc. Thermit welding shall be classified as fusion welding.

(29) "Major repair" shall mean one upon which the strength of a boiler or unfired pressure vessel depends.

(30) "Agriculture purposes" shall mean any act performed on a farm in production of crops or livestock, and shall include the storage of such crops and livestock in their natural state, but shall not be construed to include the processing or sale of crops or livestock.

(31) "Attendant" shall mean the person in charge of the operation of a boiler or unfired pressure vessel.

(32) "Automatic operation of a boiler" shall mean full control of feed water and fuel in order to maintain the pressure and temperature constant within the limits set. Controls must be such that the operation follows the demand without interruption. Manual restart may be required when the burner is off because of low water, flame failure, or power failure.

(33) "Alteration" is a structural modification of, or a departure from an original design or existing construction.

(34) "Repair" is a restoration of any damaged or impaired part to an effective and safe condition. [Statutory Authority: RCW 70.79.040 and 70.79.050. 86-01-088 (Order 85-26), § 296-104-010, filed 12/19/85; Order 72-11, § 296-104-010, filed 7/7/72; Part I, filed 3/23/60.]

WAC 296-104-015 Board meetings. The board of boiler rules shall hold its regular meetings on the third Tuesday of January, March, May, September and November of each year, the time and place of each regular meeting to be set by the chairman of the board. [Statutory Authority: RCW 70.79.040 and 70.79.050. 86-01-088 (Order 85-26), § 296-104-015, filed 12/19/85; Order 72-11, § 296-104-015, filed 7/7/72.]

WAC 296-104-200 Standards for new construction. The standards for new construction are the ASME Boiler and Pressure Vessel Code, the 1980 edition of ANSI B31.3 for oil and chemical plants, and the 1983 edition of ANSI B31.1 for other nonnuclear construction, with all addenda as effectively made part of the above referenced ANSI sections of the codes. The last preceding code may be used on and after the date of issue and becomes mandatory twelve months after adoption by the board as defined in RCW 70.79.050(2). The board recognizes that the ASME Code states that new editions of the code become mandatory on issue and that subsequent addenda become mandatory six months after the date of issue. Also, in circumstances such as nuclear systems the time period for addenda becoming mandatory is defined in the Code of Federal Regulations. [Statutory Authority: RCW 70.79.040 and 70.79.050. 86-01-088 (Order 85-26), § 296-104-200, filed 12/19/85. Statutory Authority: RCW 70.79.030 and 70.79.330. 84-11-016 (Order 84-09), § 296-104-200, filed 5/10/84; 82-24-025 (Order 82-36), § 296-104-200, filed 11/23/82, effective 1/1/83. Statutory Authority: RCW 70.79.030. 82-05-003 (Order 82-2), § 296-104-200, filed 2/4/82; 81-12-012 (Order 81-10),

§ 296-104-200, filed 5/28/81; 81-01-114 (Order 80-28), § 296-104-200, filed 12/24/80; 80-05-065 (Order 80-7), § 296-104-200, filed 4/23/80; 79-05-054 (Order 79-7), § 296-104-200, filed 4/30/79; 78-10-096 (Order 78-19), § 296-104-200, filed 10/3/78; Order 77-23, § 296-104-200, filed 11/8/77; Order 77-9, § 296-104-200, filed 5/26/77; Order 75-35, § 296-104-200, filed 10/29/75; Order 74-37, § 296-104-200, filed 11/8/74; Order 73-1, § 296-104-200, filed 3/22/73; Order 72-17, § 296-104-200, filed 9/28/72; Order 72-11, § 296-104-200, filed 7/7/72; Part IV, § 1, filed 3/23/60.]

WAC 296-104-201 Repealed. See Disposition Table at beginning of this chapter.

WAC 296-104-500 Nonnuclear repairs--Alterations. Where a major repair, involving welding to a pressure retaining part is performed, or an alteration is accomplished, a National Board Inspection Code R-1 report, signed by the certificate holder or a jurisdictional authorized owner-user inspection agency, and an authorized inspector shall be submitted to the jurisdiction. In addition, a copy of the R-1 alteration report will be sent to the National Board for Altered Registered Boilers and Pressure Vessels. Repairs and alterations to all boilers, pressure vessels, and their appurtenances shall conform to the rules contained in the National Board Inspection Code wherever they apply, except as modified above for the R-1 report submission. Furthermore, repairs shall be performed only by those holding an ASME Certificate of Authorization or a National Board "R" Certificate of Authorization or has an owner-user inspection agency accepted by the jurisdiction. In all cases the material and workmanship shall comply with the rules contained in the appropriate sections of the ASME Code. [Statutory Authority: RCW 70.79.030 and 70.79.330. 84-21-012 (Order 84-20), § 296-104-500, filed 10/5/84; Part VII, § 1, filed 3/23/60.]

WAC 296-104-515 Repairs--Safety devices. All boilers and pressure vessels shall be safeguarded by safety valves or safety relief valves as specified in the ASME Code. Rupture discs are acceptable where they apply.

The resetting, repairing, and restamping of safety devices shall be done by a qualified manufacturer or valve repair shop holding a valid "V," "UV," "NV," or "VR" Certificate of Authorization issued by the National Board of Boiler and Pressure Vessel Inspectors. Section IV safety valves shall be repaired only by the valve manufacturer. Boiler and pressure vessel users, however, may authorize external adjustments to be made to bring their installed safety devices, except Section IV safety valves, back to the stamped set pressure provided that qualified testing procedures are followed. This adjustment shall be witnessed and approved by a national

board commissioned inspector. All such external adjustments shall be resealed showing the identification of the organization making the adjustments and the date. [Statutory Authority: RCW 70.79.030 and 70.79.330. 84-21-012 (Order 84-20), § 296-104-515, filed 10/5/84; Part VII, § 4, filed 3/23/60.]

WAC 296-104-700 Inspection fees--Certificate fees--Expenses. The following fees shall be paid by, or on behalf of, the owner or user upon the completion of the inspection. The inspection fees apply to inspections made by inspectors employed by the state.

Heating boilers:	Internal	External
Cast iron--All sizes	25.00	20.00
All other boilers less than 500 sq. ft.	30.00	20.00
500 sq. ft. to 2500 sq. ft.	50.00	25.00
Each additional 2500 sq. ft. of total heating surface, or any portion thereof	20.00	10.00
Power boilers:	Internal	External
Less than 100 sq. ft.	25.00	20.00
100 sq. ft. to less than 500 sq. ft.	30.00	20.00
500 sq. ft. to 2500 sq. ft.	50.00	25.00
Each additional 2500 sq. ft. of total heating surface, or any portion thereof	20.00	10.00
Pressure vessels:		
Automatic utility hot water supply heaters per RCW 70.79.090		5.00
All other pressure vessels:		
Square feet shall be determined by multiplying the length of the shell by its diameter.	Internal	External
Less than 15 sq. ft.	20.00	15.00
15 sq. ft. to less than 50 sq. ft.	30.00	15.00
50 sq. ft. to 100 sq. ft.	35.00	20.00
For each additional 100 sq. ft. or any portion thereof	10.00	5.00
Certificate of inspection fees: For objects inspected, the certificate of inspection fee is \$15.00 per object.		
Nonnuclear shop inspections, field construction inspections, and special inspection services:		
For each hour or part of an hour up to 8 hours	30.00	
For each hour or part of an hour in excess of 8 hours	45.00	

Nuclear shop inspections, nuclear field construction inspections, and nuclear triennial shop survey and audit:

For each hour or part of an hour up to 8 hours	45.00
For each hour or part of an hour in excess of 8 hours	70.00

Nonnuclear triennial shop survey and audit:

When state is authorized inspection agency:	
For each hour or part of an hour up to 8 hours	30.00
For each hour or part of an hour in excess of 8 hours	45.00
When insurance company is authorized inspection agency:	
For each hour or part of an hour up to 8 hours	45.00
For each hour or part of an hour in excess of 8 hours	70.00

Expenses shall include:

Travel time and mileage: The department shall charge for its inspectors' travel time from their offices to the inspection sites and return. The travel time shall be charged for at the same rate as that for the inspection, audit, or survey. The department shall also charge 20 cents per mile or the actual cost of purchased transportation. Hotel and meals: Actual cost.

Reinspection fee: Same as the fee for the previous inspection during which discrepancies were reported. The fee will be charged only if the discrepancies are not corrected before the reinspection. The fee shall not exceed \$25.00. Washington state specials: For each vessel to be considered by the board for a Washington state special certificate, a fee of \$300.00 must be paid to the department before the board meets to consider the vessel. The board may, at its discretion, prorate the fee when a number of vessels that are essentially the same are to be considered.

[Statutory Authority: RCW 70.79.030 and 70.79.330. 84-21-012 (Order 84-20), § 296-104-700, filed 10/5/84; 84-11-016 (Order 84-09), § 296-104-700, filed 5/10/84; 82-24-025 (Order 82-36), § 296-104-700, filed 11/23/82, effective 1/1/83; Order 77-23, § 296-104-700, filed 11/8/77; Emergency Order 77-22, § 296-104-700, filed 11/8/77.]

**Chapter 296-116 WAC
PILOTAGE RULES**

WAC	
296-116-070	Collection of fees.
296-116-120	Physical requirements.
296-116-185	Tariffs, and pilotage rates for the Grays Harbor pilotage district.
296-116-300	Pilotage rates for the Puget Sound pilotage district.

296-116-330 Repealed.

DISPOSITION OF SECTIONS FORMERLY CODIFIED IN THIS CHAPTER

296-116-330 Marine pilot—Trip insurance. [Statutory Authority: RCW 88.16.117. 83-03-037 (Order 83-1, Resolution No. 83-1), § 296-116-330, filed 1/17/83.] Repealed by 84-11-041 (Order 84-3, Resolution No. 84-3), filed 5/16/84. Statutory Authority: RCW 88.16.035(1).

WAC 296-116-070 Collection of fees. All pilots shall pay an annual license fee of one thousand dollars for every year in which they perform any pilotage services. If a licensed pilot does not perform pilotage services during a license year, his fee for that year shall be reduced to five hundred dollars upon application to the board. The board of pilotage commissioners shall receive all fees for licenses or for other purposes and make proper accounting of same and transmit all such funds to the pilotage account. [Statutory Authority: RCW 88.16.090. 85-15-032 (Order 85-1, Resolution No. 85-1), § 296-116-070, filed 7/12/85; 84-11-056 (Order 84-4, Resolution No. 84-4), § 296-116-070, filed 5/18/84. Statutory Authority: RCW 88.16.035. 82-24-010 (Order 82-8, Resolution No. 82-8), § 296-116-070, filed 11/18/82; 79-11-063 (Order 79-5, Resolution No. 79-5), § 296-116-070, filed 10/18/79. Statutory Authority: RCW 88.16.035 and 88.16.155. 78-09-057 (Order 78-2, Resolution No. 78-2), § 296-116-070, filed 8/23/78; Order 2-68, § 296-116-070, filed 11/1/68; § 7, effective 11/25/58.]

WAC 296-116-120 Physical requirements. (1) In order to determine the physical fitness of persons to continue to serve as licensed pilots under the provisions of the pilotage act, all licensed pilots shall be required to pass a general physical examination annually within forty-five days prior to the date their annual state pilot license fee is due. As part of this examination pilots shall have completed on a form provided by the board a detailed report of physical examination. This form shall be prepared by the pilot and the examining physician and shall be maintained on file by the physician for a period of five years. The physician will submit to the board a letter stating whether and under what conditions the pilot is capable of providing pilotage services. The completion of the form and the letter to the board satisfies the minimum health standards of RCW 88.16.090(6). The detailed report of physical examination is a confidential record which will be made available to the board at the board's request and will not be available for public inspection. Such examination shall be obtained at the expense of the licensed pilots from a physician or physicians designated in advance by the board. The secretary of the board shall give each pilot reasonable written notice of the date when any such physical examination becomes due and shall specify the name of the physicians then approved by the board to conduct such physical examination.

(2) The physical examination required of all pilots shall demonstrate that he is in all respects physically fit to perform his duties as a pilot. The examination shall

assure that one's abilities as a pilot will not be impaired by eyesight, hearing or other bodily function and shall include examination of the pilot's eyes (including tests for color blindness, depth perception, night vision, disease, field of vision and reflexes); ears; heart; blood pressure; blood components; pulse; speech capabilities; history of diseases (including diabetes, cancer, arthritis, arrhythmia, asthma, bronchitis, emphysema, ulcers, alcoholism and other illnesses) and any other type of information which the physician feels is relevant.

(3) In the case of renewal of license as pilot, should the pilot be temporarily physically incapacitated at the time his license is due to be renewed, the commission shall not revoke such license until a further physical examination to be given at the expiration of three months. This procedure shall be carried on until it is evident that the pilot is permanently incapacitated; provided further, that no pilot shall be carried on the inactive list for longer than one year if disabled. Any pilot who is physically incapacitated shall not serve as a pilot during such period of incapacitation. [Statutory Authority: RCW 88.16.090. 85-15-033 (Order 85-2, Resolution No. 85-2), § 296-116-120, filed 7/12/85. Statutory Authority: RCW 88.16.035 and 88.16.090(6). 80-16-005 (Resolution No. 79-5), § 296-116-120, filed 10/23/80. Statutory Authority: RCW 88.16.035. 79-11-063 (Order 79-5, Resolution No. 79-5), § 296-116-120, filed 10/18/79; Order 73-6, § 296-116-120, filed 5/11/73; Order 2-68, § 296-116-120, filed 11/1/68; § 12, effective 11/25/58.]

WAC 296-116-185 Tariffs, and pilotage rates for the Grays Harbor pilotage district. The following rates shall become effective on January 1, 1985.

CLASSIFICATION OF PILOTAGE SERVICE RATE

Piloting of vessels in the inland waters and tributaries of Grays Harbor:

Each vessel shall be charged according to its draft and tonnage. The draft charges shall be \$33.51 per meter (or \$10.22 per foot) and the tonnage charge shall be \$.1069 per net registered ton. The minimum net registered tonnage charge is \$374.15. The charge for an extra vessel (in case of tow) is \$213.80.

Boarding fee:

Per each boarding/deboarding from a boat..... \$160.35

Harbor shifts:

For each shift from dock to dock, dock to anchorage, anchorage to dock, or anchorage to anchorage \$267.25
 Delays per hour \$ 64.14
 Cancellation charge (pilot only) \$106.90
 Cancellation charge (pilot boat only) \$320.70

CLASSIFICATION OF PILOTAGE SERVICE RATE

Travel allowance:

Boarding or deboarding a vessel off Grays Harbor entrance 50.00
 Pilot when traveling to an outlying port to join a vessel or returning through an outlying port from a vessel which has been piloted to sea shall be paid \$374.15 for each day or fraction thereof, and the travel expense incurred.

Bridge transit:

Charge for each bridge transited \$117.59

Miscellaneous:

The balance of amounts due for pilotage rates not paid within 45 days of invoice will be assessed at 1 1/2% per month late charge. At least a four hour notice shall be given for an arrival, sailing, or change of ETA or ETD.

[Statutory Authority: RCW 88.16.035(4). 85-02-048 (Order 84-5, Resolution No. 84-5), § 296-116-185, filed 12/31/84; 83-15-012 (Order 83-3, Resolution No. 83-3), § 296-116-185, filed 7/12/83; 82-08-016 (Order 82-1, Resolution No. 82-1), § 296-116-185, filed 3/29/82; 81-07-009 (Order 81-1, Resolution No. 81-1), § 296-116-185, filed 3/6/81; 80-03-081 (Order 79-6, Resolution No. 79-6), § 296-116-185, filed 3/4/80; Order 2-68, § 296-116-185, filed 11/1/68.]

WAC 296-116-300 Pilotage rates for the Puget Sound pilotage district. These rates shall become effective on January 1, 1985.

CLASSIFICATION

RATE

Ship length overall (LOA)
 Charges: per LOA rate schedule in this section

Boarding fee: \$ 26.00
 Per each boarding/deboarding at the Port Angeles pilot station.

Harbor shift - Live ship (Seattle Port) LOA Zone I
 Harbor shift - Live ship (other than Seattle Port) LOA Zone I
 Harbor shift - Dead ship Double LOA Zone I

Dead ship towing charge: Double LOA Zone
 LOA of tug + LOA of tow + beam of tow
 Any tow exceeding seven hours, two pilots are mandatory. Harbor shifts shall constitute and be limited to those services in moving vessels from dock to dock, from anchorage to dock, from dock to anchorage, or from anchorage to anchorage in the same port after all other applicable tariff charges for pilotage services have been recognized as payable.

CLASSIFICATION	RATE
Waterway and bridge charges: Ships up to 90' beam: A charge of \$133.00 shall be in addition to bridge fees for any vessel movements both inbound and outbound required to transit south of Spokane Street Bridge in Seattle, south of Eleventh Street Bridge in any of the Tacoma waterways, in Port Gamble, or in the Snohomish River. Any vessel movements required to transit through bridges shall have an additional charge of \$63.00 per bridge.	
Ships 90' beam and/or over: A charge of \$179.00 shall be in addition to bridge fees for any vessel movements both inbound and outbound required to transit south of Spokane Street Bridge in Seattle and south of Eleventh Street Bridge in any of the Tacoma waterways. Any vessel movements required to transit through bridges shall have an additional charge of \$126.00 per bridge. (The above charges shall not apply to transit of vessels from Shilshole Bay to the limits of Lake Washington.) In a case where two pilots are employed for a single vessel waterway or bridge transit, a second pilot charge shall include the bridge and waterway charge in addition to the harbor shift rate.	
Compass adjustment	\$178.00
Radio direction finder calibration	\$178.00
Launching vessels	\$267.00
Trial trips, 6 hours or less	\$ 72.00 per hr.
(Minimum \$435.00)	
Trial trips, over 6 hours (two pilots)	\$142.00 per hr.
Shilshole Bay — Salmon Bay	\$104.00
Salmon Bay — Lake Union	\$ 83.00
Lake Union — Lake Washington (plus LOA zone from Webster Point)	\$104.00
Cancellation charge	LOA Zone I
Cancellation charge — Port Angeles (when pilot is ordered and vessel proceeds without stopping for pilot.)	LOA Zone I
Docking delay after anchoring: Applicable harbor shift rate to apply, plus \$72.00 per hour standby. No charge if delay is 60 minutes or less. If the delay is more than 60 minutes, charge is \$72.00 for every hour or fraction thereof.	\$ 72.00
Sailing delay No charge if delay is 60 minutes or less. If the delay is more than 60 minutes, charge is \$72.00 for every hour or fraction thereof.	\$ 72.00 per hour
Slow-down — \$72.00 per hour for all time in excess of time spent in that particular transit for that speed of advance normal for vessel that is slowed.	\$ 72.00 per hour
Super ships — Additional charge to LOA zone mileage of \$0.0444 a gross ton for all gross tonnage in excess of 20,000 gross tons up to 50,000 gross tons. In excess of 50,000 gross tons, the charge shall be \$0.0531 per gross ton.	
Delayed arrival Port Angeles (When pilot is ordered and vessel does not arrive within two hours without notification of change of ETA.)	\$ 72.00 per hour

Transportation to vessels on Puget Sound:

March Point or Anacortes	\$ 96.00
Bangor	56.00
Bellingham	106.00
Bremerton	29.00
Cherry Point	125.00
Dupont	56.00
Edmonds	20.00
Everett	36.00
Ferndale	115.00
Manchester	44.00
Mukilteo	35.00
Olympia	72.00
Point Wells	20.00
Port Gamble	51.00
Port Townsend (Indian Island)	73.00
Semiahmoo (Blaine)	131.00
Tacoma	37.00
Tacoma Smelter	42.00
Winslow	29.00

- (a) Interport shifts: Transportation paid to and from both points.
- (b) Intraharbor shifts: Transportation to be paid both ways. If intraharbor shift is cancelled on or before scheduled reporting time, transportation paid one way only.
- (c) Cancellation: Transportation both ways unless notice of cancellation is received prior to scheduled reporting time in which case transportation need only be paid one way.
- (d) Any new facilities or other seldom used terminals, not covered above, shall be based on mileage x \$1.40 per mile.

Delinquent payment charge: 1 1/2% per month after 45 days from first billing.

Nonuse of pilots: Ships taking and discharging pilots without using their services through all Puget Sound and adjacent inland waters shall pay full pilotage fees on the LOA zone mileage basis from Port Angeles to destination, from place of departure to Port Angeles, or for entire distance between two ports on Puget Sound and adjacent inland waters.

LOA rate schedule

The following rate schedule is based upon distances furnished by National Oceanic and Atmospheric Administration, computed to the nearest half-mile and includes retirement fund contributions.

LOA	ZONE I Intra Harbor	ZONE II 0-30 Miles	ZONE III 31-50 Miles	ZONE IV 51-75 Miles	ZONE V 76-100 Miles	ZONE VI 101 Miles & Over
Up to 449	126	195	340	509	687	893
450 - 459	128	200	343	518	696	896
460 - 469	132	203	346	525	707	900
470 - 479	137	207	351	536	710	903
480 - 489	139	212	353	545	716	906
490 - 499	142	214	357	555	723	912
500 - 509	148	218	362	563	729	917
510 - 519	150	224	366	571	735	920
520 - 529	152	232	373	574	742	929
530 - 539	158	235	378	580	753	938
540 - 549	161	239	384	586	767	946
550 - 559	164	245	387	594	773	955
560 - 569	170	254	395	599	781	966
570 - 579	174	258	399	601	788	972

Chapter 296-124 WAC

RULES AND REGULATIONS FOR THE ADMINISTRATION OF THE THEATRICAL ENTERPRISE ACT

LOA	ZONE I Intra Harbor	ZONE II 0-30 Miles	ZONE III 31-50 Miles	ZONE IV 51-75 Miles	ZONE V 76-100 Miles	ZONE VI 101 Miles & Over
580 - 589	181	262	406	606	794	982
590 - 599	189	267	409	610	804	992
600 - 609	195	276	415	612	813	998
610 - 619	206	279	422	616	822	1008
620 - 629	215	283	428	621	831	1018
630 - 639	227	289	432	623	838	1028
640 - 649	237	295	437	626	848	1035
650 - 659	250	301	444	631	857	1045
660 - 669	258	304	449	634	866	1053
670 - 679	265	310	453	644	875	1061
680 - 689	271	316	459	651	883	1071
690 - 699	279	322	464	662	893	1091
700 - 719	292	332	474	670	909	1106
720 - 739	308	343	485	679	929	1124
740 - 759	322	357	496	687	946	1143
760 - 779	335	372	507	696	966	1160
780 - 799	351	385	518	707	982	1180
800 - 819	364	399	527	713	998	1196
820 - 839	378	412	538	723	1018	1212
840 - 859	394	429	549	731	1035	1232
860 - 879	407	444	560	750	1053	1249
880 - 899	422	458	571	768	1071	1268
900 - 919	435	472	581	786	1091	1286
920 - 939	450	485	594	804	1106	1304
940 - 959	464	499	602	822	1124	1320
960 - 979	477	514	614	838	1143	1339
980 - 999	494	527	624	857	1160	1357
1000 & over	507	544	636	875	1180	1374

[Statutory Authority: RCW 88.16.035(4). 86-02-035 (Order 86-1, Resolution No. 86-1), § 296-116-300, filed 12/30/85; 85-02-048 (Order 84-5, Resolution No. 84-5), § 296-116-300, filed 12/31/84; 84-04-006 (Order 84-1, Resolution No. 84-1), § 296-116-300, filed 1/20/84; 83-17-055 (Order 83-6, Resolution No. 83-6), § 296-116-300, filed 8/17/83; 82-13-065 (Order 82-4, Resolution No. 82-4), § 296-116-300, filed 6/16/82. Statutory Authority: RCW 88.16.035. 81-12-017 (Order 81-2, Resolution No. 81-2), § 296-116-300, filed 5/29/81; 80-06-084 (Order 80-1, Resolution No. 80-1), § 296-116-300, filed 5/28/80. Statutory Authority: RCW 88.16.035(4). 79-07-033 (Order 79-4, Resolution No. 79-4), § 296-116-300, filed 6/19/79. Statutory Authority: Chapter 88.16 RCW and 1977 ex. sess. c 337, §§ 1 and 4. 78-02-008 (Order 78-1), § 296-116-300, filed 1/6/78, effective 2/10/78; Order 77-18, § 296-116-300, filed 9/20/77, effective 11/1/77; Order 76-24, § 296-116-300, filed 7/22/76; Order 75-3, § 296-116-300, filed 2/10/75; Order 74-2, § 296-116-300, filed 1/8/74; Order 73-8, § 296-116-300, filed 6/20/73 and Emergency Order 73-10, filed 7/19/73, effective 8/14/73; Order 70-7, § 296-116-300, filed 7/16/70; 7/25/67; 2/18/64; 10/29/62; 12/28/60; 3/23/60.]

WAC 296-116-330 Repealed. See Disposition Table at beginning of this chapter.

WAC

- 296-124-010 Definitions.
- 296-124-020 Bond or cash deposit.
- 296-124-021 Statement of intent to hire.
- 296-124-022 Filing claim for wages against bond or cash deposit.
- 296-124-040 Multiple events.
- 296-124-050 Failure to post bond.

WAC 296-124-010 Definitions. As used in this chapter:

(1) "Theatrical enterprise" means the production of any circus, vaudeville, carnival, revue, variety show, musical comedy, operetta, opera, drama, endurance contest, marathon, walkathon, or any other entertainment event where persons are a part of the enterprise's presentation. Theatrical enterprise does not include a program of a radio or television station operating pursuant to a license issued by the Federal Communications Commission or any event produced by a nonprofit cultural or artistic organization that has been located in a community for at least two years.

(2) "Department" means the department of labor and industries.

(3) "Director" means the director of the department of labor and industries or his duly authorized deputy or representative.

(4) "Assistant director" means the supervisor of industrial relations for the department of labor and industries or his duly authorized deputy or representative.

(5) "Promoter" includes any individual, firm, partnership, association or corporation giving employment to individuals involved with the production of a theatrical enterprise.

(6) "Employee" means an employee who is employed in the business of his employer whether by way of manual labor or otherwise. [Statutory Authority: RCW 49.38.070. 85-03-065 (Order 85-4), § 296-124-010, filed 1/16/85.]

WAC 296-124-020 Bond or cash deposit. (1) Any persons engaged in the business of promoting a theatrical enterprise in this state shall deposit with the department the cash or bond issued by a surety company authorized to do business in this state in an amount determined sufficient by the department to pay the wages of every person involved in the production of the theatrical enterprise for the period for which a single payment of wages is made, but not to exceed one week.

(2) The deposit required under subsection (1) of this section shall be on file with the department seven calendar days before the commencement of the theatrical enterprise.

(3) The deposit required under subsection (1) shall be in existence for a period of at least one year after conclusion of the event.

(4) A cash deposit may be made with the department in lieu of a bond.

(5) An assigned savings account may be left with the department in lieu of the bond. [Statutory Authority: RCW 49.38.070. 85-03-065 (Order 85-4), § 296-124-020, filed 1/16/85.]

WAC 296-124-021 Statement of intent to hire. In addition to the bond or cash deposit there shall be filed, on a form supplied by the department, a notarized statement of intent to hire which shall include:

- (1) Name and address (current and permanent) of the person(s) promoting the theatrical enterprise.
- (2) The promoters' bank account location.
- (3) Proof of the promoters' industrial insurance coverage for workers.
- (4) Name of event sponsor, if applicable.
- (5) Date, time period and location of event.
- (6) Classification of workers employed.
- (7) Approximate number of workers and hourly rate to be paid each classification of workers.
- (8) Total estimate of weekly payroll for the event.
- (9) Copy of this intent shall be on file at the site of the event. [Statutory Authority: RCW 49.38.070. 85-03-065 (Order 85-4), § 296-124-021, filed 1/16/85.]

WAC 296-124-022 Filing claim for wages against bond or cash deposit. An employee may make claim against bond or cash deposit by:

- (1) Filing suit in superior or district court in the county where the event was performed or where employer or principle owner resides; and,
- (2) The employee shall file notice of court action with the department within 20 days of the conclusion of the suit; or,
- (3) An employee may file a wage claim assignment with the department in accordance with RCW 49.48.040 within 90 days of the conclusion of the event. [Statutory Authority: RCW 49.38.070. 85-03-065 (Order 85-4), § 296-124-022, filed 1/16/85.]

WAC 296-124-040 Multiple events. In the case of multiple events only one bond or cash deposit and statement of intent to hire must be filed by the promoter, providing that the bond or cash deposit and other information required by this chapter is sufficient for all events covered. [Statutory Authority: RCW 49.38.070. 85-03-065 (Order 85-4), § 296-124-040, filed 1/16/85.]

WAC 296-124-050 Failure to post bond. Failure to conform with provisions of these regulations may result in the department bringing legal action to cause compliance and/or the closure of the business. [Statutory Authority: RCW 49.38.070. 85-03-065 (Order 85-4), § 296-124-050, filed 1/16/85.]

Chapter 296-150A WAC

RULES AND REGULATIONS FOR FACTORY-BUILT HOUSING AND COMMERCIAL STRUCTURES AND GOVERNOR'S ADVISORY BOARD ADMINISTRATIVE RULES

WAC

- 296-150A-005 Application and scope.
- 296-150A-016 Definitions.
- 296-150A-040 Department check of the design plan.
- 296-150A-100 Complaint investigations.
- 296-150A-105 Fee required if a structure or component is not ready for inspection.
- 296-150A-125 Notice of noncompliance.
- 296-150A-300 Construction standards for factory-built structures.

WAC 296-150A-005 Application and scope. (1) This chapter implements the provisions of RCW 43.22.450 through 43.22.490, which cover the construction and approval of factory-built structures. The provisions apply to the in-plant inspection of closed construction not inspectable after delivery to the site.

(2) This chapter applies to:

- (a) Factory-built structures;
- (b) Components; and

(c) Equipment and installations intended to be used in factory-built structures and components. [Statutory Authority: RCW 43.22.470, 43.22.480 and 43.22.490. 85-05-026 (Order 85-1), § 296-150A-005, filed 2/15/85. Statutory Authority: RCW 43.22.475 and 43.22.480. 82-12-004 (Order 82-19), § 296-150A-005, filed 5/20/82.]

WAC 296-150A-016 Definitions. For the purposes of this chapter:

(1) "Alteration" means the replacement, addition, modification, or removal of any equipment or installations that affect the construction, structural members, fire safety, or occupancy classification, or the plumbing, heating, or electrical systems, of a structure or component.

The following are not alterations unless they are made to repair damage caused by fires, floods, or wrecks in transit or during installation:

- (a) Repairs with approved parts;
- (b) Modification of a listed fuel-burning appliance in accordance with the terms of its listing;
- (c) Replacement of equipment with similar equipment; and
- (d) Adjustment and maintenance of equipment.

(2) "Approved" means approved by the department.

(3) "Audit" means an inspection to examine for compliance a manufacturer's production and compliance control procedures.

(4) "Building site" means a tract, parcel, or subdivision of land on which a structure is or will be installed.

(5) "Compliance control" means the plan and method for ensuring that the in-plant manufacture, fabrication, assembly, or erection of structures, components, and installations, and the storing, handling, and use of materials, complies with this chapter.

(6) "Component" means a discrete element that is not inspectable at the time of installation either in the factory or in a site-built unit, but is:

- (a) Designed to be installed in a structure;
- (b) Manufactured as a unit; and

(c) Designed for a particular function or group of functions.

A component may be a floor, wall panel, roof panel, plumbing wall, electrical service wall, heating assembly, or similar assemblies. "Component" includes service cores, but does not include roof trusses.

(7) "Consumer" means a person, firm, corporation, agency, or governmental body, other than a manufacturer or dealer, that buys or leases a structure for his, her, or its own use.

(8) "Custom structure" means a one-of-a-kind structure.

(9) "Dealer" means a person, company, or corporation authorized to engage in the business of leasing, selling, offering for sale or lease, buying, or trading structures.

(10) "Department" means the Washington state department of labor and industries.

(11) "Design option" means a design that a manufacturer may use as an option to its design plan.

(12) "Design plan" means a plan for construction of a structure or component.

(13) "Equipment" means all materials, appliances, devices, fixtures, fittings, or accessories used in the manufacture, assembly, installation, or alteration of structures and components.

(14) "Factory-built structure" means a structure that is designed for occupation or use, or is occupied or used by persons; and that complies with the Uniform Building Code. "Factory-built structure" includes factory-built housing and commercial structures.

(15) "Independent inspection agency" means an organization that is in the business of inspecting structures, components, or equipment.

(16) "Insignia" means a label, stamp, or tag issued by the department to indicate that the structure or component bearing the insignia complies with this chapter.

(17) "Install" means to erect, construct, assemble, or set in place a structure, component, or piece of equipment at a building site or in another structure or building.

(18) "Labeled" means bearing the department's insignia or a label of approval from a testing or listing agency.

(19) "Lease" means an oral or written contract for the use, possession, or occupancy of property. It includes rent.

(20) "Listed" means that a piece of equipment, a component, or an installation appears in a list published by an approved testing or listing agency.

(21) "Listing agency" means an organization that is in the business of approving equipment or installations.

(22) "Local enforcement agency" means a city or county agency that enforces its laws or ordinances governing the construction and installation of structures, components, and buildings that are inspectable at the site.

(23) "Manufacturing" means making, fabricating, forming, or assembling a structure, component, equipment, or installation.

(24) "Structure" means a factory-built structure of closed construction rendering it not inspectable at the site that is entirely or substantially prefabricated or assembled at a factory or a place other than the building site on which the structure will be installed.

(25) "System" means a part of a structure or component that is designed to serve a particular function, such as a structural, plumbing, electrical, heating, or mechanical system.

(26) "Testing agency" means an organization that is in the business of testing equipment, installations, or systems.

(27) "Closed construction" means a factory assembled structure or component that may enclose a factory-installed mechanical, electrical, or plumbing equipment and is not open for visible inspection of the equipment, systems, or structure at the site.

(28) "Listed factory-built structure and component manufacturer" means a manufacturer who has paid its filing fee and has submitted applications, plans and fees to the FBH-CS Section and by such proposes to manufacture pursuant to these rules and regulations.

(29) "Local enforcement agency compliance control" means an inspection program implemented and maintained by a local enforcement agency under department certification and audit procedures.

(30) "Shell house" means factory-built housing and/or a commercial structure having incomplete construction to such an extent that it is inspectable at the site.

(31) "Service core" means a factory-assembled three-dimensional section of a building that may include installed elements containing mechanical, electrical, plumbing, heating and cooling elements, and related systems. These units may contain the kitchen, one or more bathrooms, and a utility room complex. Service cores are sometimes referred to as wet boxes, mechanical cores, or utility cores.

(32) "Technical service" means research, evaluation, consultation, plan examination, interpretation, and clarification by the department of technical data relating to the application of these rules and regulations, but not including inspections. [Statutory Authority: RCW 43.22.470, 43.22.480 and 43.22.490. 85-05-026 (Order 85-1), § 296-150A-016, filed 2/15/85. Statutory Authority: RCW 43.22.475 and 43.22.480. 82-12-004 (Order 82-19), § 296-150A-016, filed 5/20/82.]

WAC 296-150A-040 Department check of the design plan. The department shall check a design plan for compliance with this chapter. If the design plan does not comply with this chapter, the department shall notify the applicant in writing, within a reasonable time, of the deficiencies in the plan. The applicant may resubmit a corrected design plan pursuant to WAC 296-150A-045.

If the department does not find any areas in which the design plan does not comply with this chapter, the department will send the applicant a letter stating the applicant's manufacturer number and the plan number for

the design plan. The applicant may begin construction of the structure or component upon receipt of the letter from the department.

The applicant must keep a copy of the design plan at each location at which it is building the structure or component described by the design plan. [Statutory Authority: RCW 43.22.470, 43.22.480 and 43.22.490. 85-05-026 (Order 85-1), § 296-150A-040, filed 2/15/85. Statutory Authority: RCW 43.22.475 and 43.22.480. 82-12-004 (Order 82-19), § 296-150A-040, filed 5/20/82.]

WAC 296-150A-100 Complaint investigations. A person may complain in writing within one year after occupancy to the department about a structure or component. The complaint should describe the items that the person feels do not comply with this chapter. The department will send a copy of the complaint to the manufacturer and the dealer. The manufacturer and dealer have 30 days to respond. The department shall base its actions on the response.

If the department decides an investigation is necessary and discovers that the unit inspected violates this chapter, the manufacturer or dealer shall pay the cost of the inspection. If the department does not discover any violations, the complainant must pay the fees. [Statutory Authority: RCW 43.22.470, 43.22.480 and 43.22.490. 85-05-026 (Order 85-1), § 296-150A-100, filed 2/15/85. Statutory Authority: RCW 43.22.475 and 43.22.480. 82-12-004 (Order 82-19), § 296-150A-100, filed 5/20/82.]

WAC 296-150A-105 Fee required if a structure or component is not ready for inspection. If a manufacturer or person applies to the department for an inspection of a structure or component, and the structure or component is not ready to be inspected at the time or place specified in the application, the manufacturer or person must pay the department the minimum inspection fee and any travel and per diem expenses. [Statutory Authority: RCW 43.22.470, 43.22.480 and 43.22.490. 85-05-026 (Order 85-1), § 296-150A-105, filed 2/15/85. Statutory Authority: RCW 43.22.475 and 43.22.480. 82-12-004 (Order 82-19), § 296-150A-105, filed 5/20/82.]

WAC 296-150A-125 Notice of noncompliance. If an inspection or investigation reveals that a structure or component does not comply with this chapter, the department shall give or mail a notice of noncompliances to the owner, dealer, manufacturer, or other person responsible for the noncompliance. The notice of noncompliance shall describe how the structure or component does not comply with this chapter.

A person who receives a notice of noncompliances must, within ten days after receipt, notify the department in writing of the action he or she has taken or will take to correct the noncompliance. If the person has not corrected the noncompliance within ten days after receipt of the notice, or within any other period of time

allowed by the department, the department may confiscate the insignia assigned to the structure or component.

No person who has received a notice of noncompliances may move, cause to be moved, or allow another person to move the structure or component to which the notice refers until the noncompliances have been corrected, the corrections have been inspected and approved by the department, and the person has paid the appropriate inspection and insignia fees. [Statutory Authority: RCW 43.22.470, 43.22.480 and 43.22.490. 85-05-026 (Order 85-1), § 296-150A-125, filed 2/15/85. Statutory Authority: RCW 43.22.475 and 43.22.480. 82-12-004 (Order 82-19), § 296-150A-125, filed 5/20/82.]

WAC 296-150A-300 Construction standards for factory-built structures. Factory-built structures must comply with the following codes, except where a state law supersedes a code provision.

(1)(a) The design and fabrication of factory-built structures must comply with the Uniform Building Code, Appendix (except for chapter 35), and Standards (1982 editions). The "building official" mentioned in the Uniform Building Code means the assistant director of the department's building and construction safety inspection services division or his or her authorized representative.

(b) Live loading designs must comply with the Uniform Building Code. Live loading for roofs must comply with Section 2305(d), Snow Loads, and may not be less than 25 pounds per square foot.

(2) Electrical equipment, installations, and systems in or on factory-built housing and commercial structures must comply with the National Electrical Code (1984 edition) published by the National Fire Protection Association, as amended by chapter 19.28 RCW and the rules adopted under that chapter.

(3) Mechanical equipment, installations, and systems in or on factory-built housing and commercial structures must comply with the Uniform Mechanical Code (1982 edition) published by the International Association of Plumbing and Mechanical Officials, including Appendix B of chapter 22 and the standards.

(4)(a) Plumbing equipment, installations, and systems in or on factory-built housing and commercial structures must comply with the Uniform Plumbing Code (1982 edition) published by the International Association of Plumbing and Mechanical Officials. The code, however, shall not apply to gas piping, water heaters, or vents for water heaters.

(b) A manufacturer may not use plastic drain, waste, or vent pipe for laundries, laundromats, cleaners, service stations, repair garages, restaurants, snack bars, hospitals, nursing homes, medical clinics, manufacturing plants, factories, assembly buildings, theatres, or schools, or other buildings used for education, unless the pipes will carry only domestic sewage.

(5) All factory-built structures that are not residential dwellings must comply with the rules adopted pursuant to RCW 19.27.030(5), which requires manufacturers to

make buildings and facilities accessible to and usable by the physically handicapped and elderly persons.

(6) All factory-built structures must comply with the Washington State Energy Code set by chapter 51-12 WAC as of March 1, 1982. [Statutory Authority: RCW 43.22.470, 43.22.480 and 43.22.490. 85-05-026 (Order 85-1), § 296-150A-300, filed 2/15/85. Statutory Authority: RCW 43.22.475 and 43.22.480. 82-12-004 (Order 82-19), § 296-150A-300, filed 5/20/82.]

Chapter 296-150B WAC

STANDARDS FOR MOBILE HOMES, COMMERCIAL COACHES, AND RECREATIONAL VEHICLES

WAC

- 296-150B-300 Construction requirements for mobile homes.
296-150B-305 Standards for recreational vehicles.
296-150B-310 Construction requirements for recreational vehicles—
Power-supply assembly.
296-150B-990 Fees.

WAC 296-150B-300 Construction requirements for mobile homes. Alterations and repairs to mobile homes made after sale to a dealer shall comply with this section.

(1) Subject to the exceptions in subsections 2 and 3, mobile homes must comply with the 1982 edition of the *Standard for Mobile Homes*, as adopted by the National Fire Protection Association (NFPA) and approved by the American National Standards Institute (ANSI) in ANSI/NFPA 501B 1982.

(2) Mobile homes need not comply with Chapter 1, 1-2 Definitions Common to Chapters 1-5 (see WAC 296-150-015).

(3) Mobile homes must comply with the following provisions of ANSI/NFPA 501B 1982, as amended. Chapter 4, Section 4-6.3.5 Installation of Solid Fuel-Burning Fireplaces and Fireplace Stoves. Subsection (A)1. is amended to read: "A listed factory-built chimney designed to be attached directly to the fireplace or fireplace stove shall be used. The listed factory-built chimney shall be equipped with and contain as part of its listing a termination device and a spark arrester." Subsection (A)3. is amended to read: "The combustion air inlet shall conduct the air directly into the fire chamber and shall be designed to prevent material from the hearth dropping into the area beneath the mobile home." [Statutory Authority: RCW 43.22.340. 85-05-028 (Order 85-5), § 296-150B-300, filed 2/15/85; 82-04-060 (Order 82-4), § 296-150B-300, filed 2/2/82.]

WAC 296-150B-305 Standards for recreational vehicles. (1) Subject to the exceptions in subsection (2), recreational vehicles must comply with the 1982 edition of the *Standard for Recreational Vehicles*, as adopted by the National Fire Protection Association (NFPA) and approved by the American National Standards Institute (ANSI) ANSI/NFPA 501C (1982 edition).

(2) Recreational vehicles need not comply with the following provision of ANSI/NFPA 501C 1982.

(a) Delete Section 4-7.6.4 and exceptions No. 1 and No. 2 of Chapter 4, Electrical Systems. See WAC 296-150B-310.

(b) Delete the note in Section 3-6.2.2 in Chapter 3, Heating/Air Conditioning, and add the following exception:

A fuel-burning refrigerator may be installed to meet the above requirements using panels provided by the recreational vehicle manufacturer if the refrigerator manufacturer furnishes the necessary vents and grills as specified by the listing requirements and the refrigerator is equipped with the necessary means to ensure the integrity of the separation of the combustion system when the refrigerator is removed for field service and reinstalled.

(c) Delete Section 4-4.1 from Chapter 4, Electrical Systems. See WAC 296-150B-315. [Statutory Authority: RCW 43.22.340. 85-05-028 (Order 85-5), § 296-150B-305, filed 2/15/85; 82-04-060 (Order 82-4), § 296-150B-305, filed 2/2/82.]

WAC 296-150B-310 Construction requirements for recreational vehicles—Power-supply assembly. In accordance with Sections 4-7.6.4 and 4-7.4.4 of Chapter 4 of ANSI/NFPA 501C 1982, any recreational vehicle with a rating that exceeds 30 amperes, 120 volts, shall use an approved, listed, and appropriately rated 120/240 volt power-supply assembly. However, if a recreational vehicle has a dual power supply source that consists of a generator and a power-supply cord, the recreational vehicle must comply with Section 4-7.8 of Chapter 4 of ANSI/NFPA 501C 1982. [Statutory Authority: RCW 43.22.340. 85-05-028 (Order 85-5), § 296-150B-310, filed 2/15/85; 82-04-060 (Order 82-4), § 296-150B-310, filed 2/2/82.]

WAC 296-150B-990 Fees.

- (1) Initial manufacturer filing fee: \$ 25.00
- (2) Fees for application for design plan approval. The fees listed in this subsection cover the application filing fee and one hour of examination time. The applicant will be required to pay for examination time beyond the base hours pursuant to the fees set in subsection (6).
- (a) Fee for application for commercial coach, recreational vehicle, or component design plan approval: \$ 70.00

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|--|---|---|
| <p>(b) Fees for resubmittals of a design plan for a commercial coach, recreational vehicle, or component:</p> | <p>\$ 50.00</p> | <p>for routine inspections; \$50.00 minimum plus \$25.00 for every half-hour or fraction of a half-hour over one hour for nonroutine inspections and reinspections.</p> |
| <p>(3) Design plan renewal fees.</p> | | |
| <p>(a) Renewal of an unexpired and unrevoked commercial coach or recreational vehicle design plan or related group of plans:</p> | <p>\$ 30.00</p> | <p>(7) Insignia fees.</p> |
| <p>(b) Renewal of an expired or revoked design plan:</p> | <p>100% of fee for new design plan.</p> | <p>(a) For each recreational vehicle: \$ 20.00</p> <p>(b) For each single width commercial coach, or for the first section of a multiple section commercial coach: \$ 15.00</p> |
| <p>(4) Fee for transfer of design plan approval to a different manufacturer:</p> | <p>\$100.00</p> | <p>(c) For each additional section of a multiple section commercial coach: \$ 10.00</p> |
| <p>(5) Fee for filing a commercial coach, recreational vehicle, or component quality control manual:</p> | <p>\$ 10.00</p> | <p>(d) For each service core: \$ 50.00</p> <p>(e) For each component other than a service core: \$ 10.00</p> |
| <p>(6)(a) Fee for inspections, examinations of design plans, and other technical services performed by the department; other than inspections, examinations, and services for a HUD-labeled mobile home before it is sold or leased to a consumer:</p> | <p>\$50.00 minimum plus \$25.00 for every half-hour or fraction of a half-hour over one hour.</p> | <p>(f) For each reissuance of a mobile home, commercial coach, or recreational vehicle insignia: \$ 10.00</p> <p>(g) For each alteration insignia: \$ 25.00</p> |
| <p>(b) Fee for inspections, examinations, and other technical services performed by the department for a HUD-labeled mobile home before it is sold or leased to a consumer:</p> | <p>\$23.00 per floor</p> | <p>(8) Fee for each notification to a local enforcement agency: \$ 15.00</p> <p>(9) Travel fees and expenses. If a manufacturer or other person requests an inspection or other technical service outside the state, the manufacturer must prepay the travel expenses of the department's employees on an estimated basis to be corrected after the inspections are completed. The department will not charge for</p> |

travel expenses incurred for inspections or other services performed in Washington. The expenses shall be calculated pursuant to the following list:

- (a) Surface travel, per mile: \$.185
- (b) Air travel: Cost of air fare based on published rates.
- (c) Hourly charge for travel time: \$25.00 per half-hour or fraction of a half-hour.
- (d) Expenses: Expenses include, but are not limited to, car rental, parking lot charges, and personal expenses. Personal expenses, including food, lodging, and per diem, shall be calculated pursuant to the allowances and costs set by the Washington State Office of Financial Management.
- (10) Fee for change in manufacturer's or dealer's name, address, or ownership: \$ 15.00

[Statutory Authority: RCW 43.22.350. 85-05-027 (Order 85-2), § 296-150B-990, filed 2/15/85. Statutory Authority: RCW 43.22.350 and 43.22.440. 83-01-018 (Order 82-37), § 296-150B-990, filed 12/6/82. Statutory Authority: RCW 43.22.440, 43.22.475 and 43.22.480. 82-12-040 (Order 82-20), § 296-150B-990, filed 5/28/82. Statutory Authority: RCW 43.22.340. 82-09-053 (Order 82-13), § 296-150B-990, filed 4/16/82.]

Chapter 296-155 WAC
SAFETY STANDARDS FOR CONSTRUCTION WORK

- Subchapters
- Part B Occupational health and environmental control. (WAC 296-155-100 through 296-155-170)
 - Part C Personal protective and life saving equipment. (WAC 296-155-200 through 296-155-240)
 - Part N Excavation, trenching, and shoring. (WAC 296-155-650 through 296-155-66505)

Part B

OCCUPATIONAL HEALTH AND ENVIRONMENTAL CONTROL

- WAC
- 296-155-145 Occupational noise exposure.
 - 296-155-155 Nonionizing radiation.

WAC 296-155-145 Occupational noise exposure. The occupational noise exposure requirements of the general occupational health standards, chapter 296-62 WAC, shall apply. [Statutory Authority: RCW 49.17-.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-155-145, filed 12/11/84; 83-15-017 (Order 83-19), § 296-155-145, filed 7/13/83, effective 9/12/83; Order 76-29, § 296-155-145, filed 9/30/76; Order 74-26, § 296-155-145, filed 5/7/74, effective 6/6/74.]

WAC 296-155-155 Nonionizing radiation. (1) Only qualified and trained employees shall be assigned to install, adjust, and operate laser equipment.

(2) Proof of qualification of the laser equipment operator shall be available and in possession of operator at all times.

(3) Employees, when working in areas in which a potentially hazardous exposure (see WAC 296-62-09005(4)) to direct or reflected laser radiation exists, shall be provided with antilaser eye protection devices specified in Part C of this chapter.

(4) Areas in which lasers are used shall be posted with standard laser warning placards.

(5) Beam shutters or caps shall be utilized, or the laser turned off, when laser transmission is not actually required. When the laser is left unattended for a substantial period of time, such as during lunch hour, overnight, or at change of shifts, the laser shall be turned off.

(6) Only mechanical or electronic means shall be used as a detector for guiding the internal alignment of the laser.

(7) The laser beam shall not be directed at employees.

(8) When it is raining or snowing, or when there is dust or fog in the air, and it is impracticable to cease laser system operation, employees shall be kept out of range of the area of source and target during such weather conditions.

(9) Laser equipment shall bear a conspicuously displayed label to indicate hazard classification. This label shall be prepared in accordance with 21 CFR 1040.10.

(10) Only Class I, II, or III laser equipment shall be used. Class IV laser equipment shall not be used.

(11) Laser unit in operation shall be set up above the heads of the employees, when possible.

(12) Employees shall not be exposed to radiofrequency/microwave radiation in excess of the permissible exposure limits specified in WAC 296-62-09005. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-155-155, filed 12/11/84; Order 74-26, § 296-155-155, filed 5/7/74, effective 6/6/74.]

Part C
PERSONAL PROTECTIVE AND LIFE SAVING
EQUIPMENT

WAC

296-155-215 Eye and face protection.

WAC 296-155-215 Eye and face protection. (1) General. (a) Employees shall use eye and face protection equipment when machines or operations present potential eye or face injury from physical, chemical, or radiation agents.

(b) Eye and face protection equipment required by this part shall meet the requirements specified in American National Standards Institute, Z87.1-1968, Practice for Occupational and Educational Eye and Face Protection.

(c) Employees whose vision requires the use of corrective lenses in spectacles, when required by this regulation to wear eye protection, shall be protected by goggles or spectacles of one of the following types:

(i) Spectacles whose protective lenses provide optical correction;

(ii) Goggles that can be worn over corrective spectacles without disturbing the adjustment of the spectacles.

(iii) Goggles that incorporate corrective lenses mounted behind the protective lenses.

(d) Face and eye protection equipment shall be kept clean and in good repair. The use of this type equipment with structural or optical defects shall be prohibited.

(e) Table C-1 shall be used as a guide in the selection of face and eye protection for the hazards and operations noted.

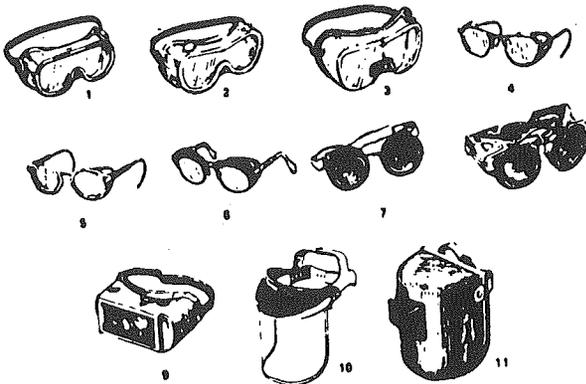


TABLE C-1

EYE AND FACE PROTECTION SELECTION GUIDE

1. GOGGLES, flexible fitting, regular ventilation
2. GOGGLES, flexible fitting, hooded ventilation
3. GOGGLES, cushioned fitting, rigid body
- *4. SPECTACLES, metal frame, with sideshields
- *5. SPECTACLES, plastic frame with sideshields
- *6. SPECTACLES, metal-plastic frame, with sideshields
- **7. WELDING GOGGLES, eyecup type, tinted lenses (illustrated)

- 7A. CHIPPING GOGGLES, eyecup type, clear safety lenses (not illustrated)
- **8. WELDING GOGGLES, coverspec type tinted lenses (illustrated)
- 8A. CHIPPING GOGGLES, coverspec type, clear safety lenses (not illustrated)
- **9. WELDING GOGGLES, coverspec type, tinted plate lens
10. FACE SHIELD (available with plastic or mesh window)
11. WELDING HELMETS

*Nonside shield spectacles are available for limited hazard use requiring only frontal protection.

**See Table C-2 in (2) of this section, Filter lens shade numbers for protection against radiant energy.

APPLICATIONS		
OPERATION	HAZARDS	RECOMMENDED PROTECTORS: Underscored Numbers Signify Preferred Protection
ACETYLENE-BURNING ACETYLENE-CUTTING ACETYLENE-WELDING	SPARKS, HARMFUL RAYS, MOLTEN METAL, FLYING PARTICLES	<u>7</u> , <u>8</u> , <u>9</u>
CHEMICAL HANDLING	SPLASH, ACID BURNS, FUMES	<u>2</u> , 10 (for severe exposure add <u>10</u> over 2)
CHIPPING	FLYING PARTICLES	<u>1</u> , <u>3</u> , <u>4</u> , <u>5</u> , <u>6</u> , <u>7A</u> , <u>8A</u>
ELECTRIC (ARC) WELDING	SPARKS, INTENSE RAYS, MOLTEN METAL	<u>9</u> , <u>11</u> (<u>11</u> in combination with 4, 5, 6, in tinted lenses, advisable)
FURNACE OPERATIONS	GLARE, HEAT, MOLTEN METAL	<u>7</u> , <u>8</u> , <u>9</u> (for severe exposure add <u>10</u>)
GRINDING-LIGHT	FLYING PARTICLES	<u>1</u> , <u>3</u> , <u>4</u> , <u>5</u> , <u>6</u> , <u>10</u>
GRINDING-HEAVY	FLYING PARTICLES	<u>1</u> , <u>3</u> , <u>7A</u> , <u>8A</u> (for severe exposure add 10)
LABORATORY	CHEMICAL SPLASH, GLASS BREAKAGE	<u>2</u> (10 when in combination with <u>4</u> , <u>5</u> , <u>6</u>)
MACHINING	FLYING PARTICLES	<u>1</u> , <u>3</u> , <u>4</u> , <u>5</u> , <u>6</u> , <u>10</u>
MOLTEN METALS	HEAT, GLARE, SPARKS, SPLASH	<u>7</u> , <u>8</u> (10 in combination with <u>4</u> , <u>5</u> , <u>6</u> , in tinted lenses)
SPOT WELDING	FLYING PARTICLES, SPARKS	<u>1</u> , <u>3</u> , <u>4</u> , <u>5</u> , <u>6</u> , <u>10</u>

(2) Protection against radiant energy. (a) Selection of shade numbers for welding filter. Table C-2 shall be used as a guide for the selection of the proper shade numbers of filter lenses or plates used in welding.

Shades more dense than those listed may be used to suit the individual's needs.

TABLE C-2

FILTER LENS SHADE NUMBERS FOR PROTECTION AGAINST RADIANT ENERGY

Welding Operation	Shade number
Shielded metal-arc welding 1/16-, 3/32-, 1/8-, 5/32-inch diameter electrodes	10
Gas-shielded arc welding (nonferrous) 1/16-, 3/32-, 1/8-, 5/32-inch diameter electrodes	11
Gas-shielded arc welding (ferrous) 1/16-, 3/32-, 1/8-, 5/32-inch diameter electrodes	12
Shielded metal-arc welding 3/16-, 7/32-, 1/4-inch diameter electrodes	12
5/16-, 3/8-inch diameter electrodes	14
Atomic hydrogen welding	10-14
Carbon-arc welding	14
Soldering	2
Torch brazing	3 or 4
Light cutting, up to 1 inch	3 or 4
Medium cutting, 1 inch to 6 inches	4 or 5
Heavy cutting, over 6 inches	5 or 6
Gas welding (light), up to 1/8-inch	4 or 5
Gas welding (medium), 1/8-inch to 1/2-inch	5 or 6
Gas welding (heavy), over 1/2-inch	6 or 9

(b) Laser protection. (i) Employees whose occupation or assignment requires potentially hazardous exposure (see WAC 296-62-09005(4)) to laser radiation shall wear suitable laser safety goggles which will protect for the specific wavelength of the laser and be of optical density (O.D.) adequate for the energy involved. Table C-3 lists the maximum power or energy density for which adequate protection is afforded by glasses of optical densities from 5 through 8.

TABLE C-3

SELECTING LASER SAFETY GLASS

INTENSITY	ATTENUATION	
CW maximum power density (watts/cm ²)	Optical density (O.D.)	Attenuation factor
10 ⁻²	5	10 ⁵
10 ⁻¹	6	10 ⁶
1.0	7	10 ⁷
10.0	8	10 ⁸

Output levels falling between lines in this table shall require the higher optical density.

(ii) All protective goggles shall bear a label identifying the following data:

- (a) The laser wavelengths for which use is intended;
- (b) The optical density of those wavelengths.

(c) The visible light transmission. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-01-022 (Order 84-24), § 296-155-215, filed 12/11/84; Order 74-26, § 296-155-215, filed 5/7/74, effective 6/6/74.]

Part N

EXCAVATION, TRENCHING, AND SHORING

WAC

296-155-665 Specific trenching requirements.

WAC 296-155-665 Specific trenching requirements.

(1) As trench construction is a hazardous operation, particular attention shall be given to the protection of the worker, the protection to be governed by the nature of the ground.

(2) No one person shall be allowed to work alone in a trench over four feet in depth unless there is a top person in constant attendance. The top person shall be in addition to the equipment operator when the person in the trench is not in constant view of the equipment operator.

(3) Except in solid rock and compact shale, the sides of all trenches, including embankments, 4 feet or more in depth and 6 feet or more in length, shall be shored, sheeted, braced, sloped or otherwise supported by means of sufficient strength to protect the employees working within them. (See Tables N-1, N-2, N-3, N-4 and N-5.) Trenches less than 4 feet in depth and 6 feet or more in length, shall also be effectively protected when the ground indicates that hazardous ground movement is possible. (See Tables N-1, N-2, N-3, N-4 and N-5.)

(4) When the sloping to the angle of repose does not extend to the bottom of the trench, shoring shall be required to support the vertical part of the trench. The shoring shall extend above the bottom of the slope a minimum of 12 inches to prevent material from sliding into the trench.

(5) The surface of the slope shall be cleaned of boulders, stumps, or other hard masses of earth on the angle of repose slope to eliminate the danger of any such materials sliding or rolling into the trench.

(6) In hard or compact soil, when the outside diameter of the pipe to be laid is 6 feet or larger, the sides of the trench can be vertical at the bottom 4 feet of the trench, providing a 4 foot bench is provided immediately above the vertical portion, and the remaining portion of the trench above the bench is sloped to the angle of repose. (See Table N-4.)

(7) Materials used for sheeting and sheet piling, bracing, shoring, and underpinning, shall be in good serviceable condition, and timbers used shall be sound and free from large or loose knots, and shall be designed and installed so as to provide adequate personnel protection to the bottom of the excavation.

(8) Additional precautions by way of shoring and bracing shall be taken to prevent slides or cave-ins when excavations or trenches are made in locations adjacent to backfilled excavations or trenches, or where excavations or trenches are subjected to vibrations from railroad or highway traffic, the operation of machinery, or any other source.

(9) Where a mechanical digger is used, the bracing shall be placed as close as possible to the lower end of the boom.

(10) When trenches are undercut, they shall be shored as necessary to safely support the overhanging material.

(11) If for any reason prior to, during or subsequent to the placement of the trench bracing system, voids should form in the sides or face of excavation or trench, such voids shall be promptly filled with compacted material or blocking, as required to distribute the load uniformly onto the bracing system.

(12) If a trench is cut alongside an existing structure and the footings of the structure are nearer to the trench than the plane of repose for the soil, they shall be underpinned or the side wall of the trench rigidly supported.

(13) Excavations or trenches made in ledge rock or compact shale shall not require bracing or shoring but shall be inspected by a competent representative of the employer before each shift of work, at which time all loose, shattered or disintegrated rock shall be removed from sides and face of excavation or trench.

(14) Excavated material and superimposed loads shall not be placed nearer than two feet to the sides of the trench, unless bracing has been designed and installed to withstand the load.

(15) Employees entering bell-bottom pier holes shall be protected by the installation of a removable-type casing of sufficient strength to resist shifting of the surrounding earth. Such temporary protection shall be provided for the full depth of that part of each pier hole which is above the bell.

(16) A means of emergency egress shall be decided prior to personnel entering bell-bottom pier holes. Employees expected to enter bell-bottom pier holes shall be instructed as to the hazards of their respective jobs, and in the means of emergency egress.

NOTE: Example of protection: A lifeline, suitable for instant rescue and securely fastened to a shoulder harness, may be worn by each employee entering the shafts. This lifeline could be individually manned and separate from any line used to remove materials excavated from the bell footing.

(17)(a) Minimum requirements for trench timbering shall be in accordance with Table N-5.

(b) Braces and diagonal shores in a wood shoring system shall not be subjected to compressive stress in excess of values given by the following formula:

$$S = 1300 - \frac{20L}{D}$$

$$\text{Maximum ratio } \frac{L}{D} = 50$$

Where:

- L = Length, unsupported, in inches.
- D = Least side of the timber in inches.
- S = Allowable stress in pounds per square inch of cross-section.

(18) When employees are required to be in trenches 4 feet deep or more, an adequate means of exit, such as a ladder or steps, shall be provided and located so as to require no more than 25 feet of lateral travel. An earth

ramp is acceptable providing: (a) The stability of the earth is adequate for good footing. (b) The total travel distance does not exceed 25 feet. (c) The trench depth does not exceed 15 feet. (d) Adequate shoring or equivalent protection is provided for the entire escape route.

(19) Bracing or shoring of trenches shall be carried along with the excavation.

(20) Cross braces or trench jacks shall be placed in true horizontal position, be spaced vertically, and be secured to prevent sliding, falling, or kickouts.

(21) Portable trench boxes or sliding trench shields may be used for the protection of personnel in lieu of a shoring system or sloping. Where such trench boxes or shields are used, they shall be designed, constructed, and maintained in a manner which will provide protection equal to or greater than the sheeting or shoring required for the trench.

(22) Backfilling and removal of trench supports shall progress together from the bottom of the trench. Jacks or braces shall be released slowly and, in unstable soil, ropes shall be used to pull out the jacks or braces from above after employees have cleared the trench.

(23) Signalpersons shall be employed to direct equipment when backfilling.

(24) The construction of temporary shoring work shall be done, or supervised, by a competent person, who shall make frequent inspections and issue instructions for its removal.

(25) Workers shall be instructed to immediately report any signs or indications of weakness of shoring or bracing.

(26) Trenching machines (ladder and rotary type). (a) Trenching machine operators shall not get on or off machine while in operation.

(b) Workers shall not work at sloping top of ditch near bucket line.

(c) Excavated material shall be conveyed to pile not closer than within 2 feet of edge of trench.

(d) Trucks hauling excavated material away from trenching machine shall not approach closer to the edge of trench than the trench depth from the surface of ground.

(e) Where side cutters are installed it will be mandatory that persons stay clear of bucket line. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-10-004 (Order 85-09), § 296-155-665, filed 4/19/85. Statutory Authority: RCW 49.17.040, 49.17.050 and 49.17.240. 81-13-053 (Order 81-9), § 296-155-665, filed 6/17/81; Order 77-12, § 296-155-665, filed 7/11/77; Order 76-29, § 296-155-665, filed 9/30/76; Order 74-26, § 296-155-665, filed 5/7/74, effective 6/6/74.]

Chapter 296-200 WAC

**CONTRACTOR CERTIFICATE OF REGISTRATION
RENEWALS--SECURITY--INSURANCE**

WAC

- 296-200-300 Procedures for notices of infraction.
- 296-200-310 Service on employee of a contractor.
- 296-200-320 Mailing copy of notice of infraction to contractor.

WAC 296-200-300 Procedures for notices of infraction. (1) The department may issue a notice of infraction to a contractor that violates RCW 18.27.200. The notice of infraction by law must be on the same basic form as that prescribed for traffic infractions. The supreme court has adopted the justice court traffic infraction rules (JTIR) as the rules of procedure for traffic infractions. To ensure that court procedures are the same for contractor notices of infraction as for traffic notices of infraction, the department shall comply with all JTIR rules except for rules 1.1, 1.2, 2.1, and 2.4(a). Rules 1.1, 1.2, and 2.1 do not directly apply to notices of violation for contractors. Rule 2.4(a) does not apply because RCW 18.27.270 provides that a defendant must respond to a notice of violation within fourteen days, not within seven days as for a traffic infraction.

(2) In reading the JTIR rules, the following terms, as they appear in the rules, shall be construed to mean:

(a) "Department" means the department of labor and industries, not the department of licensing.

(b) "Notice of traffic infraction" means notice of infraction.

(c) "Traffic case" means a contractor infraction case.

(d) "Law enforcement officer" means a representative of the department. [Statutory Authority: RCW 18.27.040, 18.27.200 and 18.106.020. 84-12-018 (Order 84-08), § 296-200-300, filed 5/25/84.]

WAC 296-200-310 Service on employee of a contractor. If a contractor is a corporation or a partnership, the department need not serve the contractor personally. In such a case, if no owner, officer, or partner of a violating contractor is on a job site, the department may issue a notice of infraction to any employee on the site. For purposes of serving the notice of infraction, the legislature intended that all employees of a contractor, at whatever level, are authorized to act as, and are, agents to accept service of the notice of infraction on behalf of the contractor. A promise to appear signed by an employee on behalf of the contractor is binding on the contractor. To lessen possible problems, however, the department shall have the employee complete the promise to appear on the notice of infraction in the following fashion: The employee shall sign the "name of the contractor, by name of the employee." It will appear thus:

→ Jane Doe Construction Co.
(by) Richard Roe, Employee.

[Statutory Authority: RCW 18.27.040, 18.27.200 and 18.106.020. 84-12-018 (Order 84-08), § 296-200-310, filed 5/25/84.]

WAC 296-200-320 Mailing copy of notice of infraction to contractor. If the department serves a notice of infraction on an employee of a contractor, and not on the owner, officer, or partner of the contractor, the law requires the department to mail by certified mail a copy of the notice of infraction to the contractor if the department can determine the contractor's name and address. If the department cannot determine the contractor's name and address, it need not mail a copy

of the notice of infraction; in such a case, the notice of infraction shall remain valid. To ensure further that the contractor receives a copy, the department shall, as well as mail a copy by certified mail, mail a second copy by ordinary mail. To prove that the letters were mailed the department's representative shall sign an affidavit of mailing in substantially the following form:

AFFIDAVIT OF MAILING

STATE OF WASHINGTON }
COUNTY OF } ss.

I, (name of Representative), being first duly sworn, on oath depone and say:

That on _____, 19__, pursuant to RCW 18.27-.230, I caused a copy of the notice of infraction, with serial number _____, dated _____, to be mailed by certified mail, return receipt requested, via the United States Postal Service, postage prepaid; and a second copy of the notice of infraction to be mailed by ordinary mail, via the United States Postal Service, postage prepaid, at _____, Washington, to:

(Name of Contractor
Address of Contractor)

(Signature of representative)
(Name of representative)

SUBSCRIBED AND SWORN TO before me this _____ day of _____, 19__.

NOTARY PUBLIC for the state of
Washington, residing at _____

[Statutory Authority: RCW 18.27.040, 18.27.200 and 18.106.020. 84-12-018 (Order 84-08), § 296-200-320, filed 5/25/84.]

Chapter 296-310 WAC
FARM LABOR CONTRACTING RULES

- WAC
- 296-310-010 Definitions.
- 296-310-020 Application for initial and renewed licenses.
- 296-310-030 Denial of license.
- 296-310-040 Requirements for a license to transport employees.
- 296-310-050 Amount of bond or security.
- 296-310-060 Fees.
- 296-310-070 Duplicate licenses.
- 296-310-080 Length of license period.
- 296-310-090 Change in business structure, name, address, or number of employees.
- 296-310-100 Cancellation of insurance or bond.
- 296-310-110 Refund of security deposited with the department.
- 296-310-120 Revocation or suspension of license.
- 296-310-130 Submission of complaint.
- 296-310-140 Investigation of complaint.
- 296-310-150 Notice of violation.
- 296-310-160 Appeal of notices.
- 296-310-170 Hearing on appeal of notice.
- 296-310-180 Effect of final decision.
- 296-310-190 Suit by department for unpaid wages or damages.
- 296-310-200 Procedures for filing suit against a contractor.
- 296-310-210 Collection of judgments.

296-310-220	Priority for payment of judgments.
296-310-230	Civil penalties.
296-310-240	Adjustment of controversies.
296-310-250	Filing and service.
296-310-260	Liability of person who uses services of unlicensed contractor.
296-310-270	Inspection of records.

WAC 296-310-010 Definitions. For the purposes of this chapter:

(1) "Agricultural employee" means any person who renders personal services to, or under the direction of, an agricultural employer in connection with the employer's agricultural activity.

(2) "Agricultural employer" means any person engaged in agricultural activity, including the growing, producing, or harvesting of farm or nursery products, or engaged in the forestation or reforestation of lands, which includes but is not limited to the planting, transplanting, tubing, precommercial thinning, and thinning of trees and seedlings, the clearing, piling, and disposal of brush and slash, the harvest of Christmas trees, and other related activities.

(3) "Bonded contractor" means a contractor who obtained a surety bond in order to comply with RCW 19.30.030(5).

(4) "Contractor" means a farm labor contractor.

(5) "Department" means the department of labor and industries.

(6) "Director" means the director of the department of labor and industries.

(7) "Employee" means an agricultural employee.

(8) "Farm labor contractor" means any person, or his or her agent or subcontractor, who, for a fee, performs any farm labor contracting activity.

(9) "License" means a farm labor contractor license.

(10) "Secured contractor" means a contractor who assigned a savings account to, or deposited cash or other security with, the department in order to comply with RCW 19.30.030(5).

(11) "Security" means a savings account assigned to, or cash or other security deposited with, the department. [Statutory Authority: RCW 19.30.130. 86-01-027 (Order 85-34), § 296-310-010, filed 12/11/85.]

WAC 296-310-020 Application for initial and renewed licenses. (1) To obtain a license, a contractor must:

(a) Complete an application for a license;

(b) Provide the information required by RCW 19.30.030 (1), (6), and (7);

(c) Obtain a surety bond or provide other acceptable security to the department. If the contractor obtains a bond, it must submit the original bond to the department;

(d) Obtain insurance and supply the information required by WAC 296-310-040(2) if the contractor seeks a license to transport workers; and

(e) Pay the fee set by WAC 296-310-060.

(2) The department shall send a renewal notice to the contractor's last recorded address at least forty-five days before the contractor's license expires. The contractor may renew its license if it submits the renewal notice

and provides the materials required in subsection (1)(b), (c), (d) if appropriate, and (e) of this section.

(3) The contractor must submit all materials to the department in one package. Each of the materials must name the contractor exactly as it is named on the application for license or the renewal notice. If the contractor is renewing its license, each of the materials must include the contractor's license number. If any of the materials are missing, do not properly name the contractor, or do not include the license number, the department shall refuse to license or renew the license of the contractor.

(4) The bond and the insurance policy must expire no sooner than the expiration date of the license for which the contractor has applied.

(5) Applications for issuance or renewal of a license must be sent to:

Department of Labor and Industries
ESAC Division
General Administration Building
Olympia WA 98504

[Statutory Authority: RCW 19.30.130. 86-01-027 (Order 85-34), § 296-310-020, filed 12/11/85.]

WAC 296-310-030 Denial of license. (1) The department may refuse to issue or renew a license for the reasons listed in RCW 19.30.050 and 19.30.060. If the department refuses a license for any of these reasons, it shall serve on the contractor a notice of denial of license. The notice of denial of license shall:

(a) Describe concisely the ground for denial of the license; and

(b) Specify the statutory authority for the denial.

The notice of denial shall inform the contractor that it may request a hearing pursuant to WAC 296-310-160 on the denial. The notice shall specify that if no hearing is requested within thirty days of the date of issuance of the notice the director shall issue a final, unappealable order denying the license.

(2) The department also shall refuse to issue a license to or renew the license of a contractor who fails to comply with WAC 296-310-020. The department shall inform the contractor of the problem either in writing or, if appropriate, orally. Because compliance with WAC 296-310-020 involves technical requirements that are entirely within the control of the contractor, no hearing shall be granted on a failure to comply. [Statutory Authority: RCW 19.30.130. 86-01-027 (Order 85-34), § 296-310-030, filed 12/11/85.]

WAC 296-310-040 Requirements for a license to transport employees. (1) A contractor who intends to transport employees must obtain liability insurance. The department shall require public liability and property damage insurance that provides coverage, for each single occurrence and for each vehicle used to transport employees, in the following minimum amounts:

(a) \$50,000 for injury or damage to property;

(b) \$100,000 for injury or damage, including death, to any one person; and

(c) \$500,000 for injury or damage, including death, to more than one person.

(2) The contractor must also provide to the department evidence of the insurance policy or policies. [Statutory Authority: RCW 19.30.130. 86-01-027 (Order 85-34), § 296-310-040, filed 12/11/85.]

WAC 296-310-050 Amount of bond or security. (1) A contractor must provide a bond or security in the following minimum amount:

- (a) If the contractor employs or intends to employ:
- | | |
|--|----------|
| (i) From one to ten employees: | \$ 5,000 |
| (ii) From eleven to fifty employees: | \$10,000 |
| (iii) From fifty-one to one hundred employees: | \$15,000 |
| (iv) Over one hundred employees: | \$20,000 |

(b) If the contractor does not employ agricultural employees, but only recruits, solicits, supplies, transports, or hires employees for another person, and that person takes complete responsibility for payment of wages to the employees, the contractor shall obtain a \$5,000 bond or other security.

(2) If the contractor obtains a two-year license, the bond or security shall be twice the minimum amounts stated in subsection (1) of this section.

(3) The department may order the contractor to obtain a bond or security for an amount greater than the minimums set by subsections (1) and (2) of this section if the security or bond is insufficient to satisfy the contractor's potential liability for the license period. If the department determines that an increased bond is necessary, it shall serve on the contractor a notice to increase bond or security. The notice shall:

- (a) Describe concisely the reasons an increase in the bond or security is necessary;
- (b) Specify the statutory authority for the required increase; and
- (c) Grant the contractor thirty days from the date of issuance of the notice to obtain and provide to the department the increased bond or security.

The notice shall inform the contractor that it may request a hearing pursuant to WAC 296-310-160 on the order to increase the bond or security. The notice shall specify that if no hearing is requested within thirty days of the date of issuance of the notice the director shall issue a final, unappealable order requiring the contractor to submit the increased bond or security. The notice shall also specify that, if the contractor neither appeals nor obtains the increased bond or security within the thirty days, the department shall suspend the contractor's license.

(4) If the director issues a final, unappealed decision raising the amount of the bond or security, the raised amount shall be required for all license periods after the date of issuance of the final decision unless the decision specifically states otherwise. A contractor may, if the circumstances that led to the increased amount change, file with the department a written petition to lower the amount. The petition shall specify the grounds that justify a lowering of the bond or security. The department

shall investigate the petition and shall issue a new notice stating its decision on the bond amount. The contractor, if aggrieved, may appeal this new notice as provided in subsection (3) of this section. [Statutory Authority: RCW 19.30.130. 86-01-027 (Order 85-34), § 296-310-050, filed 12/11/85.]

WAC 296-310-060 Fees. (1) The fee for a one-year license is:

- | | |
|---|----------|
| (a) For a contractor engaged in forestation or reforestation: | \$100.00 |
| (b) For all other contractors: | \$ 35.00 |
| (2) The fee for a two year license is: | |
| (a) For a contractor engaged in forestation or reforestation: | \$200.00 |
| (b) For all other contractors: | \$ 70.00 |

[Statutory Authority: RCW 19.30.130. 86-01-027 (Order 85-34), § 296-310-060, filed 12/11/85.]

WAC 296-310-070 Duplicate licenses. If a contractor loses its license, or if the license is stolen or destroyed, the contractor may obtain a duplicate license upon application to the department. The application must specify the reason a duplicate is necessary.

The duplicate license shall be stamped prominently with the word "duplicate." A new contractor license number shall be supplied to the contractor. [Statutory Authority: RCW 19.30.130. 86-01-027 (Order 85-34), § 296-310-070, filed 12/11/85.]

WAC 296-310-080 Length of license period. A contractor who is obtaining its initial license shall be licensed for one year only. A contractor who is renewing its license may choose to obtain either a one-year or two-year license, unless the department informs the contractor that it may obtain only a one-year license.

All one-year licenses shall expire on December 31 of the year of issuance. All two-year licenses shall expire on December 31 of the year following the year of issuance. [Statutory Authority: RCW 19.30.130. 86-01-027 (Order 85-34), § 296-310-080, filed 12/11/85.]

WAC 296-310-090 Change in business structure, name, address, or number of employees. (1) If a contractor changes its business structure (for example, if it changes from a partnership to a corporation, or if the partners in a partnership change), the contractor must apply for a new license in the manner required by WAC 296-310-020. If a contractor does not obtain a new license after a change in its business structure, its previous license may be invalid.

(2) If a contractor changes its name or address, it must notify the department within ten days.

(3) If a contractor begins employing agricultural employees, or increases the number of its employees, so that the bond or security is insufficient for that number of employees, the contractor must obtain a new bond or security in the amount required by WAC 296-310-050 and submit it to the department. The department need

not issue a notice to increase the amount of bond or security in this situation. [Statutory Authority: RCW 19.30.130. 86-01-027 (Order 85-34), § 296-310-090, filed 12/11/85.]

WAC 296-310-100 Cancellation of insurance or bond. (1) No surety company may cancel any bond issued to a contractor pursuant to RCW 19.30.040, unless the contractor previously submits another bond or other security, for the same amount, that covers the contractor's liability for the same period as that for the bond that is to be cancelled.

(2) A cancellation of a surety bond or insurance policy is effective thirty days after the department receives the cancellation notice, if the cancellation notice contains the following information:

- (a) The name of the contractor, exactly as it appears on the contractor's license;
- (b) The contractor's license number;
- (c) The contractor's business address;
- (d) The number of the bond or insurance policy that is to be cancelled;
- (e) The effective date of the bond or insurance policy that is to be cancelled; and
- (f) If the cancellation is of a surety bond, a certification that the contractor has previously obtained and submitted to the department a new bond or other security as required by subsection (1) of this section.

(3) To help the department process cancellations, the information in subsection (2) of this section should be provided in the order shown.

(4) The insurance and bonding companies should send cancellation notices to the department by certified or registered mail. [Statutory Authority: RCW 19.30.130. 86-01-027 (Order 85-34), § 296-310-100, filed 12/11/85.]

WAC 296-310-110 Refund of security deposited with the department. (1) If a contractor is secured, the department shall release its interest in the security three years after the contractor's last license expired. The department shall not release its interest, however, if an unsatisfied judgment or claim is outstanding against the contractor.

(2) The department shall in any case release its interest in the security if the contractor provides a surety bond in the same amount that covers all of the periods in which the contractor was licensed for the previous three years, plus for the contractor's current license period if applicable. [Statutory Authority: RCW 19.30.130. 86-01-027 (Order 85-34), § 296-310-110, filed 12/11/85.]

WAC 296-310-120 Revocation or suspension of license. (1) The department may revoke a contractor's license for the reasons listed in RCW 19.30.050(1) and 19.30.060. If the department revokes a license, it shall serve on the contractor a notice of revocation. The notice of revocation shall:

- (a) Describe concisely the ground for the revocation; and
- (b) Specify the statutory authority for the revocation.

The notice of revocation shall inform the contractor that it may request a hearing on the revocation. The notice shall specify that if no hearing is requested within thirty days after the date of issuance of the notice, the director shall issue a final, unappealable order revoking the contractor's license. The hearing may be requested pursuant to WAC 296-310-160.

(2) A contractor is entitled to retain its license only if it remains in compliance with the bonding and insurance requirements of RCW 19.30.030 and 19.30.040. If a contractor's surety bond or other security is impaired or becomes insufficient, the contractor's insurance policy is cancelled, or the contractor transports employees without insurance, the department shall suspend the contractor's license until the contractor obtains a new bond, other security, or insurance policy, eliminates the impairment to the bond or security, or ceases to transport workers. The contractor may not do business while its license is suspended.

The department shall inform the contractor in writing of the suspension and of the steps the contractor must take to remove the suspension. The contractor may not appeal a suspension of licensing. [Statutory Authority: RCW 19.30.130. 86-01-027 (Order 85-34), § 296-310-120, filed 12/11/85.]

WAC 296-310-130 Submission of complaint. Any person may submit to the department a complaint alleging a violation of chapter 19.30 RCW or challenging an application for a license. The complaint must describe the alleged violation or ground for denying a license, and must identify the alleged violator or applicant. It would aid the department's investigation if the complaint also specifies:

- (1) The name and address of the complainant; and
- (2) The address of the alleged violator or applicant. [Statutory Authority: RCW 19.30.130. 86-01-027 (Order 85-34), § 296-310-130, filed 12/11/85.]

WAC 296-310-140 Investigation of complaint. The department shall investigate a complaint unless the complaint was submitted more than three years after the date of the alleged violation. The department shall not investigate any complaint filed more than three years after the date of the violation. [Statutory Authority: RCW 19.30.130. 86-01-027 (Order 85-34), § 296-310-140, filed 12/11/85.]

WAC 296-310-150 Notice of violation. (1) If the department determines that there is reasonable cause to believe that chapter 19.30 RCW has been violated, the department shall serve on the violator a notice of violation. The notice of violation shall:

- (a) Describe concisely the violation;
- (b) Specify which statute was violated;
- (c) If known, identify the employees who were affected by the violation;
- (d) If known and applicable, state the amount of unpaid wages or damages the violator owes;
- (e) State the penalty, if any, the department will assess for the violation; and

(f) State whether the contractor's license is being revoked as a result of the violation.

(2) If the notice alleges that the contractor owes unpaid wages or damages, the department shall serve a copy of the notice of violation on the violator's surety bond company.

(3) The notice of violation shall inform the violator and, if applicable, its surety that they may request a hearing on the violation, the amount of unpaid wages or damages owed, or the penalty assessed. The notice shall specify that if no hearing is requested within thirty days after the date the notice was issued the director shall issue a final, unappealable order finding that the violation did occur, ordering the violator to pay any unpaid wages or damages, and assessing penalties. [Statutory Authority: RCW 19.30.130. 86-01-027 (Order 85-34), § 296-310-150, filed 12/11/85.]

WAC 296-310-160 Appeal of notices. (1) The contractor or violator, or the violator's surety if the surety has an interest in the matter, may request a hearing on the matter asserted in a notice of denial of license, a notice of revocation, a notice of increased bond amount, or a notice of violation. One original and four copies of the request must be filed with the director within thirty days after the date the department issued the notice. A party requesting a hearing on a notice of violation must also serve a copy of the request on the surety or the violator as appropriate.

(2) The request for hearing must be in writing and must specify:

(a) The name and address of the party requesting the hearing;

(b) The name and date of issuance of the notice that is being appealed;

(c) The matters contained in the notice that the requestor believes are erroneous;

(d) The reasons the notice is erroneous; and

(e) If a surety is appealing a notice of violation, the name and address of the violating contractor. [Statutory Authority: RCW 19.30.130. 86-01-027 (Order 85-34), § 296-310-160, filed 12/11/85.]

WAC 296-310-170 Hearing on appeal of notice. (1) The director may hear an appeal personally or may delegate the authority to hold the hearing and draft a proposed decision to an administrative law judge pursuant to chapter 34.12 RCW. The plaintiff at the hearing shall be the department and the defendants shall be the contractor or the violator and its surety. The department shall have the burden of proving, by a preponderance of the evidence, that the matters stated in the notice occurred.

(2) Any person who has standing may, upon motion, be allowed to intervene as a plaintiff in a hearing on a notice of violation. Any interested person, whether or not admitted as a plaintiff, may submit written arguments and affidavits in any hearing.

(3) The hearing shall be conducted in accordance with the Uniform Procedure Rules, chapter 1-08 WAC.

(4) If the director presides over the hearing, the director shall issue a final decision that includes findings of fact and conclusions of law and, if appropriate for a violation, an order to pay unpaid wages, damages, or a penalty.

(5) If an administrative law judge presides over the hearing, she or he shall issue a proposed decision that includes findings of fact and conclusions of law and, if appropriate for a violation, an order to pay unpaid wages, damages, or a penalty. The proposed decision shall be served on the contractor or the violator and its surety, the department, and any persons who have intervened as plaintiffs. Any of these parties, if aggrieved by the proposed decision, may appeal to the director within thirty days after the date of issuance of the proposed decision. If none of the parties appeals within thirty days, the proposed decision may not be appealed either to the director or the courts. A copy of the proposed decision shall also be mailed to all persons who submitted written arguments or affidavits at the hearing.

(6) An appellant must file with the director an original and four copies of its notice of appeal. The notice of appeal must specify which findings and conclusions are erroneous. The appellant must attach to the notice the written arguments supporting its appeal.

The appellant must serve a copy of the notice of appeal and the arguments on the other parties. The respondent parties must file with the director their written arguments within thirty days after the date the notice of appeal and the arguments were served upon them.

(7) The director shall review the proposed decision in accordance with the Administrative Procedure Act, chapter 34.04 RCW. The director may: Require the parties to specify the portions of the record on which the parties rely; require the parties to submit additional information by affidavit or certificate; remand the matter to the administrative law judge for further proceedings; and require a department employee to prepare a summary of the record for the department to review. The director may allow the parties to present oral arguments as well as the written arguments. The director shall issue a final decision that can affirm, modify, or reverse the proposed decision.

(8) The director shall serve the final decision on all parties. Any aggrieved party may appeal the final decision to superior court pursuant to RCW 34.04.130 unless the final decision affirms an unappealed proposed decision. If no party appeals within the period set by RCW 34.04.130, the director's decision is conclusive and binding on all parties. The director shall also mail a copy of the final decision to all persons who submitted written arguments or affidavits at the hearing. [Statutory Authority: RCW 19.30.130. 86-01-027 (Order 85-34), § 296-310-170, filed 12/11/85.]

WAC 296-310-180 Effect of final decision. If the director issues a final decision that includes a finding that a violator owes unpaid wages or damages, and the finding is not appealed or is affirmed by the courts, the finding and the decision are res judicata in any action by the department, or by any other person who was a

plaintiff at the hearing, against the violator and its surety to recover the unpaid wages or damages. The finding and decision are not res judicata in any action by a person who was not a party at the hearing. [Statutory Authority: RCW 19.30.130. 86-01-027 (Order 85-34), § 296-310-180, filed 12/11/85.]

WAC 296-310-190 Suit by department for unpaid wages or damages. (1) RCW 19.30.160(4) authorizes the department to sue a violator and its surety on behalf of an employee to recover unpaid wages and other damages. The department is not required to bring suit and, in its sole discretion, may decide not to do so in any case. The department also shall not sue on behalf of any employee who has already brought a suit against the violator and its surety in the matter.

(2) The department may file a suit against the violator and its surety at any time and without regard to whether administrative proceedings have been exhausted.

(3) The department may include in any suit a request for an injunction against the violator. [Statutory Authority: RCW 19.30.130. 86-01-027 (Order 85-34), § 296-310-190, filed 12/11/85.]

WAC 296-310-200 Procedures for filing suit against a contractor. (1) A suit against a contractor and its bond or security for unpaid wages or damages may be brought in any court with jurisdiction. The venue may be in the county in which the claim arose, or in which either the damaged person or the defendant resides.

(2) When a contractor is sued, the plaintiff must serve the summons and complaint on the contractor and its surety by serving three copies of the summons and complaint by certified or registered mail on the department. The department shall not accept personal service of the summons and complaint.

(3) The department may be unable to process a summons and complaint if the summons and complaint do not contain the following information:

- (a) The contractor's name exactly as it appears on the contractor's license;
- (b) The contractor's business address;
- (c) The names of the owners, partners, or officers of the contractor; and
- (d) The contractor's license number.

If the suit names a surety as a defendant, the summons and complaint should also include:

- (e) The name and address of the surety that issued the contractor's bond;
- (f) The bond number; and
- (g) The effective date of the bond.

If the information is insufficient for the department to identify the contractor or surety that is being sued, the department shall not attempt to serve the summons and complaint and shall return them to the plaintiff. [Statutory Authority: RCW 19.30.130. 86-01-027 (Order 85-34), § 296-310-200, filed 12/11/85.]

WAC 296-310-210 Collection of judgments. (1) If a contractor is secured, a plaintiff who has received a final

judgment against a contractor may satisfy the judgment out of the security held by the department.

(2) The department shall satisfy a final judgment if the plaintiff serves on the department three certified copies of the unsatisfied judgment. The plaintiff must include the following information with the copies of the judgment:

- (a) The name of the contractor, exactly as it appears on the contractor's license;
- (b) The contractor's business address;
- (c) The names of the owners, partners, or officers of the contractor;
- (d) The contractor's license number; and
- (e) The exact amount of the judgment awarded by the court, including attorney's fees and interest.

If the department does not receive sufficient information to enable it to pay the judgment, it shall inform the plaintiff that more information is needed.

(3) If a contractor is bonded, a plaintiff can satisfy a final judgment only against the contractor or the bonding company. The department can neither satisfy the judgment nor, unless the department itself is the plaintiff, force the contractor or the bonding company to pay the judgment. The plaintiff must join the bonding company in the suit if it wants the bonding company to pay the judgment. [Statutory Authority: RCW 19.30.130. 86-01-027 (Order 85-34), § 296-310-210, filed 12/11/85.]

WAC 296-310-220 Priority for payment of judgments. RCW 19.30.170 contains two different provisions for priority in paying judgments from the contractor's bond or security.

(1) If a contractor is secured, the department shall satisfy final judgments against the contractor in the order the department receives the judgments.

(2) If a contractor is bonded, claims for unpaid wages and benefits are satisfied first, claims for damages are satisfied second, and claims for costs and attorney's fees are satisfied last. No claim in a lesser category may be satisfied until all pending claims in the preceding categories are satisfied, unless the total amount of all pending claims in the preceding categories is less than the amount of the bond that remains unimpaired. [Statutory Authority: RCW 19.30.130. 86-01-027 (Order 85-34), § 296-310-220, filed 12/11/85.]

WAC 296-310-230 Civil penalties. (1) In determining the amount of any civil penalty to be imposed under RCW 19.30.160 the department shall consider the following factors:

- (a) Previous violations by the violator;
- (b) The history of the violator in taking all necessary measures to prevent or correct violations;
- (c) The magnitude and seriousness of the violation;
- (d) The remedial purpose of chapter 19.30 RCW;
- (e) Any mitigating circumstances; and
- (f) Any other factors the department considers relevant.

(2) It is the violator's responsibility to inform the department of mitigating evidence.

(3) The penalties for acting as a contractor without a license, or for transporting employees without an endorsement to do so, are:

- (a) Up to \$500 for the first violation;
- (b) Up to \$750 for the second violation; and
- (c) Up to \$1000 for the third and any further violations. [Statutory Authority: RCW 19.30.130. 86-01-027 (Order 85-34), § 296-310-230, filed 12/11/85.]

WAC 296-310-240 Adjustment of controversies. (1) Upon receipt of a complaint or on its own motion, the department shall attempt to adjust equitably a controversy between a contractor and its employees.

(2) No particular form of proceeding is necessary for resolving disputes. The supervisor of employment standards shall, in each case, use his or her best judgment in designing a procedure. However, in every case in which the supervisor determines that a hearing should be held, the supervisor shall notify the affected persons, or their representatives, of the time, date, place, and purpose of the hearing.

(3) A hearing shall be informal and shall not be subject to chapter 34.04 RCW. The supervisor's suggestions for resolution are advisory and not binding, and may not be appealed to any person or court.

(4) The director may delegate the resolution of any particular case to a person other than the supervisor of employment standards. That person shall have the same authority as the supervisor to determine the form of the proceeding. [Statutory Authority: RCW 19.30.130. 86-01-027 (Order 85-34), § 296-310-240, filed 12/11/85.]

WAC 296-310-250 Filing and service. All papers required to be filed with the director under this chapter or chapter 19.30 RCW shall be addressed to Director, Department of Labor and Industries, General Administration Building, Olympia, WA 98504.

Filing and service may be made as provided in WAC 1-08-090 through 1-08-140. [Statutory Authority: RCW 19.30.130. 86-01-027 (Order 85-34), § 296-310-250, filed 12/11/85.]

WAC 296-310-260 Liability of person who uses services of unlicensed contractor. (1) A person who knowingly uses the services of an unlicensed contractor is liable for unpaid wages, damages, and civil and criminal penalties to the same extent as the unlicensed contractor.

(2) Pursuant to RCW 19.30.200, a person may prove lack of knowledge by proving that she or he relied on a license issued by the department under chapter 19.30 RCW, or upon the department's representation that the contractor was licensed. The department shall not make oral representations that a contractor is or is not licensed. All representations by the department that a contractor is licensed shall be made in writing and shall be signed by the director or the employment standards supervisor or the assistant director. The department shall not accept reliance on a supposed oral representation as proof in any administrative enforcement proceeding.

[Statutory Authority: RCW 19.30.130. 86-01-027 (Order 85-34), § 296-310-260, filed 12/11/85.]

WAC 296-310-270 Inspection of records. A contractor or any person using a contractor's services shall allow a representative of the department to inspect at any reasonable time the records it is required to keep by chapter 19.30 RCW. [Statutory Authority: RCW 19.30.130. 86-01-027 (Order 85-34), § 296-310-270, filed 12/11/85.]

Chapter 296-360 WAC

DISCRIMINATION, PURSUANT TO RCW 49.17.160

WAC

296-360-040 Notification of assistant director's determination.

WAC 296-360-040 Notification of assistant director's determination. (1) RCW 49.17.160(3) provides that the assistant director is to notify a complainant within ninety days of the complaint of his determination whether prohibited discrimination has occurred. This ninety-day provision is directory, not mandatory. Although every effort will be made to notify complainants of the assistant director's determination within ninety days, there may be instances when it is not possible to do so.

(2) If a complainant receives a determination from the assistant director that prohibited discrimination has not occurred, the complainant may file a written request for review by the director within fifteen working days of receipt of the determination. The request for review must set forth the basis for the request. The request shall be filed by mailing or delivering the request to the Director of Labor and Industries, General Administration Building, Olympia, Washington 98504. Upon review the director may set aside the assistant director's determination, remand the matter for further investigation, or affirm the determination of the assistant director. The director shall notify the complainant of the decision after review. [Statutory Authority: RCW 49.17.040 and 49.17.050. 85-10-004 (Order 85-09), § 296-360-040, filed 4/19/85. Statutory Authority: RCW 49.17.040, 49.17.050, 49.17.240, chapters 43.22 and 42.30 RCW. 80-17-015 (Order 80-21), § 296-360-040, filed 11/13/80.]

Chapter 296-400 WAC

CERTIFICATION OF COMPETENCY FOR JOURNEYMAN PLUMBERS

WAC

296-400-300 Procedures for notices of infraction.

WAC 296-400-300 Procedures for notices of infraction. (1) The department may issue a notice of infraction to a plumber that violates RCW 18.106.180. The notice of infraction by law must be on the same basic form as that prescribed for traffic infractions. The

supreme court has adopted the justice court traffic infraction rules (JTIR) as the rules of procedure for traffic infractions. To ensure that court procedures are the same for plumber notices of infraction as for traffic notices of infraction, the department shall comply with all JTIR rules except for rules 1.1, 1.2, 2.1, and 2.4(a). Rules 1.1, 1.2, and 2.1 do not directly apply to notices of violation for plumbers. Rule 2.4(a) does not apply because RCW 18.106.220 provides that a defendant must respond to a notice of violation within fourteen days, not within seven days as for a traffic infraction.

(2) In reading the JTIR rules, the following terms, as they appear in the rules, shall be construed to mean:

(a) "Department" means the department of labor and industries, not the department of licensing;

(b) "Notice of traffic infraction" means notice of infraction;

(c) "Traffic case" means a plumber infraction case;

(d) "Law enforcement officer" means a representative of the department. [Statutory Authority: RCW 18.27-.040, 18.27.200 and 18.106.020. 84-12-018 (Order 84-08), § 296-400-300, filed 5/25/84.]

Chapter 296-401 WAC

CERTIFICATION OF COMPETENCY FOR JOURNEYMAN ELECTRICIANS

WAC

296-401-175 Electrical contractor license, administrator, journeyman, specialty and trainee certificate, examination and copy fees.

WAC 296-401-175 Electrical contractor license, administrator, journeyman, specialty and trainee certificate, examination and copy fees.

- (1) General or specialty electrical contractor license (expires December 31 each year) - \$ 40
- (2) Electrical contractor name or business structure change - \$ 40
- (3) Administrator certificate examination - \$ 50
- (4) Administrator certificate renewal (expires December 31 each year) - \$ 20
- (5) Late renewal of administrator certificate - \$ 40
- (6) Transfer of administrator designation - \$ 20
- (7) Journeyman or specialty certificate (expires June 30 each year) - \$ 25
- (8) Late renewal of journeyman or specialty electrician certificate - \$ 50
- (9) Journeyman or specialty electrician examination - \$ 50
- (10) Trainee certificate (expires one year after purchase) - \$ 20
- (11) Certified copy of bond and/or license - \$ 2

[Statutory Authority: RCW 19.28.060 and 19.28.210. 85-20-065 (Order 85-16), § 296-401-175, filed 9/27/85. Statutory Authority: RCW 19.28.120 and 19.28.510. 83-23-053 (Order 83-32), § 296-401-175, filed 11/14/83.]

**Chapter 296-402 WAC
ELECTRICAL TESTING LABORATORY
ACCREDITATION**

WAC

- 296-402-010 Foreword.
- 296-402-020 Purpose and scope.
- 296-402-030 Definitions.
- 296-402-040 Organization.
- 296-402-050 Professional and ethical business practices.
- 296-402-060 Quality control system.
- 296-402-070 Personnel.
- 296-402-080 Calibration—Verification and maintenance of facilities and equipment.
- 296-402-090 Plans for certification programs.
- 296-402-100 Records.
- 296-402-110 Product certification program.
- 296-402-120 Product assurance (follow-up) activities.
- 296-402-130 Laboratory approval program implementation.
- 296-402-140 Initial laboratory evaluation.
- 296-402-150 Renewals.
- 296-402-160 Conditions of accreditation.
- 296-402-170 Penalties.
- 296-402-180 Notification of change.
- 296-402-190 Revocation and suspension procedures.

WAC 296-402-010 Foreword. This chapter is promulgated in accordance with the provisions of chapter 19.28 RCW which covers electricians and electrical installations.

To qualify for certification as an approved electrical products testing laboratory, the criteria of this chapter shall be complied with. [Statutory Authority: RCW 19.28.010, 19.28.060, 19.28.065 and 19.28.070. 85-20-130 (Order 85-27), § 296-402-010, filed 10/2/85.]

WAC 296-402-020 Purpose and scope. The purpose of this chapter is to provide for recognition and accreditation of electrical products testing and certification laboratories for the state of Washington so the general consuming public can be assured that electrical products have been tested for safety and identified for their intended use.

Any electrical product, device, system, material, or installation which is accepted, or classified, identified, or certified, or listed, or labeled by a Washington state accredited electrical products testing laboratory shall be deemed to have been successfully evaluated for safety. [Statutory Authority: RCW 19.28.010, 19.28.060, 19.28.065 and 19.28.070. 85-20-130 (Order 85-27), § 296-402-020, filed 10/2/85.]

WAC 296-402-030 Definitions. The definitions set forth in this section shall apply throughout this chapter.

(1) "ANSI" means American National Standards Institute.

(2) "Certified electrical product" means an electrical product that is certified under this chapter:

(a) To which a label, symbol, or other identifying mark of an approved testing laboratory has been attached to indicate that the manufacturer produced the product in compliance with appropriate standards or that the product performs in a specified manner.

(b) That is not decertified.

(3) "Certification mark" means a specified approved testing laboratory identification indicating that a certified electrical product has been manufactured in accordance with the requirements of appropriate standards or tested for specific end uses.

(4) "Certification program" means a specified set of testing, inspection, and quality assurance procedures, with appropriate implementing authority directed toward evaluating products for certification of compliance to the requirements of appropriate standards.

(5) "Department" means the department of labor and industries.

(6) "Labeled" means an electrical product to which a label, symbol, or other identifying mark of an approved laboratory is attached.

(7) "Laboratory operations control manual" means a document consisting of specified procedures and information for each test method responding to the application requirements of the product standard.

(8) "Quality control manual" means a document consisting of general guidelines for the quality control of the laboratory's method of operation. Specific information is provided for portions of individual test methods whenever specifics are needed to comply with the criteria or otherwise support the laboratory's operations. [Statutory Authority: RCW 19.28.010, 19.28.060, 19.28.065 and 19.28.070. 85-20-130 (Order 85-27), § 296-402-030, filed 10/2/85.]

WAC 296-402-040 Organization. The laboratory shall be an independent, third-party testing and inspection organization with no organizational, managerial, or financial affiliation with manufacturers, suppliers, or vendors of products covered under its certification programs.

(1) The laboratory shall not be owned by manufacturers or vendors.

(2) The laboratory administration shall not be controlled by manufacturers or vendors.

(3) The laboratory shall be legally constituted and permitted to perform certification work.

(4) The laboratory shall not be engaged in the promotion or design of the product being evaluated, tested, or certified.

(5) The laboratory shall have sufficient diversity of clients or activity so that the loss or award of a specific contract regarding certification would not be a determinative factor in the financial well-being of the laboratory.

(6) The employment security status of the personnel of the laboratory shall be free of influence or control of manufacturers or vendors of products certified. [Statutory Authority: RCW 19.28.010, 19.28.060, 19.28.065 and 19.28.070. 85-20-130 (Order 85-27), § 296-402-040, filed 10/2/85.]

WAC 296-402-050 Professional and ethical business practices. The laboratory shall be operated in accordance with generally accepted professional and ethical business practices and shall agree in writing that as a minimum it will be its policy to:

(1) Perform the examinations, tests, evaluations, and inspections required under the certification programs in accordance with the designated standards and procedures.

(2) Assure that reported values accurately reflect measured data.

(3) Limit work to that for which competence and capacity are available.

(4) Treat test data, records, and reports as proprietary information.

(5) Respond and attempt to resolve complaints concerning test results and certifications.

(6) Be capable of performing all examinations, tests, evaluations, and inspections for certification programs for which it is approved according to the latest effective version of applicable safety standards as adopted by rule, and require that all certified products produced after the effective date comply with such standards.

(7) Maintain an independent relationship between its clients, affiliates, or other organizations, so that the laboratory's capacity to render test reports and certifications objectively and without bias is not adversely affected.

(8) Notify the department within thirty calendar days should it become unable to conform to any of these criteria. [Statutory Authority: RCW 19.28.010, 19.28.060, 19.28.065 and 19.28.070. 85-20-130 (Order 85-27), § 296-402-050, filed 10/2/85.]

WAC 296-402-060 Quality control system. The laboratory shall maintain a quality control system to help assure the accuracy and technical integrity of its work as follows:

(1) The laboratory's quality control system must include a quality control manual or a laboratory operations control manual containing written procedures and information in response to the applicable requirements of the product standard. The procedures and information may be explicitly contained in the manual or may be referenced so that their location in the laboratory is clearly identified. The written procedures and information must be adequate to guide a testing technician and inspector in conducting the tests and inspections in accordance with the test methods and procedures required for the certification programs for which accreditation is sought.

(2) The laboratory shall have a current copy of its quality control manual available in the laboratory for use by laboratory personnel and shall make the manual available to the department for review and audit. [Statutory Authority: RCW 19.28.010, 19.28.060, 19.28.065 and 19.28.070. 85-20-130 (Order 85-27), § 296-402-060, filed 10/2/85.]

WAC 296-402-070 Personnel. The laboratory shall be staffed by competent personnel who shall have the necessary education, training, technical knowledge, and experience for their assigned functions to perform the tests, examinations, reevaluations, and inspections for certification programs for which accreditation is sought.

(1) There shall be a job description for each senior technical position category.

(2) The laboratory shall assure the competency of its staff through the observation and/or examination of each relevant staff member in the performance of tests, examinations, and inspections that each member is assigned to perform. The observations must be conducted at intervals not exceeding one year by one or more individuals judged qualified by the person who has technical responsibility for the operation.

(3) The laboratory shall make available the description of its training program for assuring that new or untrained staff will be able to perform tests and inspections properly and uniformly to the requisite degree of precision and accuracy.

(4) The laboratory shall maintain records, including dates of the observation or examination of performance of personnel. Information on the relevant qualifications, training, and experience of the technical staff shall be maintained by the laboratory and shall be furnished to the department on request. [Statutory Authority: RCW 19.28.010, 19.28.060, 19.28.065 and 19.28.070. 85-20-130 (Order 85-27), § 296-402-070, filed 10/2/85.]

WAC 296-402-080 Calibration--Verification and maintenance of facilities and equipment. The laboratory shall provide evidence of the calibration, verification, and maintenance of the facilities and equipment specified for each test method for certification programs for which accreditation is sought by means of the following:

(1) A description of the procedures used in calibrating, verifying, and maintaining the test equipment and facilities, including as applicable:

(a) Calibration and verification equipment or services used;

(b) Reference standards and materials used;

(c) Measurement assurance, corroborative reference, or other programs in which the laboratory participates; and

(d) Specified maintenance practices.

(2) Calibration and verification records, including as applicable:

(a) Equipment description or name;

(b) Name of manufacturer;

(c) Model, style, and serial number, or other identification;

(d) Equipment variables subject to calibration and verification;

(e) Statement of the instrument's allowable error and tolerances of readings;

(f) Calibration or verification schedule (intervals);

(g) Dates and results of last calibrations or verifications and schedule of future calibrations or verifications;

(h) Name of laboratory person or outside contractor providing the calibration or verification services; and

(i) Traceability to National Bureau of Standards or other standard reference authority as required. [Statutory Authority: RCW 19.28.010, 19.28.060, 19.28.065 and 19.28.070. 85-20-130 (Order 85-27), § 296-402-080, filed 10/2/85.]

WAC 296-402-090 Plans for certification programs. The laboratory shall maintain plans for its certification programs for which accreditation is sought which shall include, as applicable, instructions for:

(1) Equipment maintenance and verification checks.

(2) Sample selection.

(3) Data collection, analysis, and reporting.

(4) Quality control checks and audits. [Statutory Authority: RCW 19.28.010, 19.28.060, 19.28.065 and 19.28.070. 85-20-130 (Order 85-27), § 296-402-090, filed 10/2/85.]

WAC 296-402-100 Records. The laboratory shall maintain records and prepare reports of those testing, inspection, and certification activities associated with each program for which approval is sought. The laboratory shall make available to the department, upon request, a typical completed test or inspection report with the name of the client and source of any product deleted. Test and inspection reports shall contain, as applicable:

(1) Name and address of the laboratory.

(2) Pertinent data and identification of tests or inspections.

(3) Name of client.

(4) Description and identification of the sample including, as necessary, where and how the sample was selected.

(5) An appropriate title.

(6) Identification of the test, inspection, or procedure as specified for the certification program.

(7) Known deviations, additions to, or exclusions from testing, inspection, and certification activities in order to be appropriate to new or innovative products not contemplated by the standard.

(8) Measurements, examinations, derived results, and identification of test anomalies.

(9) If necessary, a statement as to whether or not the results comply with the requirements of the standard.

(10) Signature of person(s) having responsibility for the report.

(11) Data generated during testing if not included in the test report, such as raw data, calculations, tables, graphs, sketches, and photographs, shall be maintained.

(12) Sample control forms documenting the receipt, handling, storage, shipping, and testing of samples or a written description of the procedures and separate records that are maintained to control these operations.

(13) The laboratory shall have copies of applicable standards and other documents referred to or used in performing each test or inspection for product certification for which approval is sought.

(14) The laboratory shall maintain records of its quality control checks and audits for monitoring its test work associated with its certification programs, including:

(a) Records of products assurance (follow-up) test results; and

(b) Records of detected errors and discrepancies and actions taken subsequent to such detection.

(15) The laboratory shall maintain a record of written complaints and disposition thereof.

(16) The laboratory shall retain records required by these criteria for a minimum of three years. [Statutory Authority: RCW 19.28.010, 19.28.060, 19.28.065 and 19.28.070. 85-20-130 (Order 85-27), § 296-402-100, filed 10/2/85.]

WAC 296-402-110 Product certification program.

(1) General. The testing laboratory shall be approved only to certify those products identified by the laboratory in its application and as authorized by the department. The certification program shall contain the procedures and authority to ensure that the certified product complies with the standards (requirements) established by the program.

(2) Electrical product safety standard used. The standard used as the basis of the certification program shall be a state approved product safety standard that is determined to provide an adequate level of safety or define an adequate level of safety performance.

(a) Generally, such standards shall:

(i) Be recognized in the United States as an electrical product safety standard.

(ii) Be compatible with and be maintained current with periodic revisions of applicable national codes and installation standards.

(iii) Be developed by a standards developing organization under a method providing for input and consideration of views of industry groups, experts, users, consumers, and governmental authorities, and others having broad experience in the electrical products safety field.

(b) All ANSI safety designated electrical product standards are deemed acceptable without further qualification.

(c) If a testing laboratory desires to use a published standard other than an ANSI standard, the department shall evaluate the proposed standard to determine that it provides an adequate level of safety. If there exists an ANSI standard, or other published standard meeting the criteria of (a) of this subsection which has been recognized by the department for use in certification programs, the laboratory shall identify and justify all differences between the proposed standard and such ANSI standard or other standard previously recognized by the department.

(d) Where there is no published standard meeting the above cited criteria for the equipment under consideration, the department shall evaluate the proposed standard to determine that it provides an adequate level of safety. The laboratory shall identify and justify the adequacy of the standard or other specifications used as a source of requirements.

(e) The department shall review proposed standards to determine that they provide an adequate level of safety and shall present a recommendation concerning each proposed standard to the electrical advisory board at a regular or special board meeting for the board's approval.

(3) Evaluation of components. Components of certified products shall be evaluated for compliance with standards applicable to such components or found to be

suitable for use in the product as stated in the end product standard.

(4) Certification agreement. Measures, such as the following, to provide for manufacturer compliance with the provisions of the product standard and laboratory control of the use of the certification mark shall be embodied in an agreement between the manufacturer and the testing laboratory:

(a) Require the manufacturer to provide such information and assistance as needed by the testing laboratory to conduct the necessary product conformity and production assurance evaluation.

(b) Require the manufacturer to provide the testing laboratory's representative access during working hours to the factory for inspection and audit activities without prior notice.

(c) Restrict the manufacturer to application of certification marks only to products that comply with requirements of the product standard.

(d) Secure the manufacturer's agreement to the publication of notice by the testing laboratory for any product already available in the marketplace that does not meet the safety standard.

(e) Whenever the standard covering the product is revised, require reevaluation of products as a condition of continued use of the certification mark.

(f) Provide for notification by the laboratory of the manufacturer's personnel responsible for and authorized to institute product recall in the case of a hazard.

(g) Provide for control of certification marks (or labels) by the testing laboratory.

(h) Require that the testing laboratory provide to the manufacturer a report of original product evaluation, which documents by test results and other data, when conformity with the applicable product standard is achieved.

(i) Require the manufacturer to provide the identification of the manufacturer or vendor of the product, and, if the product is produced in more than one location, the place of manufacture of the product.

(5) Identification of certified products. Certified products shall be labeled or marked with the certification mark of the approved testing laboratory. The certification mark shall:

(a) Be owned by the testing laboratory and be registered as a certification mark with the United States Patent and Trademark Office.

(b) Not be readily transferable from one product to another.

(c) Be directly applied to each unit of production in the form of labels or markings suitable for the environment and use of the product, except where the physical size of the unit does not permit, in which case markings may then be attached to the smallest package in which the unit is marketed.

(d) Include the name or other appropriate identification of the testing laboratory.

(e) Include the product category where such is not completely obvious.

(6) Directory (list) of certified products. The testing laboratory shall publish annually a products directory to

identify products that are authorized to bear the laboratory's certification mark (label). The products directory shall briefly describe the program, the products covered, the name of the manufacturer or vendor of the certified products, and the identification of the published standards or the compiled requirements on which the program is based. The products directory shall be available to the public. Supplemental up-to-date information shall be publicly available at the office of the testing laboratory at any time during normal business hours.

(7) Original conformance (engineering) evaluation. Prior to authorizing the use of a certification mark on a product, the testing laboratory shall:

(a) Determine by examination and/or tests that representative samples of the product comply with the requirements (standards). Components of certified products shall also be required to comply with the safety standards (requirements) applicable to such components or found to be suitable for use as stated in the end product standard. Evaluation of the product design shall be made on representative production samples or on prototype product samples with subsequent verification that factory productions are the same as the prototype.

(b) Determine that the manufacturer has the necessary facilities, test equipment, and control procedures to ensure that continuing production of the product complies with the requirements. [Statutory Authority: RCW 19.28.010, 19.28.060, 19.28.065 and 19.28.070. 85-20-130 (Order 85-27), § 296-402-110, filed 10/2/85.]

WAC 296-402-120 Product assurance (follow-up) activities. (1) General. Concurrent with and subsequent to authorizing the manufacturer to use the testing laboratory's certification mark, the testing laboratory shall establish a factory follow-up inspection program to determine continued compliance of certified products with the applicable standard.

(2) Follow-up inspection manual. The testing laboratory shall prepare and utilize an inspection manual setting forth the conditions governing the use of the certification mark on the products. The inspection manual shall include the identification of the products authorized for certification; identification of manufacturer and plant location at which manufacture and certification are authorized; description, specifications, and requirements applicable to the product; description of processes where needed for control purposes; description of the manufacturer's quality assurance program when used as part of the follow-up program; description of inspections and tests to be conducted by the manufacturer and the inspector; description of countercheck tests to be conducted in the laboratory; and description of the form and means of applying the certification mark.

(3) Follow-up procedures and activities. Follow-up procedures and activities shall include the following:

(a) Periodic unannounced inspections at the factory with testing at the factory or testing laboratory of representative samples selected from production and, if appropriate, from the market.

(b) Periodic auditing or surveillance of the manufacturer's quality assurance program through the witnessing

of manufacturer's tests, review of the manufacturer's records, and verification of the manufacturer's produced data.

(c) Investigation of alleged field failures upon department request.

(d) Procedures for control of the use of the certification mark by:

(i) Keeping records of the release and use of certification marks.

(ii) Removal of marks from noncomplying products.

(iii) Return or destruction of unused marks when the authority to use the marks is terminated.

(iv) Legal action.

(e) Frequency of follow-up. The frequency of follow-up inspections shall be sufficient to provide a reasonable check on the means which the manufacturer exercises to assure that the product bearing the certification mark complies with the applicable standards. The frequency shall not be less than once each three months, unless adequate data is provided to the department to justify less frequent inspections. [Statutory Authority: RCW 19.28.010, 19.28.060, 19.28.065 and 19.28.070. 85-20-130 (Order 85-27), § 296-402-120, filed 10/2/85.]

WAC 296-402-130 Laboratory approval program implementation. (1) The department may establish a standing committee for the purpose of recommending action regarding approval of electrical testing laboratories, and reviewing of applications, non-ANSI standards, and other technical criteria.

(2) The department shall develop forms and procedures which will enable applicants to submit the data necessary for evaluation.

(3) The department may waive on-site inspection for a testing laboratory showing evidence of current recognition by another state determined to provide an accreditation program acceptable to the department. [Statutory Authority: RCW 19.28.010, 19.28.060, 19.28.065 and 19.28.070. 85-20-130 (Order 85-27), § 296-402-130, filed 10/2/85.]

WAC 296-402-140 Initial laboratory evaluation. (1) The department shall:

(a) Accept requests for testing laboratory certification.

(b) Make an administrative review to ensure completeness and accuracy of information.

(c) Review the request.

(d) Arrange for the laboratory on-site inspection by a technically qualified representative of the department to evaluate compliance with accreditation criteria. The cost shall be borne by the applicant.

(2) Notification of evaluation and evaluation results. The department shall notify the applicant of the recommendation of the department and time and place of the hearing to consider the request.

(3) Fees. There shall be an initial filing fee accompanying the application, an initial accreditation fee, and a biennial renewal fee as established from time to time by the department. Evaluation costs including travel expenses and any additional related expenses shall be

borne by the laboratory. On-site inspections, requiring fees, shall not be made more than once a year, unless additional inspections are required by the department or requested by the laboratory.

Initial filing fee	\$ 500.00
Initial accreditation fee:	
One product category	\$ 250.00
Each additional category for the next nineteen categories	\$ 100.00 each
Maximum for twenty categories or more	\$2150.00
Biennial renewal fee	50% of the amount of the initial accreditation fee

(4) Number and category. Each accredited testing laboratory shall be identified by the number of electrical product category(ies) that the department has determined the laboratory is qualified to evaluate. The accreditation shall indicate the electrical product category(ies) for which accreditation is issued.

(5) Approval. The department shall accept or deny laboratory approval. Such approval shall be subject to reexamination when deemed necessary by the department.

(6) Appeal. If an applicant disagrees with the action of the department regarding accreditation or qualifications, an appeal may be made to the electrical advisory board within thirty days of the notice by the department. [Statutory Authority: RCW 19.28.010, 19.28.060, 19.28.065 and 19.28.070. 85-20-130 (Order 85-27), § 296-402-140, filed 10/2/85.]

WAC 296-402-150 Renewals. (1) At least thirty days prior to the expiration date of any such accreditation, the electrical testing laboratory shall forward to the department an application for renewal. The department, upon receipt of the completed form and fee, shall renew accreditation for a period of two years or notify such applicant of the department's refusal with reasons thereof. Accreditation may be renewed for one or more electrical product category(ies) and renewal may be refused for one or more electrical product category(ies).

(2) Appeal. If an applicant disagrees with the action of the department regarding accreditation or electrical product category(ies), an appeal may be made to the electrical advisory board within thirty days of the notice by the department. [Statutory Authority: RCW 19.28.010, 19.28.060, 19.28.065 and 19.28.070. 85-20-130 (Order 85-27), § 296-402-150, filed 10/2/85.]

WAC 296-402-160 Conditions of accreditation. (1) Evidence of accreditation. The accreditation of any testing laboratory shall be evidenced by a letter of accreditation from the department.

(2) Period of accreditation. The accreditation of a testing laboratory shall be valid for a period of two years from the date of acceptance by the department. The period of validity shall be stated in the letter of accreditation.

(3) Maintenance of qualifying conditions. Every accredited testing laboratory shall continue to satisfy all the conditions specified in this chapter during the period of the accreditation.

(4) Reports. The accredited laboratory shall furnish the department an annual report detailing the extent of its activities for the year, and covering the products which it has certified during the year. The report shall include information concerning:

(a) The number of factory inspections.

(b) List of certified products. [Statutory Authority: RCW 19.28.010, 19.28.060, 19.28.065 and 19.28.070. 85-20-130 (Order 85-27), § 296-402-160, filed 10/2/85.]

WAC 296-402-170 Penalties. Any person and/or laboratory that fails to comply with the requirements of these rules and regulations or that files a false report may have accreditation revoked for one or more electrical product category(ies) and shall bear such cost which may accrue to the department or its agent(s) as a result of the violation. A laboratory whose accreditation has been revoked may apply again for accreditation no sooner than one year after the date of revocation of accreditation. [Statutory Authority: RCW 19.28.010, 19.28.060, 19.28.065 and 19.28.070. 85-20-130 (Order 85-27), § 296-402-170, filed 10/2/85.]

WAC 296-402-180 Notification of change. Testing laboratories accredited under these rules and regulations shall notify the department within thirty working days of any of the following:

(1) Change in company name and/or address.

(2) Changes in major test equipment.

(3) Changes in principal officers, key supervisory and responsible personnel in the company including the director of testing and engineering services, director of follow-up services, and the laboratory supervisor.

(4) Change in the standard(s) covering the certified product(s).

(5) Change in independent status. [Statutory Authority: RCW 19.28.010, 19.28.060, 19.28.065 and 19.28.070. 85-20-130 (Order 85-27), § 296-402-180, filed 10/2/85.]

WAC 296-402-190 Revocation and suspension procedures. (1) Revocation and suspension. The department on its own initiative may suspend or revoke the accreditation of any testing laboratory found to be in noncompliance with these rules and regulations, the laws of the state of Washington, or having substantial evidence of the laboratory's conduct in unethical business practices.

(2) Notice and conference. Prior to suspension, revocation, or failure to renew the accreditation of a laboratory, written notice of such intent shall be served by registered mail by the department. Within ten calendar days of receipt of such notice, the affected laboratory may request a conference before the department. Should the electrical testing laboratory disagree with the decision of the department, an appeal may be made to the electrical advisory board. Direct an appeal to Chairman,

Electrical Advisory Board, 520 South Water St., P.O. Box 9519, Olympia, WA 98504.

(3) Effect of suspension and revocation. If the accreditation is suspended, revoked, or not renewed, the laboratory shall immediately notify the involved manufacturers whose products are covered by the accreditation that such products manufactured subsequent to the revocation and offered for sale in the state of Washington can no longer bear the laboratory's label that identified it as a certified product. [Statutory Authority: RCW 19.28.010, 19.28.060, 19.28.065 and 19.28.070. 85-20-130 (Order 85-27), § 296-402-190, filed 10/2/85.]

**Title 304 WAC
LIBRARY COMMISSION**

Chapters

- 304-12** Substantive rules.
- 304-25** Western library network--Western library network computer service.

**Chapter 304-12 WAC
SUBSTANTIVE RULES**

WAC

- 304-12-015 Repealed.
- 304-12-020 Washington library planning and development committee created--Appointments--Terms--Expenses.
- 304-12-025 Washington library planning and development committee--Duties.
- 304-12-125 General statement of criteria.
- 304-12-140 Other services grant programs--Principles.
- 304-12-155 Repealed.
- 304-12-170 Repealed.
- 304-12-180 Repealed.
- 304-12-190 Repealed.
- 304-12-191 Repealed.
- 304-12-192 Repealed.
- 304-12-220 Repealed.
- 304-12-225 Repealed.
- 304-12-300 Repealed.
- 304-12-305 Repealed.
- 304-12-310 Repealed.
- 304-12-350 Forms--Application for a grant.

DISPOSITION OF SECTIONS FORMERLY CODIFIED IN THIS CHAPTER

- 304-12-015 Services grant programs in Washington--Principles. [Order 3542, § 304-12-015, filed 7/11/72; Order, § 304-12-015, filed 6/22/71.] Repealed by 84-07-020 (Order 84-1), filed 3/14/84. Statutory Authority: RCW 27.04.060.
- 304-12-155 Evolutionary grants. [Order 3542, § 304-12-155, filed 7/11/72; Order, § 304-12-155, filed 6/22/71; Rules (part), filed 1/26/67.] Repealed by 85-20-032 (Order 85-01), filed 9/24/85. Statutory Authority: RCW 27.04.030.
- 304-12-170 Merger grants. [Order 3542, § 304-12-170, filed 7/11/72; Rules (part), filed 4/8/65; Emergency rules (part), filed 2/8/65.] Repealed by 85-20-032 (Order 85-01), filed 9/24/85. Statutory Authority: RCW 27.04.030.
- 304-12-180 Establishment grants. [Order 3542, § 304-12-180, filed 7/11/72; Rules (part), filed 4/8/65; Emergency rules (part), filed 2/8/65.] Repealed by 85-20-032

- (Order 85-01), filed 9/24/85. Statutory Authority: RCW 27.04.030.
- 304-12-190 Extended service grants. [Order 3542, § 304-12-190, filed 7/11/72; Order, § 304-12-190, filed 6/22/71; Rules (part), filed 4/8/65; Emergency rules (part), filed 2/8/65.] Repealed by 85-20-032 (Order 85-01), filed 9/24/85. Statutory Authority: RCW 27.04.030.
- 304-12-191 Network grants. [Order 3542, § 304-12-191, filed 7/11/72.] Repealed by 85-20-032 (Order 85-01), filed 9/24/85. Statutory Authority: RCW 27.04.030.
- 304-12-192 Education and training grants. [Order 3542, § 304-12-192, filed 7/11/72.] Repealed by 85-20-032 (Order 85-01), filed 9/24/85. Statutory Authority: RCW 27.04.030.
- 304-12-220 Research and planning grants. [Order 3542, § 304-12-220, filed 7/11/72; Rules (part), filed 4/8/65; Emergency rules (part), filed 2/8/65.] Repealed by 85-20-032 (Order 85-01), filed 9/24/85. Statutory Authority: RCW 27.04.030.
- 304-12-225 Duration. [Order 3542, § 304-12-225, filed 7/11/72; Order, § 304-12-225, filed 6/22/71.] Repealed by 85-20-032 (Order 85-01), filed 9/24/85. Statutory Authority: RCW 27.04.030.
- 304-12-300 State operational grants--Principles. [Order, § 304-12-300, filed 6/22/71. Formerly WAC 304-12-230.] Repealed by 85-20-032 (Order 85-01), filed 9/24/85. Statutory Authority: RCW 27.04.030.
- 304-12-305 State operational grants--Rules and regulations for allocation of operational grants. [Order 1-75, § 304-12-305, filed 7/21/75; Order, § 304-12-305, filed 6/22/71. Formerly WAC 304-12-240.] Repealed by 85-20-032 (Order 85-01), filed 9/24/85. Statutory Authority: RCW 27.04.030.
- 304-12-310 State operational grants--Definitions. [Order, § 304-12-310, filed 6/22/71. Formerly WAC 304-12-250.] Repealed by 85-20-032 (Order 85-01), filed 9/24/85. Statutory Authority: RCW 27.04.030.

WAC 304-12-015 Repealed. See Disposition Table at beginning of this chapter.

WAC 304-12-020 Washington library planning and development committee created--Appointments--Terms--Expenses. A Washington library planning and development committee is hereby created which shall consist of seven persons appointed for two year terms. Four persons shall be appointed by the Washington state library commission. The commission shall confirm the remaining three members who shall be designated by the Washington library association executive board, and one of whom shall be a library trustee and a member of the Washington library trustees association. Initial terms shall be determined by lot following appointment, with three persons to serve one year and four persons to serve two years. Thereafter, three members shall be appointed in June of each odd-numbered year; four members shall be appointed in June of each even-numbered year. Members may be reappointed; however, no member shall serve more than two terms consecutively. Vacancies shall be filled by appointment for the unexpired term. The committee members shall serve without compensation, but will be reimbursed for subsistence, lodging, and travel expenses for committee meetings and approved business of the committee in accordance with the provisions of the Washington state travel regulations. [Statutory Authority: RCW 27.04.060. 84-07-020 (Order 84-1), § 304-12-020, filed 3/14/84.]