

WSR 12-24-008
PERMANENT RULES
DEPARTMENT OF REVENUE

[Filed November 27, 2012, 9:35 a.m., effective December 28, 2012]

Effective Date of Rule: Thirty-one days after filing.

Purpose: Chapter 39, Laws of 2012, (HB 2758) changed the department of revenue's (department) ability to collect spirits taxes imposed under RCW 82.08.150 by authorizing it to request that the Washington state liquor control board suspend, not renew, or not issue licenses to sell spirits in Washington for delinquency in reporting or remitting spirits taxes after department notice to a taxpayer.

The department is now adopting a new rule, WAC 458-20-10003 Brief adjudicative proceedings for matters related to suspension, nonrenewal, and nonissuance of licenses to sell spirits, to establish brief adjudicative proceedings for review of the department's notice prior to any department request for suspension, nonrenewal, or nonissuance consistent with HB 2758.

Statutory Authority for Adoption: RCW 82.32.300 and 82.01.060(2).

Adopted under notice filed as WSR 12-17-128 on August 21, 2012.

Number of Sections Adopted in Order to Comply with Federal Statute: New 0, Amended 0, Repealed 0; Federal Rules or Standards: New 0, Amended 0, Repealed 0; or Recently Enacted State Statutes: New 1, Amended 0, Repealed 0.

Number of Sections Adopted at Request of a Nongovernmental Entity: New 0, Amended 0, Repealed 0.

Number of Sections Adopted on the Agency's Own Initiative: New 1, Amended 0, Repealed 0.

Number of Sections Adopted in Order to Clarify, Streamline, or Reform Agency Procedures: New 0, Amended 0, Repealed 0.

Number of Sections Adopted Using Negotiated Rule Making: New 0, Amended 0, Repealed 0; Pilot Rule Making: New 0, Amended 0, Repealed 0; or Other Alternative Rule Making: New 0, Amended 0, Repealed 0.

Date Adopted: November 27, 2012.

Alan R. Lynn
Rules Coordinator

NEW SECTION

WAC 458-20-10003 Brief adjudicative proceedings for matters related to suspension, nonrenewal, and nonissuance of licenses to sell spirits. (1) **Introduction.** The department of revenue (department) conducts adjudicative proceedings pursuant to chapter 34.05 RCW, the Administrative Procedure Act (APA). The department adopts in this section, the procedures as provided in RCW 34.05.482 through 34.05.494 for the administration of brief adjudicative proceedings to review the department notice explained in subsection (2) of this section. The department must provide the notice before it may proceed in requesting that the Washington liquor control board (board) suspend, not renew, or not issue a taxpayer's spirits license(s) as defined in RCW 66.24.010 (3)(c), referred to in this section as "agency action."

This section explains the procedure pertaining to the adopted brief adjudicative proceedings.

(2) **Department notice.** If a taxpayer is more than thirty days delinquent in reporting or remitting spirits taxes on a tax return or assessed by the department, including applicable penalties and interest, the department may request that the board suspend the taxpayer's spirits license or licenses and refuse to renew any existing spirits license held by the taxpayer or issue any new spirits license to the taxpayer. Before the department may take agency action, the department must provide the taxpayer with at least seven calendar days prior written notice of the delinquency and inform the taxpayer that the department intends to make the request to the board. The department notice must include:

- (a) A listing of any unfiled tax returns;
- (b) The amount of unpaid spirits taxes as applicable, including any applicable penalties and interest;
- (c) Who to contact to inquire about payment arrangements; and
- (d) Information that the taxpayer may seek administrative review of the department notice, including the deadline for seeking such review.

A taxpayer may seek an administrative review of the department notice as explained under subsection (3) of this section. Brief adjudicative proceedings under this section do not include the right to challenge the amount of any spirits taxes assessed by the department.

(3) **Conduct of brief adjudicative proceedings.** To initiate an appeal of a department notice, the taxpayer has seven calendar days from the date on the department notice to request a review of that notice. The taxpayer must file a written notice of appeal explaining why the taxpayer disagrees with the notice of delinquency.

A form notice of appeal is available at <http://dor.wa.gov> or by calling 1-800-647-7706. The completed form should be mailed or faxed to the department at:

Department of Revenue
Compliance Administration
Spirits License Suspension Petition
P.O. Box 47473
Olympia, WA 98504-7473
Fax: 360-586-8816

(a) A presiding officer, who will be either the assistant director of the compliance division or such other person as designated by the director of the department (director), will conduct brief adjudicative proceedings. The presiding officer for brief adjudicative proceedings will have agency expertise in the subject matter but will not otherwise have participated in the specific matter. The presiding officer's review is limited to the written record.

(b) As part of the notice of appeal, the taxpayer or the taxpayer's representative may include written documentation explaining the taxpayer's view of the matter. The presiding officer may also request additional documentation from the taxpayer or the department and will designate the date by which the documents must be submitted.

(c) In addition to the record, the presiding officer for brief adjudicative proceedings may employ agency expertise as a basis for decision.

(d) Within ten days of receipt of the taxpayer's notice of appeal, the presiding officer will enter an initial order including a brief explanation of the decision under RCW 34.05.485. All orders in these brief adjudicative proceedings will be in writing. The initial order will become the department's final order unless a petition for review is made to the department's appeals division under subsection (4) of this section. If the presiding officer's order invalidates the department notice, the department may in its discretion start new proceedings by sending a new department notice.

(4) Review of initial order from brief adjudicative proceeding. A taxpayer that has received an initial order upholding a department notice under subsection (3) of this section may request a review by the department by filing a written petition for review or by making an oral request for review with the department's appeals division within twenty-one days after the service of the initial order on the taxpayer as described in subsection (8) of this section.

A form petition of review is available at <http://dor.wa.gov>. A request for review should state the reasons for the review.

The address, telephone number, and fax number of the appeals division are:

Appeals Division
Spirits License Petition for Review/Spirits Taxes
Department of Revenue
P.O. Box 47460
Olympia, WA 98504-7460
Telephone Number: 360-534-1335
Fax: 360-534-1340

(a) A reviewing officer, who will be either the assistant director of the appeals division or such other person as designated by the director, will conduct a brief adjudicative proceeding and determine whether the initial order was correctly decided. The reviewing officer's review is limited to the written record.

(b) The agency record need not constitute the exclusive basis for the reviewing officer's decision. The reviewing officer will have the authority of a presiding officer.

(c) The order of the reviewing officer will be in writing and include a brief statement of the reasons for the decision, and it must be entered within twenty days of the petition for review. The order will include a notice that judicial review may be available. The order of the reviewing officer represents a final order of the department. If a final order invalidates the department notice, the department may in its discretion start new proceedings by sending a new department notice.

(d) A request for review is deemed denied if the department does not issue an order on review within twenty days after the petition for review is filed.

(5) Record in brief adjudicative proceedings. The record with respect to the brief adjudicative proceedings under RCW 34.05.482 through 34.05.494 related to department notice will consist of:

(a) *The record before the presiding officer:* The record before the presiding officer consists of the department notice; the taxpayer's appeal of the department notice; all records relied upon by the department or submitted by the taxpayer

related to the department notice; and all correspondence between the taxpayer and the department regarding the department notice.

(b) *The record before the reviewing officer:* The record before the reviewing officer consists of all documents included in the record before the presiding officer; the taxpayer's petition for review; and all correspondence between the taxpayer and the department regarding the taxpayer's petition for review.

(6) **Court appeal.** Court appeal from the final order of the department is available pursuant to Part V, chapter 34.05 RCW. However, court appeal may be available only if a review of the initial decision has been requested under subsection (4) of this section and all other administrative remedies have been exhausted. See RCW 34.05.534.

(7) **Computation of time.** In computing any period of time prescribed by this section or by the presiding officer or reviewing officer, the day of the act or event after which the designated period is to run is not to be included. The last day of the period is to be included, unless it is a Saturday, Sunday or a legal holiday, in which event the period runs until the next day which is not a Saturday, Sunday or legal holiday. This subsection does not apply with respect to computation of the seven calendar days required for the department notice.

(8) **Service.** All notices and other pleadings or papers filed with the presiding or reviewing officer must be served on the taxpayer, their representatives/agents of record, and the department.

(a) Service is made by one of the following methods:

- (i) In person;
- (ii) By first-class, registered or certified mail;
- (iii) By fax and same-day mailing of copies;
- (iv) By commercial parcel delivery company; or
- (v) By electronic delivery pursuant to RCW 82.32.135.

(b) Service by mail is regarded as completed upon deposit in the United States mail properly stamped and addressed.

(c) Service by electronic fax is regarded as completed upon the production by the fax machine of confirmation of transmission.

(d) Service by commercial parcel delivery is regarded as completed upon delivery to the parcel delivery company, properly addressed with charges prepaid.

(e) Service by electronic delivery is regarded as completed on the date that the department electronically sends the information to the parties or electronically notifies the parties that the information is available to be accessed by them.

(f) Service to a taxpayer, their representative/agent of record, the department, and presiding officer must be to the address shown on the notice described in subsection (3)(a) of this section.

(g) Service to the reviewing officer must be to the appeals division at the address shown in subsection (4) of this section.

(h) Where proof of service is required, the proofs of service must include:

- (i) An acknowledgment of service;
- (ii) A certificate, signed by the person who served the document(s), stating the date of service; that the person did serve the document(s) upon all or one or more of the parties

of record in the proceeding by delivering a copy in person to (names); and that the service was accomplished by a method of service as provided in this subsection.

(9) **Continuance.** The presiding officer or reviewing officer may grant, in their sole discretion, a request for a continuance by motion of the taxpayer, the department, or on its own motion.

(10) **Conversion of a brief adjudicative proceeding to a formal proceeding.** The presiding officer or reviewing officer, in their sole discretion, may convert a brief adjudicative proceeding to a formal proceeding at any time on motion of the taxpayer, the department, or the presiding/reviewing officer's own motion.

(a) The presiding/reviewing officer will convert the proceeding when it is found that the use of the brief adjudicative proceeding violates any provision of law, when the protection of the public interest requires the agency to give notice to and an opportunity to participate to persons other than the parties, and when the issues and interests involved warrant the use of the procedures of RCW 34.05.413 through 34.05.479.

(b) When a proceeding is converted from a brief adjudication to a formal proceeding, the director may become the presiding officer or may designate a replacement presiding officer to conduct the formal proceedings upon notice to the taxpayer and the department.

(c) In the conduct of the formal proceedings, WAC 458-20-10002 will apply to the proceedings.

(11) **Taking agency action.** The department may initiate agency action as follows:

(a) If the taxpayer does not file a timely appeal under subsection (3) of this section, the department may proceed with agency action the day following the end of the period for requesting such appeal;

(b) If the taxpayer does not make a petition for review consistent with subsection (4) of this section, the department may proceed with agency action the day following the end of the period for making such petition of review;

(c) If the department makes a final order adverse to the taxpayer under subsection (4) of this section, the department may proceed with agency action the day following the date the department issues its final order.

WSR 12-24-009

PERMANENT RULES

WASHINGTON STATE LOTTERY

[Filed November 27, 2012, 9:47 a.m., effective December 28, 2012]

Effective Date of Rule: Thirty-one days after filing.

Purpose: Proposed changes to WAC 315-10-020. The lottery wishes to update WAC 315-10-020 to include language to add play symbols to the front **and or back** of an instant ticket as the lottery deems necessary for creative purposes.

Citation of Existing Rules Affected by this Order: Amending WAC 315-10-020.

Statutory Authority for Adoption: RCW 67.70.040 (1), (3).

Adopted under notice filed as WSR 12-21-074 on October 19, 2012.

Number of Sections Adopted in Order to Comply with Federal Statute: New 0, Amended 0, Repealed 0; Federal Rules or Standards: New 0, Amended 0, Repealed 0; or Recently Enacted State Statutes: New 0, Amended 0, Repealed 0.

Number of Sections Adopted at Request of a Nongovernmental Entity: New 0, Amended 0, Repealed 0.

Number of Sections Adopted on the Agency's Own Initiative: New 0, Amended 1, Repealed 0.

Number of Sections Adopted in Order to Clarify, Streamline, or Reform Agency Procedures: New 0, Amended 1, Repealed 0.

Number of Sections Adopted Using Negotiated Rule Making: New 0, Amended 1, Repealed 0; Pilot Rule Making: New 0, Amended 0, Repealed 0; or Other Alternative Rule Making: New 0, Amended 0, Repealed 0.

Date Adopted: November 27, 2012.

James Warick
Deputy Director

AMENDATORY SECTION (Amending WSR 05-11-049, filed 5/13/05, effective 6/13/05)

WAC 315-10-020 Definitions. (1) Ticket. The ticket purchased for participation in an instant game and any ticket used in media promotions and retailer incentive programs authorized by the director for an instant game.

(2) Instant game. A game in which a ticket is purchased and the ticket bearer determines his or her winnings, if any.

(3) Ticket bearer. The person who has signed the ticket or has possession of the unsigned ticket.

(4) Play symbols. The numbers or symbols appearing in the designated areas on the front and or the back of the ticket. Play symbols were formerly called play numbers. Both terms shall have the same meaning.

(5) Your(s). The ticket bearer's play area or areas (for example, "your hand(s)," "your card(s)," or "your roll(s)").

(6) Their(s). The opponent's play area or areas (for example, "their card(s)," or "their roll(s)").

(7) Validation number. The multidigit number found on the ticket and on any ticket stub. There must be a validation number on the ticket or any stub.

(8) Working papers or software requirement specifications. The documents providing production and winning ticket specifications for each instant ticket game.

(9) Scratch game. An instant game in which a ticket is purchased and, upon removal of a scratch-off coating on the front and or the back of the ticket, the ticket bearer determines his or her winning, if any.

WSR 12-24-013

PERMANENT RULES

DEPARTMENT OF

SOCIAL AND HEALTH SERVICES

(Economic Services Administration)

[Filed November 27, 2012, 1:59 p.m., effective January 1, 2013]

Effective Date of Rule: January 1, 2013.

Purpose: The proposed new chapter 388-315 WAC in Title 388 WAC is necessary to comply with the requirements in RCW 74.08A.040 to enact rules covering at a minimum the appropriate uses of state maintenance of effort (MOE) funds and annual reports on program operations by a tribal TANF program. This change will affect tribes operating tribal TANF programs.

Statutory Authority for Adoption: RCW 74.08A.040.

Adopted under notice filed as WSR 12-20-077 on October 3, 2012.

Number of Sections Adopted in Order to Comply with Federal Statute: New 6, Amended 0, Repealed 0; Federal Rules or Standards: New 0, Amended 0, Repealed 0; or Recently Enacted State Statutes: New 0, Amended 0, Repealed 0.

Number of Sections Adopted at Request of a Nongovernmental Entity: New 0, Amended 0, Repealed 0.

Number of Sections Adopted on the Agency's Own Initiative: New 0, Amended 0, Repealed 0.

Number of Sections Adopted in Order to Clarify, Streamline, or Reform Agency Procedures: New 0, Amended 0, Repealed 0.

Number of Sections Adopted Using Negotiated Rule Making: New 0, Amended 0, Repealed 0; Pilot Rule Making: New 0, Amended 0, Repealed 0; or Other Alternative Rule Making: New 6, Amended 0, Repealed 0.

Date Adopted: November 26, 2012.

Katherine I. Vasquez
Rules Coordinator

NEW SECTION

WAC 388-315-1000 Tribal TANF—Overview—Why do we have state rules regarding tribal temporary assistance for needy families program and state maintenance of effort funds? (1) Under RCW 74.08A.040, the department of social and health services is required to adopt rules regarding state maintenance of effort and reporting requirements for tribal TANF programs.

(2) When statutorily required to adopt rules, the department must enact regulations in the Washington Administrative Code consistent with the Administrative Procedures Act.

(3) The department is adopting these rules so that everyone has an understanding of what is required.

NEW SECTION

WAC 388-315-1050 Tribal TANF—Overview—What is state maintenance of effort? State maintenance of effort is a federal TANF requirement that a state shall spend at least a specified amount, as required by 45 CFR 263.1, of state funds for benefits and services for members of needy families each year. A broad, but not unlimited, array of benefits and services for low-income families with children can count toward satisfying a state's maintenance of effort obligation.

NEW SECTION

WAC 388-315-1100 Tribal TANF—Overview—Do tribal TANF programs receive state maintenance of effort

funds? Yes. A tribe or a consortium of tribes may elect to operate a tribal TANF program under 45 CFR 286. Per RCW 74.08A.040, the department shall transfer a fair and equitable amount of the TANF state maintenance of effort funds to eligible tribes, or consortium of tribes, within Washington State upon approval of a tribal TANF program by the secretary of the federal department of health and human services.

NEW SECTION

WAC 388-315-1150 Tribal TANF—Overview—What agreements does the state establish with a tribe or consortium of tribes prior to distribution of state maintenance of effort funding for a tribal TANF program? In making an allocation of state maintenance of effort funding to a tribe or consortium of tribes for a tribal TANF program, the department shall ensure that the following mutually agreed upon agreements are in place:

- (1) Intergovernmental TANF agreement;
- (2) Data share agreement; and
- (3) Operational agreement.

NEW SECTION

WAC 388-315-2050 Tribal TANF—State maintenance of effort requirements—What is considered an allowable use of state maintenance of effort funds? State maintenance of effort funds for tribal TANF programs may be used as follows:

(1) The funds may be used in a flexible manner that meets the needs of their service population within the four purposes of the TANF program, as set forth in 45 CFR 260.20; and

(2) The funds may be used in any manner that meets federal requirements, as set forth in federal law, regulation and guidance, for an allowable use of funds that counts toward state maintenance of effort; and

(3) The funds must be spent on an eligible family, in accordance with 45 CFR 263.2(b) and federal guidance. For the purposes of a tribal TANF program's state maintenance of effort expenditures, an eligible family can include anyone defined in a tribal TANF program's federally approved tribal family assistance plan.

NEW SECTION

WAC 388-315-3000 Tribal TANF—Reporting requirements—What are the tribal TANF reporting requirements? The department shall require quarterly reports that are specified in the intergovernmental TANF agreement. The reports shall provide program data in the following areas:

- (1) State maintenance of effort expenditure information;
- (2) Caseload information; and
- (3) Performance measures as identified by the tribe or consortium of tribes.

WSR 12-24-014
PERMANENT RULES
DEPARTMENT OF HEALTH

[Filed November 27, 2012, 2:26 p.m., effective December 28, 2012]

Effective Date of Rule: Thirty-one days after filing.

Purpose: WAC 246-12-051, adding a new section to describe the procedure to issue a temporary practice permit to certain military spouse or state-registered domestic partner applicants who are subject to a transfer to Washington state and must complete specific, additional credential requirements to obtain a permanent credential. Applicants must be licensed in another state with substantially equivalent credentialing standards as Washington.

Statutory Authority for Adoption: RCW 43.70.040, 18.130.040, 1.12.080, ESSB 5969 (chapter 5, Laws 2011).

Adopted under notice filed as WSR 12-18-038 on August 29, 2012.

Number of Sections Adopted in Order to Comply with Federal Statute: New 0, Amended 0, Repealed 0; Federal Rules or Standards: New 0, Amended 0, Repealed 0; or Recently Enacted State Statutes: New 1, Amended 0, Repealed 0.

Number of Sections Adopted at Request of a Nongovernmental Entity: New 0, Amended 0, Repealed 0.

Number of Sections Adopted on the Agency's Own Initiative: New 1, Amended 0, Repealed 0.

Number of Sections Adopted in Order to Clarify, Streamline, or Reform Agency Procedures: New 0, Amended 0, Repealed 0.

Number of Sections Adopted Using Negotiated Rule Making: New 0, Amended 0, Repealed 0; Pilot Rule Making: New 0, Amended 0, Repealed 0; or Other Alternative Rule Making: New 1, Amended 0, Repealed 0.

Date Adopted: October 16, 2012.

Mary C. Selecky
Secretary

NEW SECTION

WAC 246-12-051 How to obtain a temporary practice permit—Military spouse. A military spouse or state registered domestic partner of a military person may receive a temporary practice permit while completing any specific additional requirements that are not related to training or practice standards for the profession. This section applies to any profession listed in RCW 18.130.040 (2)(a).

(1) A temporary practice permit may be issued to an applicant who is a military spouse or state registered domestic partner of a military person and:

(a) Is moving to Washington as a result of the military person's transfer to Washington;

(b) Left employment in another state to accompany the military person to Washington;

(c) Holds an unrestricted, active license in another state that has substantially equivalent licensing standards for the same profession to those in Washington; and

(d) Is not subject to any pending investigation, charges, or disciplinary action by the regulatory body of the other state or states.

(2) A temporary practice permit grants the individual the full scope of practice for the profession.

(3) A temporary practice permit expires when any one of the following occurs:

(a) The license is granted;

(b) A notice of decision on the application is mailed to the applicant, unless the notice of decision on the application specifically extends the duration of the temporary practice permit; or

(c) One hundred eighty days after the temporary practice permit is issued.

(4) To receive a temporary practice permit, the applicant must:

(a) Submit the necessary application, fee(s), fingerprint card if required, and documentation for the license;

(b) Attest on the application that he/she left employment in another state to accompany the military person;

(c) Meet all requirements and qualifications for the license that are specific to the training, education, and practice standards for the profession;

(d) Provide verification of having an active unrestricted license in the same profession from another state that has substantially equivalent licensing standards for the profession in Washington;

(e) Submit a copy of the military person's orders and a copy of:

(i) The military-issued identification card showing the military person's information and the applicant's relationship to the military person;

(ii) A marriage license; or

(iii) A state registered domestic partnership; and

(f) Submit a written request for a temporary practice permit.

(5) For the purposes of this section:

(a) "Military spouse" means the husband, wife, or registered domestic partner of a military person.

(b) "Military person" means a person serving in the United States armed forces, the United States public health service commissioned corps, or the merchant marine of the United States.

WSR 12-24-015
PERMANENT RULES
DEPARTMENT OF HEALTH

[Filed November 27, 2012, 2:30 p.m., effective July 1, 2013]

Effective Date of Rule: July 1, 2013.

Purpose: New WAC 246-827-990 and 246-831-990; and amending WAC 246-817-99005 and 246-841-990. Adopting fees for four new health profession credentials (medical assistant, reflexologist, dental anesthesia assistant, and nursing assistant-certified medication assistant) created by 2012 legislation ESSB 6237 and 6103, E2SSB 5620, and ESHB 2473 respectively.

Citation of Existing Rules Affected by this Order: Amending WAC 246-817-99005 and 246-841-990.

Statutory Authority for Adoption: ESHB 2473, E2SSB 5620, ESSB 6103 and 6237.

Other Authority: RCW 43.70.110, 43.70.250.

Adopted under notice filed as WSR 12-19-083 on September 18, 2012.

Number of Sections Adopted in Order to Comply with Federal Statute: New 0, Amended 0, Repealed 0; Federal Rules or Standards: New 0, Amended 0, Repealed 0; or Recently Enacted State Statutes: New 2, Amended 2, Repealed 0.

Number of Sections Adopted at Request of a Nongovernmental Entity: New 0, Amended 0, Repealed 0.

Number of Sections Adopted on the Agency's Own Initiative: New 0, Amended 0, Repealed 0.

Number of Sections Adopted in Order to Clarify, Streamline, or Reform Agency Procedures: New 0, Amended 0, Repealed 0.

Number of Sections Adopted Using Negotiated Rule Making: New 0, Amended 0, Repealed 0; Pilot Rule Making: New 0, Amended 0, Repealed 0; or Other Alternative Rule Making: New 2, Amended 2, Repealed 0.

Date Adopted: November 27, 2012.

Mary C. Selecky
Secretary

AMENDATORY SECTION (Amending WSR 10-19-071, filed 9/16/10, effective 10/15/10)

WAC 246-817-99005 Dental assistant, dental anesthesia assistant, and expanded function dental auxiliary fees and renewal cycle. (1) Credentials must be renewed every year on the practitioner's birthday as provided in chapter 246-12 WAC, Part 2(~~except faculty and resident licenses. The secretary may require payment of renewal fees less than those established in this section if the current level of fees is likely to result in a surplus of funds. Surplus funds are those in excess of the amount necessary to pay for the costs of administering the program and to maintain a reasonable reserve. Notice of any adjustment in the required payment will be provided to practitioners. The adjustment in the required payment shall remain in place for the duration of a renewal cycle to assure practitioners an equal benefit from the adjustment~~)).

(2) The following nonrefundable fees will be charged for dental assistant, dental anesthesia assistant, and expanded function dental auxiliary credentials:

Title of Fee - Dental Professionals	Fee
Registered dental assistant application	\$40.00
Registered dental assistant renewal	21.00
Registered dental assistant late <u>renewal</u>	21.00
Registered dental assistant expired reactivation	20.00
<u>Certified dental anesthesia assistant application</u>	<u>100.00</u>
<u>Certified dental anesthesia assistant renewal</u>	<u>75.00</u>
<u>Certified dental anesthesia assistant late renewal</u>	<u>50.00</u>
<u>Certified dental anesthesia assistant expired reactivation</u>	<u>75.00</u>
Licensed expanded function dental auxiliary application	175.00

Title of Fee - Dental Professionals	Fee
Licensed expanded function dental auxiliary renewal	160.00
Licensed expanded function dental auxiliary late <u>renewal</u>	80.00
Licensed expanded function dental auxiliary expired reactivation	50.00
Duplicate <u>credential</u>	15.00
((Verification)) <u>Certification of credential</u>	25.00

NEW SECTION

WAC 246-827-990 Medical assistant—Fees and renewal cycle. (1) Credentials must be renewed every two years.

(2) The following nonrefundable fees will be charged for medical assistant-certified, medical assistant-hemodialysis technician, and medical assistant-phlebotomist credentials:

Title of Fee	Fee
Initial credential	\$115.00
Renewal	115.00
Expired credential reissuance	55.00
Certification of credential	20.00
Late renewal penalty	55.00
Duplicate credential	30.00

(3) The following nonrefundable fees will be charged for a medical assistant-registered credential:

Title of Fee	Fee
Initial credential	\$90.00
Renewal	90.00
Expired credential reissuance	40.00
Certification of credential	20.00
Late renewal penalty	40.00
Duplicate credential	30.00

NEW SECTION

WAC 246-831-990 Certified reflexologist—Fees and renewal cycle. (1) Credentials must be renewed every year on the practitioner's birthday as provided in chapter 246-12 WAC, Part 2.

(2) The following nonrefundable fees will be charged for a certified reflexologist credential:

Title of Fee	Fee
Initial credential	\$50.00
Renewal	40.00
Late renewal penalty	25.00
Expired credential reissuance	25.00
Certification of credential	10.00
Duplicate credential	10.00

AMENDATORY SECTION (Amending WSR 10-19-071, filed 9/16/10, effective 10/15/10)

WAC 246-841-990 Nursing assistant—Fees and renewal cycle. (1) ~~((Certificates and registrations))~~ Credentials must be renewed every year on the practitioner's birthday as provided in chapter 246-12 WAC, Part 2. ~~((The secretary may require payment of renewal fees less than those established in this section if the current level of fees is likely to result in a surplus of funds. Surplus funds are those in excess of the amount necessary to pay for the costs of administering the program and to maintain a reasonable reserve. Notice of any adjustment in the required payment will be provided to practitioners. The adjustment in the required payment shall remain in place for the duration of a renewal cycle to assure practitioners an equal benefit from the adjustment.))~~

(2) The following nonrefundable fees will be charged for registration((s)) credentials:

Title of Fee	Fee
Application - registration	\$48.00
Renewal of registration	53.00
Duplicate registration	10.00
Registration late penalty	53.00
Expired registration reissuance	52.00

(3) The following nonrefundable fees will be charged for certification((s)) credentials:

Title of Fee	Fee
Application for certification	<u>\$48.00</u>
Certification renewal	53.00
Duplicate certification	10.00
Certification late penalty	53.00
Expired certification reissuance	52.00

(4) The following nonrefundable fees will be charged for medication assistant endorsement credentials:

<u>Title of Fee</u>	<u>Fee</u>
<u>Application for endorsement</u>	<u>\$25.00</u>
<u>Endorsement renewal</u>	<u>10.00</u>

WSR 12-24-018
PERMANENT RULES
DEPARTMENT OF
SOCIAL AND HEALTH SERVICES
 (Economic Services Administration)

[Filed November 27, 2012, 3:21 p.m., effective December 28, 2012]

Effective Date of Rule: Thirty-one days after filing.

Purpose: The department is amending the following WACs to implement annual adjustments to standards for the Washington Basic Food program: WAC 388-450-0185 What income deductions does the department allow when determining if I am eligible for food benefits and the amount of my monthly benefits?, to increase the standard deductions; WAC

388-450-0190 How does the department figure my shelter cost income deduction for Basic Food?, to raise the maximum shelter cost; and WAC 388-478-0060 What are the income limits and maximum benefit amounts for Basic Food?, to increase the maximum gross monthly income and maximum net monthly income; and to update the one hundred sixty-five percent poverty level income.

Citation of Existing Rules Affected by this Order: Amending WAC 388-450-0185, 388-450-0190, and 388-478-0060.

Statutory Authority for Adoption: RCW 74.04.005, 74.04.050, 74.04.055, 74.04.057, 74.04.500, 74.04.510, 74.08.090, 74.08A.120.

Other Authority: Supplemental nutrition assistance program Administrative Notice 12-28 - Fiscal Year 2013 cost-of-living adjustments dated August 6, 2012.

Adopted under notice filed as WSR 12-20-075 on October 3, 2012.

Number of Sections Adopted in Order to Comply with Federal Statute: New 0, Amended 0, Repealed 0; Federal Rules or Standards: New 0, Amended 3, Repealed 0; or Recently Enacted State Statutes: New 0, Amended 0, Repealed 0.

Number of Sections Adopted at Request of a Nongovernmental Entity: New 0, Amended 0, Repealed 0.

Number of Sections Adopted on the Agency's Own Initiative: New 0, Amended 0, Repealed 0.

Number of Sections Adopted in Order to Clarify, Streamline, or Reform Agency Procedures: New 0, Amended 0, Repealed 0.

Number of Sections Adopted Using Negotiated Rule Making: New 0, Amended 0, Repealed 0; Pilot Rule Making: New 0, Amended 0, Repealed 0; or Other Alternative Rule Making: New 0, Amended 3, Repealed 0.

Date Adopted: November 21, 2012.

Katherine I. Vazquez
Rules Coordinator

AMENDATORY SECTION (Amending WSR 11-24-027, filed 12/1/11, effective 1/1/12)

WAC 388-450-0185 What income deductions does the department allow when determining if I am eligible for food benefits and the amount of my monthly benefits? We determine if your assistance unit (AU) is eligible for Basic Food and calculate your monthly benefits according to requirements of the Food and Nutrition Act of 2008 and federal regulations related to the supplemental nutrition assistance program (SNAP).

These federal laws allow us to subtract **only** the following amounts from your AU's total monthly income to determine your countable monthly income under WAC 388-450-0162:

(1) A standard deduction based on the number of eligible people in your AU under WAC 388-408-0035:

Eligible AU members	Standard deduction
1	\$((147)) <u>149</u>
2	\$((147)) <u>149</u>

Eligible AU members	Standard deduction
3	\$ ((147)) <u>149</u>
4	\$ ((155)) <u>160</u>
5	\$ ((181)) <u>187</u>
6 or more	\$ ((208)) <u>214</u>

(2) Twenty percent of your AU's gross earned income (earned income deduction);

(3) Your AU's expected monthly dependent care expense needed for an AU member to:

- (a) Keep work, look for work, or accept work;
- (b) Attend training or education to prepare for employment; or

(c) Meet employment and training requirements under chapter 388-444 WAC.

(4) Medical expenses over thirty-five dollars a month owed or anticipated by an elderly or disabled person in your AU as allowed under WAC 388-450-0200.

(5) A portion of your shelter costs as described in WAC 388-450-0190.

AMENDATORY SECTION (Amending WSR 11-24-027, filed 12/1/11, effective 1/1/12)

WAC 388-450-0190 How does the department figure my shelter cost income deduction for Basic Food? The department calculates your shelter cost income deduction as follows:

(1) First, we add up the amounts your assistance unit (AU) must pay each month for shelter. We do not count any overdue amounts, late fees, penalties or mortgage payments you make ahead of time as an allowable cost. We count the following expenses as an allowable shelter cost in the month the expense is due:

- (a) Monthly rent, lease, and mortgage payments;
- (b) Property taxes;
- (c) Homeowner's association or condo fees;
- (d) Homeowner's insurance for the building only;

(e) Utility allowance your AU is eligible for under WAC 388-450-0195;

(f) Out-of-pocket repairs for the home if it was substantially damaged or destroyed due to a natural disaster such as a fire or flood;

(g) Expense of a temporarily unoccupied home because of employment, training away from the home, illness, or abandonment caused by a natural disaster or casualty loss if your:

- (i) AU intends to return to the home;
- (ii) AU has current occupants who are not claiming the shelter costs for Basic Food purposes; and
- (iii) AU's home is not being leased or rented during your AU's absence.

(2) Second, we subtract all deductions your AU is eligible for under WAC 388-450-0185 (1) through (5) from your AU's gross income. The result is your AU's net income.

(3) Finally, we subtract one-half of your AU's net income from your AU's total shelter costs. The result is your excess shelter costs. Your AU's shelter cost deduction is the excess shelter costs:

(a) Up to a maximum of four hundred ~~((fifty-nine))~~ sixty-nine dollars if no one in your AU is elderly or disabled; or

(b) The entire amount if an eligible person in your AU is elderly or disabled, even if the amount is over four hundred ~~((fifty-nine))~~ sixty-nine dollars.

AMENDATORY SECTION (Amending WSR 11-24-027, filed 12/1/11, effective 1/1/12)

WAC 388-478-0060 What are the income limits and maximum benefit amounts for Basic Food? If your assistance unit (AU) meets all other eligibility requirements for Basic Food, your AU must have income at or below the limits in column B and C to get Basic Food, unless you meet one of the exceptions listed below. The maximum monthly food assistance benefit your AU could receive is listed in column D.

EFFECTIVE ~~((10-1-2014))~~ 10-1-2012

Column A Number of Eligible AU Members	Column B Maximum Gross Monthly Income	Column C Maximum Net Monthly Income	Column D Maximum Allotment	Column E 165% of Poverty Level
1	\$ ((1,180)) <u>1,211</u>	\$ ((908)) <u>931</u>	\$200	\$ ((1,498)) <u>1,536</u>
2	((1,594)) <u>1,640</u>	((1,226)) <u>1,261</u>	367	((2,023)) <u>2,081</u>
3	((2,008)) <u>2,069</u>	((1,545)) <u>1,591</u>	526	((2,548)) <u>2,625</u>
4	((2,422)) <u>2,498</u>	((1,863)) <u>1,921</u>	668	((3,074)) <u>3,170</u>
5	((2,836)) <u>2,927</u>	((2,181)) <u>2,251</u>	793	((3,599)) <u>3,714</u>
6	((3,249)) <u>3,356</u>	((2,500)) <u>2,581</u>	952	((4,124)) <u>4,259</u>

7	((3,663)) <u>3,785</u>	((2,818)) <u>2,911</u>	1,052	((4,649)) <u>4,803</u>
8	((4,077)) <u>4,214</u>	((3,136)) <u>3,241</u>	1,202	((5,175)) <u>5,348</u>
9	((4,491)) <u>4,643</u>	((3,455)) <u>3,571</u>	1,352	((5,701)) <u>5,893</u>
10	((4,905)) <u>5,072</u>	((3,744)) <u>3,901</u>	1,502	((6,227)) <u>6,438</u>
Each Additional Mem- ber	+((414)) <u>429</u>	+((319)) <u>330</u>	+150	+((526)) <u>545</u>

Exceptions:

(1) If your AU is categorically eligible as under WAC 388-414-0001, your AU does not have to meet the gross or net income standards in columns B and C. We do budget your AU's income to decide the amount of Basic Food your AU will receive.

(2) If your AU includes a member who is sixty years of age or older or has a disability, your income must be at or below the limit in column C only.

(3) If you are sixty years of age or older and cannot buy and cook your own meals because of a permanent disability, we will use column E to decide if you can be a separate AU.

(4) If your AU has zero income, your benefits are the maximum allotment in column D, based on the number of eligible members in your AU.

and consistent with federal law while attaining and maintaining good air quality and protecting citizen's health.

Citation of Existing Rules Affected by this Order: Amending chapter 173-400 WAC, General regulations for air pollution sources.

Statutory Authority for Adoption: Chapter 70.94 RCW, Washington Clean Air Act.

Adopted under notice filed as WSR 12-13-070 on June 18, 2012.

Changes Other than Editing from Proposed to Adopted Version:

- The proposed addition of new text in WAC 173-400-020 (2)(a) and (b) and WAC 173-400-030(3) was not made.
- WAC 173-400-020(1), reworded by request to clarify the relationship between local air authority and ecology regulations.
- Updated adoption by reference dates for EPA rules throughout, consistent with stated goals of the rule making.
- Revised text in WAC 173-400-075 to clearly not adopt the 40 C.F.R. Part 63, Subparts DDDDD and JJJJJ.
- Revised text in WAC 173-400-115 to clearly not adopt the March 2011 modifications to the new source performance standards and emission guidelines for commercial and industrial solid waste incinerators.
- Clarified that a newspaper of general circulation in the area of a proposed action is sufficient prominent advertisement of a proposal.
- Incorporated EPA's "reasonable possibility" threshold for new source review pollutants.
- Various housekeeping and clarification revisions.

WSR 12-24-027

PERMANENT RULES

DEPARTMENT OF ECOLOGY

[Order 11-10—Filed November 28, 2012, 11:20 a.m., effective December 29, 2012]

Effective Date of Rule: Thirty-one days after filing.

Purpose: The purpose of this rule making is to amend chapter 173-400 WAC, General regulations for air pollution sources. Amendments include:

- Make the rule consistent with requirements in the Federal Clean Air Act.
- Support ecology's request for Environmental Protection Agency (EPA) approval of state implementation plan (SIP) revisions.
- Amend the rule sections related to permits for industrial and commercial sources of air pollution including minor new source review and major new source review (prevention of significant deterioration).
- Help emitters comply with the rule through better access to references, improved readability, and better understanding of regulations and permitting requirements.

Ecology is amending this rule to assure that it is consistent with federal requirements. This rule will subsequently be adopted into the SIP so that Washington can gain SIP approval for its new source review and prevention of significant deterioration permitting programs. Gaining SIP approval of these programs helps ensure the state is aligned

A final cost-benefit analysis is available by contacting Air Quality Program, Department of Ecology, P.O. Box 47600, Olympia, WA 98504-7600, phone (360) 407-6800, fax (360) 407-7534, e-mail AQComments@ecy.wa.gov.

Number of Sections Adopted in Order to Comply with Federal Statute: New 0, Amended 0, Repealed 0; Federal Rules or Standards: New 0, Amended 29, Repealed 0; or Recently Enacted State Statutes: New 0, Amended 0, Repealed 0.

Number of Sections Adopted at Request of a Nongovernmental Entity: New 0, Amended 0, Repealed 0.

Number of Sections Adopted on the Agency's Own Initiative: New 0, Amended 0, Repealed 0.

Number of Sections Adopted in Order to Clarify, Streamline, or Reform Agency Procedures: New 0, Amended 0, Repealed 0.

Number of Sections Adopted Using Negotiated Rule Making: New 0, Amended 0, Repealed 0; Pilot Rule Making: New 0, Amended 0, Repealed 0; or Other Alternative Rule Making: New 0, Amended 0, Repealed 0.

Date Adopted: November 28, 2012.

Ted Sturdevant
Director

AMENDATORY SECTION (Amending Order 90-06, filed 2/19/91, effective 3/22/91)

WAC 173-400-020 Applicability. (1) The provisions of this chapter shall apply statewide, except for specific subsections where a local authority has adopted and implemented corresponding local rules that apply only to sources subject to local jurisdiction as provided under RCW 70.94.141 and 70.94.331.

(2) An authority may enforce this chapter and may also adopt standards or requirements. These standards or requirements may not be less stringent than the current state air quality rules and may be more stringent than the current regulations. Unless properly delegated by ecology, authorities do not have jurisdiction over the following sources:

(a) Specific source categories over which the state, by separate regulation, has assumed or hereafter does assume jurisdiction.

(b) Automobiles, trucks, aircraft.

(c) Those sources under the jurisdiction of the energy facility site evaluation council.

AMENDATORY SECTION (Amending Order 09-01, filed 3/1/11, effective 4/1/11)

WAC 173-400-030 Definitions. The definitions in this section apply statewide except where a permitting authority has redefined a specific term. Except as provided elsewhere in this chapter, the ~~((following))~~ definitions in this section apply throughout the chapter:

(1) **"Actual emissions"** means the actual rate of emissions of a pollutant from an emission unit, as determined in accordance with (a) through (c) of this subsection.

(a) In general, actual emissions as of a particular date shall equal the average rate, in tons per year, at which the emissions unit actually emitted the pollutant during a two-year period which precedes the particular date and which is representative of normal source operation. Ecology or an authority shall allow the use of a different time period upon a determination that it is more representative of normal source operation. Actual emissions shall be calculated using the emissions unit's actual operating hours, production rates, and types of materials processed, stored, or combusted during the selected time period.

(b) Ecology or an authority may presume that source-specific allowable emissions for the unit are equivalent to the actual emissions of the emissions unit.

(c) For any emissions unit which has not begun normal operations on the particular date, actual emissions shall equal the potential to emit of the emissions unit on that date.

(2) **"Adverse impact on visibility"** is defined in WAC 173-400-117.

(3) **"Air contaminant"** means dust, fumes, mist, smoke, other particulate matter, vapor, gas, odorous substance, or any combination thereof. "Air pollutant" means the same as "air contaminant."

(4) **"Air pollution"** means the presence in the outdoor atmosphere of one or more air contaminants in sufficient quantities, and of such characteristics and duration as is, or is likely to be, injurious to human health, plant or animal life, or property, or which unreasonably interferes with enjoyment of life and property. For the purposes of this chapter, air pollution shall not include air contaminants emitted in compliance with chapter 17.21 RCW, the Washington Pesticide Application Act, which regulates the application and control of the use of various pesticides.

(5) **"Allowable emissions"** means the emission rate of a source calculated using the maximum rated capacity of the source (unless the source is subject to federally enforceable limits which restrict the operating rate, or hours of operation, or both) and the most stringent of the following:

(a) The applicable standards as in 40 C.F.R. Part 60, 61, 62, or 63;

(b) Any applicable SIP emissions limitation including those with a future compliance date; or

(c) The emissions rate specified as ~~((an))~~ a federally enforceable approval condition, including those with a future compliance date.

(6) **"Ambient air"** means the surrounding outside air.

(7) **"Ambient air quality standard"** means an established concentration, exposure time, and frequency of occurrence of air contaminant(s) in the ambient air which shall not be exceeded.

(8) **"Approval order"** is defined in **"order of approval."**

(9) **"Attainment area"** means a geographic area designated by EPA at 40 C.F.R. Part 81 as having attained the National Ambient Air Quality Standard for a given criteria pollutant.

(10) **"Authority"** means any air pollution control agency whose jurisdictional boundaries are coextensive with the boundaries of one or more counties.

(11) **"Begin actual construction"** means, in general, initiation of physical on-site construction activities on an emission unit that are of a permanent nature. Such activities include, but are not limited to, installation of building supports and foundations, laying underground pipe work and construction of permanent storage structures. With respect to a change in method of operations, this term refers to those on-site activities other than preparatory activities which mark the initiation of the change.

(12) **"Best available control technology (BACT)"** means an emission limitation based on the maximum degree of reduction for each air pollutant subject to regulation under chapter 70.94 RCW emitted from or which results from any new or modified stationary source, which the permitting authority, on a case-by-case basis, taking into account

energy, environmental, and economic impacts and other costs, determines is achievable for such source or modification through application of production processes and available methods, systems, and techniques, including fuel cleaning, clean fuels, or treatment or innovative fuel combustion techniques for control of each such pollutant. In no event shall application of the "best available control technology" result in emissions of any pollutants which will exceed the emissions allowed by any applicable standard under 40 C.F.R., Part 60 and Part 61. Emissions from any source utilizing clean fuels, or any other means, to comply with this paragraph shall not be allowed to increase above levels that would have been required under the definition of BACT in the Federal Clean Air Act as it existed prior to enactment of the Clean Air Act Amendments of 1990.

(13) "**Best available retrofit technology (BART)**" means an emission limitation based on the degree of reduction achievable through the application of the best system of continuous emission reduction for each pollutant which is emitted by an existing stationary facility. The emission limitation must be established, on a case-by-case basis, taking into consideration the technology available, the costs of compliance, the energy and nonair quality environmental impacts of compliance, any pollution control equipment in use or in existence at the source, the remaining useful life of the source, and the degree of improvement in visibility which may reasonably be anticipated to result from the use of such technology.

(14) "**Brake horsepower (BHP)**" means the measure of an engine's horsepower without the loss in power caused by the gearbox, alternator, differential, water pump, and other auxiliary components.

(15) "**Bubble**" means a set of emission limits which allows an increase in emissions from a given emissions unit in exchange for a decrease in emissions from another emissions unit, pursuant to RCW 70.94.155 and WAC 173-400-120.

(16) "**Capacity factor**" means the ratio of the average load on equipment or a machine for the period of time considered, to the manufacturer's capacity rating of the machine or equipment.

(17) "**Class I area**" means any area designated under section 162 or 164 of the Federal Clean Air Act as a Class I area. The following areas are the Class I areas in Washington state:

- (a) Alpine Lakes Wilderness;
- (b) Glacier Peak Wilderness;
- (c) Goat Rocks Wilderness;
- (d) Mount Adams Wilderness;
- (e) Mount Rainier National Park;
- (f) North Cascades National Park;
- (g) Olympic National Park;
- (h) Pasayten Wilderness; and
- (i) Spokane Indian Reservation.

(18) "**Combustion and incineration units**" means units using combustion for waste disposal, steam production, chemical recovery or other process requirements; but excludes outdoor burning.

(19)(a) "**Commence**" as applied to construction, means that the owner or operator has all the necessary preconstruction approvals or permits and either has:

(i) Begun, or caused to begin, a continuous program of actual on-site construction of the source, to be completed within a reasonable time; or

(ii) Entered into binding agreements or contractual obligations, which cannot be canceled or modified without substantial loss to the owner or operator, to undertake a program of actual construction of the source to be completed within a reasonable time.

(b) For the purposes of this definition, "necessary preconstruction approvals" means those permits or orders of approval required under federal air quality control laws and regulations, including state, local and federal regulations and orders contained in the SIP.

(20) "**Concealment**" means any action taken to reduce the observed or measured concentrations of a pollutant in a gaseous effluent while, in fact, not reducing the total amount of pollutant discharged.

(21) "**Criteria pollutant**" means a pollutant for which there is established a National Ambient Air Quality Standard at 40 C.F.R., Part 50. The criteria pollutants are carbon monoxide (CO), particulate matter, ozone (O₃), sulfur dioxide (SO₂), lead (Pb), and nitrogen dioxide (NO₂).

(22) "**Director**" means director of the Washington state department of ecology or duly authorized representative.

(23) "**Dispersion technique**" means a method that attempts to affect the concentration of a pollutant in the ambient air other than by the use of pollution abatement equipment or integral process pollution controls.

(24) "**Ecology**" means the Washington state department of ecology.

(25) "**Emission**" means a release of air contaminants into the ambient air.

(26) "**Emission reduction credit (ERC)**" means a credit granted pursuant to WAC 173-400-131. This is a voluntary reduction in emissions.

(27) "**Emission standard**" and "**emission limitation**" means a requirement established under the Federal Clean Air Act or chapter 70.94 RCW which limits the quantity, rate, or concentration of emissions of air contaminants on a continuous basis, including any requirement relating to the operation or maintenance of a source to assure continuous emission reduction and any design, equipment, work practice, or operational standard adopted under the Federal Clean Air Act or chapter 70.94 RCW.

(28) "**Emission threshold**" means an emission of a listed air contaminant at or above the following rates:

Air Contaminant	Annual Emission Rate
Carbon monoxide:	100 tons per year
Nitrogen oxides:	40 tons per year
Sulfur dioxide:	40 tons per year
Particulate matter (PM):	25 tons per year of PM emissions
	15 tons per year of PM-10 emissions
	10 tons per year of PM-2.5

Air Contaminant	Annual Emission Rate
Volatile organic compounds:	40 tons per year
Fluorides:	3 tons per year
Lead:	0.6 tons per year
Sulfuric acid mist:	7 tons per year
Hydrogen sulfide (H ₂ S):	10 tons per year
Total reduced sulfur (including H ₂ S):	10 tons per year
Reduced sulfur compounds (including H ₂ S):	10 tons per year

(29) "**Emissions unit**" or "**emission unit**" means any part of a stationary source or source which emits or would have the potential to emit any pollutant subject to regulation under the Federal Clean Air Act, chapter 70.94 or 70.98 RCW.

(30) "**Excess emissions**" means emissions of an air pollutant in excess of any applicable emission standard.

(31) "**Excess stack height**" means that portion of a stack which exceeds the greater of sixty-five meters or the calculated stack height described in WAC 173-400-200(2).

(32) "**Existing stationary facility (facility)**" is defined in WAC 173-400-151.

(33) "**Federal Clean Air Act (FCAA)**" means the Federal Clean Air Act, also known as Public Law 88-206, 77 Stat. 392, December 17, 1963, 42 U.S.C. 7401 et seq., as last amended by the Clean Air Act Amendments of 1990, P.L. 101-549, November 15, 1990.

(34) "**Federal Class I area**" means any federal land that is classified or reclassified Class I. The following areas are federal Class I areas in Washington state:

- (a) Alpine Lakes Wilderness;
- (b) Glacier Peak Wilderness;
- (c) Goat Rocks Wilderness;
- (d) Mount Adams Wilderness;
- (e) Mount Rainier National Park;
- (f) North Cascades National Park;
- (g) Olympic National Park; and
- (h) Pasayten Wilderness.

(35) "**Federal land manager**" means the secretary of the department with authority over federal lands in the United States.

(36) "**Federally enforceable**" means all limitations and conditions which are enforceable by EPA, including those requirements developed under 40 C.F.R. Parts 60, 61, 62 and 63, requirements established within the Washington SIP, requirements within any approval or order established under 40 C.F.R. 52.21 or under a SIP approved new source review regulation, and emissions limitation orders issued under WAC 173-400-091.

(37) "**Fossil fuel-fired steam generator**" means a device, furnace, or boiler used in the process of burning fossil fuel for the primary purpose of producing steam by heat transfer.

(38) "**Fugitive dust**" means a particulate emission made airborne by forces of wind, man's activity, or both. Unpaved roads, construction sites, and tilled land are examples of areas

that originate fugitive dust. Fugitive dust is a type of fugitive emission.

(39) "**Fugitive emissions**" means emissions that could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.

(40) "**General process unit**" means an emissions unit using a procedure or a combination of procedures for the purpose of causing a change in material by either chemical or physical means, excluding combustion.

(41) "**Good engineering practice (GEP)**" refers to a calculated stack height based on the equation specified in WAC 173-400-200 (2)(a)(ii).

(42) "**Greenhouse gases (GHGs)**" includes carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride.

(43) "**Incinerator**" means a furnace used primarily for the thermal destruction of waste.

(44) "**In operation**" means engaged in activity related to the primary design function of the source.

(45) "**Mandatory Class I federal area**" means any area defined in Section 162(a) of the Federal Clean Air Act. The following areas are the mandatory Class I federal areas in Washington state:

- (a) Alpine Lakes Wilderness;
- (b) Glacier Peak Wilderness;
- (c) Goat Rocks Wilderness;
- (d) Mount Adams Wilderness;
- (e) Mount Rainier National Park;
- (f) North Cascades National Park;
- (g) Olympic National Park; and
- (h) Pasayten Wilderness;

(46) "**Masking**" means the mixing of a chemically non-reactive control agent with a malodorous gaseous effluent to change the perceived odor.

(47) "**Materials handling**" means the handling, transporting, loading, unloading, storage, and transfer of materials with no significant chemical or physical alteration.

(48) "**Modification**" means any physical change in, or change in the method of operation of, a stationary source that increases the amount of any air contaminant emitted by such source or that results in the emissions of any air contaminant not previously emitted. The term modification shall be construed consistent with the definition of modification in Section 7411, Title 42, United States Code, and with rules implementing that section.

(49) "**National Ambient Air Quality Standard (NAAQS)**" means an ambient air quality standard set by EPA at 40 C.F.R. Part 50 and includes standards for carbon monoxide (CO), particulate matter, ozone (O₃), sulfur dioxide (SO₂), lead (Pb), and nitrogen dioxide (NO₂).

(50) "**National Emission Standards for Hazardous Air Pollutants (NESHAPS)**" means the federal rules in 40 C.F.R. Part 61.

(51) "**National Emission Standards for Hazardous Air Pollutants for Source Categories**" means the federal rules in 40 C.F.R. Part 63.

(52) "**Natural conditions**" means naturally occurring phenomena that reduce visibility as measured in terms of light extinction, visual range, contrast, or coloration.

(53) "**New source**" means:

(a) The construction or modification of a stationary source that increases the amount of any air contaminant emitted by such source or that results in the emission of any air contaminant not previously emitted; and

(b) Any other project that constitutes a new source under the Federal Clean Air Act.

(54) "**New Source Performance Standards (NSPS)**" means the federal rules in 40 C.F.R. Part 60.

(55) "**Nonattainment area**" means a geographic area designated by EPA at 40 C.F.R. Part 81 as exceeding a National Ambient Air Quality Standard (NAAQS) for a given criteria pollutant. An area is nonattainment only for the pollutants for which the area has been designated nonattainment.

(56) "**Nonroad engine**" means:

(a) Except as discussed in (b) of this subsection, a nonroad engine is any internal combustion engine:

(i) In or on a piece of equipment that is self-propelled or serves a dual purpose by both propelling itself and performing another function (such as garden tractors, off-highway mobile cranes and bulldozers); or

(ii) In or on a piece of equipment that is intended to be propelled while performing its function (such as lawnmowers and string trimmers); or

(iii) That, by itself or in or on a piece of equipment, is portable or transportable, meaning designed to be and capable of being carried or moved from one location to another. Indicia of transportability include, but are not limited to, wheels, skids, carrying handles, dolly, trailer, or platform.

(b) An internal combustion engine is not a nonroad engine if:

(i) The engine is used to propel a motor vehicle or a vehicle used solely for competition, or is subject to standards promulgated under section 202 of the Federal Clean Air Act; or

(ii) The engine is regulated by a New Source Performance Standard promulgated under section 111 of the Federal Clean Air Act; or

(iii) The engine otherwise included in (a)(iii) of this subsection remains or will remain at a location for more than twelve consecutive months or a shorter period of time for an engine located at a seasonal source. A location is any single site at a building, structure, facility, or installation. Any engine (or engines) that replaces an engine at a location and that is intended to perform the same or similar function as the engine replaced will be included in calculating the consecutive time period. An engine located at a seasonal source is an engine that remains at a seasonal source during the full annual operating period of the seasonal source. A seasonal source is a stationary source that remains in a single location on a permanent basis (i.e., at least two years) and that operates at that single location approximately three months (or more) each year. This paragraph does not apply to an engine after the engine is removed from the location.

(57) "**Notice of construction application**" means a written application to allow construction of a new source, modification of an existing stationary source or replacement or substantial alteration of control technology at an existing stationary source.

(58) "**Opacity**" means the degree to which an object seen through a plume is obscured, stated as a percentage.

(59) "**Outdoor burning**" means the combustion of material in an open fire or in an outdoor container, without providing for the control of combustion or the control of the emissions from the combustion. Wood waste disposal in wig-wam burners or silo burners is not considered outdoor burning.

(60) "**Order**" means any order issued by ecology or a local air authority pursuant to chapter 70.94 RCW, including, but not limited to RCW 70.94.332, 70.94.152, 70.94.153, 70.94.154, and 70.94.141(3), and includes, where used in the generic sense, the terms order, corrective action order, order of approval, and regulatory order.

(61) "**Order of approval**" or "**approval order**" means a regulatory order issued by a permitting authority to approve the notice of construction application for a proposed new source or modification, or the replacement or substantial alteration of control technology at an existing stationary source.

(62) "**Ozone depleting substance**" means any substance listed in Appendices A and B to Subpart A of 40 C.F.R. Part 82.

(63) "**Particulate matter**" or "**particulates**" means any airborne finely divided solid or liquid material with an aerodynamic diameter smaller than 100 micrometers.

(64) "**Particulate matter emissions**" means all finely divided solid or liquid material, other than uncombined water, emitted to the ambient air as measured by applicable reference methods, or an equivalent or alternative method specified in Title 40, chapter I of the Code of Federal Regulations or by a test method specified in the SIP.

(65) "**Parts per million (ppm)**" means parts of a contaminant per million parts of gas, by volume, exclusive of water or particulates.

(66) "**Permitting authority**" means ecology or the local air pollution control authority with jurisdiction over the source.

(67) "**Person**" means an individual, firm, public or private corporation, association, partnership, political subdivision, municipality, or government agency.

(68) "**PM-10**" means particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured by a reference method based on 40 C.F.R. Part 50 Appendix J and designated in accordance with 40 C.F.R. Part 53 or by an equivalent method designated in accordance with 40 C.F.R. Part 53.

(69) "**PM-10 emissions**" means finely divided solid or liquid material, including condensable particulate matter, with an aerodynamic diameter less than or equal to a nominal 10 micrometers emitted to the ambient air as measured by an applicable reference method, or an equivalent or alternate method, specified in Appendix M of 40 C.F.R. Part 51 or by a test method specified in the SIP.

(70) "**PM-2.5**" means particulate matter with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers as measured by a reference method based on 40 C.F.R. Part 50 Appendix L and designated in accordance with 40 C.F.R. Part 53 or by an equivalent method designated in accordance with 40 C.F.R. Part 53.

(71) "**PM-2.5 emissions**" means finely divided solid or liquid material, including condensable particulate matter,

with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers emitted to the ambient air as measured by an applicable reference method, or an equivalent or alternate method, specified in 40 C.F.R. Part 51 or by a test method specified in the SIP.

(72) "**Portable source**" means a type of stationary source which emits air contaminants only while at a fixed location but which is capable of being transported to various locations. Examples include a portable asphalt plant or a portable package boiler.

(73) "**Potential to emit**" means the maximum capacity of a source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design only if the limitation or the effect it would have on emissions is enforceable. Secondary emissions do not count in determining the potential to emit of a source.

(74) "**Prevention of significant deterioration (PSD)**" means the program in WAC 173-400-700 to 173-400-750.

(75) "**Projected width**" means that dimension of a structure determined from the frontal area of the structure, projected onto a plane perpendicular to a line between the center of the stack and the center of the building.

(76) "**Reasonably attributable**" means attributable by visual observation or any other technique the state deems appropriate.

(77) "**Reasonably available control technology (RACT)**" means the lowest emission limit that a particular source or source category is capable of meeting by the application of control technology that is reasonably available considering technological and economic feasibility. RACT is determined on a case-by-case basis for an individual source or source category taking into account the impact of the source upon air quality, the availability of additional controls, the emission reduction to be achieved by additional controls, the impact of additional controls on air quality, and the capital and operating costs of the additional controls. RACT requirements for any source or source category shall be adopted only after notice and opportunity for comment are afforded.

(78) "**Regulatory order**" means an order issued by a permitting authority that requires compliance with:

(a) Any applicable provision of chapter 70.94 RCW or rules adopted there under; or

(b) Local air authority regulations adopted by the local air authority with jurisdiction over the sources to whom the order is issued.

(79) "**Secondary emissions**" means emissions which would occur as a result of the construction or operation of a major stationary source or major modification, but do not come from the major stationary source or major modification itself. Secondary emissions must be specific, well defined, quantifiable, and impact the same general area as the major stationary source or major modification which causes the secondary emissions. Secondary emissions (~~may~~) include(~~;~~ but are not limited to:

~~(a) Emissions from ships or trains located at the new or modified major stationary source; and~~

~~(b)) emissions from any offsite support facility which would not (~~otherwise~~) be constructed or increase its emissions except as a result of the construction or operation of the major stationary source or major modification. Secondary emissions do not include any emissions which come directly from a mobile source such as emissions from the tailpipe of a motor vehicle, from a train, or from a vessel.~~

(80) "**Source**" means all of the emissions unit(s) including quantifiable fugitive emissions, that are located on one or more contiguous or adjacent properties, and are under the control of the same person or persons under common control, whose activities are ancillary to the production of a single product or functionally related groups of products.

(81) "**Source category**" means all sources of the same type or classification.

(82) "**Stack**" means any point in a source designed to emit solids, liquids, or gases into the air, including a pipe or duct.

(83) "**Stack height**" means the height of an emission point measured from the ground-level elevation at the base of the stack.

(84) "**Standard conditions**" means a temperature of 20°C (68°F) and a pressure of 760 mm (29.92 inches) of mercury.

(85) "**State implementation plan (SIP)**" or "**Washington SIP**" means the Washington SIP in 40 C.F.R. Part 52, subpart WW. The SIP contains state, local and federal regulations and orders, the state plan and compliance schedules approved and promulgated by EPA, for the purpose of implementing, maintaining, and enforcing the National Ambient Air Quality Standards.

(86) "**Stationary source**" means any building, structure, facility, or installation which emits or may emit any air contaminant. This term does not include emissions resulting directly from an internal combustion engine for transportation purposes or from a nonroad engine or nonroad vehicle as defined in Section 216(11) of the Federal Clean Air Act.

(87) "**Sulfuric acid plant**" means any facility producing sulfuric acid by the contact process by burning elemental sulfur, alkylation acid, hydrogen sulfide, or acid sludge.

(88) "**Synthetic minor**" means any source whose potential to emit has been limited below applicable thresholds by means of an enforceable order, rule, or approval condition.

(89) "**Total reduced sulfur (TRS)**" means the sum of the sulfur compounds hydrogen sulfide, mercaptans, dimethyl sulfide, dimethyl disulfide, and any other organic sulfides emitted and measured by EPA method 16 in Appendix A to 40 C.F.R. Part 60 or an EPA approved equivalent method and expressed as hydrogen sulfide.

(90) "**Total suspended particulate**" means particulate matter as measured by the method described in 40 C.F.R. Part 50 Appendix B.

(91) "**Toxic air pollutant (TAP)**" or "**toxic air contaminant**" means any toxic air pollutant listed in WAC 173-460-150. The term toxic air pollutant may include particulate matter and volatile organic compounds if an individual substance or a group of substances within either of these classes is listed in WAC 173-460-150. The term toxic air pollutant

does not include particulate matter and volatile organic compounds as generic classes of compounds.

(92) "**Unclassifiable area**" means an area that cannot be designated attainment or nonattainment on the basis of available information as meeting or not meeting the National Ambient Air Quality Standard for the criteria pollutant and that is listed by EPA at 40 C.F.R. Part 81.

(93) "**United States Environmental Protection Agency (USEPA)**" shall be referred to as EPA.

(94) "**Visibility impairment**" means any humanly perceptible change in visibility (light extinction, visual range, contrast, or coloration) from that which would have existed under natural conditions.

(95) "**Volatile organic compound (VOC)**" means any carbon compound that participates in atmospheric photochemical reactions.

(a) Exceptions. The following compounds are not a VOC: Acetone; carbon monoxide; carbon dioxide; carbonic acid; metallic carbides or carbonates; ammonium carbonate, methane; ethane; methylene chloride (dichloromethane); 1,1,1-trichloroethane (methyl chloroform); 1,1,2-trichloro-1,2,2-trifluoroethane (CFC-113); trichlorofluoromethane (CFC-11); dichlorodifluoromethane (CFC-12); chlorodifluoromethane (HCFC-22); trifluoromethane (HFC-23); 1,2-dichloro 1,1,2,2-tetrafluoroethane (CFC-114); chloropentafluoroethane (CFC-115); 1,1,1-trifluoro 2,2-dichloroethane (HCFC-123); 1,1,1,2-tetrafluoroethane (HFC-134a); 1,1-dichloro 1-fluoroethane (HCFC-141b); 1-chloro 1,1-difluoroethane (HCFC-142b); 2-chloro 1,1,1,2-tetrafluoroethane (HCFC-124); pentafluoroethane (HFC-125); 1,1,2,2-tetrafluoroethane (HFC-134); 1,1,1-trifluoroethane (HFC-143a); 1,1-difluoroethane (HFC-152a); parachlorobenzotrifluoride (PCBTF); cyclic, branched, or linear completely methylated siloxanes; perchloroethylene (tetrachloroethylene); 3,3-dichloro-1,1,1,2,2-pentafluoropropane (HCFC-225ca); 1,3-dichloro-1,1,2,2,3-pentafluoropropane (HCFC-225cb); 1,1,1,2,3,4,4,5,5,5-decafluoropentane (HFC 43-10mee); difluoromethane (HFC-32); ethylfluoride (HFC-161); 1,1,1,3,3,3-hexafluoropropane (HFC-236fa); 1,1,2,2,3-pentafluoropropane (HFC-245ca); 1,1,2,3,3-pentafluoropropane (HFC-245ea); 1,1,1,2,3-pentafluoropropane (HFC-245eb); 1,1,1,3,3-pentafluoropropane (HFC-245fa); 1,1,1,2,3,3-hexafluoropropane (HFC-236ea); 1,1,1,3,3-pentafluorobutane (HFC-365mfc); chlorofluoromethane (HCFC-31); 1 chloro-1-fluoroethane (HCFC-151a); 1,2-dichloro-1,1,2-trifluoroethane (HCFC-123a); 1,1,1,2,2,3,3,4,4-nonafluoro-4-methoxy-butane (C₄F₉OCH₃); 2-(difluoromethoxymethyl)-1,1,1,2,3,3,3-heptafluoropropane ((CF₃)₂CF₂OCH₃); 1-ethoxy-1,1,2,2,3,3,4,4-nonafluorobutane (C₄F₉OC₂H₅); 2-(ethoxydifluoromethyl)-1,1,1,2,3,3,3-heptafluoropropane ((CF₃)₂CF₂OC₂H₅); methyl acetate, 1,1,1,2,2,3,3-heptafluoro-3-methoxy-propane (n-C₃F₇OCH₃ or HFE-7000); 3-ethoxy-1,1,1,2,3,4,4,5,5,6,6,6-dodecafluoro-2-(trifluoromethyl) hexane (HFE-7500) 1,1,1,2,3,3,3-heptafluoropropane (HFC 227ea); methyl formate (HCOOCH₃); 1,1,1,2,2,3,4,5,5,5-decafluoro-3-methoxy-4-trifluoromethyl-pentane (HFE-7300); dimethyl carbonate; propylene carbonate; and perfluorocarbon compounds that fall into these classes:

(i) Cyclic, branched, or linear completely fluorinated alkanes;

(ii) Cyclic, branched, or linear completely fluorinated ethers with no saturations;

(iii) Cyclic, branched, or linear completely fluorinated tertiary amines with no saturations; and

(iv) Sulfur containing perfluorocarbons with no saturations and with sulfur bonds only to carbon and fluorine.

(b) For the purpose of determining compliance with emission limits, VOC will be measured by the appropriate methods in 40 C.F.R. Part 60 Appendix A. Where the method also measures compounds with negligible photochemical reactivity, these negligibly-reactive compounds may be excluded as VOC if the amount of the compounds is accurately quantified, and the exclusion is approved by ecology, the authority, or EPA.

(c) As a precondition to excluding these negligibly-reactive compounds as VOC or at any time thereafter, ecology or the authority may require an owner or operator to provide monitoring or testing methods and results demonstrating, to the satisfaction of ecology ((~~or~~)), the authority, or EPA the amount of negligibly-reactive compounds in the source's emissions.

(d) The following compounds are VOC for purposes of all recordkeeping, emissions reporting, photochemical dispersion modeling and inventory requirements which apply to VOC and shall be uniquely identified in emission reports, but are not VOC for purposes of VOC emissions limitations or VOC content requirements: Tertiary-butyl acetate.

AMENDATORY SECTION (Amending Order 09-01, filed 3/1/11, effective 4/1/11)

WAC 173-400-036 Relocation of portable sources.

(1) Applicability.

(a) Portable sources that meet the requirements of this section may without obtaining a site-specific or permitting authority-specific order of approval relocate and operate in any jurisdiction in which the permitting authority has adopted ~~((these rules))~~ this section by reference. The owner or operator of a portable source may file a new notice of construction application in compliance with WAC 173-400-110 each time the portable source relocates in lieu of participating in the inter-jurisdictional provisions in this section.

(b) Permitting authority participation in the inter-jurisdictional provisions of this section is optional. This section applies only in those jurisdictions where the permitting authority has adopted it. Nothing in this section affects a permitting authority's ability to enter into an agreement with another permitting authority to allow inter-jurisdictional relocation of a portable source under conditions other than those listed here except that subsection (2) of this section applies statewide.

(c) This section applies to sources that move from the jurisdiction of one permitting authority to the jurisdiction of another permitting authority, inter-jurisdictional relocation. This section does not apply to intra-jurisdictional relocation.

(d) Engines subject to WAC 173-400-035 Nonroad engines are not portable sources subject to this section.

(2) **Portable sources in nonattainment areas.** If a portable source is locating in a nonattainment area and if the source emits the pollutants or pollutant precursors for which

the area is classified as nonattainment, then the source must acquire a site-specific order of approval.

(3) **Major stationary sources.** If a portable source is a major stationary source then it must also comply with WAC 173-400-700 through 173-400-750 as applicable.

(4) **Relocation requirements.** Portable sources are allowed to operate at a new location without obtaining an order of approval from the permitting authority with jurisdiction over the new location provided that:

(a) A permitting authority in Washington state issued a notice of construction order of approval for the portable source after July 1, 2010, identifying the emission units as a "portable source";

(b) The owner/operator of the portable source submits a relocation notice on a form provided by the permitting authority and a copy of the applicable portable source order of approval to the permitting authority with jurisdiction over the intended operation location a minimum of fifteen calendar days before the portable source begins operation at the new location;

(c) The owner/operator submits the emission inventory required under WAC 173-400-105 to each permitting authority in whose jurisdiction the portable source operated during the preceding year. The data must be sufficient in detail to enable each permitting authority to calculate the emissions within its jurisdiction and the yearly aggregate.

(d) Operation at any location under this provision is limited to one year or less. Operations lasting more than one year must obtain a site specific order of approval.

~~((4))~~ (5) **Enforcement of the order of approval.** The permitting authority with jurisdiction over the location where a portable source is operating has authority to enforce the conditions of the order of approval that authorizes the portable source operation, regardless of which permitting authority issued the order of approval. All persons who receive an order of approval must comply with all approval conditions contained in the order of approval.

~~((5))~~ (6) **Change of conditions to orders of approval.** To change the conditions in an order of approval, the owner/operator must obtain a new order of approval from the permitting authority with jurisdiction over the portable source.

~~((6))~~ (7) **Portable source modification.** Prior to beginning actual construction or installation of a modification of a portable source, the owner/operator must obtain a new order of approval from the permitting authority with jurisdiction over the portable source.

AMENDATORY SECTION (Amending Order 09-01, filed 3/1/11, effective 4/1/11)

WAC 173-400-050 Emission standards for combustion and incineration units. (1) Combustion and incineration emissions units must meet all requirements of WAC 173-400-040 and, in addition, no person shall cause or allow emissions of particulate matter in excess of 0.23 gram per dry cubic meter at standard conditions (0.1 grain/dscf), except, for an emissions unit combusting wood derived fuels for the production of steam. No person shall allow the emission of particulate matter in excess of 0.46 gram per dry cubic meter

at standard conditions (0.2 grain/dscf), as measured by EPA method 5 in Appendix A to 40 C.F.R. Part 60, (in effect on July 1, (~~2010~~) 2012) or approved procedures contained in "Source Test Manual - Procedures For Compliance Testing," state of Washington, department of ecology, as of September 20, 2004, on file at ecology.

(2) For any incinerator, no person shall cause or allow emissions in excess of one hundred ppm of total carbonyls as measured by Source Test Method 14 procedures contained in "Source Test Manual - Procedures For Compliance Testing," state of Washington, department of ecology, as of September 20, 2004, on file at ecology. An applicable EPA reference method or other procedures to collect and analyze for the same compounds collected in the ecology method may be used if approved by the permitting authority prior to its use.

(a) **Incinerators** not subject to the requirements of chapter 173-434 WAC or WAC 173-400-050 (4) or (5), or requirements adopted by reference in WAC 173-400-075 (40 C.F.R. 63 subpart EEE) and WAC 173-400-115 (40 C.F.R. 60 subparts E, Ea, Eb, Ec, AAAA, and CCCC) shall be operated only during daylight hours unless written permission to operate at other times is received from the permitting authority.

(b) Total carbonyls means the concentration of organic compounds containing the =C=O radical as collected by the Ecology Source Test Method 14 contained in "Source Test Manual - Procedures For Compliance Testing," state of Washington, department of ecology, as of September 20, 2004, on file at ecology.

(3) Measured concentrations for combustion and incineration units shall be adjusted for volumes corrected to seven percent oxygen, except when the permitting authority determines that an alternate oxygen correction factor is more representative of normal operations such as the correction factor included in an applicable NSPS or NESHAP, actual operating characteristics, or the manufacturer's specifications for the emission unit.

(4) **Commercial and industrial solid waste incineration units** constructed on or before November 30, 1999.

(a) Definitions.

(i) **"Commercial and industrial solid waste incineration (CISWI) unit"** means any combustion device that combusts commercial and industrial waste, as defined in this subsection. The boundaries of a CISWI unit are defined as, but not limited to, the commercial or industrial solid waste fuel feed system, grate system, flue gas system, and bottom ash. The CISWI unit does not include air pollution control equipment or the stack. The CISWI unit boundary starts at the commercial and industrial solid waste hopper (if applicable) and extends through two areas:

(A) The combustion unit flue gas system, which ends immediately after the last combustion chamber.

(B) The combustion unit bottom ash system, which ends at the truck loading station or similar equipment that transfers the ash to final disposal. It includes all ash handling systems connected to the bottom ash handling system.

(ii) **"Commercial and industrial solid waste"** means solid waste combusted in an enclosed device using controlled flame combustion without energy recovery that is a distinct operating unit of any commercial or industrial facility

(including field erected, modular, and custom built incineration units operating with starved or excess air), or solid waste combusted in an air curtain incinerator without energy recovery that is a distinct operating unit of any commercial or industrial facility.

(b) **Applicability.** This section applies to incineration units that meet all three criteria:

(i) The incineration unit meets the definition of CISWI unit in this subsection.

(ii) The incineration unit commenced construction on or before November 30, 1999.

(iii) The incineration unit is not exempt under (c) of this subsection.

(c) The following types of incineration units are exempt from this subsection:

(i) *Pathological waste incineration units.* Incineration units burning 90 percent or more by weight (on a calendar quarter basis and excluding the weight of auxiliary fuel and combustion air) of pathological waste, low-level radioactive waste, and/or chemotherapeutic waste as defined in 40 C.F.R. 60.2265 (in effect on July 1, 2010) are not subject to this section if you meet the two requirements specified in (c)(i)(A) and (B) of this subsection.

(A) Notify the permitting authority that the unit meets these criteria.

(B) Keep records on a calendar quarter basis of the weight of pathological waste, low-level radioactive waste, and/or chemotherapeutic waste burned, and the weight of all other fuels and wastes burned in the unit.

(ii) *Agricultural waste incineration units.* Incineration units burning 90 percent or more by weight (on a calendar quarter basis and excluding the weight of auxiliary fuel and combustion air) of agricultural wastes as defined in 40 C.F.R. 60.2265 (in effect on January 30, 2001) are not subject to this subpart if you meet the two requirements specified in (c)(ii)(A) and (B) of this subsection.

(A) Notify the permitting authority that the unit meets these criteria.

(B) Keep records on a calendar quarter basis of the weight of agricultural waste burned, and the weight of all other fuels and wastes burned in the unit.

(iii) *Municipal waste combustion units.* Incineration units that meet either of the two criteria specified in (c)(iii)(A) and (B) of this subsection.

(A) Units are regulated under 40 C.F.R. Part 60, subpart Ea or subpart Eb (in effect on July 1, 2010); Spokane County Air Pollution Control Authority Regulation 1, Section 6.17 (in effect on February 13, 1999); 40 C.F.R. Part 60, subpart AAAA (in effect on July 1, 2010); or WAC 173-400-050(5).

(B) Units burn greater than 30 percent municipal solid waste or refuse-derived fuel, as defined in 40 C.F.R. Part 60, subparts Ea (in effect on July 1, 2010), Eb (in effect on July 1, 2010), and AAAA (in effect on July 1, 2010), and WAC 173-400-050(5), and that have the capacity to burn less than 35 tons (32 megagrams) per day of municipal solid waste or refuse-derived fuel, if you meet the two requirements in (c)(iii)(B)(I) and (II) of this subsection.

(I) Notify the permitting authority that the unit meets these criteria.

(II) Keep records on a calendar quarter basis of the weight of municipal solid waste burned, and the weight of all other fuels and wastes burned in the unit.

(iv) *Medical waste incineration units.* Incineration units regulated under 40 C.F.R. Part 60, subpart Ec (Standards of Performance for Hospital/Medical/Infectious Waste Incinerators for Which Construction is Commenced After June 20, 1996) (in effect on July 1, 2010);

(v) *Small power production facilities.* Units that meet the three requirements specified in (c)(v)(A) through (C) of this subsection.

(A) The unit qualifies as a small power-production facility under section 3 (17)(C) of the Federal Power Act (16 U.S.C. 796 (17)(C)).

(B) The unit burns homogeneous waste (not including refuse-derived fuel) to produce electricity.

(C) You notify the permitting authority that the unit meets all of these criteria.

(vi) *Cogeneration facilities.* Units that meet the three requirements specified in (c)(vi)(A) through (C) of this subsection.

(A) The unit qualifies as a cogeneration facility under section 3 (18)(B) of the Federal Power Act (16 U.S.C. 796 (18)(B)).

(B) The unit burns homogeneous waste (not including refuse-derived fuel) to produce electricity and steam or other forms of energy used for industrial, commercial, heating, or cooling purposes.

(C) You notify the permitting authority that the unit meets all of these criteria.

(vii) *Hazardous waste combustion units.* Units that meet either of the two criteria specified in (c)(vii)(A) or (B) of this subsection.

(A) Units for which you are required to get a permit under section 3005 of the Solid Waste Disposal Act.

(B) Units regulated under subpart EEE of 40 C.F.R. Part 63 (National Emission Standards for Hazardous Air Pollutants from Hazardous Waste Combustors) (in effect on July 1, 2010).

(viii) *Materials recovery units.* Units that combust waste for the primary purpose of recovering metals, such as primary and secondary smelters;

(ix) *Air curtain incinerators.* Air curtain incinerators that burn only the materials listed in (c)(ix)(A) through (C) of this subsection are only required to meet the requirements under "Air Curtain Incinerators" in 40 C.F.R. 60.2245 through 60.2260 (in effect on July 1, 2010).

(A) 100 percent wood waste.

(B) 100 percent clean lumber.

(C) 100 percent mixture of only wood waste, clean lumber, and/or yard waste.

(x) *Cyclonic barrel burners.* See 40 C.F.R. 60.2265 (in effect on July 1, 2010).

(xi) *Rack, part, and drum reclamation units.* See 40 C.F.R. 60.2265 (in effect on July 1, 2010).

(xii) *Cement kilns.* Kilns regulated under subpart LLL of 40 C.F.R. Part 63 (National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry) (in effect on July 1, 2010).

(xiii) *Sewage sludge incinerators.* Incineration units regulated under 40 C.F.R. Part 60, (Standards of Performance for Sewage Treatment Plants) (in effect on July 1, 2010).

(xiv) *Chemical recovery units.* Combustion units burning materials to recover chemical constituents or to produce chemical compounds where there is an existing commercial market for such recovered chemical constituents or compounds. The seven types of units described in (c)(xiv)(A) through (G) of this subsection are considered chemical recovery units.

(A) Units burning only pulping liquors (i.e., black liquor) that are reclaimed in a pulping liquor recovery process and reused in the pulping process.

(B) Units burning only spent sulfuric acid used to produce virgin sulfuric acid.

(C) Units burning only wood or coal feedstock for the production of charcoal.

(D) Units burning only manufacturing by-product streams/residues containing catalyst metals which are reclaimed and reused as catalysts or used to produce commercial grade catalysts.

(E) Units burning only coke to produce purified carbon monoxide that is used as an intermediate in the production of other chemical compounds.

(F) Units burning only hydrocarbon liquids or solids to produce hydrogen, carbon monoxide, synthesis gas, or other gases for use in other manufacturing processes.

(G) Units burning only photographic film to recover silver.

(xv) *Laboratory analysis units.* Units that burn samples of materials for the purpose of chemical or physical analysis.

(d) Exceptions.

(i) Physical or operational changes to a CISWI unit made primarily to comply with this section do not qualify as a "modification" or "reconstruction" (as defined in 40 C.F.R. 60.2815, in effect on July 1, 2010).

(ii) Changes to a CISWI unit made on or after June 1, 2001, that meet the definition of "modification" or "reconstruction" as defined in 40 C.F.R. 60.2815 (in effect on July 1, 2010) mean the CISWI unit is considered a new unit and subject to WAC 173-400-115, which adopts 40 C.F.R. Part 60, subpart CCCC by reference.

(e) A CISWI unit must comply with 40 C.F.R. 60.2575 through 60.2875, in effect on July 1, 2010, which is adopted by reference. The federal rule contains these major components:

- Increments of progress towards compliance in 60.2575 through 60.2630;
- Waste management plan requirements in 60.2620 through 60.2630;
- Operator training and qualification requirements in 60.2635 through 60.2665;
- Emission limitations and operating limits in 60.2670 through 60.2685;
- Performance testing requirements in 60.2690 through 60.2725;
- Initial compliance requirements in 60.2700 through 60.2725;
- Continuous compliance requirements in 60.2710 through 60.2725;

- Monitoring requirements in 60.2730 through 60.2735;
- Recordkeeping and reporting requirements in 60.2740 through 60.2800;
- Title V operating permits requirements in 60.2805;
- Air curtain incinerator requirements in 60.2810 through 60.2870;
- Definitions in 60.2875; and
- Tables in 60.2875. In Table 1, the final control plan must be submitted before June 1, 2004, and final compliance must be achieved by June 1, 2005.

(i) Exception to adopting the federal rule. For purposes of this section, "administrator" includes the permitting authority.

(ii) Exception to adopting the federal rule. For purposes of this section, "you" means the owner or operator.

(iii) Exception to adopting the federal rule. For purposes of this section, each reference to "the effective date of state plan approval" means July 1, 2002.

(iv) Exception to adopting the federal rule. The Title V operating permit requirements in 40 C.F.R. ((2805)) 60.2805(a) are not adopted by reference. Each CISWI unit, regardless of whether it is a major or nonmajor unit, is subject to the air operating permit regulation, chapter 173-401 WAC, beginning on July 1, 2002. See WAC 173-401-500 for the permit application requirements and deadlines.

(v) Exception to adopting the federal rule. The following compliance dates apply:

(A) The final control plan (Increment 1) must be submitted no later than July 1, 2003. (See Increment 1 in Table 1.)

(B) Final compliance (Increment 2) must be achieved no later than July 1, 2005. (See Increment 2 in Table 1.)

(5) **Small municipal waste combustion units** constructed on or before August 30, 1999.

(a) Definition. "Municipal waste combustion unit" means any setting or equipment that combusts, liquid, or gasified municipal solid waste including, but not limited to, field-erected combustion units (with or without heat recovery), modular combustion units (starved air- or excess-air), boilers (for example, steam generating units), furnaces (whether suspension-fired, grate-fired, mass-fired, air-curtain incinerators, or fluidized bed-fired), and pyrolysis/combustion units. Two criteria further define municipal waste combustion units:

(i) Municipal waste combustion units do not include the following units:

(A) Pyrolysis or combustion units located at a plastics or rubber recycling unit as specified under the exemptions in this subsection (5)(c)(viii) and (ix).

(B) Cement kilns that combust municipal solid waste as specified under the exemptions in this subsection (5)(c)(x).

(C) Internal combustion engines, gas turbines, or other combustion devices that combust landfill gases collected by landfill gas collection systems.

(ii) The boundaries of a municipal waste combustion unit are defined as follows. The municipal waste combustion unit includes, but is not limited to, the municipal solid waste fuel feed system, grate system, flue gas system, bottom ash system, and the combustion unit water system. The municipal waste combustion unit does not include air pollution control equipment, the stack, water treatment equipment, or the tur-

bine-generator set. The municipal waste combustion unit boundary starts at the municipal solid waste pit or hopper and extends through three areas:

(A) The combustion unit flue gas system, which ends immediately after the heat recovery equipment or, if there is no heat recovery equipment, immediately after the combustion chamber.

(B) The combustion unit bottom ash system, which ends at the truck loading station or similar equipment that transfers the ash to final disposal. It includes all ash handling systems connected to the bottom ash handling system.

(C) The combustion unit water system, which starts at the feed water pump and ends at the piping that exits the steam drum or superheater.

(b) Applicability. This section applies to a municipal waste combustion unit that meets these three criteria:

(i) The municipal waste combustion unit has the capacity to combust at least 35 tons per day of municipal solid waste but no more than 250 tons per day of municipal solid waste or refuse-derived fuel.

(ii) The municipal waste combustion unit commenced construction on or before August 30, 1999.

(iii) The municipal waste combustion unit is not exempt under (c) of this section.

(c) Exempted units. The following municipal waste combustion units are exempt from the requirements of this section:

(i) *Small municipal waste combustion units that combust less than 11 tons per day.* Units are exempt from this section if four requirements are met:

(A) The municipal waste combustion unit is subject to a federally enforceable order or order of approval limiting the amount of municipal solid waste combusted to less than 11 tons per day.

(B) The owner or operator notifies the permitting authority that the unit qualifies for the exemption.

(C) The owner or operator of the unit sends a copy of the federally enforceable order or order of approval to the permitting authority.

(D) The owner or operator of the unit keeps daily records of the amount of municipal solid waste combusted.

(ii) *Small power production units.* Units are exempt from this section if four requirements are met:

(A) The unit qualifies as a small power production facility under section 3 (17)(C) of the Federal Power Act (16 U.S.C. 796 (17)(C)).

(B) The unit combusts homogeneous waste (excluding refuse-derived fuel) to produce electricity.

(C) The owner or operator notifies the permitting authority that the unit qualifies for the exemption.

(D) The owner or operator submits documentation to the permitting authority that the unit qualifies for the exemption.

(iii) *Cogeneration units.* Units are exempt from this section if four requirements are met:

(A) The unit qualifies as a small power production facility under section 3 (18)(C) of the Federal Power Act (16 U.S.C. 796 (18)(C)).

(B) The unit combusts homogeneous waste (excluding refuse-derived fuel) to produce electricity and steam or other

forms of energy used for industrial, commercial, heating, or cooling purposes.

(C) The owner or operator notifies the permitting authority that the unit qualifies for the exemption.

(D) The owner or operator submits documentation to the permitting authority that the unit qualifies for the exemption.

(iv) *Municipal waste combustion units that combust only tires.* Units are exempt from this section if three requirements are met:

(A) The municipal waste combustion unit combusts a single-item waste stream of tires and no other municipal waste (the unit can cofire coal, fuel oil, natural gas, or other nonmunicipal solid waste).

(B) The owner or operator notifies the permitting authority that the unit qualifies for the exemption.

(C) The owner or operator submits documentation to the permitting authority that the unit qualifies for the exemption.

(v) *Hazardous waste combustion units.* Units are exempt from this section if the units have received a permit under section 3005 of the Solid Waste Disposal Act.

(vi) *Materials recovery units.* Units are exempt from this section if the units combust waste mainly to recover metals. Primary and secondary smelters may qualify for the exemption.

(vii) *Cofired units.* Units are exempt from this section if four requirements are met:

(A) The unit has a federally enforceable order or order of approval limiting municipal solid waste combustion to no more than 30 percent of total fuel input by weight.

(B) The owner or operator notifies the permitting authority that the unit qualifies for the exemption.

(C) The owner or operator submits a copy of the federally enforceable order or order of approval to the permitting authority.

(D) The owner or operator records the weights, each quarter, of municipal solid waste and of all other fuels combusted.

(viii) *Plastics/rubber recycling units.* Units are exempt from this section if four requirements are met:

(A) The pyrolysis/combustion unit is an integrated part of a plastics/rubber recycling unit as defined in 40 C.F.R. 60.1940 (in effect on July 1, (~~2010~~) 2012).

(B) The owner or operator of the unit records the weight, each quarter, of plastics, rubber, and rubber tires processed.

(C) The owner or operator of the unit records the weight, each quarter, of feed stocks produced and marketed from chemical plants and petroleum refineries.

(D) The owner or operator of the unit keeps the name and address of the purchaser of the feed stocks.

(ix) *Units that combust fuels made from products of plastics/rubber recycling plants.* Units are exempt from this section if two requirements are met:

(A) The unit combusts gasoline, diesel fuel, jet fuel, fuel oils, residual oil, refinery gas, petroleum coke, liquified petroleum gas, propane, or butane produced by chemical plants or petroleum refineries that use feed stocks produced by plastics/rubber recycling units.

(B) The unit does not combust any other municipal solid waste.

(x) *Cement kilns*. Cement kilns that combust municipal solid waste are exempt.

(xi) *Air curtain incinerators*. If an air curtain incinerator as defined under 40 C.F.R. 60.1910 (in effect on July 1, ((2010)) 2012) combusts 100 percent yard waste, then those units must only meet the requirements under 40 C.F.R. 60.1910 through 60.1930 (in effect on July 1, ((2010)) 2012).

(d) Exceptions.

(i) Physical or operational changes to an existing municipal waste combustion unit made primarily to comply with this section do not qualify as a modification or reconstruction, as those terms are defined in 40 C.F.R. 60.1940 (in effect on July 1, ((2010)) 2012).

(ii) Changes to an existing municipal waste combustion unit made on or after June 6, 2001, that meet the definition of modification or reconstruction, as those terms are defined in 40 C.F.R. 60.1940 (in effect on July 1, ((2010)) 2012), mean the unit is considered a new unit and subject to WAC 173-400-115, which adopts 40 C.F.R. Part 60, subpart AAAA (in effect on July 1, ((2010)) 2012).

(e) Municipal waste combustion units are divided into two subcategories based on the aggregate capacity of the municipal waste combustion plant as follows:

(i) Class I units. Class I units are small municipal waste combustion units that are located at municipal waste combustion plants with an aggregate plant combustion capacity greater than 250 tons per day of municipal solid waste. See the definition of "municipal waste combustion plant capacity" in 40 C.F.R. 60.1940 (in effect on July 1, ((2010)) 2012) for the specification of which units are included in the aggregate capacity calculation.

(ii) Class II units. Class II units are small municipal waste combustion units that are located at municipal waste combustion plants with an aggregate plant combustion capacity less than or equal to 250 tons per day of municipal solid waste. See the definition of "municipal waste combustion plant capacity" in 40 C.F.R. 60.1940 (in effect on July 1, ((2010)) 2012) for the specification of which units are included in the aggregate capacity calculation.

(f) Compliance option 1.

(i) A municipal solid waste combustion unit may choose to reduce, by the final compliance date of June 1, 2005, the maximum combustion capacity of the unit to less than 35 tons per day of municipal solid waste. The owner or operator must submit a final control plan and the notifications of achievement of increments of progress as specified in 40 C.F.R. 60.1610 (in effect on July 1, ((2010)) 2012).

(ii) The final control plan must, at a minimum, include two items:

(A) A description of the physical changes that will be made to accomplish the reduction.

(B) Calculations of the current maximum combustion capacity and the planned maximum combustion capacity after the reduction. Use the equations specified in 40 C.F.R. 60.1935 (d) and (e) (in effect on July 1, ((2010)) 2012) to calculate the combustion capacity of a municipal waste combustion unit.

(iii) An order or order of approval containing a restriction or a change in the method of operation does not qualify as a reduction in capacity. Use the equations specified in 40

C.F.R. 60.1935 (d) and (e) (in effect on July 1, ((2010)) 2012) to calculate the combustion capacity of a municipal waste combustion unit.

(g) Compliance option 2. The municipal waste combustion unit must comply with 40 C.F.R. 60.1585 through 60.1905, and 60.1935 (in effect on July 1, ((2010)) 2012), which is adopted by reference.

(i) The rule contains these major components:

(A) Increments of progress towards compliance in 60.1585 through 60.1640;

(B) Good combustion practices - Operator training in 60.1645 through 60.1670;

(C) Good combustion practices - Operator certification in 60.1675 through 60.1685;

(D) Good combustion practices - Operating requirements in 60.1690 through 60.1695;

(E) Emission limits in 60.1700 through 60.1710;

(F) Continuous emission monitoring in 60.1715 through 60.1770;

(G) Stack testing in 60.1775 through 60.1800;

(H) Other monitoring requirements in 60.1805 through 60.1825;

(I) Recordkeeping reporting in 60.1830 through 60.1855;

(J) Reporting in 60.1860 through 60.1905;

(K) Equations in 60.1935;

(L) Tables 2 through 8.

(ii) Exception to adopting the federal rule. For purposes of this section, each reference to the following is amended in the following manner:

(A) "State plan" in the federal rule means WAC 173-400-050(5).

(B) "You" in the federal rule means the owner or operator.

(C) "Administrator" includes the permitting authority.

(D) "The effective date of the state plan approval" in the federal rule means December 6, 2002.

(h) Compliance schedule.

(i) Small municipal waste combustion units must achieve final compliance or cease operation not later than December 1, 2005.

(ii) Small municipal waste combustion units must achieve compliance by May 6, 2005 for all Class II units, and by November 6, 2005 for all Class I units.

(iii) Class I units must comply with these additional requirements:

(A) The owner or operator must submit the dioxins/furans stack test results for at least one test conducted during or after 1990. The stack test must have been conducted according to the procedures specified under 40 C.F.R. 60.1790 (in effect on July 1, ((2010)) 2012).

(B) Class I units that commenced construction after June 26, 1987, must comply with the dioxins/furans and mercury limits specified in Tables 2 and 3 in 40 C.F.R. Part 60, subpart BBBB (in effect on February 5, 2001) by the later of two dates:

(I) December 6, 2003; or

(II) One year following the issuance of an order of approval (revised construction approval or operation permit)

if an order or order of approval or operation modification is required.

(i) Air operating permit. Applicability to chapter 173-401 WAC, the air operating permit regulation, begins on July 1, 2002. See WAC 173-401-500 for the permit application requirements and deadlines.

AMENDATORY SECTION (Amending Order 09-01, filed 3/1/11, effective 4/1/11)

WAC 173-400-070 Emission standards for certain source categories. Ecology finds that the reasonable regulation of sources within certain categories requires separate standards applicable to such categories. The standards set forth in this section shall be the maximum allowable standards for emissions units within the categories listed. Except as specifically provided in this section, such emissions units shall not be required to meet the provisions of WAC 173-400-040, 173-400-050 and 173-400-060.

(1) Wigwam and silo burners.

(a) All wigwam and silo burners designed to dispose of wood waste must meet all provisions of WAC 173-400-040 (3), (4), (5), (6), (7), (8), and WAC 173-400-050(4) or 173-400-115 (40 C.F.R. 60 subpart DDDD) as applicable.

(b) All wigwam and silo burners must use RACT. All emissions units shall be operated and maintained to minimize emissions. These requirements may include a controlled tangential vent overfire air system, an adequate underfire system, elimination of all unnecessary openings, a controlled feed and other modifications determined necessary by ecology or the permitting authority.

(c) It shall be unlawful to install or increase the existing use of any burner that does not meet all requirements for new sources including those requirements specified in WAC 173-400-040 and 173-400-050, except operating hours.

(d) The permit authority may establish additional requirements for wigwam and silo burners. These requirements may include but shall not be limited to:

(i) A requirement to meet all provisions of WAC 173-400-040 and 173-400-050. Wigwam and silo burners will be considered to be in compliance if they meet the requirements contained in WAC 173-400-040(2), visible emissions. An exception is made for a startup period not to exceed thirty minutes in any eight consecutive hours.

(ii) A requirement to apply BACT.

(iii) A requirement to reduce or eliminate emissions if ecology establishes that such emissions unreasonably interfere with the use and enjoyment of the property of others or are a cause of violation of ambient air standards.

(2) Hog fuel boilers.

(a) Hog fuel boilers shall meet all provisions of WAC 173-400-040 and 173-400-050(1), except that emissions may exceed twenty percent opacity for up to fifteen consecutive minutes once in any eight hours. The intent of this provision is to allow soot blowing and grate cleaning necessary to the operation of these units. This practice is to be scheduled for the same specific times each day and the permitting authority shall be notified of the schedule or any changes.

(b) All hog fuel boilers shall utilize RACT and shall be operated and maintained to minimize emissions.

(3) Orchard heating.

(a) Burning of rubber materials, asphaltic products, crankcase oil or petroleum wastes, plastic, or garbage is prohibited.

(b) It is unlawful to burn any material or operate any orchard-heating device that causes a visible emission exceeding twenty percent opacity, except during the first thirty minutes after such device or material is ignited.

(4) Grain elevators.

Any grain elevator which is primarily classified as a materials handling operation shall meet all the provisions of WAC 173-400-040 (2), (3), (4), and (5).

(5) Catalytic cracking units.

(a) All existing catalytic cracking units shall meet all provisions of WAC 173-400-040 (2), (3), (4), (5), (6), and (7) and:

(i) No person shall cause or allow the emission for more than three minutes, in any one hour, of an air contaminant from any catalytic cracking unit which at the emission point, or within a reasonable distance of the emission point, exceeds forty percent opacity.

(ii) No person shall cause or allow the emission of particulate material in excess of 0.46 grams per dry cubic meter at standard conditions (0.20 grains/dscf) of exhaust gas.

(b) All new catalytic cracking units shall meet all provisions of WAC 173-400-115.

(6) Other wood waste burners.

(a) Wood waste burners not specifically provided for in this section shall meet all applicable provisions of WAC 173-400-040. In addition, wood waste burners subject to WAC 173-400-050(4) or 173-400-115 (40 C.F.R. 60 subpart DDDD) must meet all applicable provisions of those sections.

(b) Such wood waste burners shall utilize RACT and shall be operated and maintained to minimize emissions.

(7) Sulfuric acid plants.

No person shall cause to be discharged into the atmosphere from a sulfuric acid plant, any gases which contain acid mist, expressed as H₂SO₄, in excess of 0.15 pounds per ton of acid produced. Sulfuric acid production shall be expressed as one hundred percent H₂SO₄.

~~(8) (~~Sewage sludge incinerators.~~ Standards for the incineration of sewage sludge found in 40 CFR Part 503 subparts A (General Provisions) and E (Incineration) in effect on July 1, 2010, are adopted by reference.~~

~~(9))~~ **Municipal solid waste landfills constructed, reconstructed, or modified before May 30, 1991.** A municipal solid waste landfill (MSW landfill) is an entire disposal facility in a contiguous geographical space where household waste is placed in or on the land. A MSW landfill may also receive other types of waste regulated under Subtitle D of the Federal Resource Conservation and Recovery Act including the following: Commercial solid waste, non-hazardous sludge, conditionally exempt small quantity generator waste, and industrial solid waste. Portions of an MSW landfill may be separated by access roads. A MSW landfill may be either publicly or privately owned. A MSW landfill may be a new MSW landfill, an existing MSW landfill, or a lateral expansion. All references in this subsection to 40

C₂F₂R₂ Part 60 rules mean those rules in effect on July 1, 2000.

(a) Applicability. These rules apply to each MSW landfill constructed, reconstructed, or modified before May 30, 1991; and the MSW landfill accepted waste at any time since November 8, 1987 or the landfill has additional capacity for future waste deposition. (See WAC 173-400-115 for the requirements for MSW landfills constructed, reconstructed, or modified on or after May 30, 1991.) Terms in this subsection have the meaning given them in 40 C₂F₂R₂ 60.751, except that every use of the word "administrator" in the federal rules referred to in this subsection includes the "permitting authority."

(b) Exceptions. Any physical or operational change to an MSW landfill made solely to comply with these rules is not considered a modification or rebuilding.

(c) Standards for MSW landfill emissions.

(i) A MSW landfill having a design capacity less than 2.5 million megagrams or 2.5 million cubic meters must comply with the requirements of 40 C₂F₂R₂ 60.752(a) in addition to the applicable requirements specified in this section.

(ii) A MSW landfill having design capacity equal to or greater than 2.5 million megagrams and 2.5 million cubic meters must comply with the requirements of 40 C₂F₂R₂ 60.752(b) in addition to the applicable requirements specified in this section.

(d) Recordkeeping and reporting. A MSW landfill must follow the recordkeeping and reporting requirements in 40 C₂F₂R₂ 60.757 (submission of an initial design capacity report) and 40 C₂F₂R₂ 60.758 (recordkeeping requirements), as applicable, except as provided for under (d)(i) and (ii).

(i) The initial design capacity report for the facility is due before September 20, 2001.

(ii) The initial nonmethane organic compound (NMOC) emissions rate report is due before September 20, 2001.

(e) Test methods and procedures.

(i) A MSW landfill having a design capacity equal to or greater than 2.5 million megagrams and 2.5 million cubic meters must calculate the landfill nonmethane organic compound emission rates following the procedures listed in 40 C₂F₂R₂ 60.754, as applicable, to determine whether the rate equals or exceeds 50 megagrams per year.

(ii) Gas collection and control systems must meet the requirements in 40 C₂F₂R₂ 60.752 (b)(2)(ii) through the following procedures:

(A) The systems must follow the operational standards in 40 C₂F₂R₂ 60.753.

(B) The systems must follow the compliance provisions in 40 C₂F₂R₂ 60.755 (a)(1) through (a)(6) to determine whether the system is in compliance with 40 C₂F₂R₂ 60.752 (b)(2)(ii).

(C) The system must follow the applicable monitoring provisions in 40 C₂F₂R₂ 60.756.

(f) Conditions. Existing MSW landfills that meet the following conditions must install a gas collection and control system:

(i) The landfill accepted waste at any time since November 8, 1987, or the landfill has additional design capacity available for future waste deposition;

(ii) The landfill has design capacity greater than or equal to 2.5 million megagrams or 2.5 million cubic meters. The landfill may calculate design capacity in either megagrams or cubic meters for comparison with the exception values. Any density conversions shall be documented and submitted with the report; and

(iii) The landfill has a nonmethane organic compound (NMOC) emission rate of 50 megagrams per year or greater.

(g) Change in conditions. After the adoption date of this rule, a landfill that meets all three conditions in (e) of this subsection must comply with all the requirements of this section within thirty months of the date when the conditions were met. This change will usually occur because the NMOC emission rate equaled or exceeded the rate of 50 megagrams per year.

(h) Gas collection and control systems.

(i) Gas collection and control systems must meet the requirements in 40 C₂F₂R₂ 60.752 (b)(2)(ii).

(ii) The design plans must be prepared by a licensed professional engineer and submitted to the permitting authority within one year after the adoption date of this section.

(iii) The system must be installed within eighteen months after the submittal of the design plans.

(iv) The system must be operational within thirty months after the adoption date of this section.

(v) The emissions that are collected must be controlled in one of three ways:

(A) An open flare designed and operated according to 40 C₂F₂R₂ 60.18;

(B) A control system designed and operated to reduce NMOC by 98 percent by weight; or

(C) An enclosed combustor designed and operated to reduce the outlet NMOC concentration to 20 parts per million as hexane by volume, dry basis to three percent oxygen, or less.

(i) Air operating permit.

(i) A MSW landfill that has a design capacity less than 2.5 million megagrams or 2.5 million cubic meters on January 7, 2000, is not subject to the air operating permit regulation, unless the landfill is subject to chapter 173-401 WAC for some other reason. If the design capacity of an exempted MSW landfill subsequently increases to equal or exceed 2.5 million megagrams or 2.5 million cubic meters by a change that is not a modification or reconstruction, the landfill is subject to chapter 173-401 WAC on the date the amended design capacity report is due.

(ii) A MSW landfill that has a design capacity equal to or greater than 2.5 million megagrams or 2.5 million cubic meters on January 7, 2000, is subject to chapter 173-401 WAC beginning on the effective date of this section. (Note: Under 40 C₂F₂R₂ 62.14352(e), an applicable MSW landfill must have submitted its application so that by April 6, 2001, the permitting authority was able to determine that it was timely and complete. Under 40 C₂F₂R₂ 70.7(b), no source may operate after the time that it is required to submit a timely and complete application.)

(iii) When a MSW landfill is closed, the owner or operator is no longer subject to the requirement to maintain an operating permit for the landfill if the landfill is not subject to

chapter 173-401 WAC for some other reason and if either of the following conditions are met:

- (A) The landfill was never subject to the requirement for a control system under 40 C.F.R. 62.14353; or
- (B) The landfill meets the conditions for control system removal specified in 40 C.F.R. 60.752 (b)(2)(v).

AMENDATORY SECTION (Amending Order 09-01, filed 3/1/11, effective 4/1/11)

WAC 173-400-075 Emission standards for sources emitting hazardous air pollutants. (1) National emission standards for hazardous air pollutants (NESHAPs). 40 C.F.R. Part 61 and Appendices in effect on July 1, (~~2010~~) 2012, are adopted by reference. The term "administrator" in 40 C.F.R. Part 61 includes the permitting authority.

(2) The permitting authority may conduct source tests and require access to records, books, files, and other information specific to the control, recovery, or release of those pollutants regulated under 40 C.F.R. Parts 61, 62, 63 and 65, as applicable, in order to determine the status of compliance of sources of these contaminants and to carry out its enforcement responsibilities.

(3) Source testing, monitoring, and analytical methods for sources of hazardous air pollutants must conform with the requirements of 40 C.F.R. Parts 51, 60, 61, 62, 63 and 65, as applicable.

(4) This section does not apply to any source operating under a waiver granted by EPA or an exemption granted by the president of the United States.

(5) Submit reports required by 40 C.F.R. Parts 61 and 63 to the permitting authority, unless otherwise instructed.

(6) National Emission Standards for Hazardous Air Pollutants for Source Categories.

Adopt by reference.

(a) **Major sources of hazardous air pollutants.** 40 C.F.R. Part 63 and Appendices in effect on July 1, (~~2010~~) 2012, as they apply to major (~~stationary~~) sources of hazardous air pollutants are adopted by reference, except for Subpart M, National Perchloroethylene Emission Standards for Dry Cleaning Facilities, as it applies to nonmajor sources and as specified under (b), (c), and (d) of this subsection. The term "administrator" in 40 C.F.R. Part 63 includes the permitting authority.

(b) **Area sources of hazardous air pollutants.** 40 C.F.R. Part 63 and Appendices in effect on July 1, (~~2010~~) 2012, as they apply to these specific area sources of hazardous air pollutants are adopted by reference:

- (i) Subpart EEEEEEE, Primary Copper Smelting;
- (ii) Subpart FFFFFFF, Secondary Copper Smelting;
- (iii) Subpart GGGGGG, Primary Nonferrous Metal;
- (iv) Subpart SSSSSS, Pressed and Blown Glass Manufacturing;
- (v) Subpart YYYYYY, Stainless and Nonstainless Steel Manufacturing (electric arc furnace);
- (vi) Subpart EEE, Hazardous Waste Incineration;
- (vii) Subpart IIIII, Mercury Cell Chlor-Alkali Plants;
- (viii) Subpart LLL, Portland Cement;
- (ix) Subpart X, Secondary Lead Smelting;
- (x) MMMMMMM, Carbon black production;

- (xi) NNNNNN, Chromium compounds; and
- (xii) VVVVVV, Chemical manufacturing for synthetic minors.

(xiii) EEEEEEE, Gold Mine Ore Processing and Production.

(c) The area source rules in 40 C.F.R. Part 63 and appendices in effect on July 1, 2012, (except subpart JJJJJ) are adopted by reference as they apply to a stationary source located at a chapter 401 source subject to chapter 173-401 WAC, operating permit regulation.

(d) 40 C.F.R. Part 63, Subpart JJJJJ: Industrial, Commercial and Institutional Boilers, is not adopted by reference.

(e) 40 C.F.R. Part 63, Subpart DDDDD - National emission for major sources: Industrial, Commercial, and Institutional Boilers and Process Heaters, is not adopted by reference.

(7) Consolidated requirements for the synthetic organic chemical manufacturing industry. 40 C.F.R. Part 65, in effect on July 1, (~~2010~~) 2012, is adopted by reference.

(8) Emission standards for perchloroethylene dry cleaners.

(a) **Applicability.**

(i) This section applies to all dry cleaning systems that use perchloroethylene (PCE). Each dry cleaning system must follow the applicable requirements in Table 1:

TABLE 1. PCE Dry Cleaner Source Categories

Dry cleaning facilities with:	Small area source purchases less than:	Large area source purchases between:	Major source purchases more than:
Only Dry-to-Dry Machines	140 gallons PCE/yr	140-2,100 gallons PCE/yr	2,100 gallons PCE/yr

(ii) Major sources. In addition to the requirements in this section, a dry cleaning system that is considered a major source according to Table 1 must follow the federal requirements for major sources in 40 C.F.R. Part 63, Subpart M (in effect on July 1, (~~2010~~) 2012).

(iii) It is illegal to operate a transfer machine and any machine that requires the movement of wet clothes from one machine to another for drying.

(b) Additional requirements for dry cleaning systems located in a residential building. A residential building is a building where people live.

(i) It is illegal to locate a dry cleaning machine using perchloroethylene in a residential building.

(ii) If you installed a dry cleaning machine using perchloroethylene in a building with a residence before December 21, 2005, you must remove the system by December 21, 2020.

(iii) In addition to requirements found elsewhere in this rule, you must operate the dry cleaning system inside a vapor barrier enclosure. A vapor barrier enclosure is a room that encloses the dry cleaning system. The vapor barrier enclosure must be:

(A) Equipped with a ventilation system that exhausts outside the building and is completely separate from the ventilation system for any other area of the building. The exhaust system must be designed and operated to maintain negative

pressure and a ventilation rate of at least one air change per five minutes.

(B) Constructed of glass, plexiglass, polyvinyl chloride, PVC sheet 22 mil thick (0.022 in.), sheet metal, metal foil face composite board, or other materials that are impermeable to perchloroethylene vapor.

(C) Constructed so that all joints and seams are sealed except for inlet make-up air and exhaust openings and the entry door.

(iv) The exhaust system for the vapor barrier enclosure must be operated at all times that the dry cleaning system is in operation and during maintenance. The entry door to the enclosure may be open only when a person is entering or exiting the enclosure.

(c) Operations and maintenance record.

(i) Each dry cleaning facility must keep an operations and maintenance record that is available upon request.

(ii) The information in the operations and maintenance record must be kept on-site for five years.

(iii) The operations and maintenance record must contain the following information:

(A) Inspection: The date and result of each inspection of the dry cleaning system. The inspection must note the condition of the system and the time any leaks were observed.

(B) Repair: The date, time, and result of each repair of the dry cleaning system.

(C) Refrigerated condenser information. If you have a refrigerated condenser, enter this information:

(I) The air temperature at the inlet of the refrigerated condenser;

(II) The air temperature at the outlet of the refrigerated condenser;

(III) The difference between the inlet and outlet temperature readings; and

(IV) The date the temperature was taken.

(D) Carbon adsorber information. If you have a carbon adsorber, enter this information:

(I) The concentration of PCE in the exhaust of the carbon adsorber; and

(II) The date the concentration was measured.

(E) A record of the volume of PCE purchased each month must be entered by the first of the following month;

(F) A record of the total amount of PCE purchased over the previous twelve months must be entered by the first of each month;

(G) All receipts of PCE purchases; and

(H) A record of any pollution prevention activities that have been accomplished.

(d) General operations and maintenance requirements.

(i) Drain cartridge filters in their housing or other sealed container for at least twenty-four hours before discarding the cartridges.

(ii) Close the door of each dry cleaning machine except when transferring articles to or from the machine.

(iii) Store all PCE, and wastes containing PCE, in a closed container with no perceptible leaks.

(iv) Operate and maintain the dry cleaning system according to the manufacturer's specifications and recommendations.

(v) Keep a copy on-site of the design specifications and operating manuals for all dry cleaning equipment.

(vi) Keep a copy on-site of the design specifications and operating manuals for all emissions control devices.

(vii) Route the PCE gas-vapor stream from the dry cleaning system through the applicable equipment in Table 2:

TABLE 2. Minimum PCE Vapor Vent Control Requirements

Small area source	Large area source	Major source	Dry cleaner located in a building where people live
Refrigerated condenser for all machines installed after September 21, 1993.	Refrigerated condenser for all machines.	Refrigerated condenser with a carbon adsorber for all machines installed after September 21, 1993.	Refrigerated condenser with a carbon adsorber for all machines and a vapor barrier enclosure.

(e) Inspection.

(i) The owner or operator must inspect the dry cleaning system at a minimum following the requirements in Table 3 and Table 4:

TABLE 3. Minimum Inspection Frequency

Small area source	Large area source	Major source	Dry cleaner located in a building where people live
Once every 2 weeks.	Once every week.	Once every week.	Once every week.

TABLE 4. Minimum Inspection Frequency Using Portable Leak Detector

Small area source	Large area source	Major source	Dry cleaner located in a building where people may live
Once every month.	Once every month.	Once every month.	Once every week.

(ii) You must check for leaks using a portable leak detector.

(A) The leak detector must be able to detect concentrations of (~~perchloroethylene~~ [~~perchloroethylene~~]) perchloroethylene of 25 parts per million by volume.

(B) The leak detector must emit an audible or visual signal at 25 parts per million by volume.

(C) You must place the probe inlet at the surface of each component where leakage could occur and move it slowly along the joints.

(iii) You must examine these components for condition and perceptible leaks:

(A) Hose and pipe connections, fittings, couplings, and valves;

(B) Door gaskets and seatings;

(C) Filter gaskets and seatings;

(D) Pumps;

(E) Solvent tanks and containers;

(F) Water separators;

(G) Muck cookers;

(H) Stills;

(I) Exhaust dampers; and

(J) Cartridge filter housings.

(iv) The dry cleaning system must be inspected while it is operating.

(v) The date and result of each inspection must be entered in the operations and maintenance record at the time of the inspection.

(f) Repair.

(i) Leaks must be repaired within twenty-four hours of detection if repair parts are available.

(ii) If repair parts are unavailable, they must be ordered within two working days of detecting the leak.

(iii) Repair parts must be installed as soon as possible, and no later than five working days after arrival.

(iv) The date and time each leak was discovered must be entered in the operations and maintenance record.

(v) The date, time, and result of each repair must be entered in the operations and maintenance record at the time of the repair.

(g) Requirements for systems with refrigerated condensers. A dry cleaning system using a refrigerated condenser must meet all of the following requirements:

(i) Outlet air temperature.

(A) Each week the air temperature sensor at the outlet of the refrigerated condenser must be checked.

(B) The air temperature at the outlet of the refrigerated condenser must be less than or equal to 45°F (7.2°C) during the cool-down period.

(C) The air temperature must be entered in the operations and maintenance record manual at the time it is checked.

(D) The air temperature sensor must meet these requirements:

(I) An air temperature sensor must be permanently installed on a dry-to-dry machine, dryer or reclaimer at the outlet of the refrigerated condenser. The air temperature sensor must be installed by September 23, 1996, if the dry cleaning system was constructed before December 9, 1991.

(II) The air temperature sensor must be accurate to within 2°F (1.1°C).

(III) The air temperature sensor must be designed to measure at least a temperature range from 32°F (0°C) to 120°F (48.9°C); and

(IV) The air temperature sensor must be labeled "RC outlet."

(ii) Inlet air temperature.

(A) Each week the air temperature sensor at the inlet of the refrigerated condenser installed on a washer must be checked.

(B) The inlet air temperature must be entered in the operations and maintenance record at the time it is checked.

(C) The air temperature sensor must meet these requirements:

(I) An air temperature sensor must be permanently installed on a washer at the inlet of the refrigerated condenser. The air temperature sensor must be installed by September 23, 1996, if the dry cleaning system was constructed before December 9, 1991.

(II) The air temperature sensor must be accurate to within 2°F (1.1°C).

(III) The air temperature sensor must be designed to measure at least a temperature range from 32°F (0°C) to 120°F (48.9°C).

(IV) The air temperature sensor must be labeled "RC inlet."

(ii) For a refrigerated condenser used on the washer unit of a transfer system, the following are additional requirements:

(A) Each week the difference between the air temperature at the inlet and outlet of the refrigerated condenser must be calculated.

(B) The difference between the air temperature at the inlet and outlet of a refrigerated condenser installed on a washer must be greater than or equal to 20°F (11.1°C).

(C) The difference between the inlet and outlet air temperature must be entered in the operations and maintenance record each time it is checked.

(iv) A converted machine with a refrigerated condenser must be operated with a diverter valve that prevents air drawn into the dry cleaning machine from passing through the refrigerated condenser when the door of the machine is open;

(v) The refrigerated condenser must not vent the air-PCE gas-vapor stream while the dry cleaning machine drum is rotating or, if installed on a washer, until the washer door is opened; and

(vi) The refrigerated condenser in a transfer machine may not be coupled with any other equipment.

(h) Requirements for systems with carbon adsorbers. A dry cleaning system using a carbon adsorber must meet all of the following requirements:

(i) Each week the concentration of PCE in the exhaust of the carbon adsorber must be measured at the outlet of the carbon adsorber using a colorimetric detector tube.

(ii) The concentration of PCE must be written in the operations and maintenance record each time the concentration is checked.

(iii) If the dry cleaning system was constructed before December 9, 1991, monitoring must begin by September 23, 1996.

(iv) The colorimetric tube must meet these requirements:

(A) The colorimetric tube must be able to measure a concentration of 100 parts per million of PCE in air.

(B) The colorimetric tube must be accurate to within 25 parts per million.

(C) The concentration of PCE in the exhaust of the carbon adsorber must not exceed 100 ppm while the dry cleaning machine is venting to the carbon adsorber at the end of the last dry cleaning cycle prior to desorption of the carbon adsorber.

(v) If the dry cleaning system does not have a permanently fixed colorimetric tube, a sampling port must be provided within the exhaust outlet of the carbon adsorber. The sampling port must meet all of these requirements:

(A) The sampling port must be easily accessible;

(B) The sampling port must be located 8 stack or duct diameters downstream from a bend, expansion, contraction or outlet; and

(C) The sampling port must be 2 stack or duct diameters upstream from a bend, expansion, contraction, inlet or outlet.

AMENDATORY SECTION (Amending Order 09-01, filed 3/1/11, effective 4/1/11)

WAC 173-400-105 Records, monitoring, and reporting. The owner or operator of a source shall upon notification by the director of ecology, maintain records on the type and quantity of emissions from the source and other information deemed necessary to determine whether the source is in compliance with applicable emission limitations and control measures.

(1) **Emission inventory.** The owner(s) or operator(s) of any air contaminant source shall submit an inventory of emissions from the source each year. The inventory will include stack and fugitive emissions of particulate matter, PM-10, PM-2.5, sulfur dioxide, oxides of nitrogen, carbon monoxide, total reduced sulfur compounds (TRS), fluorides, lead, VOCs, ammonia, and other contaminants. The format for the submittal of these inventories will be specified by the permitting authority or ecology. When submittal of emission inventory information is requested, the emissions inventory shall be submitted no later than one hundred five days after the end of the calendar year. The owner(s) or operator(s) shall maintain records of information necessary to substantiate any reported emissions, consistent with the averaging times for the applicable standards. Emission estimates used in the inventory may be based on the most recent published EPA emission factors for a source category, or other information available to the owner(s) or operator(s), whichever is the better estimate.

(2) **Monitoring.** Ecology shall conduct a continuous surveillance program to monitor the quality of the ambient atmosphere as to concentrations and movements of air contaminants. As a part of this program, the director of ecology or an authorized representative may require any source under the jurisdiction of ecology to conduct stack and/or ambient air monitoring and to report the results to ecology.

(3) **Investigation of conditions.** Upon presentation of appropriate credentials, for the purpose of investigating conditions specific to the control, recovery, or release of air contaminants into the atmosphere, personnel from ecology or an authority shall have the power to enter at reasonable times upon any private or public property, excepting nonmultiple unit private dwellings housing one or two families.

(4) **Source testing.** To demonstrate compliance, ecology or the authority may conduct or require that a test be conducted of the source using approved EPA methods from 40 C.F.R. Parts 51, 60, 61 and 63 (in effect on July 1, ~~(2010)~~ 2012) or procedures contained in "Source Test Manual - Procedures for Compliance Testing," state of Washington, department of ecology, as of September 20, 2004, on file at ecology. The operator of a source may be required to provide the necessary platform and sampling ports for ecology personnel or others to perform a test of an emissions unit. Ecology shall be allowed to obtain a sample from any emissions unit. The operator of the source shall be given an opportunity to observe the sampling and to obtain a sample at the same time.

(5) **Continuous monitoring and recording.** Owners and operators of the following categories of sources shall install, calibrate, maintain and operate equipment for continuously monitoring and recording those emissions specified.

(a) Fossil fuel-fired steam generators.

(i) Opacity, except where:

(A) Steam generator capacity is less than two hundred fifty million BTU per hour heat input; or

(B) Only gaseous fuel is burned.

(ii) Sulfur dioxide, except where steam generator capacity is less than two hundred fifty million BTU per hour heat input or if sulfur dioxide control equipment is not required.

(iii) Percent oxygen or carbon dioxide where such measurements are necessary for the conversion of sulfur dioxide continuous emission monitoring data.

(iv) General exception. These requirements do not apply to a fossil fuel-fired steam generator with an annual average capacity factor of less than thirty percent, as reported to the Federal Power Commission for calendar year 1974, or as otherwise demonstrated to ecology or the authority by the owner(s) or operator(s).

(b) **Sulfuric acid plants.** Sulfur dioxide where production capacity is more than three hundred tons per day, expressed as one hundred percent acid, except for those facilities where conversion to sulfuric acid is utilized primarily as a means of preventing emissions to the atmosphere of sulfur dioxide or other sulfur compounds.

(c) Fluid bed catalytic cracking units catalyst regenerators at petroleum refineries. Opacity where fresh feed capacity is more than twenty thousand barrels per day.

(d) Wood residue fuel-fired steam generators.

(i) Opacity, except where steam generator capacity is less than one hundred million BTU per hour heat input.

(ii) Continuous monitoring equipment. The requirements of (e) of this subsection do not apply to wood residue fuel-fired steam generators, but continuous monitoring equipment required by (d) of this subsection shall be subject to approval by ecology.

(e) Owners and operators of those sources required to install continuous monitoring equipment under this subsection shall demonstrate to ecology or the authority, compliance with the equipment and performance specifications and observe the reporting requirements contained in 40 C.F.R. Part 51, Appendix P, Sections 3, 4 and 5 (in effect on ~~(July 1, 2010)~~ May 1, 2012).

(f) Special considerations. If for reason of physical plant limitations or extreme economic situations, ecology determines that continuous monitoring is not a reasonable requirement, alternative monitoring and reporting procedures will be established on an individual basis. These will generally take the form of stack tests conducted at a frequency sufficient to establish the emission levels over time and to monitor deviations in these levels.

(g) Exemptions. This subsection (5) does not apply to any emission unit which is:

(i) Required to continuously monitor emissions due to a standard or requirement contained in 40 C.F.R. Parts 60, 61, 62, 63, or 75 or a permitting authority's adoption by reference of such federal standards. Emission units and sources subject to those standards shall comply with the data collection requirements that apply to those standards.

(ii) Not subject to an applicable emission standard.

(6) ~~((Change in raw materials or fuels for sources not subject to requirements of the operating permit program. Any~~

~~change or series of changes in raw material or fuel which will result in a cumulative increase in emissions of sulfur dioxide of forty tons per year or more over that stated in the initial inventory required by subsection (1) of this section shall require the submittal of sufficient information to ecology or the authority to determine the effect of the increase upon ambient concentrations of sulfur dioxide. Ecology or the authority may issue regulatory orders requiring controls to reduce the effect of such increases. Cumulative changes in raw material or fuel of less than 0.5 percent increase in average annual sulfur content over the initial inventory shall not require such notice.~~

~~(7))~~ No person shall make any false material statement, representation or certification in any form, notice or report required under chapter 70.94 or 70.120 RCW, or any ordinance, resolution, regulation, permit or order in force pursuant thereto.

~~((8))~~ (7) Continuous emission monitoring system operating requirements. All continuous emission monitoring systems (CEMS) required by 40 C.F.R. Parts 60, 61, 62, 63, or 75, or a permitting authority's adoption of those federal standards must meet the continuous emission monitoring systems (CEMS) performance specifications and data recovery requirements imposed by those standards. All CEMS required under an order, PSD permit, or regulation issued by a permitting authority and not subject to CEMS performance specifications and data recovery requirements imposed by 40 C.F.R. Parts 60, 61, 62, 63, or 75 must follow the continuous emission monitoring rule of the permitting authority, or if the permitting authority does not have a continuous emission monitoring rule, must meet the following requirements:

(a) The owner or operator shall recover valid hourly monitoring data for at least 95 percent of the hours that the equipment (required to be monitored) is operated during each calendar month except for periods of monitoring system downtime, provided that the owner or operator demonstrated that the downtime was not a result of inadequate design, operation, or maintenance, or any other reasonable preventable condition, and any necessary repairs to the monitoring system are conducted in a timely manner.

(b) The owner or operator shall install a continuous emission monitoring system that meets the performance specification in 40 C.F.R. Part 60, Appendix B in effect at the time of its installation, and shall operate this monitoring system in accordance with the quality assurance procedures in Appendix F of 40 C.F.R. Part 60 in effect on ~~(July 1, 2010))~~ May 1, 2012, and the U.S. Environmental Protection Agency's "Recommended Quality Assurance Procedures for Opacity Continuous Monitoring Systems" (EPA) 340/1-86-010.

(c) Monitoring data commencing on the clock hour and containing at least forty-five minutes of monitoring data must be reduced to one hour averages. Monitoring data for opacity is to be reduced to six minute block averages unless otherwise specified in the order of approval or permit. All monitoring data will be included in these averages except for data collected during calibration drift tests and cylinder gas audits, and for data collected subsequent to a failed quality assurance test or audit. After a failed quality assurance test or audit, no

valid data is collected until the monitoring system passes a quality assurance test or audit.

(d) Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required under subsection (a) of this section, all continuous monitoring systems shall be in continuous operation.

(i) Continuous monitoring systems for measuring opacity shall complete a minimum of one cycle of sampling and analyzing for each successive ten second period and one cycle of data recording for each successive six minute period.

(ii) Continuous monitoring systems for measuring emissions other than opacity shall complete a minimum of one cycle of sampling, analyzing, and recording for each successive fifteen minute period.

(e) The owner or operator shall retain all monitoring data averages for at least five years, including copies of all reports submitted to the permitting authority and records of all repairs, adjustments, and maintenance performed on the monitoring system.

(f) The owner or operator shall submit a monthly report (or other frequency as directed by terms of an order, air operating permit or regulation) to the permitting authority within thirty days after the end of the month (or other specified reporting period) in which the data were recorded. The report required by this section may be combined with any excess emission report required by WAC 173-400-108. This report shall include:

(i) The number of hours that the monitored emission unit operated each month and the number of valid hours of monitoring data that the monitoring system recovered each month;

(ii) The date, time period, and cause of each failure to meet the data recovery requirements of (a) of this subsection and any actions taken to ensure adequate collection of such data;

(iii) The date, time period, and cause of each failure to recover valid hourly monitoring data for at least 90 percent of the hours that the equipment (required to be monitored) was operated each day;

(iv) The results of all cylinder gas audits conducted during the month; and

(v) A certification of truth, accuracy, and completeness signed by an authorized representative of the owner or operator.

~~((9))~~ (8) No person shall render inaccurate any monitoring device or method required under chapter 70.94 or 70.120 RCW, or any ordinance, resolution, regulation, permit, or order in force pursuant thereto.

AMENDATORY SECTION (Amending Order 09-01, filed 3/1/11, effective 4/1/11)

WAC 173-400-110 New source review (NSR) for sources and portable sources. (1) Applicability.

(a) ~~((This section;))~~ WAC 173-400-110, 173-400-111, 173-400-112, and 173-400-113 apply statewide except where ~~((an))~~ a permitting authority has adopted its own new source review ~~((rule))~~ regulations.

(b) This section applies to new sources and stationary sources as defined in RCW 70.94.030, and WAC 173-400-030, but does not include nonroad engines.

(c) For purposes of this section:

(i) "Establishment" means to begin actual construction;

(ii) "New source" includes:

(A) A modification to an existing stationary source, as "modification" is defined in WAC 173-400-030:

(B) The construction, modification, or relocation of a portable source as defined in WAC 173-400-030, except those relocating in compliance with WAC 173-400-036; ~~(and)~~

(C) The establishment of a new or modified toxic air pollutant source, as defined in WAC 173-460-020; and

(D) A major modification to an existing major stationary source, as defined in WAC 173-400-710 and 173-400-810.

(d) New source review of a modification is limited to the emission unit or units proposed to be modified and the air contaminants whose emissions would increase as a result of the modification. Review of a major modification must comply with WAC 173-400-700 through 173-400-750 or 173-400-800 through 173-400-860, as applicable.

(e) The procedural requirements pertaining to NOC applications and orders of approval for new sources that are not major stationary sources, as defined in WAC 173-400-710 and 173-400-810, shall not apply to any person conducting a remedial action at a facility pursuant to a consent decree, order, or agreed order issued pursuant to chapter 70.105D RCW, Model Toxics Control Act, or to the department of ecology when it conducts a remedial action under chapter 70.105D RCW. The department of ecology shall ensure compliance with the substantive requirements of this chapter through the consent decree, order, or agreed order issued pursuant to chapter 70.105D RCW using the procedures outlined in WAC 173-340-710(9) or during a department-conducted remedial action, through the procedures outlined in WAC 173-340-710(9).

(2) Preconstruction approval requirements. The applicant must evaluate the proposed project and submit an application addressing all applicable new source review requirements of this chapter.

(a) A notice of construction application must be filed and an order of approval must be issued by the permitting authority prior to the establishment of any new source or modification except for those new sources or modifications exempt from permitting under subsections (4), (5), and (6) of this section.

(b) If the proposed project is a new major stationary source or a major modification, located in a designated non-attainment area, and if the project emits the air pollutant or precursors of the air pollutant for which the area is designated nonattainment, and the project meets the applicability criteria in WAC 173-400-820, then the project is subject to the permitting requirements of WAC 173-400-800 through 173-400-860.

(c) If the proposed project is a new major stationary source or a major modification that meets the applicability criteria of WAC 173-400-720, then the project is subject to the PSD permitting requirements of WAC 173-400-700 through 173-400-750.

(d) If the proposed project will increase emissions of toxic air pollutants regulated under chapter 173-460 WAC,

then the project must meet all applicable requirements of that program.

(3) Modifications.

New source review is required for any modification to a stationary source that requires:

(a) An increase in a plant-wide cap; or ((requires))

(b) An increase in an emission unit or activity specific emission limit.

(4) Emission unit and activity exemptions.

The construction or modification of emission units or an activity in one of the categories listed below is exempt from new source review, provided that the modified unit continues to fall within one of the listed categories. The construction or modification of an emission unit or an activity exempt under this subsection does not require the filing of a notice of construction application.

(a) Maintenance/construction:

(i) Cleaning and sweeping of streets and paved surfaces;

(ii) Concrete application, and installation;

(iii) Dredging wet spoils handling and placement;

(iv) Paving application and maintenance. This provision does not exempt asphalt plants from this chapter;

(v) Plant maintenance and upkeep activities (grounds keeping, general repairs, house keeping, plant painting, welding, cutting, brazing, soldering, plumbing, retarring roofs, etc.);

(vi) Plumbing installation, plumbing protective coating application and maintenance activities;

(vii) Roofing application and maintenance;

(viii) Insulation application and maintenance;

(ix) Janitorial services and consumer use of janitorial products;

(x) Construction activities that do not result in new or modified stationary sources or portable stationary sources.

(b) Storage tanks:

Note: It can be difficult to determine requirements for storage tanks. Ecology strongly recommends that an owner or operator contact the permitting authority to determine the exemption status of storage tanks prior to their installation.

(i) Lubricating oil storage tanks. This provision does not exempt wholesale distributors of lubricating oils from this chapter;

(ii) Polymer tanks and storage devices and associated pumping and handling equipment, used for solids dewatering and flocculation;

(iii) Storage tanks, reservoirs, pumping and handling equipment of any size containing soaps, vegetable oil, grease, animal fat, and nonvolatile aqueous salt solutions;

(iv) Process and white water storage tanks;

(v) Operation, loading and unloading of storage tanks and storage vessels, with lids or other appropriate closure and less than 260-gallon capacity (35 cubic feet);

(vi) Operation, loading and unloading of storage tanks, ≤ 1100 gallon capacity, with lids or other appropriate closure, not for use with materials containing toxic air pollutants, as listed in chapter 173-460 WAC, max. VP 550 mm mercury at 21°C;

(vii) Operation, loading and unloading storage of butane, propane, or liquefied petroleum gas with a vessel capacity less than 40,000 gallons;

(viii) Tanks, vessels and pumping equipment, with lids or other appropriate closure for storage or dispensing of aqueous solutions of inorganic salts, bases and acids.

(c) New or modified emission units with combined aggregate heat inputs to combustion units (excluding emergency engines exempted by subsection (4)(h)(xxxix) of this section), less than or equal to all of the following, as applicable:

(i) $\leq 500,000$ Btu/hr using coal with $\leq 0.5\%$ sulfur or other solid fuels with $\leq 0.5\%$ sulfur;

(ii) $\leq 500,000$ Btu/hr using used oil, per the requirements of RCW 70.94.610;

(iii) $\leq 400,000$ Btu/hr using wood waste or paper;

(iv) $\leq 1,000,000$ Btu/hr using gasoline, kerosene, #1, or #2 fuel oil and with $\leq 0.05\%$ sulfur;

(v) $\leq 4,000,000$ Btu/hr using natural gas, propane, or LPG.

(d) Material handling:

(i) Continuous digester chip feeders;

(ii) Grain elevators not licensed as warehouses or dealers by either the Washington state department of agriculture or the U.S. Department of Agriculture;

(iii) Storage and handling of water based lubricants for metal working where organic content of the lubricant is $\leq 10\%$;

(iv) Equipment used exclusively to pump, load, unload, or store high boiling point organic material in tanks less than one million gallon, material with initial atmospheric boiling point not less than 150°C or vapor pressure not more than 5 mm mercury at 21°C , with lids or other appropriate closure.

(e) Water treatment:

(i) Septic sewer systems, not including active wastewater treatment facilities;

(ii) NPDES permitted ponds and lagoons used solely for the purpose of settling suspended solids and skimming of oil and grease;

(iii) De-aeration (oxygen scavenging) of water where toxic air pollutants as defined in chapter 173-460 WAC are not emitted;

(iv) Process water filtration system and demineralizer vents;

(v) Sewer manholes, junction boxes, sumps and lift stations associated with wastewater treatment systems;

(vi) Demineralizer tanks;

(vii) Alum tanks;

(viii) Clean water condensate tanks.

(f) Environmental chambers and laboratory equipment:

(i) Environmental chambers and humidity chambers using only gases that are not toxic air pollutants listed in chapter 173-460 WAC;

(ii) Gas cabinets using only gases that are not toxic air pollutants regulated under chapter 173-460 WAC;

(iii) Installation or modification of a single laboratory fume hood;

(iv) Laboratory research, experimentation, analysis and testing at sources whose primary purpose and activity is research or education. To be exempt, these sources must not engage in the production of products, or in providing commercial services, for sale or exchange for commercial profit

except in a de minimis manner. Pilot-plants or pilot scale processes at these sources are not exempt.

(v) Laboratory calibration and maintenance equipment.

(g) Monitoring/quality assurance/testing:

(i) Equipment and instrumentation used for quality control/assurance or inspection purpose;

(ii) Hydraulic and hydrostatic testing equipment;

(iii) Sample gathering, preparation and management;

(iv) Vents from emission monitors and other analyzers.

(h) Miscellaneous:

(i) Single-family residences and duplexes;

(ii) Plastic pipe welding;

(iii) Primary agricultural production activities including soil preparation, planting, fertilizing, weed and pest control, and harvesting;

(iv) Comfort air conditioning;

(v) Flares used to indicate danger to the public;

(vi) Natural and forced air vents and stacks for bathroom/toilet activities;

(vii) Personal care activities;

(viii) Recreational fireplaces including the use of barbecues, campfires, and ceremonial fires;

(ix) Tobacco smoking rooms and areas;

(x) Noncommercial smokehouses;

(xi) Blacksmith forges for single forges;

(xii) Vehicle maintenance activities, not including vehicle surface coating;

(xiii) Vehicle or equipment washing (see (c) of this subsection for threshold for boilers);

(xiv) Wax application;

(xv) Oxygen, nitrogen, or rare gas extraction and liquefaction equipment not including internal and external combustion equipment;

(xvi) Ozone generators and ozonation equipment;

(xvii) Solar simulators;

(xviii) Ultraviolet curing processes, to the extent that toxic air pollutant gases as defined in chapter 173-460 WAC are not emitted;

(xix) Electrical circuit breakers, transformers, or switching equipment installation or operation;

(xx) Pulse capacitors;

(xxi) Pneumatically operated equipment, including tools and hand held applicator equipment for hot melt adhesives;

(xxii) Fire suppression equipment;

(xxiii) Recovery boiler blow-down tank;

(xxiv) Screw press vents;

(xxv) Drop hammers or hydraulic presses for forging or metal working;

(xxvi) Production of foundry sand molds, unheated and using binders less than 0.25% free phenol by sand weight;

(xxvii) Kraft lime mud storage tanks and process vessels;

(xxviii) Lime grits washers, filters and handling;

(xxix) Lime mud filtrate tanks;

(xxx) Lime mud water;

(xxxi) Stock cleaning and pressurized pulp washing down process of the brown stock washer;

(xxxii) Natural gas pressure regulator vents, excluding venting at oil and gas production facilities and transportation marketing facilities;

(xxxiii) Solvent cleaners less than 10 square feet air-vapor interface with solvent vapor pressure not more than 30 mm mercury at 21°C where no toxic air pollutants as listed under chapter 173-460 WAC are emitted;

(xxxiv) Surface coating, aqueous solution or suspension containing ≤ 1% (by weight) VOCs, or ≤ 1% (by weight) toxic air pollutants as listed in chapter 173-460 WAC;

(xxxv) Cleaning and stripping activities and equipment using solutions having ≤ 1% VOCs (by weight) or ≤ 1% (by weight) toxic air pollutants. Acid solutions used on metallic substances are not exempt;

(xxxvi) Dip coating operations, using materials less than 1% VOCs (by weight) or ≤ 1% (by weight) toxic air pollutants as listed in chapter 173-460 WAC.

(xxxvii) Abrasive blasting performed inside a booth or hangar designed to capture the blast grit or overspray.

(xxxviii) For structures or items too large to be reasonably handled indoors, abrasive blasting performed outdoors that employs control measures such as curtailment during windy periods and enclosure of the area being blasted with tarps and uses either steel shot or an abrasive containing less than one percent (by mass) which would pass through a No. 200 sieve.

(xxxix) Stationary emergency internal combustion engines with an aggregate brake horsepower that is less than or equal to 500 brake horsepower.

(xl) Gasoline dispensing facilities with annual gasoline throughputs less than those specified in WAC 173-491-040 (4)(a). Gasoline dispensing facilities subject to chapter 173-491 WAC are exempt from toxic air pollutant analysis pursuant to chapter 173-460 WAC.

(5) Exemptions based on emissions.

(a) Except as provided in this subsection:

(i) Construction of a new emissions unit that has a potential to emit below each of the levels listed in Table 110(5) Exemption levels is exempt from new source review.

(ii) A modification to an existing emissions unit that increases the unit's actual emissions by less than each of the threshold levels listed in Table 110(5) Exemption levels of this subsection is exempt from new source review.

(b) Greenhouse gas emissions are exempt from new source review requirements except to the extent required under WAC 173-400-720, prevention of significant deterioration. The owner or operator of a source or emission unit, may request that the permitting authority impose emission limits and/or operation limitations for greenhouse gas in any new source review order of approval.

Table 110(5) Exemption levels:

POLLUTANT	LEVEL (TONS PER YEAR)
Carbon monoxide	5.0
Lead	0.005
Nitrogen oxides	2.0
PM-10	0.75
PM-2.5	0.5
Total suspended particulates	1.25
Sulfur dioxide	2.0

POLLUTANT	LEVEL (TONS PER YEAR)
Volatile Organic Compounds, total	2.0
Ozone Depleting Substances, total	1.0
Toxic Air Pollutants	The de minimis emission rate specified for each TAP in WAC 173-460-150.

(6) **Portable source with order of approval.** A portable source is authorized to operate without obtaining a site-specific or a permitting authority specific approval order to relocate if the portable source complies with the provisions of WAC 173-400-036.

AMENDATORY SECTION (Amending Order 09-01, filed 3/1/11, effective 4/1/11)

WAC 173-400-111 Processing notice of construction applications for sources, stationary sources and portable sources. WAC 173-400-110, 173-400-111, 173-400-112, and 173-400-113 apply statewide except where a permitting authority has adopted its own new source review regulations.

(1) Completeness determination.

(a) Within thirty days after receiving a notice of construction application, the permitting authority must either notify the applicant in writing that the application is complete or notify the applicant in writing of all additional information necessary to complete the application.

(b) A complete application contains all the information necessary for processing the application. At a minimum, the application must provide information on the nature and amounts of emissions to be emitted by the proposed new source or increased as part of a modification, as well as the location, design, construction, and operation of the new source as needed to enable the permitting authority to determine that the construction or modification will meet the requirements of WAC 173-400-113. Designating an application complete for purposes of permit processing does not preclude the reviewing authority from requesting or accepting any additional information.

(c) For a project subject to the special protection requirements for federal Class I areas under WAC 173-400-117(2), a completeness determination includes a determination that the application includes all information required for review of that project under WAC 173-400-117(3). The applicant must send a copy of the application and all amendments to the application to the EPA and the responsible federal land manager.

(d) For a project subject to the major new source review requirements in WAC 173-400-800 through 173-400-860, the completeness determination includes a determination that the application includes all information required for review under those sections.

(e) An application is not complete until any permit application fee required by the permitting authority has been paid.

(2) Coordination with chapter 173-401 WAC, operating permit regulation. A person seeking approval to construct or

modify a source that requires an operating permit may elect to integrate review of the operating permit application or amendment required under chapter 173-401 WAC and the notice of construction application required by this section. A notice of construction application designated for integrated review must be processed in accordance with operating permit program procedures and deadlines in chapter 173-401 WAC and must comply with WAC 173-400-171.

(3) Criteria for approval of a notice of construction application. An order of approval cannot be issued until the following criteria are met as applicable:

(a) The requirements of WAC 173-400-112;

(b) The requirements of WAC 173-400-113;

(c) The requirements of WAC 173-400-117;

(d) The requirements of WAC 173-400-171;

~~((d))~~ (e) The requirements of WAC 173-400-200 and 173-400-205;

~~((e))~~ (f) The requirements of WAC 173-400-700 through 173-400-750;

(g) The requirements of WAC 173-400-800 through 173-400-860(~~(-as applicable)~~);

(h) The requirements of chapter 173-460 WAC; and

~~((h))~~ (i) All fees required under chapter 173-455 WAC (or the applicable new source review fee table of the local air pollution control authority) have been paid.

(4) Final determination - Time frame and signature authority.

(a) Within sixty days of receipt of a complete notice of construction application, the permitting authority must either:

(i) Issue a final decision on the application; or

(ii) Initiate notice and comment for those projects subject to WAC 173-400-171 followed as promptly as possible by a final decision.

(b) Every final determination on a notice of construction application must be reviewed and signed prior to issuance by a professional engineer or staff under the direct supervision of a professional engineer in the employ of the permitting authority.

(5) Distribution of the final decision.

(a) The permitting authority must promptly provide copies of each order approving or denying a notice of construction application to the applicant and to any other party who submitted timely comments on the application, along with a notice advising parties of their rights of appeal to the pollution control hearings board.

(b) If the new source is a major stationary source or the change is a major modification subject to the requirements of WAC 173-400-800 through 173-400-860, the permitting authority must:

(i) Submit any control technology (LAER) determination included in a final order of approval to the RACT/BACT/LAER clearinghouse maintained by EPA; and

(ii) Send a copy of the final approval order to EPA.

(6) Appeals. Any conditions contained in an order of approval, or the denial of a notice of construction application may be appealed to the pollution control hearings board as provided under chapters 43.21B RCW and 371-08 WAC.

(7) Construction time limitations.

(a) Approval to construct or modify a stationary source becomes invalid if construction is not commenced within

eighteen months after receipt of the approval, if construction is discontinued for a period of eighteen months or more, or if construction is not completed within a reasonable time. The permitting authority may extend the eighteen-month period upon a satisfactory showing by the permittee that an extension is justified.

(b) The extension of a project that is either a major stationary source, as defined in WAC 173-400-810, in a nonattainment area or a major modification, as defined in WAC 173-400-810, of a major stationary source in a nonattainment area must also require LAER, for the pollutants for which the area is classified as nonattainment, as LAER exists at the time of the extension for the pollutants that were subject to LAER in the original approval.

(c) This provision does not apply to the time period between construction of the approved phases of a phased construction project. Each phase must commence construction within eighteen months of the projected and approved commencement construction date.

(8) Change of conditions or revisions to orders of approval.

(a) The owner or operator may request, at any time, a change in the conditions of an approval order and the permitting authority may approve the request provided the permitting authority finds that:

(i) The change in conditions will not cause the source to exceed an emissions standard set by regulation or rule;

(ii) No ambient air quality standard will be exceeded as a result of the change;

(iii) The change will not adversely impact the ability of the permitting authority to determine compliance with an emissions standard;

(iv) The revised order will continue to require BACT for each new source approved by the order except where the Federal Clean Air Act requires LAER; and

(v) The revised order meets the requirements of WAC 173-400-111, 173-400-112, 173-400-113, 173-400-720, 173-400-830, and 173-460-040, as applicable.

(b) Actions taken under this subsection are subject to the public involvement provisions of WAC 173-400-171 or the permitting authority's public notice and comment procedures.

(c) The applicant must consider the criteria in 40 C.F.R. 52.21 (r)(4) as adopted by reference in WAC 173-400-720 or 173-400-830(3), as applicable, when determining which new source review approvals are required.

(9) Fees. Chapter 173-455 WAC lists the required fees payable to ecology for various permit actions.

(10) Enforcement. All persons who receive an order of approval must comply with all approval conditions contained in the order of approval.

AMENDATORY SECTION (Amending Order 09-01, filed 3/1/11, effective 4/1/11)

WAC 173-400-112 Requirements for new sources in nonattainment areas—Review for compliance with regulations. WAC 173-400-110, 173-400-111, 173-400-112, and 173-400-113 apply statewide except where a permitting authority has adopted its own new source review regulations. The permitting authority that is reviewing an application

required by WAC 173-400-110(2) to establish a new source in a nonattainment area shall issue the order of approval if it determines that the proposed project satisfies each of the following requirements:

(1) The proposed new source or modification will comply with all applicable new source performance standards, national emission standards for hazardous air pollutants, national emission standards for hazardous air pollutants for source categories, emission standards adopted under chapter 70.94 RCW and, for sources regulated by an authority, the applicable emission standards of that authority.

(2) The proposed new source or modification will ~~((employ BACT for all air contaminants, except that if the new source is a major stationary source or the proposed modification is a major modification it will))~~ achieve LAER for ~~((the))~~ any air contaminants for which:

(a) The area has been designated nonattainment; and ~~((for which))~~ (b)(i) The proposed new source is major; or (ii) The existing source is major and the major modification is ~~((major))~~ significant.

(3) The proposed new source will employ BACT for those air contaminants not subject to LAER that the new source will emit or for which the proposed modification will cause an emissions increase.

(4) The proposed new source or modification will not cause any ambient air quality standard to be exceeded, will not violate the requirements for reasonable further progress established by the SIP and will comply with WAC 173-400-113 (3) and (4) for all air contaminants for which the area has not been designated nonattainment.

(5) If the proposal is a new major stationary source or a major modification as those terms are defined in WAC 173-400-810 then it must also comply with WAC 173-400-800 through 173-400-860.

AMENDATORY SECTION (Amending Order 09-01, filed 3/1/11, effective 4/1/11)

WAC 173-400-113 ((Requirements for)) New sources in attainment or unclassifiable areas—Review for compliance with regulations. WAC 173-400-110, 173-400-111, 173-400-112, and 173-400-113 apply statewide except where a permitting authority has adopted its own new source review regulations. The permitting authority that is reviewing an application to establish a new source or modification in an attainment or unclassifiable area shall issue an order of approval if it determines that the proposed project satisfies each of the following requirements:

(1) The proposed new source or modification will comply with all applicable new source performance standards, national emission standards for hazardous air pollutants, national emission standards for hazardous air pollutants for source categories, emission standards adopted under chapter 70.94 RCW and, for sources regulated by an authority, the applicable emission standards of that authority.

(2) The proposed new source or modification will employ BACT for all pollutants not previously emitted or whose emissions would increase as a result of the new source or modification.

(3) Allowable emissions from the proposed new source or the increase in emissions from the proposed modification will not cause or contribute to a violation of any ambient air quality standard. If the modeled concentrations of allowable emissions from the proposed new source or the increase in emissions from the proposed modification are below the levels in Table 4a, the proposed source does not contribute to a violation of an ambient air quality standard.

(4)(a) If the projected impact of the allowable emissions from the proposed new major stationary source (as defined in WAC 173-400-810) or the projected impact of the increase in allowable emissions from the proposed major modification (as defined in WAC 173-400-810) at any location within a nonattainment area does not exceed the following levels for the pollutants for which the area has been designated nonattainment, then the proposed new source or modification will not be considered to cause or contribute to a violation of an ambient air quality standard:

Table 4a: Cause or Contribute Threshold Values for Nonattainment Area Impacts

Pollutant	Annual Average	24-Hour Average	8-Hour Average	3-Hour Average	1-Hour Average
CO-	-	-	0.5 mg/m ³	-	2 mg/m ³
SO ₂	1.0 µg/m ³	5 µg/m ³	-	25 µg/m ³	30 µg/m ³
PM ₁₀	1.0 µg/m ³	5 µg/m ³	-	-	-
PM _{2.5}	0.3 µg/m ³	1.2 µg/m ³	-	-	-
NO ₂	1.0 µg/m ³	-	-	-	-

(b) ~~((A project that))~~ If the projected impact of the allowable emissions from the proposed new major stationary source (as defined in WAC 173-400-810) or the projected impact of the increase in allowable emissions from the proposed major modification (as defined in WAC 173-400-810) results in a projected impact at any location inside a nonattainment area above the appropriate value in Table 4a of this section may use an offsetting emission reduction ((adequate to)) or other method identified in 40 C.F.R. Part 51 Appendix S, Sections III and IV.A which reduce the projected impacts to the above values or less. If the owner or operator of the proposed ((project)) new major stationary source or major source proposed to be modified is unable to reduce emissions or obtain offsetting emissions reductions adequate to reduce modeled impacts below the values in Table 4a of this section, then the permitting authority shall deny approval to construct and operate the proposed new major stationary source or major modification.

(5) ~~((If the proposed new source or the proposed modification will emit any toxic air pollutants regulated under chapter 173-460 WAC, then the source must meet all applicable requirements of that program.))~~ If the proposal is a new major stationary source or a major modification as defined in WAC 173-400-720, then it must also comply with WAC 173-400-700 through 173-400-750.

AMENDATORY SECTION (Amending Order 99-06, filed 8/15/01, effective 9/15/01)

WAC 173-400-114 Requirements for replacement or substantial alteration of emission control technology at an

existing stationary source. (1) Any person proposing to replace or substantially alter the **emission control technology** installed on an existing **stationary source** or **emission unit** shall file a **notice of construction application** with the appropriate **authority**, or with **ecology** in areas or for **sources** over which **ecology** has jurisdiction. Replacement or substantial alteration of control technology does not include routine maintenance, repair or similar parts replacement.

(2) ~~((For projects not otherwise reviewable under WAC 173-400-110, **ecology** or))~~ A project to replace or substantially alter emission control technology at an existing stationary source that results in an increase in emissions of any air contaminant is subject to new source review as provided in WAC 173-400-110. For any other project to replace or significantly alter control technology the permitting authority may:

(a) Require that the owner or operator employ **RACT** for the affected **emission unit**;

(b) Prescribe reasonable operation and maintenance conditions for the control equipment; and

(c) Prescribe other requirements as authorized by chapter 70.94 RCW.

(3) Within thirty days of receipt of a **notice of construction application** under this section **ecology** or the **authority** shall either notify the applicant in writing that the application is complete or notify the applicant in writing of all additional information necessary to complete the application. Within thirty days of receipt of a complete **notice of construction application** under this section **ecology** or the **authority** shall either issue an **order of approval** or a proposed **RACT** determination for the proposed project.

(4) Construction shall not "**commence**," as defined in WAC 173-400-030, on a project subject to review under this section until **ecology** or the **authority** issues a final **order of approval**. However, any **notice of construction application** filed under this section shall be deemed to be approved without conditions if **ecology** or the **authority** takes no action within thirty days of receipt of a complete **notice of construction application**.

(5) Approval to replace or substantially alter **emission control technology** shall become invalid if construction is not **commenced** within eighteen months after receipt of such approval, if construction is discontinued for a period of eighteen months or more, or if construction is not completed within a reasonable time. **Ecology** or the **authority** may extend the eighteen-month period upon a satisfactory showing that an extension is justified. This provision does not apply to the time period between construction of the approved phases of a phased construction project; each phase must commence construction within eighteen months of the projected and approved commencement date.

AMENDATORY SECTION (Amending Order 09-01, filed 3/1/11, effective 4/1/11)

WAC 173-400-115 Standards of performance for new sources. NSPS. Standards of performance for new sources are called New Source Performance Standards, or NSPS.

(1) **Adoption by reference.**

(a) 40 C.F.R. Part 60 and Appendices in effect on ~~((July 1, 2010))~~ August 14, 2012, are adopted by reference. Exceptions are listed in ~~((subsection (1))~~) (b) and (c) of this ~~((section))~~ subsection.

(b) 40 C.F.R. Part 60, Subpart CCCC - Standards of Performance for Commercial and Industrial Solid Waste Incineration Units (December 23, 2011), is not adopted by reference.

(c) Exceptions to adopting 40 C.F.R. Part 60 by reference.

(i) The term "administrator" in 40 C.F.R. Part 60 includes the permitting authority.

(ii) The following sections and subparts of 40 C.F.R. Part 60 are not adopted by reference:

(A) 40 C.F.R. 60.5 (determination of construction or modification);

(B) 40 C.F.R. 60.6 (review of plans);

(C) 40 C.F.R. Part 60, subpart B (Adoption and Submission of State Plans for Designated Facilities), and subparts C, Cb, Cc, Cd, Ce, BBBB, DDDD, FFFF, HHHH (emission guidelines); and

(D) 40 C.F.R. Part 60, Appendix G, Provisions for an Alternative Method of Demonstrating Compliance With 40 C.F.R. 60.43 for the Newton Power Station of Central Illinois Public Service Company.

(2) Where EPA has delegated to the permitting authority, the authority to receive reports under 40 C.F.R. Part 60, from the affected facility in lieu of providing such report to EPA, the affected facility is required to provide such reports only to the permitting authority unless otherwise requested in writing by the permitting authority or EPA.

Note: Under RCW 80.50.020(14), larger energy facilities subject to subparts D, Da, GG, J, K, Kb, Y, KKK, LLL, and QQQ are regulated by the energy facility site evaluation council (EFSEC).

AMENDATORY SECTION (Amending Order 03-07, filed 1/10/05, effective 2/10/05)

WAC 173-400-117 Special protection requirements for federal Class I areas. (1) Definitions. The following definitions apply to this section:

(a) "**Adverse impact on visibility**" means visibility impairment that interferes with the management, protection, preservation, or enjoyment of the visitor's visual experience of the federal Class I area. This determination must be made on a case-by-case basis taking into account the geographic extent, intensity, duration, frequency, and time of visibility impairment, and how these factors correlate with:

(i) Times of visitor use of the federal Class I area; and

(ii) The frequency and timing of natural conditions that reduce visibility.

(b) The terms "major stationary source," "major modification," and "net emissions increase" are ~~((as provided))~~ defined in WAC 173-400-720 for projects located in areas designated as attainment or unclassifiable for the pollutants proposed to increase as a result of the project and are defined in WAC 173-400-810 for projects located in areas designated as nonattainment for the pollutants proposed to increase as a result of the project.

(2) **Applicability.** The requirements of this section apply to all of the following permitting actions:

(a) A PSD permit application for a new major stationary source or a major modification; or

(b) ~~((Submittal of))~~ A notice of construction application for a major stationary source or a major modification to a stationary source in a nonattainment area, as either of those terms are defined in WAC ~~((173-400-720))~~ 173-400-810.

(3) Contents and distribution of application.

(a) The application shall include an analysis of the anticipated impacts of the project on visibility in any federal Class I area.

(b) The applicant must mail a copy of the application for the project and all amendments to the application to the permitting authority, EPA and to the responsible federal land managers. Ecology will provide a list of the names and addresses of the federal land manager.

(4) Notice to federal land manager.

(a) The permitting authority shall send a copy of the completeness determination to the responsible federal land manager.

(b) If, prior to receiving a notice of construction application or a PSD permit application, the permitting authority receives notice of a project described in subsection (2) of this section that may affect visibility in a federal Class I area, the permitting authority shall notify the responsible federal land manager within thirty days of the notification.

(5) Analysis by federal land manager.

(a) The permitting authority will consider any demonstration presented by the responsible federal land manager that emissions from a proposed new major stationary source or the net emissions increase from a proposed major modification described in subsection (2) of this section would have an adverse impact on visibility in any federal Class I area, provided that the demonstration is received by the permitting authority within thirty days of the federal land manager's receipt of the complete application.

(b) If the permitting authority concurs with the federal land manager's demonstration, the PSD permit or approval order for the project either shall be denied, or conditions shall be included in the approval order to prevent the adverse impact.

(c) If the permitting authority finds that the federal land manager's analysis does not demonstrate that the project will have an adverse impact on visibility in a federal Class I area, the permitting authority ~~((either))~~ shall explain its decision in compliance with the ~~((public))~~ notice ~~((required by WAC 173-400-730, or, in the case of))~~ requirements of WAC 173-400-171 for those permits subject to WAC 173-400-800 through 173-400-860. For permits subject to the prevention of significant deterioration program, the permitting authority shall state in the public notice ~~((of proposed action on a PSD permit application, state))~~ required by WAC 173-400-740 that an explanation of the decision appears in the Technical Support Document for the proposed permit.

(6) Additional requirements for projects that require a PSD permit.

(a) For sources impacting federal Class I areas, the permitting authority shall provide notice to EPA of every action related to consideration of the PSD permit.

(b) The permitting authority shall consider any demonstration received from the responsible federal land manager

prior to the close of the public comment period on a proposed PSD permit that emissions from the proposed new major stationary source or the net emissions increase from a proposed major modification would have an adverse impact on the air quality-related values (including visibility) of any mandatory Class I federal area.

(c) If the permitting authority concurs with the demonstration, the PSD permit either shall be denied, or conditions shall be included in the PSD permit to prevent the adverse impact.

(7) Additional requirements for projects located in nonattainment areas. In reviewing a PSD permit application or notice of construction application for a new major stationary source or major modification proposed for construction, as those terms are defined in WAC 173-400-810, in an area classified as nonattainment, the permitting authority must ensure that the proposed new source's emissions or the proposed modification's increase in emissions will be consistent with making reasonable progress toward meeting the national goal of preventing any future, and remedying any existing, impairment of visibility by human-caused air pollution in mandatory Class I federal areas. In determining the need for approval order conditions to meet this requirement, the permitting authority may take into account the costs of compliance, the time necessary for compliance, the energy and nonair quality environmental impacts of compliance, and the useful life of the source.

(8) Monitoring. The permitting authority may require post-construction monitoring of the impact from the project. The monitoring shall be limited to the impacts on visibility in any federal Class I area near the proposed project.

AMENDATORY SECTION (Amending Order 03-07, filed 1/10/05, effective 2/10/05)

WAC 173-400-118 Designation of Class I, II, and III areas. (1) Designation.

(a) Lands within the exterior boundaries of Indian reservations may be proposed for redesignation by an Indian governing body or EPA. This restriction does not apply to non-trust lands within the 1873 Survey Area of the Puyallup Indian Reservation.

(b) All areas of the state must be designated either Class I, II or III.

(i) The following areas are the Class I areas in Washington state:

- (A) Alpine Lakes Wilderness;
- (B) Glacier Peak Wilderness;
- (C) Goat Rocks Wilderness;
- (D) Adams Wilderness;
- (E) Mount Rainier National Park;
- (F) North Cascades National Park;
- (G) Olympic National Park;
- (H) Pasayten Wilderness; and
- (I) Spokane Indian Reservation.¹

(ii) All other areas of the state are Class II, but may be redesignated as provided in subsections (2) and (3) of this section.

¹ EPA redesignated this land based on a request from the Spokane Tribal Council. See 40 C.F.R. 52.2497 and 56 FR 14862, April 12, 1991, for details.

(2) Restrictions on area classifications.

(a) Except for the Spokane Indian Reservation, the Class I areas listed in subsection (1) of this section may not be redesignated.

(b) Except as provided in (a) of this subsection, the following areas that exceed 10,000 acres in size may be redesignated as Class I or II:

(i) Areas in existence on August 7, 1977:

(A) A national monument;

(B) A national primitive area;

(C) A national preserve;

(D) A national wild and scenic river;

(E) A national wildlife refuge;

(F) A national lakeshore or seashore; or

(G) A national recreation area.

(ii) Areas established after August 7, 1977:

(A) A national park;

(B) A national wilderness area; or

(C) Areas proposed by ecology for designation or redesignation.

(3) Redesignation of area classifications.

(a) Ecology shall propose the redesignation of an area classification as a revision to the SIP.

(b) Ecology may submit to EPA a proposal to redesignate areas of the state as Class I or II if:

(i) Ecology followed the public involvement procedures in WAC 173-400-171(12);

(ii) Ecology explained the reasons for the proposed redesignation, including a description and analysis of the health, environmental, economic, social, and energy effects of the proposed redesignation;

(iii) Ecology made available for public inspection at least thirty days before the hearing the explanation of the reasons for the proposed redesignation;

(iv) Ecology notified other states, tribal governing bodies, and federal land managers (as defined in 40 C.F.R. 52.21(b)(24)) whose lands may be affected by the proposed redesignation at least thirty days prior to the public hearing;

(v) Ecology consulted with the elected leadership of local governments in the area covered by the proposed redesignation before proposing the redesignation; and

(vi) Ecology followed these procedures when a redesignation includes any federal lands:

(A) Ecology notified in writing the appropriate federal land manager on the proposed redesignation. Ecology allowed forty-five days for the federal land manager to confer with ecology and to submit written comments.

(B) Ecology responded to any written comments from the federal land manager that were received within forty-five days of notification. Ecology's response was available to the public in advance of the notice of the hearing.

(I) Ecology sent the written comments of the federal land manager, along with ecology's response to those comments, to the public location as required in WAC 173-400-171(2)(a).

(II) If ecology disagreed with the federal land manager's written comments, ecology published a list of any inconsis-

tency between the redesignation and the comments of the federal land manager, together with the reasons for making the redesignation against the recommendation of the federal land manager.

(c) Ecology may submit to EPA a proposal to redesignate any area other than an area to which subsection (1) of this section applies as Class III if:

(i) The redesignation followed the public involvement requirements of WAC 173-400-171 and 173-400-118(3);

(ii) The redesignation has been specifically approved by the governor of Washington state, after consultation with the appropriate committees of the legislature if it is in session, or with the leadership of the legislature, if it is not in session;

(iii) The redesignation has been approved by local governments representing a majority of the residents of the area to be redesignated. The local governments enacted legislation or passed resolutions concurring in the redesignation;

(iv) The redesignation would not cause, or contribute to, a concentration of any air contaminant which would exceed any maximum allowable increase permitted under the classification of any other area or any National Ambient Air Quality Standard; and

(v) A PSD permit under WAC 173-400-720 for a new major stationary source or major modification could be issued only if the area in question were redesignated as Class III, and material submitted as part of that application was available for public inspection prior to any public hearing on redesignation of the area as Class III.

AMENDATORY SECTION (Amending Order 09-01, filed 3/1/11, effective 4/1/11)

WAC 173-400-136 Use of emission reduction credits (ERC). (1) Permissible use. An ERC may be used to:

(a) Satisfy the requirements for authorization of a bubble under WAC 173-400-120;

(b) ~~As ((a part of a determination of "net emissions increase"; or~~

as)) an offsetting reduction to satisfy the requirements for new source review in WAC 173-400-830 or 173-400-113(4) ((~~or~~);

(c) Or if the reduction meets the criteria to be a creditable contemporaneous emission reduction, to demonstrate a creditable contemporaneous emission reduction for ~~((permitting)) determining a net emissions increase~~ under WAC ~~((173-400-720)) 173-400-700 through 173-400-750 and 173-400-800 through 173-400-860.~~

(2) **Surrender of ERC certificate.** When an ERC is used under subsection (1) of this section, the certificate for the ERC must be surrendered to the permitting authority. If only a portion of the ERC is used, the amended certificate will be returned to the owner.

(3) Conditions of use.

(a) An ERC may be used only for the air contaminants for which it was issued.

(b) The permitting authority may impose additional conditions of use to account for temporal and spatial differences between the emissions units that generated the ERC and the emissions units that use the ERC.

(4) **Sale of an ERC.** An ERC may be sold or otherwise transferred to a person other than the person to whom it was originally issued. Within thirty days after the transfer of ownership, the certificate must be surrendered to the issuing authority. After receiving the certificate, the issuing authority shall reissue the certificate to the new owner.

(5) **Redemption period.** An unused ERC expires ten years after date of original issue.

(6) **Discount due to change in SIP.** If reductions in emissions beyond those identified in the SIP are required to meet an ambient air quality standard, issued ERCs may be discounted as necessary to reach attainment.

(a) Issued ERCs may be discounted if:

(i) Reductions in emissions beyond those identified in the SIP are required to meet an ambient air quality standard;

(ii) The ambient standard cannot be met through controls on operating sources; and

(iii) The plan must be revised.

(b) The discount shall not exceed the percentage of additional emission reduction needed to reach attainment.

(c) ERCs may be discounted by the permitting authority only after notice to the public according to WAC 173-400-171 and the owners of affected ERCs.

AMENDATORY SECTION (Amending Order 09-01, filed 3/1/11, effective 4/1/11)

WAC 173-400-171 Public notice and opportunity for public comment. The purpose of this section is to specify the requirements for notifying the public about air quality (~~per-~~~~mit~~) actions and to provide opportunities for the public to participate in those (~~per-~~~~mit~~) actions. This section applies statewide except that the requirements of WAC 173-400-171 (1) through (11) do not apply where the permitting authority has adopted its own public notice provisions.

(1) **Applicability to prevention of significant deterioration, and relocation of portable sources.**

This section does not apply to:

(a) A notice of construction application designated for integrated review with actions regulated by WAC (~~(173-400-720)) 173-400-700 through 173-400-750~~. In such cases, compliance with the public notification requirements of WAC 173-400-740 is required.

(b) Portable source relocation notices as regulated by WAC 173-400-036, relocation of portable sources.

(2) **Internet notice of application.**

(a) For those applications and actions not subject to a mandatory public comment period per subsection (3) of this section, the permitting authority must post an announcement of the receipt of notice of construction applications and other proposed actions on the permitting authority's internet web site.

(b) The internet posting must remain on the permitting authority's web site for a minimum of fifteen consecutive days.

(c) The internet posting must include a notice of the receipt of the application, the type of proposed action, and a statement that the public may request a public comment period on the proposed action.

(d) Requests for a public comment period must be submitted to the permitting authority in writing via letter, fax, or electronic mail during the fifteen-day internet posting period.

(e) A public comment period must be provided for any application or proposed action that receives such a request. Any application or proposed action for which a public comment period is not requested may be processed without further public involvement at the end of the fifteen-day internet posting period.

(3) **Actions subject to a mandatory public comment period.**

The permitting authority must provide public notice and a public comment period before approving or denying any of the following types of applications or other actions:

(a) Any application, order, or proposed action for which a public comment period is requested in compliance with subsection (2) of this section.

(b) Any notice of construction application for a new or modified source, including the initial application for operation of a portable source, if there is an increase in emissions of any air pollutant at a rate above the emission threshold rate (defined in WAC 173-400-030) or any increase in emissions of a toxic air pollutant above the acceptable source impact level~~((s))~~ for that toxic air pollutant as regulated under chapter 173-460 WAC; or

(c) Any use of a modified or substituted air quality model, other than a guideline model in Appendix W of 40 C.F.R. Part 51 (in effect on ~~(July 1, 2010)) May 1, 2012~~) as part of review under WAC 173-400-110, 173-400-113, or 173-400-117~~((, or 173-400-720))~~; or

(d) Any order to determine reasonably available control technology, RACT; or

(e) An order to establish a compliance schedule issued under WAC 173-400-161, or a variance issued under WAC 173-400-180; or

Note: Mandatory notice is not required for compliance orders issued under WAC 173-400-230.

(f) An order to demonstrate the creditable height of a stack which exceeds the good engineering practice, GEP, formula height and sixty-five meters, by means of a fluid model or a field study, for the purposes of establishing an emission limitation; or

(g) An order to authorize a bubble; or

(h) Any action to discount the value of an emission reduction credit, ERC, issued to a source per WAC 173-400-136; or

(i) Any regulatory order to establish best available retrofit technology, BART, for an existing stationary facility; or

(j) Any notice of construction application or regulatory order used to establish a creditable emission reduction; or

(k) Any order issued under WAC 173-400-091 that establishes limitations on a source's potential to emit; or

(l) The original issuance and the issuance of all revisions to a general order of approval issued under WAC 173-400-560 (this does not include coverage orders); or

(m) Any extension of the deadline to begin actual construction of a "major stationary source" or "major modification" in a nonattainment area; or

(n) Any application or other action for which the permitting authority determines that there is significant public interest.

(4) **Advertising the mandatory public comment period.** Public notice of all applications, orders, or actions listed in subsection (3) of this section must be ~~((published in a newspaper of general circulation))~~ given by prominent advertisement in the area ((where the source or sources are or will be located)) affected by the proposal. Prominent advertisement may be by publication in a newspaper of general circulation in the area of the proposed action or other means of prominent advertisement in the area affected by the proposal. This public notice can be published or given only after all of the information required by the permitting authority has been submitted and after the applicable preliminary determinations, if any, have been made. The notice must be published or given before any of the applications or other actions listed in subsection (3) of this section are approved or denied. The applicant or other initiator of the action must pay the publishing cost of providing public notice.

(5) **Information available for public review.** The information submitted by the applicant, and any applicable preliminary determinations, including analyses of the effects on air quality, must be available for public inspection in at least one location near the proposed project. Exemptions from this requirement include information protected from disclosure under any applicable law, including, but not limited to, RCW 70.94.205 and chapter 173-03 WAC.

(6) ~~((Published))~~ **Public notice components.**

(a) The notice must include:

(i) The name and address of the owner or operator and the facility;

(ii) A brief description of the proposal and the type of facility, including a description of the facility's processes subject to the permit;

(iii) A description of the air contaminant emissions including the type of pollutants and quantity of emissions that would increase under the proposal;

(iv) The location where those documents made available for public inspection may be reviewed;

(v) A thirty-day period for submitting written comment to the permitting authority;

(vi) A statement that a public hearing will be held if the permitting authority determines that there is significant public interest;

(vii) ~~((The time, date and location of the public hearing for those ecology only actions listed in WAC 173-400-171(12);~~

~~((viii)))~~ The name, address, and telephone number and e-mail address of a person at the permitting authority from whom interested persons may obtain additional information, including copies of the permit draft, the application, all relevant supporting materials, including any compliance plan, permit, and monitoring and compliance certification report, and all other materials available to the permitting authority that are relevant to the permit decision, unless the information is exempt from disclosure;

(b) For projects subject to special protection requirements for federal Class I areas, as required by WAC 173-400-117, public notice must include an explanation of the permit-

ting authority's draft decision or state that an explanation of the draft decision appears in the support document for the proposed order of approval ~~((; and~~

~~((e) For a redesignation of an area under WAC 173-400-118, the notice must state that an explanation of the reasons for the proposed redesignation is available for review at the public location)).~~

(7) **Length of the public comment period.**

(a) The public comment period must ~~((be))~~ extend at least thirty days ~~((long))~~ prior to any hearing.

(b) If a public hearing is held, the public comment period must extend through the hearing date.

(c) The final decision cannot be issued until the public comment period has ended and any comments received during the public comment period have been considered.

(8) **Requesting a public hearing.** The applicant, any interested governmental entity, any group, or any person may request a public hearing within the thirty-day public comment period. All hearing requests must be submitted to the permitting authority in writing via letter, fax, or electronic mail. A request must indicate the interest of the entity filing it and why a hearing is warranted.

(9) **Setting the hearing date and providing hearing notice.** If the permitting authority determines that significant public interest exists, then it will hold a public hearing. The permitting authority will determine the location, date, and time of the public hearing.

(10) **Notice of public hearing.**

(a) At least thirty days prior to the hearing the permitting authority will provide notice of the hearing as follows:

(i) ~~((Publish the))~~ Give public hearing notice ((of public hearing in a newspaper of general circulation)) by prominent advertisement in the area ((where the source or sources are or will be located)) affected by the proposal. Prominent advertisement may be by publication in a newspaper of general circulation in the area of the proposed action or other means of prominent advertisement in the area affected by the proposal; and

(ii) Mail the notice of public hearing to ~~((the applicant and to))~~ any person who submitted written comments on the application or requested a public hearing and in the case of a permit action, to the applicant.

(b) This notice must include the date, time and location of the public hearing and the information described in subsection (6) of this section.

(c) In the case of a permit action, the applicant must pay all publishing costs associated with meeting the requirements of this subsection.

(11) **Notifying the EPA.** The permitting authority must send a copy of the notice for all actions subject to ~~((the))~~ a mandatory public comment period to the EPA Region 10 regional administrator.

(12) **Special requirements for ecology only actions.**

(a) ~~((Ecology must comply with the requirements of 40 CFR 51.102, in effect on July 1, 2010, on the following ecology only actions:~~

~~((i) A Washington state recommendation to EPA that will be submitted by the director of ecology for approval of a SIP revision including plans for attainment, maintenance, and visibility protection;~~

~~(ii) A Washington state recommendation to EPA for designation, redesignation, or a change of boundaries of an attainment area, or nonattainment area, or an unclassifiable area;~~

~~(iii) A Washington state recommendation to EPA to redesignate Class I, II, or III areas under WAC 173-400-118.~~

~~(b) The notice must comply with subsection (10) of this section.) This subsection applies to ecology only actions including:~~

~~(i) A Washington state recommendation to EPA for the designation of an area as attainment, nonattainment or unclassifiable after EPA promulgation of a new or revised ambient air quality standard or for the redesignation of an unclassifiable or attainment area to nonattainment;~~

~~(ii) A Washington state submittal of a SIP revision to EPA for approval including plans for attainment and maintenance of ambient air quality standards, plans for visibility protection, requests for revision to the boundaries of attainment and maintenance areas, requests for redesignation of Class I, II, or III areas under WAC 173-400-118, and rules to strengthen the SIP.~~

~~(b) Ecology must provide a public hearing or an opportunity for requesting a public hearing on an ecology only action. The notice providing the opportunity for a public hearing must specify the manner and date by which a person may request the public hearing and either provide the date, time and place of the proposed hearing or specify that ecology will publish a notice specifying the date, time and place of the hearing at least thirty days prior to the hearing. When ecology provides the opportunity for requesting a public hearing, the hearing must be held if requested by any person. Ecology may cancel the hearing if no request is received.~~

~~(c) The public notice for ecology only actions must comply with the requirements of 40 C.F.R. 51.102 in effect on July 1, 2012.~~

(13) Other requirements of law. Whenever procedures permitted or mandated by law will accomplish the objectives of public notice and opportunity for comment, those procedures may be used in lieu of the provisions of this section.

AMENDATORY SECTION (Amending Order 09-01, filed 3/1/11, effective 4/1/11)

WAC 173-400-560 General order of approval. In lieu of filing a notice of construction application under WAC 173-400-110, the owner or operator may apply for coverage under a general order of approval issued under this section. Coverage under a general order of approval satisfies the requirement for new source review under RCW 70.94.152.

(1) Issuance of general orders of approval. A permitting authority may issue a general order of approval applicable to a specific type of emission unit or source, not including nonroad engines as defined in section 216 of the Federal Clean Air Act, subject to the conditions in this section. A general order of approval shall identify criteria by which an emission unit or source may qualify for coverage under the associated general order of approval and shall include terms and conditions under which the owner or operator agrees to install and/or operate the covered emission unit or source. At a minimum, these terms and conditions shall include:

(a) Applicable emissions limitations and/or control requirements;

(b) Best available control technology;

(c) Appropriate operational restrictions, such as:

(i) Criteria related to the physical size of the unit(s) covered;

(ii) Criteria related to raw materials and fuels used;

(iii) Criteria related to allowed or prohibited locations; and

(iv) Other similar criteria determined by a permitting authority;

(d) Monitoring, reporting and recordkeeping requirements to ensure compliance with the applicable emission limits and control requirements;

(e) Appropriate initial and periodic emission testing requirements;

(f) Compliance with chapter 173-460 WAC, WAC 173-400-112 and 173-400-113 ~~((3) and (4))~~ as applicable;

(g) Compliance with 40 C.F.R. Parts 60, 61, 62, and 63; and

(h) The application and approval process to obtain coverage under the specific general order of approval.

(2) Public comment. Compliance with WAC 173-400-171 is required for a proposed new general order of approval or modification of an existing general order of approval.

(3) Modification of general orders of approval. A permitting authority may review and modify a general order of approval at any time. Only the permitting authority that issued a general order of approval may modify that general order of approval. Modifications to general orders of approval shall follow the procedures of this regulation and shall only take effect prospectively.

(4) Application for coverage under a general order of approval.

(a) In lieu of applying for an individual order of approval under WAC 173-400-110, an owner or operator of an emission unit or source may apply for and receive coverage from a permitting authority under a general order of approval if:

(i) The owner or operator of the emission unit or source applies for coverage under a general order of approval in accordance with this regulation and any conditions of the approval related to application for and granting coverage under the general order of approval;

(ii) The emission unit or source meets all the qualifications listed in the requested general order of approval;

(iii) The requested emission unit or source is not part of a new major stationary source or major modification of a major stationary source subject to the requirements of WAC ~~((173-400-112 or 173-400-720))~~ 173-400-113 (3) and (4), 173-400-700 through 173-400-750 or 173-400-800 through 173-400-860; and

(iv) The requested emission unit or source does not trigger applicability of the operating permit program under chapter 173-401 WAC or trigger a required modification of an existing operating permit.

(b) Owners or operators of emission units or sources applying for coverage under a general order of approval shall do so using the forms supplied by a permitting authority and include the required fee. The application must include all

information necessary to determine qualification for, and to assure compliance with, a general order of approval.

(c) An application shall be incomplete until a permitting authority has received any required fees.

(d) The owner or operator of a new source or modification of an existing source that qualifies for coverage under a general order of approval may not begin actual construction of the new source or modification until its application for coverage has been approved or accepted under the procedures established in subsection (5) of this section.

(5) **Processing applications for coverage under a general order of approval.** Each general order of approval shall include a section on how an applicant is to request coverage and how the permitting authority will grant coverage. The section of the general order of approval will include either the method in (a) or (b) of this subsection to describe the process for the applicant to be granted coverage.

(a) Within thirty days of receipt of an application for coverage under a general order of approval, the permitting authority shall notify an applicant in writing that the application is incomplete, approved, or denied. If an application is incomplete, the permitting authority shall notify an applicant of the information needed to complete the application. If an application is denied, the permitting authority shall notify an applicant of the reasons why the application is denied. Coverage under a general order of approval is effective as of the date of issuance of approval by the permitting authority.

(b) The applicant is approved for coverage under the general order of approval thirty-one days after an application for coverage is received by the permitting authority, unless the owner or operator receives a letter from the permitting authority, postmarked within thirty days of when the application for coverage was received by the permitting authority, notifying the owner or operator that the emissions unit or source does not qualify for coverage under the general order of approval. The letter denying coverage shall notify the applicant of the disqualification and the reasons why coverage is denied.

(6) **Termination of coverage under a general order of approval.** An owner or operator who has received approval of an application for coverage under a general order of approval may later request to be excluded from coverage under that general order of approval by applying to the same permitting authority for an individual order of approval, under WAC 173-400-110, or for coverage under another general order of approval. If the same permitting authority issues an individual order of approval or other permit or order serving the same purpose as the original general order of approval, or approves coverage under a different general order of approval, coverage under the original general order of approval is automatically terminated, effective on the effective date of the individual order of approval, order or permit or new general order of approval.

(7) **Failure to qualify or comply.** An owner or operator who requests and is granted approval for coverage under a general order of approval shall be subject to enforcement action for establishment of a new source in violation of WAC 173-400-110 if a decision to grant coverage under a general order of approval was based upon erroneous information submitted by the applicant.

AMENDATORY SECTION (Amending Order 06-03, filed 5/8/07, effective 6/8/07)

WAC 173-400-710 Definitions. (1) ~~((The definitions in WAC 173-400-030 are to be used in WAC 173-400-700 through 173-400-750 unless:~~

~~(a) A term is defined differently in WAC 173-400-710 for use in the major source permitting requirements in WAC 173-400-700 through 173-400-750; or~~

~~(b) A term is defined differently in the federal program requirements adopted by reference in WAC 173-400-720.))~~ For purposes of WAC 173-400-720 through 173-400-750 the definitions in 40 C.F.R. 52.21(b), adopted by reference in WAC 173-400-720 (4)(a)(iv), are to be used, except: The definition of "secondary emissions" as defined in WAC 173-400-030 will be used.

(2) All usage of the term "source" in WAC 173-400-710 through 173-400-750 and in 40 C.F.R. 52.21 as adopted by reference is to be interpreted to mean "stationary source" as defined in 40 C.F.R. 52.21 (b)(5). A stationary source (or source) does not include emissions resulting directly from an internal combustion engine for transportation purposes, from a nonroad engine, or a nonroad vehicle as defined in section 216 of the Federal Clean Air Act.

AMENDATORY SECTION (Amending Order 11-04, filed 8/10/11, effective 9/10/11)

WAC 173-400-720 Prevention of significant deterioration (PSD). (1) No major stationary source or major modification to which the requirements of this section apply is authorized to begin actual construction without having received a PSD permit.

(2) **Early planning encouraged.** In order to develop an appropriate application, the source should engage in an early planning process to assess the needs of the facility. An opportunity for a preapplication meeting with ecology is available to any potential applicant.

(3) **Enforcement.** Ecology or the permitting authority with jurisdiction over the source under chapter 173-401 WAC, the Operating permit regulation, shall:

(a) Receive all reports required in the PSD permit;

(b) Enforce the requirement to apply for a PSD permit when one is required; and

(c) Enforce the conditions in the PSD permit.

(4) **Applicable requirements.**

(a) A PSD permit must assure compliance with the following requirements:

(i) WAC 173-400-113 ~~((3) and))~~ (1) through (4) ~~((-));~~

(ii) WAC 173-400-117 - Special protection requirements for federal Class I areas;

(iii) ~~((The proposed major new source or major modification will comply with all applicable new source performance standards (40 CFR Part 60), National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61), and emission standards adopted under chapter 70.94 RCW that have been incorporated into the Washington state implementation plan))~~ WAC 173-400-200;

(iv) WAC 173-400-205;

(v) Allowable emission limits established under WAC 173-400-081 must also meet the criteria of 40 C.F.R. 52.21 (k)(1) and 52.21 (p)(1) through (4); and

~~((i+))~~ (vi) The following subparts of 40 C.F.R. 52.21, in effect on ~~((July 20, 2011))~~ August 13, 2012, which are adopted by reference. Exceptions are listed in (b)(i), (ii), ~~((and))~~ (iii), and (iv) of this subsection:

Section	Title
40 C.F.R. 52.21 (a)(2)	Applicability Procedures.
40 C.F.R. 52.21 (b)	Definitions, <u>except the definition of "secondary emissions."</u>
40 C.F.R. 52.21 (c)	Ambient air increments.
40 C.F.R. 52.21 (d)	Ambient air ceilings.
40 C.F.R. 52.21 (h)	Stack heights.
40 C.F.R. 52.21 (i)	Review of major stationary sources and major modifications - source applicability and exemptions.
40 C.F.R. 52.21 (j)	Control technology review.
40 C.F.R. 52.21 (k)	Source impact analysis.
40 C.F.R. 52.21 (l)	Air quality models.
40 C.F.R. 52.21 (m)	Air quality analysis.
40 C.F.R. 52.21 (n)	Source information.
40 C.F.R. 52.21 (o)	Additional impact analysis.
40 C.F.R. 52.21 (p)(1) through (4)	Sources impacting federal Class I areas - additional requirements
40 C.F.R. 52.21 (r)	Source obligation.
40 C.F.R. 52.21 (v)	Innovative control technology.
40 C.F.R. 52.21 (w)	Permit rescission.
40 C.F.R. 52.21 (aa)	Actuals Plantwide Applicability Limitation.

(b) Exceptions to adopting 40 C.F.R. 52.21 by reference.

(i) Every use of the word "administrator" in 40 C.F.R. 52.21 means ecology except for the following:

(A) In 40 C.F.R. 52.21 (b)(17), the definition of federally enforceable, "administrator" means the EPA administrator.

(B) In 40 C.F.R. 52.21 (l)(2), air quality models, "administrator" means the EPA administrator.

(C) In 40 C.F.R. 52.21 (b)(43) the definition of prevention of significant deterioration program, "administrator" means the EPA administrator.

(D) In 40 C.F.R. 52.21 (b)(48)(ii)(c) related to regulations promulgated by the administrator, "administrator" means the EPA administrator.

(E) In 40 C.F.R. 52.21 (b)(50)(i) related to the definition of a regulated NSR pollutant, "administrator" means the EPA administrator.

(F) In 40 C.F.R. 52.21 (b)(37) related to the definition of repowering, "administrator" means the EPA administrator.

(G) In 40 C.F.R. 52.21 (b)(51) related to the definition of reviewing authority, "administrator" means the EPA administrator.

(ii) Each reference in 40 C.F.R. 52.21(i) to "paragraphs (j) through (r) of this section" is amended to state "paragraphs (j) through (p) (1) - (4) of this section, paragraph (r) of this section, WAC 173-400-720, and 173-400-730."

(iii) The following paragraphs replace the designated paragraphs of 40 C.F.R. 52.21:

(A) In 40 C.F.R. 52.21 (b)(1)(i)(a) and (b)(1)(iii)(h), the size threshold for municipal waste incinerators is changed to 50 tons of refuse per day.

(B) 40 C.F.R. 52.21 (b)(23)(i) After the entry for municipal solid waste landfills emissions, add Ozone Depleting Substances: 100 tpy.

(C) 40 C.F.R. 52.21(c) after the effective date of EPA's incorporation of this section into the Washington state implementation plan, the concentrations listed in WAC 173-400-116(2) are excluded when determining increment consumption.

(D) 40 C.F.R. 52.21 (r)(6)

"The provisions of this paragraph (r)(6) apply with respect to any regulated NSR pollutant from projects at an existing emissions unit at a major stationary source (other than projects at a source with a PAL) in circumstances where there is a reasonable possibility that a project that is not a part of a major modification may result in a significant emissions increase of such pollutant and the owner or operator elects to use the method specified in paragraphs 40 C.F.R. 52.21 (b)(41)(ii)(a) through (c) for calculating projected actual emissions.

(i) Before beginning actual construction of the project, the owner or operator shall document and maintain a record of the following information:

~~((A))~~ (a) A description of the project;
~~((B))~~ (b) Identification of the emissions unit(s) whose emissions of a regulated NSR pollutant could be affected by the project; and
~~((C))~~ (c) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including the baseline actual emissions, the projected actual emissions, the amount of emissions excluded under paragraph 40 C.F.R. 52.21 (b)(41)(ii)(c) and an explanation for why such amount was excluded, and any netting calculations, if applicable.

(ii) The owner or operator shall submit a copy of the information set out in paragraph 40 C.F.R. 52.21 (r)(6)(i) to the permitting authority before beginning actual construction. This information may be submitted in conjunction with any NOC application required under the provisions of WAC 173-400-110. Nothing in this paragraph (r)(6)(ii) shall be construed to require the owner or operator of such a unit to obtain any PSD determination from the permitting authority before beginning actual construction.

- (iii) The owner or operator shall monitor the emissions of any regulated NSR pollutant that could increase as a result of the project and that is emitted by any emissions unit identified in paragraph 40 C.F.R. 52.21 (r)(6)(i)(b); and calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of 5 years following resumption of regular operations after the change, or for a period of 10 years following resumption of regular operations after the change if the project increases the design capacity of or potential to emit that regulated NSR pollutant at such emissions unit. ~~((For purposes of this paragraph (r)(6)(iii), fugitive emissions (to the extent quantifiable) shall be monitored if the emissions unit is part of one of the source categories listed in 40 CFR 52.21 (b)(1)(iii) or if the emissions unit is located at a major stationary source that belongs to one of the listed source categories.))~~
- (iv) The owner or operator shall submit a report to the permitting authority within 60 days after the end of each year during which records must be generated under paragraph 40 C.F.R. 52.21 (r)(6)(iii) setting out the unit's annual emissions ~~((as monitored pursuant to 40 CFR 52.21 (r)(6)(iii);))~~ during the calendar year that preceded submission of the report.
- (v) The owner or operator shall submit a report to the permitting authority if the annual emissions, in tons per year, from the project identified in paragraph 40 C.F.R. 52.21 (r)(6)(i), exceed the baseline actual emissions (as documented and maintained pursuant to paragraph 40 C.F.R. 52.21 (r)(6)(i)(c)), by a significant amount (as defined in paragraph 40 C.F.R. 52.21 (b)(23)) for that regulated NSR pollutant, and if such emissions differ from the preconstruction projection as documented and maintained pursuant to paragraph 40 C.F.R. 52.21 (r)(6)(i)(c). Such report shall be submitted to the permitting authority within 60 days after the end of such year. The report shall contain the following:
- (a) The name, address and telephone number of the major stationary source;
- (b) The annual emissions as calculated pursuant to paragraph (r)(6)(iii) of this section; and
- (c) Any other information that the owner or operator wishes to include in the report (e.g., an explanation as to why the emissions differ from the preconstruction projection).
- (vi) A "reasonable possibility" under this subsection occurs when the owner or operator calculates the project to result in either:
- (a) A projected actual emissions increase of at least fifty percent of the amount that is a "significant emissions increase." (without reference to the amount that is a significant net emissions increase), for the regulated NSR pollutant; or
- (b) A projected actual emissions increase that, added to the amount of emissions excluded under the definition of projected actual emissions sums to at least fifty percent of the amount that is a "significant emissions increase." (without reference to the amount that is a significant net emissions increase), for the regulated NSR pollutant. For a project for which a reasonable possibility occurs only within the meaning of (r)(6)(vi)(b) of this subsection, and not also within the meaning of (r)(6)(vi)(a) of this subsection, then the provisions of (r)(6)(vi)(ii) through (v) of this subsection do not apply to the project."
- (E) 40 C.F.R. 52.21 (r)(7) "The owner or operator of the source shall submit the information required to be documented and maintained pursuant to paragraphs 40 C.F.R. 52.21 (r)(6)(iv) and (v) annually within 60 days after the anniversary date of the original analysis. The original analysis and annual reviews shall also be available for review upon a request for inspection by the permitting authority or the general public pursuant to the requirements contained in 40 C.F.R. 70.4 (b)(3)(viii)."
- (F) 40 C.F.R. 52.21 (aa)(2)(ix) "PAL permit means the PSD permit, an ecology issued order of approval issued under WAC 173-400-110, or regulatory order issued under WAC 173-400-091 issued by ecology that establishes a PAL for a major stationary source."
- (G) 40 C.F.R. 52.21 (aa)(5) "Public participation requirements for PALs. PALs for existing major stationary sources shall be established, renewed, or expired through the public participation process in WAC 173-400-171. A request to increase a PAL shall be processed in accordance with the application processing and public participation process in WAC 173-400-730 and 173-400-740."
- (H) 40 C.F.R. 52.21 (aa)(9)(i)(b) "Ecology, after consultation with the permitting authority, shall decide whether and how the PAL allowable emissions will be distributed and issue a revised order, order of approval or PSD permit incorporating allowable limits for each emissions unit, or each group of emissions units, as ecology determines is appropriate."
- (I) 40 C.F.R. 52.21 (aa)(14) "Reporting and notification requirements. The owner or operator shall submit semiannual monitoring reports and prompt deviation reports to the permitting authority in accordance with the requirements in chapter 173-401 WAC. The reports shall meet the requirements in paragraphs 40 C.F.R. 52.21 (aa)(14)(i) through (ii)."
- (J) 40 C.F.R. 52.21 (aa)(14)(ii) "Deviation report. The major stationary source owner or operator shall promptly submit reports of any deviations or exceedance of the PAL requirements, including periods where no monitoring is

available. A report submitted pursuant to WAC 173-401-615 (3)(b) and within the time limits prescribed shall satisfy this reporting requirement. The reports shall contain the information found at WAC 173-401-615(3)."

(iv) 40 C.F.R. 52.21 (r)(2) is not adopted by reference.

AMENDATORY SECTION (Amending Order 09-01, filed 3/1/11, effective 4/1/11)

WAC 173-400-730 Prevention of significant deterioration application processing procedures. (1) Application submittal.

(a) The applicant shall submit an application that provides complete information necessary for ecology to determine compliance with all PSD program requirements.

(b) The applicant shall submit complete copies of its PSD application or an application to increase a PAL, distributed in the following manner:

(i) Three copies to ecology: Air Quality Program, P.O. Box 47600, Olympia, WA 98504-7600.

(ii) One copy to each of the following federal land managers:

(A) U.S. Department of the Interior - National Park Service; and

(B) U.S. Department of Agriculture - U.S. Forest Service.

(iii) One copy to the permitting authority with authority over the source under chapter 173-401 WAC.

(iv) One copy to EPA.

(c) Application submittal and processing for the initial request, renewal or expiration of a PAL under 40 C.F.R. 52.21(aa) shall be done as provided in 40 C.F.R. 52.21(aa)(3) - (5), which is adopted by reference in WAC 173-400-720 (4)(a)(iv), except public participation must comply with WAC ((173-400-720 (4)(b)(iii)(F))) 173-400-740.

(2) Application processing.

(a) Completeness determination.

(i) Within thirty days after receiving a PSD permit application, ecology shall either notify the applicant in writing that the application is complete or notify the applicant in writing of all additional information necessary to complete the application. Ecology may request additional information clarifying aspects of the application after it has been determined to be complete.

(ii) The effective date of the application is the date on which ecology notifies the applicant that the application is complete pursuant to (a)(i) of this subsection.

(iii) If an applicant fails or refuses to correct deficiencies in the application, the permit may be denied and appropriate enforcement action taken.

(iv) The permitting authority shall send a copy of the completeness determination to the responsible federal land manager.

(b) Preparation and issuance of the preliminary determination.

(i) When the application has been determined to be complete, ecology shall begin developing the preliminary determination to approve or deny the application.

(ii) ((Within one year)) As expeditiously as possible after receipt of a complete application, ecology shall provide the

applicant with a preliminary determination along with a technical support document and a public notice.

(c) Issuance of the final determination.

(i) Ecology shall make no final decision until the public comment period has ended and all comments received during the public comment period have been considered.

(ii) Within one year of the date of receipt of the complete application and as expeditiously as possible after the close of the public comment period, or hearing if one is held, ecology shall prepare and issue the final determination.

(d) Once the PSD program set forth in WAC 173-400-700 through 173-400-750 is incorporated into the Washington SIP, the effective date of a determination will be either the date of issuance of the final determination, or a later date if specified in the final determination.

Until the PSD program set forth in WAC 173-400-700 through 173-400-750 is incorporated into the Washington SIP, the effective date of a final determination is one of the following dates:

(i) If no comments on the preliminary determination were received, the date of issuance; or

(ii) If comments were received, thirty days after receipt of the final determination; or

(iii) A later date as specified within the PSD permit approval.

(3) **PSD technical support document.** Ecology shall develop a technical support document for each preliminary PSD determination. The preliminary technical support document will be updated prior to issuance of the final determination to reflect changes to the final determination based on comments received. The technical support document shall include the following information:

(a) A brief description of the major stationary source, major modification, or activity subject to review;

(b) The physical location, ownership, products and processes involved in the major stationary source or major modification subject to review;

(c) The type and quantity of pollutants proposed to be emitted into the air;

(d) A brief summary of the BACT options considered and the reasons why the selected BACT level of control was selected;

(e) A brief summary of the basis for the permit approval conditions;

(f) A statement on whether the emissions will or will not cause a state and national ambient air quality standard to be exceeded;

(g) The degree of increment consumption expected to result from the source or modification;

(h) An analysis of the impacts on air quality related values in federal Class I areas and other Class I areas affected by the project; and

(i) An analysis of the impacts of the proposed emissions on visibility in any federal Class I area following the requirements in WAC 173-400-117.

(4) **Appeals.** A PSD permit, any conditions contained in a PSD permit, or the denial of PSD permit may be appealed to the pollution control hearings board as provided in chapter 43.21B RCW. A PSD permit issued under the terms of a delegation agreement can be appealed to the EPA's environmen-

tal appeals board as provided in 40 C.F.R. 124.13 and 40 C.F.R. 124.19.

(5) **Construction time limitations.**

(a) Approval to construct or modify a major stationary source becomes invalid if construction is not commenced within eighteen months of the effective date of the approval, if construction is discontinued for a period of eighteen months or more, or if construction is not completed within a reasonable time. The time period between construction of the approved phases of a phased construction project cannot be extended. Each phase must commence construction within eighteen months of the projected and approved commencement date.

(b) Ecology may extend the eighteen-month effective period of a PSD permit upon a satisfactory showing that an extension is justified. A request to extend the effective time to begin or complete actual construction under a PSD permit may be submitted. The request may result from the cessation of on-site construction before completion or failure to begin actual construction of the project(s) covered by the PSD permit.

(i) Request requirements.

(A) A written request for the extension, submitted by the PSD permit holder, as soon as possible prior to the expiration of the current PSD permit.

(B) An evaluation of BACT and an updated ambient impact, including an increment analysis, for all pollutants subject to the approval conditions in the PSD permit.

(ii) Duration of extensions.

(A) No single extension of time shall be longer than eighteen months.

(B) The cumulative time prior to beginning actual construction under the original PSD permit and all approved time extensions shall not exceed fifty-four months.

(iii) Issuance of an extension.

(A) Ecology may approve and issue an extension of the current PSD permit.

(B) The extension of approval shall reflect any revised BACT limitations based on the evaluation of BACT presented in the request for extension and other information available to ecology.

(C) The issuance of an extension is subject to the public involvement requirements in WAC 173-400-740.

(iv) For the extension of a PSD permit, ecology must prepare a technical support document consistent with WAC 173-400-730(3) only to the extent that those criteria apply to a request to extend the construction time limitation.

AMENDATORY SECTION (Amending Order 03-07, filed 1/10/05, effective 2/10/05)

WAC 173-400-740 PSD permitting public involvement requirements. (1) **Actions requiring notification of the public.** Ecology must provide public notice before approving or denying any of the following types of actions related to implementation of the PSD program contained in WAC 173-400-720:

(a) Any preliminary determination to approve or disapprove a PSD permit application; or

(b) An extension of the time to begin construction or suspend construction under a PSD permit; or

(c) A revision to a PSD permit, except an administrative amendment to an existing permit; or

(d) Use of a modified or substituted model in Appendix W of 40 C.F.R. Part 51 (as in effect on May 1, 2012) as part of review of air quality impacts.

(2) **Notification of the public.** (~~Within one year of~~) As expeditiously as possible after the receipt of a complete PSD application, and as expeditiously as possible after receipt of a request for extension of the construction time limit under WAC 173-400-730(6) or (~~for~~) after receipt of a nonadministrative revision to a PSD permit under WAC 173-400-750, ecology shall:

(a) Make available for public inspection in at least one location in the vicinity where the proposed source would be constructed, or for revisions to a PSD permit where the permittee exists, a copy of the information submitted by the applicant, and any applicable preliminary determinations, including analyses of the effects on air quality and air quality related values, considered in making the preliminary determination. Exemptions from this requirement include information protected from disclosure under any applicable law, including, but not limited to, RCW 70.94.205 and chapter 173-03 WAC.

(b) Notify the public by:

(i) Causing to be published, in a newspaper of general circulation in the area of the proposed project, the public notice prepared in accordance with WAC 173-400-730(4). The date the public notice is published in the newspaper starts the required thirty-day comment period.

(ii) If ecology grants a request to extend the public comment period, the extension notice must also be published in a newspaper as noted above and a copy of the extension notice sent to the organizations and individuals listed in (c) and (d) of this subsection. The closing date of the extended comment period shall be as defined in the public comment period extension notification.

(iii) If a hearing is held, the public comment period must extend through the hearing date.

(iv) The applicant or other initiator of the action must pay the cost of providing public notice.

(c) Send a copy of the public notice to:

(i) Any Indian governing body whose lands may be affected by emissions from the project;

(ii) The chief executive of the city where the project is located;

(iii) The chief executive of the county where the project is located;

(iv) Individuals or organizations that requested notification of the specific project proposal;

(v) Other individuals who requested notification of PSD permits;

(vi) Any state within 100 km of the proposed project.

(d) Send a copy of the public notice, PSD preliminary determination, and the technical support document to:

(i) The applicant;

(ii) The affected federal land manager;

(iii) EPA Region 10;

(iv) The permitting authority with authority over the source under chapter 173-401 WAC;

(v) Individuals or organizations who request a copy; and

(vi) The location for public inspection of material required under (a) of this subsection.

(3) **Public notice content.** The public notice shall contain at least the following information:

(a) The name and address of the applicant;

(b) The location of the proposed project;

(c) A brief description of the project proposal;

(d) The preliminary determination to approve or disapprove the application;

(e) How much increment is expected to be consumed by this project;

(f) The name, address, and telephone number of the person to contact for further information;

(g) A brief explanation of how to comment on the project;

(h) An explanation on how to request a public hearing;

(i) The location of the documents made available for public inspection;

(j) There is a thirty-day period from the date of publication of the notice for submitting written comment to ecology;

(k) A statement that a public hearing may be held if ecology determines within a thirty-day period that significant public interest exists;

(l) The length of the public comment period in the event of a public hearing;

(m) For projects subject to special protection requirements for federal Class I areas, in WAC 173-400-117, and where ecology disagrees with the analysis done by the federal land manager, ecology shall explain its decision in the public notice or state that an explanation of the decision appears in the technical support document for the proposed approval or denial.

(4) **Public hearings.**

(a) The applicant, any interested governmental entity, any group, or any person may request a public hearing within the thirty-day public comment period. A request must indicate the interest of the entity filing it and why a hearing is warranted. Whether a request for a hearing is filed or not, ecology may hold a public hearing if it determines significant public interest exists. Ecology will determine the location, date, and time of the public hearing.

(b) Notification of a public hearing will be accomplished per the requirements of WAC 173-400-740(2).

(c) The public must be notified at least thirty days prior to the date of the hearing (or first of a series of hearings).

(5) **Consideration of public comments.** Ecology shall make no final decision on any application or action of any type described in subsection (1) of this section until the public comment period has ended and any comments received during the public comment period have been considered. Ecology shall make all public comments available for public inspection at the same locations where the preconstruction information on the proposed major source or major modification was made available.

(6) **Issuance of a final determination.**

(a) The final approval or disapproval determination ~~((shall))~~ must be made within one year of receipt of a complete application and must include the following:

(i) A copy of the final PSD permit or the determination to deny the permit;

(ii) A summary of the comments received;

(iii) Ecology's response to those comments;

(iv) A description of what approval conditions changed from the preliminary determination; and

(v) A cover letter that includes an explanation of how the final determination may be appealed.

(b) Ecology shall mail a copy of the cover letter that accompanies the final determination to:

(i) Individuals or organizations that requested notification of the specific project proposal;

(ii) Other individuals who requested notification of PSD permits.

(c) A copy of the final determination shall be sent to:

(i) The applicant;

(ii) U.S. Department of the Interior - National Park Service;

(iii) U.S. Department of Agriculture - Forest Service;

(iv) EPA Region 10;

(v) The permitting authority with authority over the source under chapter 173-401 WAC;

(vi) Any person who commented on the preliminary determination; and

(vii) The location for public inspection of material required under subsection (2)(a) of this section.

AMENDATORY SECTION (Amending Order 09-01, filed 3/1/11, effective 4/1/11)

WAC 173-400-750 Revisions to PSD permits. (1) The owner or operator may request, at any time, a change in conditions of a PSD permit and ecology may approve the request provided ecology finds that:

(a) The change in conditions will not cause the source to exceed an emissions standard established by regulation;

(b) No ambient air quality standard or PSD increment will be exceeded as a result of the change;

(c) The change will not adversely impact the ability of ecology or the authority to determine compliance with an emissions standard;

(d) The revised PSD permit will continue to require BACT for each new or modified emission unit approved by the original PSD permit; and

(e) The revised PSD permit continues to meet the requirements of WAC ~~((173-400-112))~~ 173-400-800 through 173-400-860, and 173-400-113 ~~((3) and (4))~~, as applicable.

(2) A request to revise a PSD permit must be acted upon using the timelines found in WAC 173-400-730. The fee schedule found in chapter 173-455 WAC also applies.

(3) All revisions to PSD permits are subject to public involvement except for the following administrative revisions:

(a) Change of the owner or operator's business name and/or mailing address;

(b) Corrections to typographical errors;

(c) Revisions to compliance monitoring methods that provide for more frequent monitoring, replace a periodic monitoring requirement with a continuous monitoring, result in replacement of a manual emission testing method with an instrumental method, or other similar changes that based on ecology's technical evaluation of the proposal, do not reduce the ~~((permittee's))~~ ability of the permittee, the public, the permitting authority, EPA, or ~~((ecology's ability))~~ ecology to determine compliance with the emission limitations; ~~((or))~~

(d) Revisions to reporting requirements contained in a PSD permit to coordinate reporting with reporting requirements contained in the air operating permit issued to the source or that result in more frequent reporting by the permittee; or

(e) Any other revision, similar to those listed above, that based on ecology's technical evaluation of the proposal, does not reduce the stringency of the emission limitations in the PSD permit or the ability of ecology, the permitting authority, EPA, or the public to determine compliance with the approval conditions in the PSD permit.

AMENDATORY SECTION (Amending Order 09-01, filed 3/1/11, effective 4/1/11)

WAC 173-400-810 Major stationary source and major modification definitions. ~~((The definitions in WAC 173-400-030 are to be used in WAC 173-400-800 through 173-400-860 unless a term is defined differently in this section.))~~ The definitions in this section must be used in the major stationary source nonattainment area permitting requirements in WAC 173-400-800 through 173-400-860. If a term is defined differently in the federal program requirements for issuance, renewal and expiration of a Plant Wide Applicability Limit which are adopted by reference in WAC 173-400-850, then that definition is to be used for purposes of the Plant Wide Applicability Limit program.

(1) Actual emissions means:

(a) The actual rate of emissions of a regulated NSR pollutant from an emissions unit, as determined in accordance with (b) through (d) of this subsection. This definition does not apply when calculating whether a significant emissions increase has occurred, or for establishing a PAL under WAC 173-400-850. Instead, "projected actual emissions" and "baseline actual emissions" as defined in subsections (2) and (23) of this section apply for those purposes.

(b) In general, actual emissions as of a particular date shall equal the average rate, in tons per year, at which the unit actually emitted the pollutant during a consecutive twenty-four-month period which precedes the particular date and which is representative of normal source operation. The permitting authority shall allow the use of a different time period upon a determination that it is more representative of normal source operation. Actual emissions shall be calculated using the unit's actual operating hours, production rates, and types of materials processed, stored, or combusted during the selected time period.

(c) The permitting authority may presume that source-specific allowable emissions for the unit are equivalent to the actual emissions of the unit.

(d) For any emissions unit that has not begun normal operations on the particular date, actual emissions shall equal the potential to emit of the unit on that date.

(2) Baseline actual emissions means the rate of emissions, in tons per year, of a regulated NSR pollutant, as determined in accordance with (a) through (d) of this subsection.

(a) For any existing electric utility steam generating unit, baseline actual emissions means the average rate, in tons per year, at which the unit actually emitted the pollutant during any consecutive twenty-four-month period selected by the owner or operator within the five-year period immediately preceding when the owner or operator begins actual construction of the project. The permitting authority shall allow the use of a different time period upon a determination that it is more representative of normal source operation.

(i) The average rate shall include emissions associated with startups, shutdowns, and malfunctions; and, for an emissions unit that is part of one of the source categories listed in subsection (14)(e) of this section, the definition of major stationary source, or for an emissions unit that is located at a major stationary source that belongs to one of the listed source categories, the average rate shall include fugitive emissions (to the extent quantifiable).

(ii) The average rate shall be adjusted downward to exclude any noncompliant emissions that occurred while the source was operating above any emission limitation that was legally enforceable during the consecutive twenty-four-month period.

(iii) For a regulated NSR pollutant, when a project involves multiple emissions units, only one consecutive twenty-four-month period must be used to determine the baseline actual emissions for the emissions units being changed. A different consecutive twenty-four-month period can be used for each regulated NSR pollutant.

(iv) The average rate shall not be based on any consecutive twenty-four-month period for which there is inadequate information for determining annual emissions, in tons per year, and for adjusting this amount if required by (a)(ii) of this subsection.

(b) For an existing emissions unit (other than an electric utility steam generating unit), baseline actual emissions means the average rate, in tons per year, at which the emissions unit actually emitted the pollutant during any consecutive twenty-four-month period selected by the owner or operator within the ten-year period immediately preceding either the date the owner or operator begins actual construction of the project, or the date a complete permit application is received by the permitting authority for a permit required either under WAC 173-400-800 through 173-400-860 or under a plan approved by the administrator, whichever is earlier, except that the ten-year period shall not include any period earlier than November 15, 1990.

(i) The average rate shall include emissions associated with startups, shutdowns, and malfunctions; and, for an emissions unit that is part of one of the source categories listed in subsection (14)(e) of this section, the definition of major stationary source, or for an emissions unit that is located at a major stationary source that belongs to one of the listed source categories, the average rate shall include fugitive emissions (to the extent quantifiable).

(ii) The average rate shall be adjusted downward to exclude any noncompliant emissions that occurred while the source was operating above an emission limitation that was legally enforceable during the consecutive twenty-four-month period.

(iii) The average rate shall be adjusted downward to exclude any emissions that would have exceeded an emission limitation with which the major stationary source must currently comply, had such major stationary source been required to comply with such limitations during the consecutive twenty-four-month period. However, if an emission limitation is part of a maximum achievable control technology standard that the administrator proposed or promulgated under 40 C.F.R. Part 63, the baseline actual emissions need only be adjusted if the state has taken credit for such emissions reductions in an attainment demonstration or maintenance plan as part of the demonstration of attainment or as reasonable further progress to attain the NAAQS.

(iv) For a regulated NSR pollutant, when a project involves multiple emissions units, only one consecutive twenty-four-month period must be used to determine the baseline actual emissions for the emissions units being changed. A different consecutive twenty-four-month period can be used for each regulated NSR pollutant.

(v) The average rate shall not be based on any consecutive twenty-four-month period for which there is inadequate information for determining annual emissions, in tons per year, and for adjusting this amount if required under (b)(ii) and (iii) of this subsection.

(c) For a new emissions unit, the baseline actual emissions for purposes of determining the emissions increase that will result from the initial construction and operation of such unit shall equal zero; and thereafter, for all other purposes, shall equal the unit's potential to emit. In the latter case, fugitive emissions, to the extent quantifiable, shall be included only if the emissions unit is part of one of the source categories listed in subsection (14)(e) of this section, the definition of major stationary source, or if the emissions unit is located at a major stationary source that belongs to one of the listed source categories.

(d) For a PAL for a major stationary source, the baseline actual emissions shall be calculated for existing electric utility steam generating units in accordance with the procedures contained in (a) of this subsection, for other existing emissions units in accordance with the procedures contained in (b) of this subsection, and for a new emissions unit in accordance with the procedures contained in (c) of this subsection, except that fugitive emissions (to the extent quantifiable) shall be included regardless of the source category.

(3) Building, structure, facility, or installation means all of the pollutant-emitting activities which belong to the same industrial grouping, are located on one or more contiguous or adjacent properties, and are under the control of the same person (or persons under common control) except the activities of any vessel. Pollutant-emitting activities shall be considered as part of the same industrial grouping if they belong to the same major group (i.e., which have the same two-digit code) as described in the *Standard Industrial Classification Manual*, 1972, as amended by the 1977 Supplement (U.S.

Government Printing Office stock numbers 4101-0065 and 003-005-00176-0, respectively).

(4) Clean coal technology means any technology, including technologies applied at the precombustion, combustion, or post combustion stage, at a new or existing facility which will achieve significant reductions in air emissions of sulfur dioxide or oxides of nitrogen associated with the utilization of coal in the generation of electricity, or process steam which was not in widespread use as of November 15, 1990.

(5) Clean coal technology demonstration project means a project using funds appropriated under the heading "Department of Energy-Clean Coal Technology," up to a total amount of two and one-half billion dollars for commercial demonstration of clean coal technology, or similar projects funded through appropriations for the Environmental Protection Agency. The federal contribution for a qualifying project shall be at least twenty percent of the total cost of the demonstration project.

(6) Construction means any physical change or change in the method of operation (including fabrication, erection, installation, demolition, or modification of an emissions unit) that would result in a change in emissions.

(7) Continuous emissions monitoring system (CEMS) means all of the equipment that may be required to meet the data acquisition and availability requirements of this section, to sample, condition (if applicable), analyze, and provide a record of emissions on a continuous basis.

(8) Continuous parameter monitoring system (CPMS) means all of the equipment necessary to meet the data acquisition and availability requirements of this section, to monitor process and control device operational parameters (for example, control device secondary voltages and electric currents) and other information (for example, gas flow rate, O₂ or CO₂ concentrations), and to record average operational parameter value(s) on a continuous basis.

(9) Continuous emissions rate monitoring system (CERMS) means the total equipment required for the determination and recording of the pollutant mass emissions rate (in terms of mass per unit of time).

(10) Electric utility steam generating unit means any steam electric generating unit that is constructed for the purpose of supplying more than one-third of its potential electric output capacity and more than 25 MW electrical output to any utility power distribution system for sale. Any steam supplied to a steam distribution system for the purpose of providing steam to a steam-electric generator that would produce electrical energy for sale is also considered in determining the electrical energy output capacity of the affected facility.

(11) Emissions unit means any part of a stationary source that emits or would have the potential to emit any regulated NSR pollutant and includes an electric steam generating unit. For purposes of this section, there are two types of emissions units:

(a) A new emissions unit is any emissions unit which is (or will be) newly constructed and which has existed for less than two years from the date such emissions unit first operated.

(b) An existing emissions unit is any emissions unit that is not a new emissions unit. A replacement unit, as defined in subsection (25) of this section is an existing emissions unit.

(12) Fugitive emissions means those emissions which could not reasonably pass through a stack, chimney, vent or other functionally equivalent opening. Fugitive emissions, to the extent quantifiable, are addressed as follows for the purposes of this section:

(a) In determining whether a stationary source or modification is major, fugitive emissions from an emissions unit are included only if the emissions unit is part of one of the source categories listed in subsection (14)(e) of this section, the definition of major stationary source, or the emissions unit is located at a stationary source that belongs to one of those source categories. Fugitive emissions are not included for those emissions units located at a facility whose primary activity is not represented by one of the source categories listed in subsection (14)(e) of this section, the definition of major stationary source and that are not, by themselves, part of a listed source category.

(b) For purposes of determining the net emissions increase associated with a project, an increase or decrease in fugitive emissions is creditable only if it occurs at an emissions unit that is part of one of the source categories listed in subsection (14)(e) of this section, the definition of major stationary source, or if the emission unit is located at a major stationary source that belongs to one of the listed source categories. Fugitive emission increases or decreases are not creditable for those emissions units located at a facility whose primary activity is not represented by one of the source categories listed in subsection (14)(e) of this section, the definition of major stationary source, and that are not, by themselves, part of a listed source category.

(c) For purposes of determining the projected actual emissions of an emissions unit after a project, fugitive emissions are included only if the emissions unit is part of one of the source categories listed in subsection (14)(e) of this section, the definition of major stationary source, or if the emission unit is located at a major stationary source that belongs to one of the listed source categories. Fugitive emissions are not included for those emissions units located at a facility whose primary activity is not represented by one of the source categories listed in subsection (14)(e) of this section, the definition of major stationary source, and that are not, by themselves, part of a listed source category.

(d) For purposes of determining the baseline actual emissions of an emissions unit, fugitive emissions are included only if the emissions unit is part of one of the source categories listed in subsection (14)(e) of this section, the definition of major stationary source, or if the emission unit is located at a major stationary source that belongs to one of the listed source categories, except that, for a PAL, fugitive emissions shall be included regardless of the source category. With the exception of PALs, fugitive emissions are not included for those emissions units located at a facility whose primary activity is not represented by one of the source categories listed in subsection (14)(e) of this section, the definition of major stationary source, and that are not, by themselves, part of a listed source category.

(e) In calculating whether a project will cause a significant emissions increase, fugitive emissions are included only for those emissions units that are part of one of the source categories listed in subsection (14)(e) of this section, the defini-

tion of major stationary source, or for any emissions units that are located at a major stationary source that belongs to one of the listed source categories. Fugitive emissions are not included for those emissions units located at a facility whose primary activity is not represented by one of the source categories listed in subsection (14)(e) of this section, the definition of major stationary source, and that are not, by themselves, part of a listed source category.

(f) For purposes of monitoring and reporting emissions from a project after normal operations have been resumed, fugitive emissions are included only for those emissions units that are part of one of the source categories listed in subsection (14)(e) of this section, the definition of major stationary source, or for any emissions units that are located at a major stationary source that belongs to one of the listed source categories. Fugitive emissions are not included for those emissions units located at a facility whose primary activity is not represented by one of the source categories listed in subsection (14)(e) of this section, the definition of major stationary source, and that are not, by themselves, part of a listed source category.

(g) For all other purposes of this section, fugitive emissions are treated in the same manner as other, nonfugitive emissions. This includes, but is not limited to, the treatment of fugitive emissions for offsets (see WAC 173-400-840(7)) and for PALs (see WAC 173-400-850).

(13) Lowest achievable emission rate (LAER) means, for any source, the more stringent rate of emissions based on the following:

(a) The most stringent emissions limitation which is contained in the implementation plan of any state for such class or category of stationary source, unless the owner or operator of the proposed stationary source demonstrates that such limitations are not achievable; or

(b) The most stringent emissions limitation which is achieved in practice by such class or category of stationary sources. This limitation, when applied to a modification, means the lowest achievable emissions rate for the new or modified emissions units within a stationary source. In no event shall the application of the term permit a proposed new or modified stationary source to emit any pollutant in excess of the amount allowable under an applicable new source standard of performance.

(14)(a) Major stationary source means any stationary source of air pollutants that emits, or has the potential to emit, one hundred tons per year or more of any regulated NSR pollutant, except that lower emissions thresholds apply in areas subject to sections 181-185B, sections 186 and 187, or sections 188-190 of the Federal Clean Air Act. In those areas the following thresholds apply:

(i) Fifty tons per year of volatile organic compounds in any serious ozone nonattainment area;

(ii) Fifty tons per year of volatile organic compounds in an area within an ozone transport region, except for any severe or extreme ozone nonattainment area;

(iii) Twenty-five tons per year of volatile organic compounds in any severe ozone nonattainment area;

(iv) Ten tons per year of volatile organic compounds in any extreme ozone nonattainment area;

(v) Fifty tons per year of carbon monoxide in any serious nonattainment area for carbon monoxide, where stationary sources contribute significantly to carbon monoxide levels in the area (as determined under rules issued by the administrator);

(vi) Seventy tons per year of PM-10 in any serious nonattainment area for PM-10.

(b) For the purposes of applying the requirements of WAC 173-400-830 to stationary sources of nitrogen oxides located in an ozone nonattainment area or in an ozone transport region, any stationary source which emits, or has the potential to emit, one hundred tons per year or more of nitrogen oxides emissions, except that the emission thresholds in (b)(i) through (vi) of this subsection shall apply in areas subject to sections 181-185B of the Federal Clean Air Act.

(i) One hundred tons per year or more of nitrogen oxides in any ozone nonattainment area classified as marginal or moderate.

(ii) One hundred tons per year or more of nitrogen oxides in any ozone nonattainment area classified as a transitional, submarginal, or incomplete or no data area, when such area is located in an ozone transport region.

(iii) One hundred tons per year or more of nitrogen oxides in any area designated under section 107(d) of the Federal Clean Air Act as attainment or unclassifiable for ozone that is located in an ozone transport region.

(iv) Fifty tons per year or more of nitrogen oxides in any serious nonattainment area for ozone.

(v) Twenty-five tons per year or more of nitrogen oxides in any severe nonattainment area for ozone.

(vi) Ten tons per year or more of nitrogen oxides in any extreme nonattainment area for ozone.

(c) Any physical change that would occur at a stationary source not qualifying under (a) and (b) of this subsection as a major stationary source, if the change would constitute a major stationary source by itself.

(d) A major stationary source that is major for volatile organic compounds shall be considered major for ozone.

(e) The fugitive emissions of a stationary source shall not be included in determining for any of the purposes of subsection (14) of this section whether it is a major stationary source, unless the source belongs to one of the following categories of stationary sources:

- (i) Coal cleaning plants (with thermal dryers);
- (ii) Kraft pulp mills;
- (iii) Portland cement plants;
- (iv) Primary zinc smelters;
- (v) Iron and steel mills;
- (vi) Primary aluminum ore reduction plants;
- (vii) Primary copper smelters;
- (viii) Municipal incinerators capable of charging more than fifty tons of refuse per day;
- (ix) Hydrofluoric, sulfuric, or nitric acid plants;
- (x) Petroleum refineries;
- (xi) Lime plants;
- (xii) Phosphate rock processing plants;
- (xiii) Coke oven batteries;
- (xiv) Sulfur recovery plants;
- (xv) Carbon black plants (furnace process);
- (xvi) Primary lead smelters;

(xvii) Fuel conversion plants;

(xviii) Sintering plants;

(xix) Secondary metal production plants;

(xx) Chemical process plants - The term chemical processing plant shall not include ethanol production facilities that produce ethanol by natural fermentation included in NAICS codes 325193 or 312140;

(xxi) Fossil-fuel boilers (or combination thereof) totaling more than two hundred fifty million British thermal units per hour heat input;

(xxii) Petroleum storage and transfer units with a total storage capacity exceeding three hundred thousand barrels;

(xxiii) Taconite ore processing plants;

(xxiv) Glass fiber processing plants;

(xxv) Charcoal production plants;

(xxvi) Fossil fuel-fired steam electric plants of more than two hundred fifty million British thermal units per hour heat input; and

(xxvii) Any other stationary source category which, as of August 7, 1980, is being regulated under section 111 or 112 of the act.

(15)(a) Major modification means any physical change in or change in the method of operation of a major stationary source that would result in:

(i) A significant emissions increase of a regulated NSR pollutant; and

(ii) A significant net emissions increase of that pollutant from the major stationary source.

(b) Any significant emissions increase from any emissions units or net emissions increase at a major stationary source that is significant for volatile organic compounds shall be considered significant for ozone.

(c) A physical change or change in the method of operation shall not include:

(i) Routine maintenance, repair and replacement;

(ii) Use of an alternative fuel or raw material by reason of an order under sections 2 (a) and (b) of the Energy Supply and Environmental Coordination Act of 1974 (or any superseding legislation) or by reason of a natural gas curtailment plan pursuant to the Federal Power Act;

(iii) Use of an alternative fuel by reason of an order or rule section 125 of the Federal Clean Air Act;

(iv) Use of an alternative fuel at a steam generating unit to the extent that the fuel is generated from municipal solid waste;

(v) Use of an alternative fuel or raw material by a stationary source which:

(A) The source was capable of accommodating before December 21, 1976, unless such change would be prohibited under any federally enforceable permit condition which was established after December 12, 1976, pursuant to 40 C.F.R. 52.21 or under regulations approved pursuant to 40 C.F.R. Part 51, Subpart I or section 51.166; or

(B) The source is approved to use under any permit issued under regulations approved by the administrator implementing 40 C.F.R. 51.165.

(vi) An increase in the hours of operation or in the production rate, unless such change is prohibited under any federally enforceable permit condition which was established after December 21, 1976, pursuant to 40 C.F.R. 52.21 or reg-

ulations approved pursuant to 40 C.F.R. Part 51, Subpart I or 40 C.F.R. 51.166;

(vii) Any change in ownership at a stationary source;

(viii) The installation, operation, cessation, or removal of a temporary clean coal technology demonstration project, provided that the project complies with:

(A) The state implementation plan for the state in which the project is located; and

(B) Other requirements necessary to attain and maintain the National Ambient Air Quality Standard during the project and after it is terminated.

(d) This definition shall not apply with respect to a particular regulated NSR pollutant when the major stationary source is complying with the requirements for a PAL for that pollutant. Instead, the definitions in 40 C.F.R. Part 51, Appendix S adopted by reference in WAC 173-400-850 shall apply.

(e) For the purpose of applying the requirements of WAC 173-400-830 (1)(i) to modifications at major stationary sources of nitrogen oxides located in ozone nonattainment areas or in ozone transport regions, whether or not subject to sections 181-185B, Part D, Title I of the Federal Clean Air Act, any significant net emissions increase of nitrogen oxides is considered significant for ozone.

(f) Any physical change in, or change in the method of operation of, a major stationary source of volatile organic compounds that results in any increase in emissions of volatile organic compounds from any discrete operation, emissions unit, or other pollutant emitting activity at the source shall be considered a significant net emissions increase and a major modification for ozone, if the major stationary source is located in an extreme ozone nonattainment area that is subject to sections 181-185B, Part D, Title I of the Federal Clean Air Act.

(g) Fugitive emissions shall not be included in determining for any of the purposes of this section whether a physical change in or change in the method of operation of a major stationary source is a major modification, unless the source belongs to one of the source categories listed in subsection (14)(e) of this section, the definition of major stationary source.

(16) Necessary preconstruction approvals or permits means those permits or orders of approval required under federal air quality control laws and regulations or under air quality control laws and regulations which are part of the applicable state implementation plan.

(17)(a) Net emissions increase means with respect to any regulated NSR pollutant emitted by a major stationary source, the amount by which the sum of the following exceeds zero:

(i) The increase in emissions from a particular physical change or change in the method of operation at a stationary source as calculated pursuant to WAC 173-400-820 (2) and (3); and

(ii) Any other increases and decreases in actual emissions at the major stationary source that are contemporaneous with the particular change and are otherwise creditable. In determining the net emissions increase, baseline actual emissions for calculating increases and decreases shall be determined as provided in the definition of baseline actual emis-

sions, except that subsection (2)(a)(iii) and (b)(iv) of this section, in the definition of baseline actual emissions, shall not apply.

(b) An increase or decrease in actual emissions is contemporaneous with the increase from the particular change only if it occurs before the date that the increase from the particular change occurs;

(c) An increase or decrease in actual emissions is creditable only if:

(i) It occurred no more than one year prior to the date of submittal of a complete notice of construction application for the particular change, or it has been documented by an emission reduction credit (ERC). Any emissions increases occurring between the date of issuance of the ERC and the date when a particular change becomes operational shall be counted against the ERC; and

(ii) The permitting authority has not relied on it in issuing a permit for the source under regulations approved pursuant to 40 C.F.R. 51.165, which permit is in effect when the increase in actual emissions from the particular change occurs; and

(iii) As it pertains to an increase or decrease in fugitive emissions (to the extent quantifiable), it occurs at an emissions unit that is part of one of the source categories listed in subsection (14)(e) of this section, the definition of major stationary source, or it occurs at an emissions unit that is located at a major stationary source that belongs to one of the listed source categories. Fugitive emission increases or decreases are not creditable for those emissions units located at a facility whose primary activity is not represented by one of the source categories listed in subsection (14)(e) of this section, the definition of major stationary source, and that are not, by themselves, part of a listed source category.

(d) An increase in actual emissions is creditable only to the extent that the new level of actual emissions exceeds the old level;

(e) A decrease in actual emissions is creditable only to the extent that:

(i) The old level of actual emission or the old level of allowable emissions whichever is lower, exceeds the new level of actual emissions;

(ii) It is enforceable as a practical matter at and after the time that actual construction on the particular change begins;

(iii) The permitting authority has not relied on it as part of an offsetting transaction under WAC 173-400-113(4) or 173-400-830 or in issuing any permit under regulations approved pursuant to 40 C.F.R. Part 51, Subpart I or the state has not relied on it in demonstrating attainment or reasonable further progress;

(iv) It has approximately the same qualitative significance for public health and welfare as that attributed to the increase from the particular change; and

(f) An increase that results from a physical change at a source occurs when the emissions unit on which construction occurred becomes operational and begins to emit a particular pollutant.

(g) Any replacement unit that requires shakedown becomes operational only after a reasonable shakedown period, not to exceed one hundred eighty days.

(h) Subsection (1)(b) of this section, in the definition of actual emissions, shall not apply for determining creditable increases and decreases or after a change.

(18) Nonattainment major new source review (NSR) program means the major source preconstruction permit program that has been approved by the administrator and incorporated into the plan to implement the requirements of 40 C.F.R. 51.165, or a program that implements 40 C.F.R. Part 51 Appendix S, sections I through VI. Any permit issued under either program is a major NSR permit.

(19) Pollution prevention means any activity that through process changes, product reformulation or redesign, or substitution of less polluting raw materials, eliminates or reduces the release of air pollutants (including fugitive emissions) and other pollutants to the environment prior to recycling, treatment, or disposal; it does not mean recycling (other than certain "in-process recycling" practices), energy recovery, treatment, or disposal.

(20) Predictive emissions monitoring system (PEMS) means all of the equipment necessary to monitor process and control device operational parameters (for example, control device secondary voltages and electric currents) and other information (for example, gas flow rate, O₂ or CO₂ concentrations), and calculate and record the mass emissions rate (for example, lb/hr) on a continuous basis.

(21) Prevention of significant deterioration (PSD) permit means any permit that is issued under the major source preconstruction permit program that has been approved by the administrator and incorporated into the plan to implement the requirements of 40 C.F.R. 51.166, or under the program in 40 C.F.R. 52.21.

(22) Project means a physical change in, or change in the method of operation of, an existing major stationary source.

(23)(a) Projected actual emissions means the maximum annual rate, in tons per year, at which an existing emissions unit is projected to emit a regulated NSR pollutant in any one of the five years (twelve-month period) following the date the unit resumes regular operation after the project, or in any one of the ten years following that date, if the project involves increasing the emissions unit's design capacity or its potential to emit of that regulated NSR pollutant and full utilization of the unit would result in a significant emissions increase or a significant net emissions increase at the major stationary source.

(b) In determining the projected actual emissions before beginning actual construction, the owner or operator of the major stationary source:

(i) Shall consider all relevant information including, but not limited to, historical operational data, the company's own representations, the company's expected business activity and the company's highest projections of business activity, the company's filings with the state or federal regulatory authorities, and compliance plans under the approved plan; and

(ii) Shall include emissions associated with startups, shutdowns, and malfunctions; and, for an emissions unit that is part of one of the source categories listed in subsection (14)(e) of this section, the definition of major stationary source, or for an emissions unit that is located at a major stationary source that belongs to one of the listed source categories,

shall include fugitive emissions (to the extent quantifiable); and

(iii) Shall exclude, in calculating any increase in emissions that results from the particular project, that portion of the unit's emissions following the project that an existing unit could have accommodated during the consecutive twenty-four-month period used to establish the baseline actual emissions and that are also unrelated to the particular project, including any increased utilization due to product demand growth; or

(iv) In lieu of using the method set out in (b)(i) through (iii) of this subsection, the owner or operator may elect to use the emissions unit's potential to emit, in tons per year. For this purpose, if the emissions unit is part of one of the source categories listed in subsection (14)(e) of this section, the definition of major stationary source or if the emissions unit is located at a major stationary source that belongs to one of the listed source categories, the unit's potential to emit shall include fugitive emissions (to the extent quantifiable).

(24)(a) Regulated NSR pollutant, means the following:

(i) Nitrogen oxides or any volatile organic compounds;

(ii) Any pollutant for which a National Ambient Air Quality Standard has been promulgated;

(iii) Any pollutant that is identified under this subsection as a constituent or precursor of a general pollutant listed in (a)(i) or (ii) of this subsection, provided that such constituent or precursor pollutant may only be regulated under NSR as part of regulation of the general pollutant. For purposes of NSR precursor pollutants are the following:

(A) Volatile organic compounds and nitrogen oxides are precursors to ozone in all ozone nonattainment areas.

(B) Sulfur dioxide is a precursor to PM-2.5 in all PM-2.5 nonattainment areas.

(C) Nitrogen oxides are precursors to PM-2.5 in all PM-2.5 nonattainment areas.

(b) PM-2.5 emissions and PM-10 emissions shall include gaseous emissions from a source or activity which condense to form particulate matter at ambient temperatures. On or after January 1, 2011 (~~(((or any earlier date established in the upcoming EPA rulemaking codifying emission test methods for condensable particulate matter)))~~), such condensable particulate matter shall be accounted for in applicability determinations and in establishing emissions limitations for PM-2.5 in nonattainment major NSR permits. Compliance with emissions limitations for PM-2.5 issued prior to this date shall not be based on condensable particulate matter unless required by the terms and conditions of the permit or the applicable implementation plan. Applicability determinations for PM-2.5 made prior to the effective date of WAC 173-400-800 through 173-400-850 made without accounting for condensable particulate matter shall not be considered in violation of WAC 173-400-800 through 173-400-850.

(25)(a) Replacement unit means an emissions unit for which all the criteria listed below are met:

(i) The emissions unit is a reconstructed unit within the meaning of 40 C.F.R. 60.15 (b)(1), or the emissions unit completely takes the place of an existing emissions unit.

(ii) The emissions unit is identical to or functionally equivalent to the replaced emissions unit.

(iii) The replacement does not alter the basic design parameters of the process unit. Basic design parameters are:

(A) Except as provided in (a)(iii)(C) of this subsection, for a process unit at a steam electric generating facility, the owner or operator may select as its basic design parameters either maximum hourly heat input and maximum hourly fuel consumption rate or maximum hourly electric output rate and maximum steam flow rate. When establishing fuel consumption specifications in terms of weight or volume, the minimum fuel quality based on British thermal units content must be used for determining the basic design parameter(s) for a coal-fired electric utility steam generating unit.

(B) Except as provided in (a)(iii)(C) of this subsection, the basic design parameter(s) for any process unit that is not at a steam electric generating facility are maximum rate of fuel or heat input, maximum rate of material input, or maximum rate of product output. Combustion process units will typically use maximum rate of fuel input. For sources having multiple end products and raw materials, the owner or operator should consider the primary product or primary raw material of the process unit when selecting a basic design parameter.

(C) If the owner or operator believes the basic design parameter(s) in (a)(iii)(A) and (B) of this subsection is not appropriate for a specific industry or type of process unit, the owner or operator may propose to the reviewing authority an alternative basic design parameter(s) for the source's process unit(s). If the reviewing authority approves of the use of an alternative basic design parameter(s), the reviewing authority will issue a new permit or modify an existing permit that is legally enforceable that records such basic design parameter(s) and requires the owner or operator to comply with such parameter(s).

(D) The owner or operator shall use credible information, such as results of historic maximum capability tests, design information from the manufacturer, or engineering calculations, in establishing the magnitude of the basic design parameter(s) specified in (a)(iii)(A) and (B) of this subsection.

(E) If design information is not available for a process unit, then the owner or operator shall determine the process unit's basic design parameter(s) using the maximum value achieved by the process unit in the five-year period immediately preceding the planned activity.

(F) Efficiency of a process unit is not a basic design parameter.

(iv) The replaced emissions unit is permanently removed from the major stationary source, otherwise permanently disabled, or permanently barred from operation by a permit that is enforceable as a practical matter. If the replaced emissions unit is brought back into operation, it shall constitute a new emissions unit.

(b) No creditable emission reductions shall be generated from shutting down the existing emissions unit that is replaced.

(26) Reviewing authority means "permitting authority" as defined in WAC 173-400-030.

(27) Significant means:

(a) In reference to a net emissions increase or the potential of a source to emit any of the following pollutants, a rate

of emissions that would equal or exceed any of the following rates:

Pollutant	Emission Rate
Carbon monoxide	100 tons per year (tpy)
Nitrogen oxides	40 tons per year
Sulfur dioxide	40 tons per year
Ozone	40 tons per year of volatile organic compounds or nitrogen oxides
Lead	0.6 tons per year
PM-10	15 tons per year
PM-2.5	10 tons per year of direct PM-2.5 emissions; 40 tons per year of nitrogen oxide emissions; 40 tons per year of sulfur dioxide emissions

(b) Notwithstanding the significant emissions rate for ozone, significant means, in reference to an emissions increase or a net emissions increase, any increase in actual emissions of volatile organic compounds that would result from any physical change in, or change in the method of operation of, a major stationary source locating in a serious or severe ozone nonattainment area that is subject to sections 181-185B, of the Federal Clean Air Act, if such emissions increase of volatile organic compounds exceeds twenty-five tons per year.

(c) For the purposes of applying the requirements of WAC 173-400-830 (1)(i) to modifications at major stationary sources of nitrogen oxides located in an ozone nonattainment area or in an ozone transport region, the significant emission rates and other requirements for volatile organic compounds in (a), (b), and (e) of this subsection, of the definition of significant, shall apply to nitrogen oxides emissions.

(d) Notwithstanding the significant emissions rate for carbon monoxide under (a) of this subsection, the definition of significant, significant means, in reference to an emissions increase or a net emissions increase, any increase in actual emissions of carbon monoxide that would result from any physical change in, or change in the method of operation of, a major stationary source in a serious nonattainment area for carbon monoxide if such increase equals or exceeds fifty tons per year, provided the administrator has determined that stationary sources contribute significantly to carbon monoxide levels in that area.

(e) Notwithstanding the significant emissions rates for ozone under (a) and (b) of this subsection, the definition of significant, any increase in actual emissions of volatile organic compounds from any emissions unit at a major stationary source of volatile organic compounds located in an extreme ozone nonattainment area that is subject to sections 181-185B of the Federal Clean Air Act shall be considered a significant net emissions increase.

(28) Significant emissions increase means, for a regulated NSR pollutant, an increase in emissions that is significant for that pollutant.

(29) Source (~~means "stationary source" as defined in WAC 173-400-030~~) and stationary source means any build-

ing, structure, facility, or installation which emits or may emit a regulated NSR pollutant.

(30) Temporary clean coal technology demonstration project means a clean coal technology demonstration project that is operated for a period of five years or less, and which complies with the state implementation plan for the state in which the project is located and other requirements necessary to attain and maintain the National Ambient Air Quality Standards during the project and after it is terminated.

(31) Best available control technology (BACT) means an emissions limitation (including a visible emissions standard) based on the maximum degree of reduction for each regulated NSR pollutant which would be emitted from any proposed major stationary source or major modification which the reviewing authority, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such source or modification through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such pollutant. In no event shall application of best available control technology result in emissions of any pollutant which would exceed the emissions allowed by any applicable standard under 40 C.F.R. Part 60 or 61. If the reviewing authority determines that technological or economic limitations on the application of measurement methodology to a particular emissions unit would make the imposition of an emissions standard infeasible, a design, equipment, work practice, operational standard, or combination thereof, may be prescribed instead to satisfy the requirement for the application of BACT. Such standard shall, to the degree possible, set forth the emissions reduction achievable by implementation of such design, equipment, work practice or operation, and shall provide for compliance by means which achieve equivalent results.

AMENDATORY SECTION (Amending Order 09-01, filed 3/1/11, effective 4/1/11)

WAC 173-400-820 Determining if a new stationary source or modification to a stationary source is subject to these requirements. (1) Any new major stationary source ~~((or major modification))~~ located anywhere in a nonattainment area designated under section 107 (d)(1)(A)(i) of the Federal Clean Air Act, that is major for the pollutant for which the area is designated nonattainment ((under section 107 (d)(1)(A)(i) of the Federal Clean Air Act, if the stationary source or modification would locate anywhere in the designated nonattainment under section 107 (d)(1)(A)(i) of the Federal Clean Air Act area shall use the following procedures to determine if the new stationary source or modification)) is subject to the permitting requirements of WAC 173-400-830 through 173-400-850. Any major modification of an existing major stationary source that is major for the pollutant for which the area is designated nonattainment and is located anywhere in a nonattainment area designated under section 107 (d)(1)(A)(i) of the Federal Clean Air Act, and that has a significant net emissions increase of the pollutant for which the area is designated nonattainment is subject to the permitting requirements of WAC 173-400-830 through 173-400-

850. A modification to an existing major stationary source must use the following procedures to determine if the modification would result in a significant net emissions increase of the nonattainment pollutant.

(2) Except as otherwise provided in subsection (4) of this section, and consistent with the definition of major modification, a project is a major modification for a regulated NSR pollutant if it causes two types of emissions increases - A significant emissions increase, and a significant net emissions increase. The project is not a major modification if it does not cause a significant emissions increase. If the project causes a significant emissions increase, then the project is a major modification only if it also results in a significant net emissions increase.

(3) The procedure for calculating (before beginning actual construction) whether a significant emissions increase (i.e., the first step of the process) will occur depends upon the type of emissions units being modified, according to (a) through (c) of this subsection. For these calculations, fugitive emissions (to the extent quantifiable) are included only if the emissions unit is part of one of the source categories listed in the definition of major stationary source contained in WAC 173-400-810 (14)(e) or if the emissions unit is located at a major stationary source that belongs to one of the listed source categories. Fugitive emissions are not included for those emissions units located at a facility whose primary activity is not represented by one of the source categories listed in the definition of major stationary source contained in WAC 173-400-810 (14)(e) and that are not, by themselves, part of a listed source category. The procedure for calculating (before beginning actual construction) whether a significant net emissions increase will occur at the major stationary source (i.e., the second step of the process) is contained in the definition of net emission increase. Regardless of any such preconstruction projections, a major modification results if the project causes a significant emissions increase and a significant net emissions increase.

(a) Actual-to-projected-actual applicability test for projects that only involve existing emissions units. A significant emissions increase of a regulated NSR pollutant is projected to occur if the sum of the difference between the projected actual emissions and the baseline actual emissions, for each existing emissions unit, equals or exceeds the significant amount for that pollutant.

(b) Actual-to-potential test for projects that only involve construction of a new emissions unit(s). A significant emissions increase of a regulated NSR pollutant is projected to occur if the sum of the difference between the potential to emit from each new emissions unit following completion of the project and the baseline actual emissions of these units before the project equals or exceeds the significant amount for that pollutant.

(c) Hybrid test for projects that involve multiple types of emissions units. A significant emissions increase of a regulated NSR pollutant is projected to occur if the sum of the emissions increases for each emissions unit, using the method specified in (a) and (b) of this subsection as applicable with respect to each emissions unit, for each type of emissions unit equals or exceeds the significant amount for that pollutant.

(4) Any major stationary source which has a PAL for a regulated NSR pollutant shall comply with requirements in WAC 173-400-850.

(5) ~~((Reasonable possibility))~~ The following specific provisions apply with respect to any regulated NSR pollutant emitted from projects at existing emissions units at a major stationary source (other than projects at a source with a PAL) in circumstances where there is a reasonable possibility that a project that is not a part of a major modification may result in a significant emissions increase of such pollutant, and the owner or operator elects to use the method specified in the definition of projected actual emissions contained in WAC 173-400-810 (23)(b)(i) through (iii) for calculating projected actual emissions.

(a) Before beginning actual construction of the project, the owner or operator shall document, and maintain a record of the following information:

(i) A description of the project;

(ii) Identification of the emissions unit(s) whose emissions of a regulated NSR pollutant could be affected by the project; and

(iii) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including the baseline actual emissions, the projected actual emissions, the amount of emissions excluded under the definition of projected actual emissions contained in WAC 173-400-810 (23)(b)(iii) and an explanation for why such amount was excluded, and any netting calculations, if applicable.

(b) Before beginning actual construction, the owner or operator shall provide a copy of the information set out in (a) of this subsection to the permitting authority. This information may be submitted in conjunction with any NOC application required under the provisions of WAC 173-400-110. Nothing in this subsection shall be construed to require the owner or operator of such a unit to obtain any determination from the permitting authority before beginning actual construction.

(c) The owner or operator shall monitor the emissions of any regulated NSR pollutant that could increase as a result of the project and that is emitted by any emissions units identified in (a)(ii) of this subsection; and calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of five years following resumption of regular operations after the change, or for a period of ten years following resumption of regular operations after the change if the project increases the design capacity or potential to emit that regulated NSR pollutant at such emissions unit. ~~((For purposes of this subsection (c), fugitive emissions (to the extent quantifiable) shall be monitored if the emissions unit is part of one of the source categories listed in the definition of major stationary source contained in WAC 173-400-810 (14)(c) or if the emissions unit is located at a major stationary source that belongs to one of the listed source categories.))~~

(d) The owner or operator shall submit a report to the permitting authority within sixty days after the end of each year during which records must be generated under (c) of this subsection setting out the unit's annual emissions, as moni-

tored pursuant to (c) of this subsection, during the year that preceded submission of the report.

(e) The owner or operator shall submit a report to the permitting authority if the annual emissions, in tons per year, from the project identified in (a) of this subsection, exceed the baseline actual emissions (as documented and maintained pursuant to (a)(iii) of this subsection), by a significant amount (as defined in the definition of significant) for that regulated NSR pollutant, and if such emissions differ from the preconstruction projection as documented and maintained pursuant to (a)(iii) of this subsection. Such report shall be submitted to the permitting authority within sixty days after the end of such year. The report shall contain the following:

(i) The name, address and telephone number of the major stationary source;

(ii) The annual emissions as calculated pursuant to (d) of this subsection; and

(iii) Any other information that the owner or operator wishes to include in the report (e.g., an explanation as to why the emissions differ from the preconstruction projection).

(f) A "reasonable possibility" under this subsection occurs when the owner or operator calculates the project to result in either:

(i) A projected actual emissions increase of at least fifty percent of the amount that is a "significant emissions increase," (without reference to the amount that is a significant net emissions increase), for the regulated NSR pollutant;

or

(ii) A projected actual emissions increase that, added to the amount of emissions excluded under the definition of projected actual emissions sums to at least fifty percent of the amount that is a "significant emissions increase," (without reference to the amount that is a significant net emissions increase), for the regulated NSR pollutant. For a project for which a reasonable possibility occurs only within the meaning of (f)(ii) of this subsection, and not also within the meaning of (f)(i) of this subsection, then (c) through (f) of this subsection does not apply to the project.

(6) For projects not required to submit the above information to the permitting authority as part of a notice of construction application, the owner or operator of the source shall make the information required to be documented and maintained pursuant to subsection (5) of this section available for review upon a request for inspection by the permitting authority or the general public pursuant to the requirements contained in chapter 173-401 WAC.

AMENDATORY SECTION (Amending Order 09-01, filed 3/1/11, effective 4/1/11)

WAC 173-400-830 Permitting requirements. (1) The owner or operator of a proposed new major stationary source or a major modification of an existing major stationary source, as determined according to WAC 173-400-820, is authorized to construct and operate the proposed project provided the following requirements are met:

(a) The proposed new major stationary source or a major modification of an existing major stationary source will not cause any ambient air quality standard to be exceeded, will not violate the requirements for reasonable further progress

established by the SIP and will comply with WAC 173-400-113 (3) and (4) for all air contaminants for which the area has not been designated nonattainment.

(b) The ~~((proposed new major stationary source or a major modification of an existing major stationary source and the))~~ permitting authority has determined, based on review of an analysis performed by the owner or operator of a proposed new major stationary source or a major modification of an existing major stationary source of alternative sites, sizes, production processes, and environmental control techniques, that the benefits of the project significantly outweigh the environmental and social costs imposed as a result of its location, construction, or modification.

(c) The proposed new major stationary source or a major modification of an existing major stationary source will comply with all applicable new source performance standards, National Emission Standards for Hazardous Air Pollutants, National Emission Standards for Hazardous Air Pollutants for source categories, and emission standards adopted by ecology and the permitting authority.

(d) The proposed new major stationary source or a major modification of an existing major stationary source will employ BACT for all air contaminants and designated precursors to those air contaminants, except that it will achieve LAER for the air contaminants and designated precursors to those air contaminants for which the area has been designated nonattainment and for which the proposed new major stationary source ~~((or major modification to an existing major stationary source is major))~~ is major or for which the existing source is major and the proposed modification is a major modification.

(e) Allowable emissions from the proposed new major stationary source or major modification of an existing major stationary source of that air contaminant and designated precursors to those air contaminants are offset by reductions in actual emissions from existing sources in the nonattainment area. All offsetting emission reductions must satisfy the requirements in WAC 173-400-840.

(f) The owner or operator of the proposed new major stationary source or major modification of an existing major stationary source has demonstrated that all major stationary sources owned or operated by such person (or by any entity controlling, controlled by, or under common control with such person) in Washington are subject to emission limitations and are in compliance, or on a schedule for compliance, with all applicable emission limitations and standards under the Federal Clean Air Act, including all rules in the SIP.

(g) If the proposed new source is also a major stationary source within the meaning of WAC 173-400-720, or the proposed modification is also a major modification within the meaning of WAC 173-400-720, it meets the requirements of the PSD program under 40 C.F.R. 52.21 delegated to ecology by EPA Region 10, while such delegated program remains in effect. The proposed new major stationary source or major modification will comply with the PSD program in WAC ~~((173-400-720))~~ 173-400-700 through 173-400-750 for all air contaminants for which the area has not been designated nonattainment when that PSD program has been approved into the Washington SIP.

(h) The proposed new major stationary source or the proposed major modification meets the special protection requirements for federal Class I areas in WAC 173-400-117.

(i) All requirements of this section applicable to major stationary sources and major modifications of volatile organic compounds shall apply to nitrogen oxides emissions from major stationary sources and major modifications of nitrogen oxides in an ozone transport region or in any ozone nonattainment area, except in an ozone nonattainment area or in portions of an ozone transport region where the administrator of the environmental protection agency has granted a NO_x waiver applying the standards set forth under section 182(f) of the Federal Clean Air Act and the waiver continues to apply.

(j) The requirements of this section applicable to major stationary sources and major modifications of PM-10 and PM-2.5 shall also apply to major stationary sources and major modifications of PM-10 and PM-2.5 precursors, except where the administrator of the EPA determines that such sources do not contribute significantly to PM-10 levels that exceed the PM-10 ambient standards in the area.

(2) Approval to construct shall not relieve any owner or operator of the responsibility to comply fully with applicable provisions of the state implementation plan and any other requirements under local, state or federal law.

(3) At such time that a particular source or modification becomes a major stationary source or major modification solely by virtue of a relaxation in any ~~((enforcement))~~ enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant, such as a restriction on hours of operation, then the requirements of regulations approved pursuant to 40 C.F.R. 51.165, or the requirements of 40 C.F.R. Part 51, Appendix S, as applicable, shall apply to the source or modification as though construction had not yet commenced on the source or modification. 40 C.F.R. Part 51, Appendix S shall not apply to a new or modified source for which enforceable limitations are established after WAC 173-400-800 through 173-400-850 have been approved into Washington's SIP.

AMENDATORY SECTION (Amending Order 09-01, filed 3/1/11, effective 4/1/11)

WAC 173-400-840 Emission offset requirements. (1)

The ratio of total actual emissions reductions to the emissions increase shall be 1.1:1 unless an alternative ratio is provided for the applicable nonattainment area in subsection (2) through (4) of this section.

(2) In meeting the emissions offset requirements of WAC 173-400-830 for ozone nonattainment areas that are subject to sections 181-185B of the Federal Clean Air Act, the ratio of total actual emissions reductions of VOC to the emissions increase of VOC shall be as follows:

- (a) In any marginal nonattainment area for ozone - 1.1:1;
 - (b) In any moderate nonattainment area for ozone - 1.15:1;
 - (c) In any serious nonattainment area for ozone - 1.2:1;
 - (d) In any severe nonattainment area for ozone - 1.3:1;
- and

(e) In any extreme nonattainment area for ozone - 1.5:1.

(3) Notwithstanding the requirements of subsection (2) of this section for meeting the requirements of WAC 173-400-830, the ratio of total actual emissions reductions of VOC to the emissions increase of VOC shall be 1.15:1 for all areas within an ozone transport region that is subject to sections 181-185B of the Federal Clean Air Act, except for serious, severe, and extreme ozone nonattainment areas that are subject to sections 181-185B of the Federal Clean Air Act.

(4) In meeting the emissions offset requirements of this section for ozone nonattainment areas that are subject to sections 171-179b of the Federal Clean Air Act (but are not subject to sections 181-185B of the Federal Clean Air Act, including eight-hour ozone nonattainment areas subject to 40 C.F.R. 51.902(b)), the ratio of total actual emissions reductions of VOC to the emissions increase of VOC shall be 1.1:1.

(5) Emission offsets used to meet the requirements of WAC 173-400-830 (1)(e), must be for the same regulated NSR pollutant.

(6) If the offsets are provided by another source, the reductions in emissions from that source must be federally enforceable by the time the order of approval for the new or modified source is effective. An emission reduction credit issued under WAC 173-400-131 may be used to satisfy some or all of the offset requirements of this subsection.

(7) Emission offsets are required for the incremental increase in allowable emissions occurring during startup and shutdown operations at the new or modified emission units subject to nonattainment area major new source review. The incremental increase is the difference between the allowable emissions during normal operation and the allowable emissions for startup and shutdown contained in the nonattainment new source review approval.

(8) Emission offsets (~~not included~~) including those described in an emission reduction credit issued under WAC 173-400-131, must meet the following criteria:

(a) The baseline for determining credit for emissions reductions is the emissions limit under the applicable state implementation plan in effect at the time the notice of construction application is determined to be complete, except that the offset baseline shall be the actual emissions of the source from which offset credit is obtained where:

(i) The demonstration of reasonable further progress and attainment of ambient air quality standards is based upon the actual emissions of sources located within the designated nonattainment area; or

(ii) The applicable state implementation plan does not contain an emissions limitation for that source or source category.

(b) Other limitations on emission offsets.

(i) Where the emissions limit under the applicable state implementation plan allows greater emissions than the potential to emit of the source, emissions offset credit will be allowed only for control below the potential to emit;

(ii) For an existing fuel combustion source, credit shall be based on the allowable emissions under the applicable state implementation plan for the type of fuel being burned at the time the notice of construction application is determined to be complete. If the existing source commits to switch to a

cleaner fuel at some future date, an emissions offset credit based on the allowable (or actual) emissions reduction resulting from the fuels change is not acceptable, unless the permit or other enforceable order is conditioned to require the use of a specified alternative control measure which would achieve the same degree of emissions reduction should the source switch back to the higher emitting (dirtier) fuel at some later date. The permitting authority must ensure that adequate long-term supplies of the new fuel are available before granting emissions offset credit for fuel switches;

(iii) Emission reductions.

(A) Emissions reductions achieved by shutting down an existing emission unit or curtailing production or operating hours may be generally credited for offsets if:

(I) Such reductions are surplus, permanent, quantifiable, and federally enforceable; and

(II) The shutdown or curtailment occurred after the last day of the base year for the SIP planning process. For purposes of this subsection, the permitting authority may choose to consider a prior shutdown or curtailment to have occurred after the last day of the base year if the projected emissions inventory used to develop the attainment demonstration explicitly includes the preshutdown or precurtailment emissions from the previously shutdown or curtailed emission units. However, in no event may credit be given for shutdowns that occurred before August 7, 1977.

(B) Emissions reductions achieved by shutting down an existing emissions unit or curtailing production or operating hours and that do not meet the requirements in subsection (8)(b)(iii)(A) of this section may be generally credited only if:

(I) The shutdown or curtailment occurred on or after the date the construction permit application is filed; or

(II) The applicant can establish that the proposed new emissions unit is a replacement for the shutdown or curtailed emissions unit, and the emissions reductions achieved by the shutdown or curtailment met the requirements of (7)(b)(iii)(A)(I) of this section.

(iv) All emission reductions claimed as offset credit shall be federally enforceable;

(v) Emission reductions used for offsets may only be from any location within the designated nonattainment area. Except the permitting authority may allow use of emission reductions from another area that is nonattainment for the same pollutant, provided the following conditions are met:

(A) The other area is designated as an equal or higher nonattainment status than the nonattainment area where the source proposing to use the reduction is located; and

(B) Emissions from the other nonattainment area contribute to violations of the standard in the nonattainment area where the source proposing to use the reduction is located.

(vi) Credit for an emissions reduction can be claimed to the extent that the reduction has not been relied on in issuing any permit under 40 C.F.R. 52.21 or regulations approved pursuant to 40 C.F.R. Part 51 Subpart I or the state has not relied on it in demonstration of attainment or reasonable further progress.

(vii) The total tonnage of increased emissions, in tons per year, resulting from a major modification that must be offset in accordance with Section 173 of the Federal Clean Air Act

shall be determined by summing the difference between the allowable emissions after the modification and the actual emissions before the modification for each emissions unit.

~~((8))~~ (9) No emissions credit may be allowed for replacing one hydrocarbon compound with another of lesser reactivity, except for those compounds listed in Table 1 of EPA's "Recommended Policy on Control of Volatile Organic Compounds" (42 FR 35314, July 8, 1977). This document is also available from Mr. Ted Creekmore, Office of Air Quality Planning and Standards, (MD-15) Research Triangle Park, NC 27711.

AMENDATORY SECTION (Amending Order 09-01, filed 3/1/11, effective 4/1/11)

WAC 173-400-850 Actual emissions plantwide applicability limitation (PAL). The Actuals Plantwide Applicability limit program contained in Section IV.K of 40 C.F.R. Part 51, Appendix S, Emission Offset Ruling, as of ~~((July 1, 2010))~~ May 1, 2012, is adopted by reference with the following exceptions:

(1) The term "reviewing authority" means "permitting authority" as defined in WAC 173-400-030.

(2) "PAL permit" means the major or minor new source review permit issued that establishes the PAL and those PAL terms as they are incorporated into an air operating permit issued pursuant to chapter 173-401 WAC.

(3) The reference to 40 C.F.R. 70.6 (a)(3)(iii)(B) in subsection IV.K.14 means WAC 173-401-615 (3)(b).

(4) No PAL permit can be issued under this provision until EPA adopts this section into the state implementation plan.

AMENDATORY SECTION (Amending Order 09-01, filed 3/1/11, effective 4/1/11)

WAC 173-400-930 Emergency engines. (1) Applicability.

(a) This section applies statewide except where a permitting authority has not adopted this section in rule.

(b) This section applies to diesel-fueled compression ignition emergency engines with a cumulative BHP rating greater than 500 BHP and equal to or less than 2000 BHP.

~~((b))~~ (c) This section is not applicable to emergency engines proposed to be installed as part of a new major stationary source, as defined in WAC 173-400-710 and 173-400-810, or major modification, as defined in WAC 173-400-710 and 173-400-810.

(d) In lieu of filing a notice of construction application under WAC 173-400-110, the owner or operator may comply with the requirements of this section for emergency engines.

~~((e))~~ (e) Compliance with this section satisfies the requirement for new source review of emergency engines under RCW 70.94.152 and chapter 173-460 WAC.

~~((f))~~ (f) An applicant may choose to submit a notice of construction application in accordance with WAC 173-400-110 for a site specific review of criteria and toxic air pollutants in lieu of using this section's provisions.

~~((g))~~ (g) If an applicant cannot meet the requirements of this section, then they must file a notice of construction application.

(2) Operating requirements for emergency engines.

Emergency engines using this section must:

(a) Meet EPA emission standards applicable to all new nonroad compression-ignition engines, contained in 40 C.F.R. Part 89.112 Table 1 and 40 C.F.R. Part 1039.102 Tables 6 and 7, as applicable for the year that the emergency engine is put in operation.

(b) Be fueled by ultra low sulfur diesel or ultra low sulfur biodiesel, with a sulfur content of 15 ppm or 0.0015% sulfur by weight or less.

(c) Operate a maximum of fifty hours per year for maintenance and testing or other nonemergency use.

(3) Definitions.

(a) **Emergency engine** means a new diesel-fueled stationary compression ignition engine. The engine must meet all the criteria specified below. The engine must be:

(i) Installed for the primary purpose of providing electrical power or mechanical work during an emergency use and is not the source of primary power at the facility; and

(ii) Operated to provide electrical power or mechanical work during an emergency use.

(b) **Emergency use** means providing electrical power or mechanical work during any of the following events or conditions:

(i) The failure or loss of all or part of normal power service to the facility beyond the control of the facility; or

(ii) The failure or loss of all or part of a facility's internal power distribution system.

Examples of emergency operation include the pumping of water or sewage and the powering of lights.

(c) **Maintenance and testing** means operating an emergency engine to:

(i) Evaluate the ability of the engine or its supported equipment to perform during an emergency; or

(ii) Train personnel on emergency activities; or

(iii) Test an engine that has experienced a breakdown, or failure, or undergone a preventative overhaul during maintenance; or

(iv) Exercise the engine if such operation is recommended by the engine or generator manufacturer.

WSR 12-24-031

PERMANENT RULES

DEPARTMENT OF ECOLOGY

[Order 11-03—Filed November 28, 2012, 1:24 p.m., effective December 29, 2012]

Effective Date of Rule: Thirty-one days after filing.

Purpose: Creates chapter 173-165 WAC, Certified water right examiners, to implement RCW 90.03.665. The rule:

- Sets a fee schedule for certified water right examiner (CWRE)-program applicants and CWREs.
- Establishes a certification process.
- Describes CWRE responsibilities and the rights and responsibilities of permittees.
- Creates a framework for compliance and enforcement.

- Clarifies the process related to ecology review and decision making related to proof reports of examination submitted by CWREs.
- Includes other requirements to implement the program.

Statutory Authority for Adoption: RCW 90.03.665(11), 43.27A.090(11), 43.21A.064(9).

Adopted under notice filed as WSR 12-17-110 on August 20, 2012.

Changes Other than Editing from Proposed to Adopted Version: Adds definitions for "applicant," "proof examination," "qualified water conservancy board commissioner," and "water right certification." Allows CWREs to work with others in generating the report while clarifying that they must be responsible for the content. Addresses conflict of interest issues in the rule rather than only in the rules of professional performance. Removes requirement to submit written notice to clients and ecology of certification expiration. Allows for nonformal training to qualify for continuing education credit. Adds notice to a CWRE if under full investigation. Adds interviewing or surveying past and current CWRE clients as an informal compliance method. Stipulates that ecology will retain a copy of a withdrawn proof report of examination and permittees must explain discrepancies between it and any later report submitted. For further detail on changes, please see the concise explanatory statement Pub #12-11-044.

A final cost-benefit analysis is available by contacting Washington Department of Ecology, Water Resources Program Publications, P.O. Box 47600, Olympia, WA 98504-7600, phone (360) 407-6872, fax (360) 407-7162, e-mail WRPublications@ecy.wa.gov.

Number of Sections Adopted in Order to Comply with Federal Statute: New 0, Amended 0, Repealed 0; Federal Rules or Standards: New 0, Amended 0, Repealed 0; or Recently Enacted State Statutes: New 13, Amended 0, Repealed 0.

Number of Sections Adopted at Request of a Nongovernmental Entity: New 0, Amended 0, Repealed 0.

Number of Sections Adopted on the Agency's Own Initiative: New 0, Amended 0, Repealed 0.

Number of Sections Adopted in Order to Clarify, Streamline, or Reform Agency Procedures: New 0, Amended 0, Repealed 0.

Number of Sections Adopted Using Negotiated Rule Making: New 0, Amended 0, Repealed 0; Pilot Rule Making: New 0, Amended 0, Repealed 0; or Other Alternative Rule Making: New 0, Amended 0, Repealed 0.

Date Adopted: November 28, 2012.

Ted Sturdevant
Director

Chapter 173-165 WAC

CERTIFIED WATER RIGHT EXAMINERS

NEW SECTION

WAC 173-165-010 Purpose and authority of this chapter. The purpose of this chapter is to establish procedures for implementing RCW 90.03.665, Certified water

right examiners—Fees—Rules. The statute authorizes certified water right examiners to conduct final proof examinations of permitted water uses to support department of ecology (ecology) decisions on whether to issue water right certificates. The statute requires permittees, as explained herein, to hire a certified water right examiner to complete a proof examination. RCW 90.03.665(1) requires ecology to establish and maintain a list of certified water right examiners through a defined certification process. RCW 90.03.665(11) authorizes ecology to adopt rules appropriate to carry out the purposes of the statute.

NEW SECTION

WAC 173-165-020 Definitions. The definitions included in this chapter are intended solely for the implementation of this chapter. This applies to the definitions in this section and those in WAC 173-165-100, Compliance and enforcement.

"Applicant" means an individual who has submitted an application to become a certified water right examiner, but has not yet obtained certification.

"Client" means the water right permit or change authorization holder (permittee) that hires the certified water right examiner.

"CWRE" stands for "certified water right examiner" and, when used for clarification in this chapter, denotes elements of the CWRE process and function, such as the CWRE coordinator, certification under this chapter, the list of certified water right examiners, or the proof examinations, reports, and recommendations made by certified water right examiners under this chapter.

"CWRE investigative committee" means a group that may be formed to investigate or to review corrective action proposals if ecology suspects malfeasance, receives excessive complaints from clients, or finds a pattern of poor performance. The committee may be convened on an as needed basis at any time and may include:

- The CWRE coordinator.
- Regional water right permitting staff.
- Other program staff or managers.
- Other ecology staff or managers.
- Assistant attorney(s) general.
- Others with expertise appropriate to the process.

"Permitted water use" means a water use authorized by a water right permit or change authorization.

"Permittee" means the person or entity that holds the water right permit or change authorization.

"Program" means ecology's water resources program or its successor.

"Proof examination" means a field inspection of a water use authorized by a water right permit or change authorization to determine the quantity of water put to beneficial use and verify other aspects reported in the proof of appropriation.

"Proof report of examination" means the detailed account of the beneficial use of water verified by a proof examination, which the certified water right examiner submits to ecology to support ecology's decisions on issuing a water right certificate.

"Qualified water conservancy board commissioner" means an appointed commissioner of a water conservancy board who is in compliance with all training requirements and is serving within an unexpired term of appointment.

"Revocation," "revoke," or "revoking" means a CWRE certification is completely invalidated with sanctions.

"Suspension," "suspend," or "suspending" means temporary postponement or limitation of a certified water right examiner's certification authorities.

"Water right certification" includes water right certifications, superseding certifications, certificates of change, or amended claims.

NEW SECTION

WAC 173-165-030 Certified water right examiner responsibilities. (1) Certified water right examiners must qualify and apply as individuals and maintain their qualification under WAC 173-165-050 and RCW 90.03.665(2) throughout the period of their application and certification.

(a) If a person qualifies as a certified water right examiner through a hydrogeology, professional engineering, or land surveyor license in the state of Washington, he/she must maintain that licensure to remain qualified as a certified water right examiner unless he/she satisfies another criterion in RCW 90.03.665(2).

(b) Certified water right examiners must notify ecology within two business days if:

(i) Notified their license as a professional engineer, land surveyor, or registered hydrogeologist is suspended or revoked; or

(ii) No longer a qualified water conservancy board commissioner.

(2) The certified water right examiner must follow the CWRE rules of professional performance. The applicant must review the rules of professional performance as provided by ecology and acknowledge by returning a copy with his/her signature.

(3) Certified water right examiners must maintain the validity of their CWRE certification throughout the period that they accept clients, perform proof examinations, and submit proof reports of examination, or ecology may revoke their certification. Maintaining a valid certification includes, but may not be limited to:

(a) Maintaining CWRE qualification under RCW 90.03.-665 and WAC 173-165-050.

(b) Completing and showing proof of eight hours of approved continuing education annually, as defined in WAC 173-165-090.

(c) Paying CWRE certification renewal fees in a timely manner, as defined in WAC 173-165-080(4).

(d) Complying with the conditions of any suspension order or probation agreement.

(4) A CWRE certification applies only to an individual, and not to any associate, business, organization, or other entity. The certified water right examiner must perform all aspects of the proof examinations, including field visits and technical evaluation, and is responsible for the full content of the associated proof reports of examination.

(a) If an entity employs a certified water right examiner, other employees of the same entity cannot perform the duties under RCW 90.03.665 or this chapter using the certified water right examiner's certification.

(b) Two or more certified water right examiners, regardless of whether they share a common employer, may perform work related to the same permit or change authorization only with the written permission of the client.

(c) Certified water right examiners must make full disclosure to all parties concerned of any personal stake or conflict of interest in projects or properties on which the certified water right examiner performs work.

(d) A certified water right examiner who is a water right holder, the employee of a water right holder, or otherwise has a vested interest in a water right permit or change authorization may perform the associated proof examination, but must comply with all requirements of RCW 90.03.665 and this chapter, and must disclose to ecology the relationship when submitting the proof report of examination.

(5) Upon review of a client's beneficial water use under a permit or change authorization, certified water right examiners are responsible for submitting a proof report of examination to the appropriate ecology regional office for ecology's review and decision making. The proof report of examination must be complete and legible, and:

(a) In the form authorized by ecology. Ecology will not accept changes to the authorized forms.

(b) Compliant with permit or change authorization conditions, state water law, and other known local, state, or federal regulations.

(c) Adequately supported by data, calculations, computations, and photographs.

(6) Certified water right examiners are responsible for the billing of clients and collection of fees. The state of Washington shall not be liable for a person's compensation as a certified water right examiner. The client shall pay any charges directly to the certified water right examiner, or his/her employer or chosen representative.

NEW SECTION

WAC 173-165-040 Fees. RCW 90.03.665(10) directs ecology to establish and collect fees for the examination, certification, and renewal of certification for certified water right examiners. Table 1 summarizes ecology's fee structure related to CWRE examination and certification under this chapter. Further detail on fees is contained in WAC 173-165-070 and 173-165-080.

Table 1

Type of fee	Amount	Due
Application	No fee to apply	Applicants should NOT include any fee when submitting their application
Examination	\$300	At least two weeks prior to the testing date

Type of fee	Amount	Due
Certification fee	\$200	Prior to receiving certification
Certification renewal fee	\$100	Annually, prior to expiration of the current certification
Additional late fee for renewal up to 30 days after expiration	\$50	Within 30 days following expiration of the certification
Additional late fee for renewal 31 to 90 days after expiration	\$100	Within 90 days of expiration

NEW SECTION

WAC 173-165-050 Minimum qualifications for CWRE certification. (1) To be a certified water right examiner, you must meet at least one of the following qualifications:

(a) Licensed in Washington state as a:

- (i) Professional engineer;
- (ii) Professional land surveyor; or
- (iii) Hydrogeologist.

(b) A qualified water conservancy board commissioner, as defined in WAC 173-165-020; or

(c) Holding five years applicable experience as defined in subsection (2) of this section, including at least three years of experience defined in subsection (3) of this section.

(2) The five years of applicable work experience includes direct individual and practical experience related to one or more of the following:

(a) Conducting water right proof examinations in Washington or another state, or performing comparable work in evaluating the beneficial use of water.

(b) Preparing water right documents for use in the adjudication of water rights.

(c) Working in private industry evaluating water right applications and preparing reports of examination for cost recovery or cost reimbursement contracts.

(d) Evaluating state water right applications, conducting field investigations for water right permits, and preparing reports of examination.

(e) Preparing or reviewing records of decision for county conservancy boards.

(3) The five years of work experience must include at least three years of any one of the following:

(a) Evaluating new water right applications and/or applications for change or transfer of a water right to support permit and/or change authorization decision making.

(b) Conducting field investigations and preparing tentative determinations of water rights related to water use.

(c) Verifying beneficial use of water.

(d) Regulating water rights as a stream patrolman or watermaster (RCW 90.03.070) or watermaster assigned to regulate water use within federal reclamation projects.

(e) Conducting proof examinations for issuance of certificates of water rights.

(f) Other qualifying experience, substituted year for year, as determined by ecology.

(4) Qualified applicants must maintain at least one of their qualifications throughout the duration of the application and certification periods. (See WAC 173-165-030.)

NEW SECTION

WAC 173-165-060 Application process. Submitting a completed application is the first step of the CWRE examination.

(1) Applicants should verify that they meet minimum qualification requirements under RCW 90.03.665(2) and WAC 173-165-050 prior to applying.

(2) Applicants must complete and submit to ecology an application for certified water rights examiner on an ecology-approved application form. Ecology will not accept changes to the application form.

(3) Ecology will not consider an application complete until receipt of:

(a) A completed CWRE application form without omissions, signed by the applicant.

(b) Any other documentation requested by ecology.

(4) Ecology will review each application based on RCW 90.03.665(2) and WAC 173-165-050.

(5) Ecology will notify each applicant in writing on whether his/her application is approved.

(a) If his/her application is approved, ecology will provide the applicant information on testing opportunities and submitting the required examination fee.

(b) If the applicant does not appear to meet the minimum qualifications or the application is not complete, ecology will return the application.

(c) If an applicant had a CWRE certification previously revoked under WAC 173-165-100, ecology may reject their application without regard to whether the applicant otherwise meets the minimum qualifications. Ecology may consider the following before approving the application:

(i) Whether five years has elapsed since the CWRE certificate was revoked.

(ii) The status of the applicant's qualifications including any professional licensure or water conservancy board membership.

(iii) The status of the incident(s) that originally required revocation of the CWRE certification.

(6) Application materials are considered public records and are subject to the Public Records Act, chapter 42.56 RCW.

NEW SECTION

WAC 173-165-070 Examination process. (1) Applicants must:

(a) Qualify for testing through the application process defined in WAC 173-165-060.

(b) Submit the three hundred dollar examination fee at least two weeks prior to the testing date.

(2) For applicants with a disability, ecology will provide accommodations consistent with the Americans with Disabilities Act. Applicants should make their request for accommodations as early as possible to provide reasonable notice.

(3) Ecology will notify applicants by mail of their examination result as either pass or fail.

(4) If an applicant fails the examination, he/she may:

(a) Repeat the examination no sooner than thirty days after testing.

(b) Apply to retake the examination by submitting a written request and the three hundred dollar examination fee to ecology.

(5) Only ecology staff or their delegates may review CWRE testing materials or past examinations.

NEW SECTION

WAC 173-165-080 Certification. (1) Ecology will issue the CWRE certificate and add the certified water right examiner's name to the CWRE list on ecology's web site within thirty days upon completion of the following:

(a) The applicant shows proof of qualifications through the application process;

(b) The applicant passes the CWRE examination;

(c) The applicant submits a signed copy of the CWRE rules of professional performance, as prescribed by ecology; and

(d) Ecology receives the two hundred dollar certification fee.

(2) The CWRE certificate allows the holder to conduct proof examinations in accordance with RCW 90.03.665 and to submit proof reports of examination to support ecology decision making.

(3) The CWRE certificate does not constitute professional licensure for any related field including hydrogeology, engineering, or land surveying.

(4) Certification renewal.

(a) CWRE certifications expire annually on the month and day that the original CWRE certification was issued.

(b) Ecology will issue a renewal reminder letter to the certified water right examiner at the address of record, at least sixty days prior to the expiration of the current certification. The letter will provide the following information:

(i) The status of his/her continuing education credits.

(ii) Whether the certification is in good standing under RCW 90.03.665 and this chapter.

(iii) Whether proof of qualifications is required.

(iv) Directions for submitting the certification renewal fee and other required documentation.

(c) To renew certification, the certified water right examiner must submit to ecology, as directed in the renewal reminder letter and postmarked no later than the expiration date:

(i) A one hundred dollar renewal fee;

(ii) Proof of having completed any remaining continuing education credits due;

(iii) Proof of qualifications, if required; and

(iv) A certification renewal form or a letter requesting renewal of the CWRE certification.

(d) If a certified water right examiner does not renew his/her certificate by the expiration date, the certification expires and becomes invalid.

(i) The list of certified water right examiners on ecology's web site will indicate that the certification has expired.

(ii) There is a maximum ninety-day grace period after the expiration date for the certified water right examiner to

renew the certification. Associated late fees will apply during the grace period as required under (e) of this subsection.

(ii) Late renewal during the ninety-day grace period will not delay the date the new certification will expire, or change the anniversary date regarding annual continuing education requirements.

(e) If the certified water right examiner fails to renew his/her certification by the expiration date as required under (c) of this subsection, the following late fees will apply:

(i) Renewal between one to thirty days after expiration of the certificate includes a late fee of fifty dollars, in addition to the one hundred dollar renewal fee.

(ii) Renewal between thirty-one to ninety days after expiration of the certificate includes a late fee of one hundred dollars, in addition to the one hundred dollar renewal fee.

(f) If a certified water right examiner fails to renew their certification before the end of the ninety-day grace period:

(i) Ecology will remove his/her name from the list of certified water right examiners.

(ii) He/she must successfully reapply, retest, and pay all related fees to become recertified.

NEW SECTION

WAC 173-165-090 Continuing education. (1) Each certified water right examiner must complete eight hours annually of continuing education in the water resources field.

(2) Ecology will provide information on the internet on continuing education opportunities for certified water right examiners.

(a) Ecology may grant credit for completing related training not listed on our web site at the discretion of the CWRE coordinator.

(b) The CWRE coordinator may approve nonformal educational activities, such as workshops or conferences for water resources professionals, as qualifying for continuing education credit, but may choose to grant credit at less than an hour-for-hour basis.

(3) Certified water right examiners may submit proof of their continuing education credits to the CWRE coordinator at any time.

(4) Ecology will notify certified water right examiners of their qualifying education status in their certification renewal letter.

(5) Ecology will not renew the CWRE certification until receipt of evidence that the certified water right examiner has completed the required continuing education hours.

(6) Ecology will apply continuing education hours earned in the following order:

(a) Overdue hours needed to renew certification during the ninety-day grace period.

(b) Hours needed for the next certification renewal.

(7) Certified water right examiners may not carry over continuing education hours for future credit in excess of the annually required eight hours.

NEW SECTION

WAC 173-165-100 Compliance and enforcement. (1) Ecology is authorized to take action under this rule to exam-

ine, certify, investigate, and enforce this rule against certified water right examiners and CWRE applicants. However:

(a) Certified water right examiners are hired and paid by water right permit or change authorization holders, and are not ecology employees.

(b) Ecology is not responsible for the direct supervision of a certified water right examiner.

(c) Ecology is not responsible for the contractual relationship between certified water right examiners and their clients.

(2) Nothing in this chapter is intended to prevent ecology from taking immediate action if it is critical to the safety of the public, agency staff, and others; or is critical to the protection of the water resource as otherwise authorized by law.

(3) Client complaints, issues of poor performance, and any indications of malfeasance should be referred to the CWRE coordinator. The CWRE coordinator may work with regional permitting staff and program management to determine what further action, if any, is appropriate, such as:

(a) Meeting with the certified water right examiner to discuss concerns and possible options for dealing with the problem.

(b) Providing technical assistance.

(c) Issuing a verbal or written warning.

(d) Consulting with an assistant attorney general.

(e) Presenting issues to agency senior management.

(f) Filing a police report.

(g) Performing a preliminary or full compliance investigation (see subsection (4) of this section).

(h) Convening the CWRE investigative committee as defined in WAC 173-165-020.

(i) Taking other steps as appropriate for the complaint.

(4) Ecology or the CWRE investigative committee may perform a general, preliminary, or full compliance investigation to ensure that the public is being competently served, or in response to client complaints, indications of poor performance, or when ecology suspects malfeasance.

(a) Ecology may use general compliance investigations to assess elements of the CWRE program, or the program as a whole.

(b) Ecology may use preliminary investigations to determine whether a situation warrants any action or a full investigation.

(c) Ecology will use full investigations primarily when circumstances are uncertain but indicate a potential need for suspending or revoking a certified water right examiner's certification.

(5) When ecology or the CWRE investigative committee does a full compliance investigation of a certified water right examiner, except when doing so could compromise the investigation or potential prosecution, they will notify the certified water right examiner in writing:

(a) That the investigation is taking place, when the investigation is begun; and

(b) Of the results of the investigation, when the investigation is complete.

Informal actions.

(6) Ecology will use informal methods, which are not appealable, to pursue compliance with RCW 90.03.665 and

this chapter, and to ensure the public is competently served. Informal methods include, but are not limited to:

(a) Spot-checking the work of certified water right examiners.

(b) Surveying or interviewing current and past clients.

(c) Providing technical assistance or training.

(d) Issuing verbal or written warnings, such as to advise on poor performance, give notice of one or more customer complaints, or to request actions to prevent violations before they occur (RCW 90.03.605 (1)(b)).

Formal actions.

(7) RCW 90.03.665(4) authorizes ecology to suspend or revoke the certification of a certified water right examiner based on poor performance, excessive complaints from their clients, or malfeasance. For the purposes of this chapter:

(a) **"Poor performance"** means work products or work behaviors that fail to meet accepted standards of professional behavior and performance, such as:

(i) Repeated submittal of incomplete, inaccurate, insufficiently detailed, or otherwise unacceptable proof reports of examination.

(ii) Failure to abide by the CWRE rules of professional performance (WAC 173-165-080 (1)(c)) or to meet statutory requirements.

(b) **"Excessive complaints"** means complaints that go beyond what is normal and reasonable. If ecology receives two or more complaints for an individual certified water right examiner in any twelve-month period, in determining whether complaints are excessive, ecology may consider the nature of the complaints, as well as the number of complaints relative to the number of proof examinations the certified water right examiner has completed in the same period.

(c) **"Malfeasance"** means wrongdoing or misconduct, such as an act that gives rise to civil liability for damages arising out of professional conduct; or that is harmful or contrary to law; or that is a violation of professional standards or ethical rules; or an act in violation of the public trust.

(8) Ecology will determine whether to suspend or revoke a CWRE certification.

(a) The CWRE coordinator or designee will discuss the recommendation, including the results of any investigation made, with program management.

(b) To suspend or revoke a CWRE certification, ecology will issue an administrative order. An order is a formal requirement to correct or prevent a documented violation and is an appealable action.

(i) Orders are issued by certified mail to the certified water right examiner's address on record or delivered in person.

(ii) The suspension or revocation is effective as of the date of formal notification to the certified water right examiner.

(c) Ecology is ultimately responsible for the content of the order to suspend or revoke a CWRE certification.

(9) Suspension is intended for the certified water right examiner to improve poor performance, resolve client complaints, or to acquire additional training; or ecology may suspend a certified water right examiner as a temporary measure during a compliance investigation.

(a) Suspension is for a period not to exceed one year.

(b) The suspension order shall state the terms for reinstatement of the certification, including the length of time to fulfill the requirements of the suspension before ecology will revoke the CWRE certification for failure to meet the terms of the suspension.

(c) Ecology may enter into a probation agreement with a suspended certified water right examiner that would allow him/her to continue to perform some or all CWRE services during her/his period of suspension.

(i) A probation agreement will be the equivalent of a conditional certification.

(ii) The probation agreement will identify the following:

(A) The conditions for and limitations of CWRE services that the certified water right examiner may perform.

(B) Any requirements for the certified water right examiner to fulfill the agreement, such as additional continuing education of a specific subject.

(C) Any requirements for retesting.

(D) Any other elements specific to the case.

(iii) Any probation agreement will be signed by the certified water right examiner and ecology program manager or designee.

(d) Certified water right examiners may renew their CWRE certification during the period of suspension, if they are in compliance with the suspension order and the conditions of any probation agreement, and meet the conditions of renewal under WAC 173-165-080(4). If the certified water right examiner under suspension does not maintain his/her certification according to the renewal deadlines identified in WAC 173-165-080(4), ecology may revoke the certification as described in subsection (10) of this section.

(e) The certified water right examiner under suspension must abide by the terms of the suspension order and any probation agreement, and satisfy all remedial requirements, in addition to any statutory requirements, or ecology may revoke the certification as described in subsection (10) of this section.

(10) A revoked CWRE certification cannot be renewed.

(a) When a CWRE certification is revoked, to become recertified, the person:

(i) Must wait at least five years before ecology may accept her/his reapplication.

(ii) Must reapply, retest, and be recertified, as well as pay all associated fees.

(b) Even after the five years ((a)(i) of this subsection) have passed, ecology may choose to reject the application of a person whose certification has been revoked regardless of whether the applicant otherwise meets minimum qualifications (WAC 173-165-060 (5)(c)).

(11) Ecology may immediately revoke the certification of a certified water right examiner found liable or convicted for malfeasance in a court of law.

NEW SECTION

WAC 173-165-110 Appeals. All final written decisions of ecology pertaining to certified water right examiners and CWRE applicants under this chapter shall be subject to

review by the pollution control hearings board in accordance with chapter 43.21B RCW.

NEW SECTION

WAC 173-165-120 Permittee rights and responsibilities. (1) A permittee may develop all or a portion of the project and put water to beneficial use in compliance with his/her water right permit or change authorization. Development of the project and the measure of the beneficial use may be less than authorized, but may not exceed the authorized quantity or conditions of use.

(2) Once the project development ends and beneficial use of the water is established under the water right permit or change authorization, the permittee shall submit a notarized proof of appropriation form to the appropriate ecology regional office.

(3) Ecology will review the proof of appropriation form and, if determined appropriate, will respond in writing directing the permittee to hire a certified water right examiner. Ecology may waive the requirement to secure the services of a certified water right examiner if ecology has conducted the proof examination or determines that one is not necessary to issue a certificate of water right.

(4) As directed by ecology, the permittee must secure the services of a certified water right examiner from the ecology-maintained CWRE list on ecology's web site to perform the proof examination and submit a proof report of examination to ecology.

(5) If ecology returns the proof report of examination to the certified water right examiner for correction under WAC 173-165-130(3), ecology will send the permittee a copy of the communication with the certified water right examiner.

(6) Until ecology has made a final decision (WAC 173-165-130), the permittee may withdraw the proof report of examination submitted by the certified water right examiner at any time during ecology's review period.

(a) To withdraw the CWRE proof report of examination, the permittee must submit to ecology the request to withdraw in writing, including the effective date and future intent of water use.

(b) Upon written withdrawal by the permittee, ecology will cease review of the proof report of examination.

(i) A copy of the withdrawn report shall remain within the associated water right permit or change authorization file.

(ii) Ecology may review the withdrawn report for comparison to any future report submitted and require explanations for any conflicting statements of fact or recommendations.

(7) Within thirty days of withdrawing the proof report or examination, the permittee must:

(a) Schedule a technical assistance meeting with the regional water resources program; and

(b) Define a course of action for moving the water right permit or change authorization from proof of appropriation stage to certification under RCW 90.03.330, which may include requesting an extension of the development schedule.

(8) Should the permittee not comply with this section, ecology may:

- (a) Issue a final determination through an administrative order based on the information submitted, per WAC 173-165-130(5); or
- (b) Cancel all or a portion of the change authorization.

NEW SECTION

WAC 173-165-130 Ecology review and final decision making. (1) Ecology has a maximum of sixty days to make the final decision on the CWRE proof report of examination unless otherwise requested in writing by the permittee as allowed under RCW 90.03.665(6).

(2) Ecology will not accept proof reports of examination from a certified water right examiner whose certificate is expired, revoked, or otherwise invalid.

(3) Ecology may return the proof report of examination for correction to the certified water right examiner and the permittee within thirty days of ecology's initial receipt of the documents.

(a) Ecology's initial review will be comprehensive to identify all deficiencies.

(b) Ecology shall document on the proof report of examination the date ecology returned the report to the certified water right examiner for revision.

(c) If a proof report of examination is returned to the certified water right examiner and permittee for correction, ecology's sixty-day clock stops.

(d) The certified water right examiner should return the corrected report within ninety days for ecology to complete its review. On receipt of the corrected report from the certified water right examiner, ecology has thirty days to issue a final decision regarding the water right certification.

(e) If the certified water right examiner returns the corrected report later than ninety days, ecology will determine it to be a new report and ecology's sixty-day review period begins again.

(4) If during the sixty-day review period, the permittee submits a request to withdraw the proof report of examination, so long as ecology has not yet made a final decision on certification of the water right, ecology will cease their review. Ecology may consider the withdrawal as evidence of the permittee's intent to cancel the permit or change authorization if the permittee fails to:

(a) Schedule a technical assistance meeting with regional program staff; and

(b) Define a course of action for moving the water right permit or change authorization from proof of appropriation stage to certification under RCW 90.03.330, as required under WAC 173-165-120(7).

(5) Within sixty days, ecology will make a final determination regarding the proof report of examination by:

(a) Issuing a recommendation to certify the beneficial use of water in a final administrative order.

(i) After the thirty-day appeal period, ecology will prepare the water right certificate based on their review of the CWRE proof report of examination and any other information within the record, and request certificate and recording fees from the permittee.

(ii) Ecology will issue the water right certification upon receipt of certificate and recording fees.

(b) Defining a course of action for moving the water right permit or change authorization to certification under RCW 90.03.330.

(c) Canceling the permit or change authorization by issuing an administrative order that identifies the reasons for the cancellation.

(d) Taking other actions deemed appropriate based on the CWRE proof report of examination and findings.

(6) If ecology's final decision on the proof report of examination is in conflict with the certified water right examiner's recommendation, ecology will identify in its administrative order the reasons for modifying or reversing the CWRE recommendation.

WSR 12-24-032

PERMANENT RULES

LIQUOR CONTROL BOARD

[Filed November 28, 2012, 1:57 p.m., effective December 29, 2012]

Effective Date of Rule: Thirty-one days after filing.

Purpose: The purpose of this rule making is to authorize the utilization of brief adjudicatory proceedings (BAP) in accordance with RCW 34.05.482 (1)(c). Creating a BAP process will give applicants and liquor licensees and [an] option to a full adjudicative hearing. This process could save time and resources for applicants and liquor licensees.

Statutory Authority for Adoption: RCW 66.08.030.

Adopted under notice filed as WSR 12-20-081 on October 3, 2012.

Number of Sections Adopted in Order to Comply with Federal Statute: New 0, Amended 0, Repealed 0; Federal Rules or Standards: New 0, Amended 0, Repealed 0; or Recently Enacted State Statutes: New 0, Amended 0, Repealed 0.

Number of Sections Adopted at Request of a Nongovernmental Entity: New 0, Amended 0, Repealed 0.

Number of Sections Adopted on the Agency's Own Initiative: New 5, Amended 0, Repealed 0.

Number of Sections Adopted in Order to Clarify, Streamline, or Reform Agency Procedures: New 5, Amended 0, Repealed 0.

Number of Sections Adopted Using Negotiated Rule Making: New 0, Amended 0, Repealed 0; Pilot Rule Making: New 0, Amended 0, Repealed 0; or Other Alternative Rule Making: New 0, Amended 0, Repealed 0.

Date Adopted: November 28, 2012.

Sharon Foster
Chairman

NEW SECTION

WAC 314-42-110 Brief adjudicative proceedings.

The Administrative Procedure Act provides for brief adjudicative proceedings in RCW 34.05.482 through 34.05.494. The board will conduct brief adjudicative proceedings where it does not violate any provision of law and where protection of the public interest does not require the board to give notice and an opportunity to participate to persons other than the parties. If an adjudicative proceeding is requested, a brief

adjudicative proceeding will be conducted where the matter involves one or more of the following:

- (1) Liquor license suspensions due to nonpayment of spirits taxes per RCW 66.24.010;
- (2) Liquor license denials per WAC 314-07-065(2);
- (3) Liquor license denials per WAC 314-07-040;
- (4) Special occasion license application denials per WAC 314-07-040;
- (5) Special occasion license application denials per WAC 314-07-065(7);
- (6) MAST provider or trainer denials for noncompliance with a support order in accordance with RCW 66.20.085;
- (7) MAST provider denials or revocations per WAC 314-17-070;
- (8) Liquor license suspensions due to nonpayment of beer or wine taxes per WAC 314-19-015;
- (9) One-time event denials for private clubs per WAC 314-40-080;
- (10) Banquet permit denials per WAC 314-18-030;
- (11) The restrictions recommended by the local authority on a nightclub license are denied per WAC 314-02-039 (a local authority may request a BAP);
- (12) The restrictions recommended by a local authority are approved per WAC 314-02-039 (an applicant for a nightclub license may request a BAP);
- (13) Liquor license suspensions due to noncompliance with a support order per RCW 66.24.010;
- (14) Liquor license suspensions due to noncompliance with RCW 74.08.580(2), electronic benefits cards, per RCW 66.24.013;
- (15) License suspension due to nonpayment of spirits liquor license fees per RCW 66.24.630;
- (16) License suspension due to nonpayment of spirits distributor license fees per RCW 66.24.055; and
- (17) Tobacco license denials per WAC 314-33-005.

NEW SECTION

WAC 314-42-115 Preliminary record in brief adjudicative proceedings. (1) The preliminary record with respect to a liquor license suspension due to nonpayment of spirits taxes in RCW 66.24.010 shall consist of:

- (a) All correspondence from department of revenue requesting missing taxes or reports; and
 - (b) Request from department of revenue to the liquor control board requesting suspension of the liquor license.
- (2) The preliminary record with respect to a liquor license intent to deny under WAC 314-07-065(2) where the applicant has failed to submit information or documentation shall consist of:
- (a) All correspondence between the applicant and the board pertaining to requests for information or documentation; and
 - (b) A copy of the application report prepared by licensing division staff.
- (3) The preliminary record with respect to a liquor license application intent to deny where the applicant failed to meet the criminal history standards outlined in WAC 314-07-040 shall consist of:

(a) A copy of the application report prepared by licensing division staff;

(b) The personal/criminal history statement(s) submitted by the applicant;

(c) Any interoffice correspondence reporting criminal history of applicant(s); and

(d) Copies of any correspondence submitted by the applicant explaining or rebutting the criminal history findings.

(4) The preliminary record with respect to a special occasion liquor license application (chapter 314-05 WAC) intent to deny where the applicant failed to meet the criminal history standards outlined in WAC 314-07-040 shall consist of:

(a) A copy of the application report prepared by licensing division staff;

(b) The personal/criminal history statement(s) submitted by the applicant(s);

(c) Any interoffice correspondence reporting criminal history of applicant(s); and

(d) Copies of any correspondence submitted by the applicant explaining or rebutting the criminal history findings.

(5) The preliminary record with respect to a special occasion liquor license application (chapter 314-05 WAC) intent to deny where the application was objected to by the local authority wherein the event is scheduled (WAC 314-07-065(7)) shall consist of:

(a) A copy of the special occasion license application and supporting materials;

(b) A copy of the notice sent to the local authority by licensing division staff;

(c) A copy of the objection received from the local authority; and

(d) A copy of any correspondence from the applicant rebutting the objection from the local authority.

(6) The preliminary record with respect to suspension of mandatory alcohol server, provider or trainer, for noncompliance with a support order in accordance with RCW 66.20.085 shall consist of:

(a) A copy of the license suspension certification from the department of social and health services; and

(b) A copy of all documents received from or on behalf of the permit holder rebutting the identification of the server, provider, or trainer.

(7) The preliminary record with respect to suspension of mandatory alcohol server, provider or trainer, for failing to meet the criminal history standards outlined in WAC 314-07-070(1) shall consist of:

(a) A copy of the personal/criminal history statement submitted by the applicant;

(b) Any interoffice correspondence reporting criminal history of applicant; and

(c) Copies of any correspondence submitted by the applicant, permit holder, provider or trainer explaining or rebutting the criminal history findings.

(8) The preliminary record with respect to liquor license suspensions due to nonpayment of beer or wine taxes per WAC 314-19-015 shall consist of:

(a) Copies of any correspondence requesting missing taxes, fees, or penalties when identified after processing reporting form monthly; and

(b) Copies of backup documentation including envelopes showing late filing, corrections on reporting form, and audit findings.

(9) The preliminary record with respect to one-time event denials for private clubs in WAC 314-40-080 shall consist of:

(a) A copy of the written request for a one-time event;

(b) A copy of the written denial including the reason(s) for the denial; and

(c) Copies of all correspondence.

(10) The preliminary record with respect to banquet permit denials in WAC 314-18-030 shall consist of:

(a) The application for a banquet permit;

(b) A copy of the written denial including the reason(s) for denial; and

(c) All correspondence.

(11) The preliminary record with respect to denial of restrictions requested on a nightclub license by a local authority under the provisions in WAC 314-02-039 shall consist of:

(a) A copy of the application report prepared by licensing division staff and the threshold decision by the licensing director or his/her designee;

(b) A copy of all correspondence from the local authority requesting restrictions on the nightclub premises; and

(c) Copies of any correspondence submitted by the nightclub applicant or license holder rebutting the request for restrictions.

(12) The preliminary record with respect to licensing's approval of a request for restrictions on a nightclub license under the provisions of WAC 314-02-039 shall consist of:

(a) A copy of the application report prepared by licensing division staff and the threshold decision by the licensing director or his/her designee;

(b) A copy of all correspondence from the local authority requesting restrictions on the nightclub premises; and

(c) Copies of any correspondence submitted by the nightclub applicant or license holder rebutting the request for restrictions.

(13) The preliminary record with respect to a liquor license suspension due to noncompliance with a support order from the department of social and health services under RCW 66.24.010 shall consist of:

(a) The written request from department of social and health services to suspend the liquor license;

(b) A copy of the written liquor control board suspension order; and

(c) Copies of all correspondence.

(14) The preliminary record with respect to a liquor license suspension due to noncompliance with RCW 74.08.-580, electronic benefits cards, per RCW 66.24.013 shall consist of:

(a) The written request from department of social and health services to suspend the liquor license;

(b) The complete investigation from department of social and health services to support the suspension;

(c) A copy of the written liquor control board suspension order; and

(d) Copies of all correspondence.

(15) The preliminary records with respect to liquor license suspension due to nonpayment of spirits liquor license fees per RCW 66.24.630 shall consist of:

(a) All correspondence relating to discrepancies in fees and/or penalties when identified after processing reporting forms; and

(b) All backup documentation including envelopes showing late filing, corrections on reporting forms, and audit findings.

(16) The preliminary records with respect to liquor license suspensions due to nonpayment of spirits distributor license fees per RCW 66.24.055 shall consist of:

(a) All correspondence requesting missing fees and/or penalties when identified after processing reporting forms; and

(b) All backup documentation including envelopes showing late filing, corrections on reporting forms, and audit findings.

(17) The preliminary record with respect to tobacco license denials shall consist of:

(a) The license application from business license services;

(b) The personal/criminal history statement submitted by the applicant;

(c) The judicial information system criminal history and division recommendation;

(d) The letter of denial from the liquor control board;

(e) The notice of intent to deny statement to the applicant; and

(f) All correspondence.

NEW SECTION

WAC 314-42-120 Conduct of brief adjudicative proceedings. (1) Brief adjudicative proceedings shall be conducted by a presiding officer for brief adjudicative proceedings designated by the board. The presiding officer for brief adjudicative proceedings shall have agency expertise in the subject matter but shall not have personally participated in the decision to issue the initiating document.

(2) The parties or their representatives may present written documentation. The presiding officer for brief adjudicative proceedings shall designate the date by which written documents must be submitted by the parties.

(3) The presiding officer for brief adjudicative proceedings may, in his or her discretion, entertain oral argument from the parties or their representatives.

(4) No witnesses may appear to testify.

(5) The presiding officer for brief adjudicative proceedings shall not issue an oral order. Within ten business days of the final date for submission of materials or oral argument, if any, the presiding officer for brief adjudicative proceedings shall enter an initial order.

NEW SECTION

WAC 314-42-125 Brief adjudicative proceedings conversion to formal adjudicative proceedings. (1) At

least five days before the scheduled issuance of either an initial or a final order, any party, including the agency, may file a written objection to resolution of a matter by a brief adjudicative proceeding and may request that it be converted to a formal adjudicative proceeding. Upon receiving a timely written objection, the presiding officer or reviewing officer shall determine whether the matter should be converted. Regardless of whether any party files a timely objection, the presiding officer or reviewing officer may convert any brief adjudicative proceeding to a formal adjudicative proceeding whenever it appears that a brief adjudicative proceeding is insufficient to determine the issues pending before the board.

(2) In determining whether to convert a proceeding, the presiding officer may consider the following factors:

(a) Whether witness testimony will aid the presiding or reviewing officer in resolving contested issues of fact;

(b) Whether the legal or factual issues are sufficiently complex to warrant a formal adjudicative proceeding, including whether there are multiple issues of fact or law;

(c) Whether a brief adjudicative proceeding will establish an adequate record for further agency or judicial review;

(d) Whether the legal issues involved in the proceeding present questions of legal significance or are being raised for the first time before the agency;

(e) Whether conversion of the proceeding will cause unnecessary delay in resolving the issues; and

(f) Any other factors that the presiding or reviewing officer deems relevant in reaching a determination.

NEW SECTION

WAC 314-42-130 Appeal rights on brief adjudicatory proceeding initial order. (1) If you are dissatisfied with the order in the brief adjudicative proceeding, you may appeal to the reviewing officer, which shall be the board chair, or designee. This appeal process is called an administrative review. Your appeal must be received by the board, in writing, within twenty-one days after the brief adjudicative proceedings order is deposited in the U.S. mail.

(2) The reviewing officer considers your appeal and either upholds or overturns the brief adjudicative proceeding order. The reviewing officer's decision, also called an order, is the final agency decision. The order will be provided to you at the last address you furnished to the board.

(3) The order on review must be in writing, must include a brief statement of the reasons for the decision, and must be entered within twenty days after the date of the initial order or of the request for review, whichever is later. The order shall include a description of any further available administrative review or, if none is available, a notice that judicial review may be available.

(4) A request for administrative review is deemed to have been denied if the agency does not make a disposition of the matter within twenty days after the request is submitted.

WSR 12-24-033 PERMANENT RULES DEPARTMENT OF ECOLOGY

[Order 11-01—Filed November 28, 2012, 4:16 p.m., effective December 29, 2012]

Effective Date of Rule: Thirty-one days after filing.

Purpose: This rule making updates chapter 173-423 WAC, Low emission vehicles, to incorporate by reference recent changes to California clean car regulations to maintain consistency with the California motor vehicle emission standards and compliance with federal law.

Updates, to maintain consistency with the California motor vehicle emissions standards and compliance with federal law, include:

- Motor vehicle emission standards for criteria pollutants and greenhouse gas emissions,
- Vehicle labeling requirements,
- Option for manufacturers to use federal motor vehicle greenhouse gas standards to show compliance with California's greenhouse gas limits ("Harmonization Provision"),
- Option for manufacturers to show how they meet greenhouse gas limits across multiple states in lieu of state-by-state compliance ("Compliance Pooling"),
- On-board diagnostic system requirements,
- Clarify the emergency vehicle exemption,
- Repeal reporting requirements for emission-related equipment and required corrective action (Article 5) repealed by California in 2008,
- Other changes as needed to maintain consistency with the California motor vehicle emission standards, and
- Other minor technical and administrative changes to help users comply with the rule.

Citation of Existing Rules Affected by this Order: Amending chapter 173-423 WAC, Low emission vehicles.

Statutory Authority for Adoption: RCW 70.120A.010.

Adopted under notice filed as WSR 12-20-068 on October 3, 2012.

Changes Other than Editing from Proposed to Adopted Version: WAC 173-423-070, the "note to reader" was deleted. California Air Resources Board (ARB) did not finalize the rule making in question prior to our adoption date. Therefore, ecology did not update the specified sections. This is consistent with both the note to reader and the Proposed rule making (CR-102) form filed October 3, 2012, WSR 12-20-068.

Table 070(1): Section 2036 was added back to the rule. It was mistakenly deleted in the proposed rule text. Reverting to the currently adopted text is consistent with state and federal requirements and the stated goal of this rule making.

Number of Sections Adopted in Order to Comply with Federal Statute: New 0, Amended 0, Repealed 0; Federal Rules or Standards: New 0, Amended 10, Repealed 0; or Recently Enacted State Statutes: New 0, Amended 10, Repealed 0.

Number of Sections Adopted at Request of a Nongovernmental Entity: New 0, Amended 0, Repealed 0.

Number of Sections Adopted on the Agency's Own Initiative: New 0, Amended 0, Repealed 0.

Number of Sections Adopted in Order to Clarify, Streamline, or Reform Agency Procedures: New 0, Amended 0, Repealed 0.

Number of Sections Adopted Using Negotiated Rule Making: New 0, Amended 0, Repealed 0; Pilot Rule Making: New 0, Amended 0, Repealed 0; or Other Alternative Rule Making: New 0, Amended 0, Repealed 0.

Date Adopted: November 28, 2012.

Ted Sturdevant
Director

AMENDATORY SECTION (Amending WSR 05-24-044, filed 11/30/05, effective 12/31/05)

WAC 173-423-010 Purpose. The purpose of this chapter is to establish rules implementing the California motor vehicle emission standards adopted by the 2005 legislature and codified in chapters 70.120A and 46.16A RCW.

AMENDATORY SECTION (Amending WSR 05-24-044, filed 11/30/05, effective 12/31/05)

WAC 173-423-040 Definitions and abbreviations. The following definitions apply to the administration of this chapter. Any term that is not defined in this section shall be as defined or described in the California Code of Regulations, Title 13, section 1900. Definitions in the California Code of Regulations, Title 13, section 1900 will prevail if any discrepancy arises between them and those set forth in this section.

(1) "Emission credits" are earned when a manufacturer's reported fleet average is less than the required fleet average. Credits are calculated according to formulas contained in the California Code of Regulations, Title 13, section 1961(c) ~~((and)), 1961.1(b), 1961.2(c), and 1961.3(b), as appropriate.~~

(2) "Emission debits" are earned when a manufacturer's reported fleet average exceeds the required fleet average. Debits are calculated according to formulas contained in the California Code of Regulations, Title 13, section 1961(c) ~~((and)), 1961.1(b), 1961.2(c), and 1961.3(b), as appropriate.~~

(3) "Fleet average greenhouse gas emission requirements" are generally referred to as limitations on greenhouse gas exhaust mass emission values from passenger cars, light-duty trucks and medium-duty passenger vehicles. The fleet average greenhouse gas emission requirements are set forth in CCR, Title 13, section 1961.1 and 1961.3, and incorporated herein by reference.

(4) "Gross vehicle weight rating" or "GVWR" is the value specified by the manufacturer as the maximum design loaded weight of a single vehicle.

(5) "Independent low volume manufacturer" is defined in the California Code of Regulations, Title 13, section 1900 and incorporated herein by reference.

(6) "Intermediate volume manufacturer" is defined in the California Code of Regulations, Title 13, section 1900 and incorporated herein by reference.

(7) "Large volume manufacturer" is defined in the California Code of Regulations, Title 13, section 1900 and incorporated herein by reference.

(8) "Light duty truck" is any 2000 and subsequent model motor vehicle certified to the standards in Title 13, CCR, section 1961 (a)(1) rated at 8,500 pounds gross vehicle weight or less, and any other motor vehicle rated at 6,000 pounds gross vehicle weight or less, which is designed primarily for the purposes of transportation of property or is a derivative of such vehicle, or is available with special features enabling off-street or off-highway operation and use.

(9) "Medium duty passenger vehicle" (MDPV) is any medium-duty vehicle with a gross vehicle weight rating of less than 10,000 pounds that is designed primarily for the transportation of persons. The medium-duty passenger vehicle definition does not include any vehicle which:

(a) Is an "incomplete truck," i.e., is a truck that does not have the primary load carrying device or container attached; or

(b) Has a seating capacity of more than twelve persons; or

(c) Is designed for more than nine persons in seating rearward of the driver's seat; or

(d) Is equipped with an open cargo area of 72.0 inches in interior length or more. A covered box not readily accessible from the passenger compartment will be considered an open cargo area for the purpose of this definition.

(10) "Model year" is the manufacturer's annual production period which includes January 1 of a calendar year. If the manufacturer has no annual production period, "model year" is the calendar year. In the case of any vehicle manufactured in two or more stages, the time of manufacture shall be the date of completion of the chassis.

(11) "Nonmethane organic gas" or "NMOG" is the sum of nonoxygenated and oxygenated hydrocarbons contained in a gas sample as measured in accordance with the "*California Non-Methane Organic Gas Test Procedures*," and incorporated herein by reference.

(12) "NMOG fleet average emissions" is a motor vehicle manufacturer's average vehicle emissions of all nonmethane organic gases from passenger cars and light duty trucks in any model year delivered in Washington that are subject to this regulation.

(13) "Passenger car" is any motor vehicle designed primarily for transportation of persons and having a design capacity of twelve persons or less.

(14) "Small volume manufacturer" is defined as set forth in the California Code of Regulations, Title 13, section 1900 and incorporated herein by reference.

AMENDATORY SECTION (Amending WSR 05-24-044, filed 11/30/05, effective 12/31/05)

WAC 173-423-050 Requirement to meet California vehicle emission standards. (1) Starting with the 2009 model year, no vehicle shall be registered, leased, rented, licensed or sold for use in the state of Washington unless such vehicle is certified to California emission standards, except as provided in WAC 173-423-060, Exemptions.

(2) The state of Washington will use the vehicle emission standards used by California including:

(a) The exhaust emission standards set forth in the California Code of Regulations, Title 13, sections 1961 and 1961.2;

(b) The emission control label or smog index label requirements set forth in the California Code of Regulations, Title 13, section 1965;

(c) The evaporative emission standards set forth in the California Code of Regulations, Title 13, section 1976;

(d) The refueling emissions standards set forth in the California Code of Regulations, Title 13, section 1978;

(e) The malfunction and diagnostic system requirements set forth in the California Code of Regulations, Title 13, 1968.2;

(f) The specifications for fill pipes and openings of motor vehicle fuel tanks set forth in the California Code of Regulations, Title 13, section 2235; and

(g) The greenhouse gas emission standards as set forth in the California Code of Regulations, Title 13, section 1961.1 and 1961.3.

(3) All vehicle manufacturers shall comply with the fleet average emission requirement, and the warranty, recall and other applicable requirements set forth in this chapter.

AMENDATORY SECTION (Amending WSR 05-24-044, filed 11/30/05, effective 12/31/05)

WAC 173-423-060 Exemptions. The following vehicles are not subject to this chapter:

- (1) Military tactical vehicles;
- (2) Vehicles sold for registration and use out-of-state;
- (3) Previously registered vehicles where the mileage at the time of sale exceeds seven thousand five hundred miles, provided that for vehicle dealers, the mileage at the time of sales is determined by the odometer statement at the time the vehicle dealer acquired the vehicle;
- (4) Vehicles which are only available for rent to a final destination outside of Washington;
- (5) Vehicles purchased by a nonresident prior to establishing residency in the state of Washington, regardless of the mileage on the vehicle;
- (6) Vehicles transferred by inheritance or as a result of divorce, dissolution or legal separation; and
- (7) ~~((An emergency vehicle when a public safety agency has demonstrated to the department of ecology's satisfaction that a vehicle that will meet said agency's needs is not otherwise reasonably available.))~~ Motor vehicles purchased for use by a local police department, county sheriff, fire district, or the Washington state patrol.

AMENDATORY SECTION (Amending Order 08-16, filed 1/15/09, effective 2/15/09)

WAC 173-423-070 Emission standards, warranty, recall and other California provisions adopted by reference. Each manufacturer and each new 2009 and subsequent model year passenger car, light duty truck and medium duty passenger vehicle subject to this chapter shall comply with each applicable standard set forth in Table 070(1) and incorporated by reference:

Table 070(1)
California Code of Regulations (CCR)
Title 13
Provisions Incorporated by Reference
Effective in Washington January 14, 2009

Title 13 CCR Division 3 Air Resources Board	Title	California Effective Date
Chapter 1 Motor Vehicle Pollution Control Devices		
Article 1 General Provisions		
Section 1900	Definitions	((1/01/06)) <u>8/7/12</u>
Section 1956.8 (g) and (h)	Exhaust Emission Standards and Test Procedures - 1985 and Subsequent Model Heavy Duty Engines and Vehicles	((10/11/07)) <u>8/7/12</u>
Section 1960.1	Exhaust Emission Standards and Test Procedures - 1981 and through 2006 Model Passenger Cars, Light-Duty and Medium-Duty Vehicles	((3/26/04)) <u>8/7/12</u>
Section 1961	Exhaust Emission Standards and Test Procedures - 2004 ((and Subsequent)) <u>through 2019 Model Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles</u>	((6/16/08)) <u>8/7/12</u>
Section 1961.1	Greenhouse Gas Exhaust Emission Standards and Test Procedures - 2009 ((and Subsequent)) <u>through 2016 Model Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles</u>	((1/01/06)) <u>8/7/12</u>
<u>Section 1961.2</u>	<u>Exhaust Emission Standards and Test Procedures - 2015 and Subsequent Model Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles</u>	<u>8/7/12</u>

Title 13 CCR Division 3 Air Resources Board	Title	California Effective Date
<u>Section 1961.3</u>	<u>Greenhouse Gas Exhaust Emission Standards and Test Procedures - 2017 and Subsequent Model Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles</u>	<u>8/8/12</u>
Section 1965	Emission Control, Smog Index, and Environmental Performance Labels - 1979 and Subsequent Model-Year Motor Vehicles	((6/16/08)) <u>8/7/12</u>
Section 1968.2	Malfunction and Diagnostic System Requirements - 2004 and Subsequent Model-Year Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles and Engines	((11/09/07)) <u>8/7/12</u>
Section 1968.5	Enforcement of Malfunction and Diagnostic System Requirements for 2004 and Subsequent Model Year Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles and Engines	((11/09/07)) <u>8/7/12</u>
Section 1976	Standards and Test Procedures for Motor Vehicle Fuel Evaporative Emissions	((1/04/08)) <u>8/7/12</u>
Section 1978	Standards and Test Procedures for Vehicle Refueling Emissions	((1/04/08)) <u>8/7/12</u>
Article 6 Emission Control System Warranty		
Section 2035	Purpose, Applicability and Definitions	((11/09/07)) <u>11/9/07</u>

Title 13 CCR Division 3 Air Resources Board	Title	California Effective Date
Section 2036	Defects Warranty Requirements for 1979 through 1989 Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles; 1979 and Subsequent Model Motorcycles and Heavy-Duty Vehicles; and Motor Vehicle Engines Used in Such Vehicles	5/15/99
Section 2037	Defects Warranty Requirements for 1990 and Subsequent Model Year Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles and Motor Vehicle Engines Used in Such Vehicles	((11/09/07)) <u>8/7/12</u>
Section 2038	Performance Warranty Requirements for 1990 and Subsequent Model Year Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles and Motor Vehicle Engines Used in Such Vehicles	((11/09/07)) <u>8/7/12</u>
Section 2039	Emission Control System Warranty Statement	12/26/90
Section 2040	Vehicle Owner Obligations	12/26/90
Section 2046	Defective Catalyst	2/15/79
Chapter 2 Enforcement of Vehicle Emission Standards and Enforcement Testing		
Article 2 Enforcement of New and In-Use Vehicle Standards		
Section 2109	New Vehicle Recall Provisions	12/30/83
Article 2.1 Procedures for In-Use Vehicle Voluntary and Influenced Recalls		
Section 2111	Applicability	((1/04/08)) <u>12/8/10</u>

Title 13 CCR Division 3 Air Resources Board	Title	California Effective Date
Section 2112	Definitions	((8/15/07)) 8/7/12
	Appendix A to Article 2.1	((8/15/07)) 8/16/09
Section 2113	Initiation and Approval of Voluntary and Influenced Emission-Related Recalls	1/26/95
Section 2114	Voluntary and Influenced Recall Plans	11/27/99
Section 2115	Eligibility for Repair	1/26/95
Section 2116	Repair Label	1/26/95
Section 2117	Proof of Correction Certificate	1/26/95
Section 2118	Notification	1/26/95
Section 2119	Recordkeeping and Reporting Requirements	11/27/99
Section 2120	Other Requirements Not Waived	1/26/95
Article 2.2 Procedures for In-Use Vehicle Ordered Recalls		
Section 2122	General Provisions	((1/04/08)) 12/8/10
Section 2123	Initiation and Notification of Ordered Emission-Related Recalls	1/26/95
Section 2124	Availability of Public Hearing	1/26/95
Section 2125	Ordered Recall Plan	1/26/95
Section 2126	Approval and Implementation of Recall Plan	1/26/95
Section 2127	Notification of Owners	1/26/95
Section 2128	Repair Label	1/26/95
Section 2129	Proof of Correction Certificate	1/26/95
Section 2130	Capture Rates and Alternative Measures	11/27/99
Section 2131	Preliminary Tests	1/26/95
Section 2132	Communication with Repair Personnel	1/26/95
Section 2133	Recordkeeping and Reporting Requirements	1/26/95
Section 2135	Extension of Time	1/26/95

Title 13 CCR Division 3 Air Resources Board	Title	California Effective Date
Article 2.4 Procedures for Reporting Failure of Emission-Related Components		
Section 2141	General Provisions	((1/04/08)) 12/8/10
Section 2142	Alternative Procedures	2/23/90
Section 2143	Failure Levels Triggering Recall	11/27/99
Section 2144	Emission Warranty Information Report	11/27/99
Section 2145	Field Information Report	((11/27/99)) 8/7/12
Section 2146	Emissions Information Report	11/27/99
Section 2147	Demonstration of Compliance with Emission Standards	((8/21/02)) 8/7/12
Section 2148	Evaluation of Need for Recall	11/27/99
Section 2149	Notification and Subsequent Action	2/23/90
(Article 5 Procedures for Reporting Failures of Emission-Related Equipment and Required Corrective Action		
Section 2166	General Provisions	1/04/08
Section 2166.1	Definitions	1/04/08
Section 2167	Emission Warranty-Information Report	1/04/08
Section 2168	Supplemental Emissions Warranty Information Report	1/04/08
Section 2169	Recall and Corrective Action for Failures of Exhaust After Treatment Devices	1/04/08
Section 2170	Recall and Corrective Action for Other Emission-Related Component Failures (On-Board Diagnostic-Equipped Vehicles and Engines)	1/04/08

Title 13 CCR Division 3 Air Resources Board	Title	California Effective Date
Section 2171	Recall and Corrective Action for Vehicles Without On-Board Diagnostic Systems, Vehicles with Non-compliant On-Board Diagnostic Systems, or Vehicles with On-Board Computer Malfunction	1/04/08
Section 2172	Notification of Required Recall or Corrective Action by the Executive Officer	1/04/08
Section 2172.1	Ordered or Voluntary Corrective Action Plan	1/04/08
Section 2172.2	Approval and Implementation of Corrective Action Plan	1/04/08
Section 2172.3	Notification of Owners	1/04/08
Section 2172.4	Repair Label	1/04/08
Section 2172.5	Proof of Correction Certificate	1/04/08
Section 2172.6	Preliminary Tests	1/04/08
Section 2172.7	Communication with Repair Personnel	1/04/08
Section 2172.8	Recordkeeping and Reporting Requirements	1/04/08
Section 2172.9	Extension of Time	1/04/08
Section 2173	Penalties	1/04/08
Section 2174	Availability of Public Hearing	1/04/08))
Chapter 4.4 Specifications for Fill Pipes and Openings of Motor Vehicle Fuel Tanks		
Section 2235	Requirements	((9/17/91)) 8/8/12

AMENDATORY SECTION (Amending WSR 05-24-044, filed 11/30/05, effective 12/31/05)

WAC 173-423-080 Fleet average nonmethane organic gas (NMOG) and NMOG Plus NO_x exhaust emission requirements, reporting and compliance. (1) Fleet average requirement.

(a) Effective model year 2009 through 2014, except as provided in this subsection, each motor vehicle manufacturer's NMOG fleet average emissions from passenger cars and light duty trucks delivered for sale in Washington shall

not exceed the Fleet Average NMOG Exhaust Emission Requirement set forth in the California Code of Regulations, Title 13, section 1961(b). For the 2014 model year only, a manufacturer may comply with the fleet average NMOG + NO_x values in subsection (b) of this section in lieu of complying with the NMOG fleet average emissions in this subsection. A manufacturer must either comply with the NMOG + NO_x fleet average requirements for both its PC/LDT1 fleet and its LDT2/MDPV fleet or comply with the NMOG fleet average requirements for both its PC/LDT1 fleet and its LDT2/MDPV fleet. A manufacturer must calculate its fleet average NMOG + NO_x values using the applicable full useful life standards.

(b) Effective model year 2015, each motor vehicle manufacturer's NMOG + NO_x fleet average emissions from passenger cars, light duty trucks and medium duty passenger vehicles delivered for sale in Washington shall not exceed the fleet average NMOG + NO_x exhaust emission requirement set forth in the California Code of Regulations, Title 13, section 1961.2(b).

Compliance shall be based on the number of vehicles, subject to this regulation, delivered for sale in the state of Washington.

(2) Fleet average NMOG and NMOG Plus NO_x exhaust emission credits and debits.

(a) Effective model year 2009 through 2014, except as provided in this subsection, each vehicle manufacturer can accrue NMOG emission credits and debits and use credits in accordance with the procedures in the California Code of Regulations, Title 13, section 1961(c). For the 2014 model year only, a manufacturer may comply with the fleet average NMOG + NO_x values in subsection (b) of this section in lieu of complying with the NMOG fleet average emissions in this subsection. A manufacturer must either comply with the NMOG + NO_x fleet average requirements for both its PC/LDT1 fleet and its LDT2/MDPV fleet or comply with the NMOG fleet average requirements for both its PC/LDT1 fleet and its LDT2/MDPV fleet. A manufacturer must calculate its fleet average NMOG + NO_x values using the applicable full useful life standards.

(b) Effective model year 2015, each vehicle manufacturer may accrue NMOG + NO_x emission credits and debits and use credits in accordance with the procedures in the California Code of Regulations, Title 13, section 1961.2(c).

Debits and credits accrued and used shall be based on the number of vehicles, subject to this chapter, produced and delivered for sale by each manufacturer, in the state of Washington.

(3) Reporting. ((Commencing with the))

(a) Effective model year 2009 through model year 2014, Except as provided in this subsection, each manufacturer shall submit by March 1 a report to the department of ecology that ((shall include:

(a) Pre-model year data which projects the fleet average NMOG exhaust emissions for vehicles expected to be delivered for sale in Washington.

(b) End-of-model year data which)) calculates the fleet average NMOG exhaust emissions for the model year just ended.

The report shall follow the procedures in the California Code of Regulations, Title 13, section 1961 and shall be in the same format used to report such information to the California Air Resources Board. Manufacturers that elect to comply with the NMOG + NO_x fleet average emission limit for 2014 must report as provided in subsection (b) of this section.

(b) Effective model year 2015 and each model year thereafter, each manufacturer shall submit by March 1st a report to the department of ecology that calculates the fleet average NMOG + NO_x exhaust emissions for the model year just ended.

The report shall follow the procedures in the California Code of Regulations, Title 13, section 1961.2 and shall be in the same format used to report such information to the California Air Resources Board.

(4) Compliance with fleet average NMOG requirement. ~~((Beginning in))~~ Effective model year 2012 through 2014, if a report submitted by the manufacturer under subsection (3) of this section demonstrates that the manufacturer is not in compliance with the fleet average emission standard, the manufacturer must submit to the department of ecology within sixty days a Fleet Average Enforcement Report. The Fleet Average Enforcement Report shall:

(a) Describe how the manufacturer intends to equalize any accrued debits, as required in the California Code of Regulations, Title 13, section 1961 ~~(c)(3)~~, and in accordance with subsection (2) of this section.

(b) Identify all vehicle models delivered for sale in Washington, their corresponding certification standards, and the percentage of each model delivered for sale in Washington and California in relation to total fleet sales in the respective state.

(c) Describe how the manufacturer plans to achieve compliance with the fleet average in future model years.

~~((For model years 2009 through 2011 the Fleet Average Enforcement Report, if needed, must be submitted to the department of ecology by March 1, 2012. If debits are accrued in all three years, one year of debits must be equalized by the end of the 2012 model year.))~~ (5) Compliance with fleet average NMOG + NO_x requirement. Beginning in model year 2015, if a report submitted by the manufacturer under subsection (3)(b) of this section demonstrates that the manufacturer is not in compliance with the fleet average emission standard, the manufacturer must submit to the department of ecology within sixty days a Fleet Average Enforcement Report. The Fleet Average Enforcement Report shall:

(a) Describe how the manufacturer intends to equalize any accrued debits, as required in the California Code of Regulations, Title 13, section 1961.2 (c)(3), and in accordance with subsection (2) of this section.

(b) Identify all vehicle models delivered for sale in Washington, their corresponding certification standards, and the percentage of each model delivered for sale in Washington and California in relation to total fleet sales in the respective state.

(c) Describe how the manufacturer plans to achieve compliance with the fleet average in future model years.

(6) For model years 2009 through 2011, the Fleet Average Enforcement Report, if needed, must be submitted to the department of ecology by March 1, 2012. If debits are accrued in all three years, one year of debits must be equalized by the end of the 2012 model year.

AMENDATORY SECTION (Amending WSR 05-24-044, filed 11/30/05, effective 12/31/05)

WAC 173-423-090 Fleet average greenhouse gas exhaust emission requirements, reporting and compliance.

(1) Each manufacturer subject to the greenhouse gas provisions of this regulation shall comply with emissions standards, fleet average greenhouse gas exhaust mass emission requirements for passenger car, light duty truck, medium duty passenger vehicle weight classes, and other requirements of the California Code of Regulations, Title 13, section 1961.1 and 1961.3.

(2) Large volume manufacturer. The fleet average greenhouse gas exhaust emission levels for passenger cars, light-duty trucks, and medium-duty passenger vehicles produced and delivered for sale in the state of Washington by a large volume manufacturer for each 2009 and subsequent model year are established in the California Code of Regulations, Title 13, section 1961.1 and 1961.3.

(3) Small, intermediate and independent manufacturers. The fleet average greenhouse gas exhaust emission requirements for passenger cars, light-duty trucks, and medium-duty passenger vehicles delivered for sale in the state of Washington by small volume, intermediate volume and independent low volume manufacturers are set forth in the California Code of Regulations, Title 13, section 1961.1, which specifies that requirements for these manufacturers are waived prior to the 2016 model year and CCR, Title 13, section 1961.3 which specifies the requirements that apply for the 2017 and each subsequent model year.

(4) Greenhouse gas credits and debits. Greenhouse gas credits and debits may be accrued and used based on each manufacturer's sale of vehicles in Washington in accordance with the California Code of Regulations, Title 13, section 1961.1(b) and 1961.3(b).

(5) Optional alternative compliance with greenhouse gas emission standards. Greenhouse gas vehicle test groups that are certified pursuant to the California Code of Regulations, Title 13, section 1961.1 (a)(1)(B)2.a in the state of California may receive equivalent credit if delivered for sale and use in the state of Washington.

(6) Alternative compliance credit. A manufacturer shall submit to the department of ecology the data set forth in the California Code of Regulations, Title 13, section 1961.1 (a)(1)(B)2.a.i for Washington specific sale and use in order to receive the credit identified in subsection (5) of this section.

(7) Reporting on greenhouse gas requirements. Beginning with the 2009 model year, each manufacturer shall submit by March 1 a report to the department of ecology that shall include:

~~((a) Premodel year data which projects the fleet average greenhouse gas emissions for vehicles expected to be delivered for sale in Washington.~~

~~(b))~~ End-of-model year data which calculates the fleet average greenhouse gas emissions for the model year just ended. The report shall include the number of greenhouse gas vehicle test groups, delineated by model type, certified pursuant to the California Code of Regulations, Title 13, section 1961.1 and 1961.3, as appropriate.

The report shall follow the procedures in the California Code of Regulations, Title 13, section 1961.1 and 1961.3 and shall be in the same format used to report such information to the California Air Resources Board.

(8) Compliance with fleet average greenhouse gas requirements. Beginning in model year 2009, if the report submitted by the manufacturer under subsection (7) of this section demonstrates that the manufacturer is not in compliance with the fleet average emission standards, the manufacturer must submit to the department of ecology within sixty days a Fleet Average Enforcement Report. The Fleet Average Enforcement Report shall:

(a) Describe how the manufacturer intends to equalize any accrued debits, as required in the California Code of Regulations, Title 13, section 1961.1 ~~(b) and 1961.3(b)~~, as appropriate.

(b) Identify all vehicle models delivered for sale in Washington, their corresponding certification standards, and the percentage of each model delivered for sale in Washington and California in relation to total fleet sales in the respective state.

(c) Describe how the manufacturer plans to achieve compliance with the fleet average in future model years.

AMENDATORY SECTION (Amending WSR 05-24-044, filed 11/30/05, effective 12/31/05)

WAC 173-423-100 Manufacturer delivery reporting requirements. (1) The manufacturer shall submit to the department of ecology one copy of the California Executive Order and Certificate of Conformity for certification of new motor vehicles for each engine family to be sold in the state of Washington within thirty days of ~~((receiving the Executive Order from the California Air Resources Board))~~ the department of ecology's request. If such reports are available electronically, the manufacturer shall send the record in an electronic format acceptable to the department of ecology. ~~((Manufacturers may discontinue submitting these reports if so notified by the department of ecology.))~~

(2) Commencing with the 2009 model year and prior to the beginning of each model year, upon request, each manufacturer shall submit to the department of ecology a list of all models of medium duty vehicles and medium duty passenger vehicles that will be delivered to Washington dealers. Medium duty vehicles are those with a GVWR of 8,501 to 14,000 pounds.

(3) Upon request, each manufacturer shall report to the department of ecology the vehicle identification numbers (VIN) of each passenger car, light duty truck and medium duty passenger vehicle delivered to each Washington dealer that is not certified to California emission standards.

(4) For the purposes of determining compliance with this chapter, the department of ecology may require any vehicle manufacturer to submit any documentation the department of

ecology deems necessary to the effective administration and enforcement of this chapter, including all certification materials submitted to the California Air Resources Board.

AMENDATORY SECTION (Amending Order 08-16, filed 1/15/09, effective 2/15/09)

WAC 173-423-110 Warranty requirements. (1) For all 2009 and subsequent model year vehicles subject to the provisions of this chapter, each manufacturer shall provide, to the ultimate purchaser and each subsequent purchaser, a warranty that complies with the requirements set forth in the California Code of Regulations, Title 13, sections 2035 through 2038, 2040, and 2046.

(2) For all 2009 and subsequent model year vehicles subject to the provisions of this chapter, each manufacturer shall include the emission control system warranty statement that complies with the requirements in the California Code of Regulations, Title 13, section 2039. Manufacturers may modify this statement as necessary to inform Washington vehicle owners of the applicability of the warranty. The manufacturer shall provide a telephone number appropriate for Washington residents.

(3) All manufacturers shall submit to the department of ecology Failure of Emission-Related Components reports as defined in the California Code of Regulations, Title 13, section 2144 for vehicles subject to this regulation. For purposes of compliance with this requirement, manufacturers may submit copies of the Failure of Emission-Related Components reports that are submitted to the California Air Resources Board, in lieu of submitting reports for vehicles subject to this chapter. Manufacturers may discontinue submitting these reports if so notified by the department of ecology.

~~((4) Upon request, all manufacturers shall submit to the department of ecology Emission Warranty Information Reports (EWIRs) and Supplemental Emission Warranty Information Reports (SEWIRs) as defined in the California Code of Regulations, Title 13, sections 2167 and 2168 for vehicles subject to this regulation. For purposes of compliance with this requirement, manufacturers may submit copies of the EWIRs and SEWIRs that are submitted to the California Air Resources Board, in lieu of submitting reports for vehicles subject to this chapter.))~~

AMENDATORY SECTION (Amending Order 08-16, filed 1/15/09, effective 2/15/09)

WAC 173-423-120 Recalls. (1) Any order or enforcement action taken by the California Air Resources Board to correct noncompliance with any section of Title 13, which results in the recall ~~((and/or corrective action))~~ of any vehicle pursuant to the California Code of Regulations, Title 13, sections 2109 through 2135 ~~((or sections 2166 through 2172.9.))~~ shall be applicable to vehicles registered in the state of Washington. If the manufacturer can demonstrate to the department of ecology's satisfaction that the action is not applicable to vehicles registered in Washington, the action shall not apply in Washington.

(2) Any voluntary or influenced emission-related recall campaign ~~((or corrective action))~~ initiated by any manufacturer pursuant to the California Code of Regulations, Title 13,

sections 2113 through 2121 (~~or sections 2166 through 2172-9~~)) shall extend to all applicable vehicles registered in Washington. If the manufacturer can demonstrate to the department of ecology's satisfaction that said campaign is not applicable to vehicles registered in Washington, the campaign shall not apply in Washington.

(3) For vehicles subject to an action pursuant to subsection (1) (~~or (2)~~) of this section, each manufacturer shall send to owners of vehicles registered in the state of Washington a notice that complies with the requirements in the California Code of Regulations, Title 13, sections 2118(~~(-)~~) or 2127(~~(-)~~ or 2172-3)). Such notice shall contain a telephone number appropriate for Washington residents.

WSR 12-24-034
PERMANENT RULES
DEPARTMENT OF
SOCIAL AND HEALTH SERVICES

(Economic Services Administration)

[Filed November 29, 2012, 8:23 a.m., effective January 1, 2013]

Effective Date of Rule: January 1, 2013.

Purpose: The department is amending WAC 388-478-0015 Need standards for cash assistance, in order to revise basic need standards for cash assistance based on the 2009 forecast. RCW 74.04.770 requires the department of social and health services to annually establish consolidated standards of need.

Citation of Existing Rules Affected by this Order: Amending WAC 388-478-0015.

Statutory Authority for Adoption: RCW 74.04.050, 74.04.055, 74.04.057, 74.04.770, and 74.08.090.

Adopted under notice filed as WSR 12-21-095 on October 22, 2012.

Number of Sections Adopted in Order to Comply with Federal Statute: New 0, Amended 0, Repealed 0; Federal Rules or Standards: New 0, Amended 0, Repealed 0; or Recently Enacted State Statutes: New 0, Amended 1, Repealed 0.

Number of Sections Adopted at Request of a Nongovernmental Entity: New 0, Amended 0, Repealed 0.

Number of Sections Adopted on the Agency's Own Initiative: New 0, Amended 0, Repealed 0.

Number of Sections Adopted in Order to Clarify, Streamline, or Reform Agency Procedures: New 0, Amended 0, Repealed 0.

Number of Sections Adopted Using Negotiated Rule Making: New 0, Amended 0, Repealed 0; Pilot Rule Making: New 0, Amended 0, Repealed 0; or Other Alternative Rule Making: New 0, Amended 1, Repealed 0.

Date Adopted: November 28, 2012.

Katherine I. Vasquez
 Rules Coordinator

AMENDATORY SECTION (Amending WSR 11-24-021, filed 11/30/11, effective 1/1/12)

WAC 388-478-0015 Need standards for cash assistance. The need standards for cash assistance units are:

(1) For assistance units with obligation to pay shelter costs:

Assistance Unit Size	Need Standard
1	\$(1,154) <u>1,192</u>
2	((1,460)) <u>1,508</u>
3	((1,803)) <u>1,862</u>
4	((2,128)) <u>2,197</u>
5	((2,452)) <u>2,532</u>
6	((2,777)) <u>2,867</u>
7	((3,209)) <u>3,314</u>
8	((3,552)) <u>3,668</u>
9	((3,894)) <u>4,022</u>
10 or more	((4,237)) <u>4,376</u>

(2) For assistance units with shelter provided at no cost:

Assistance Unit Size	Need Standard
1	\$(607) <u>621</u>
2	((768)) <u>786</u>
3	((948)) <u>970</u>
4	((1,119)) <u>1,145</u>
5	((1,290)) <u>1,319</u>
6	((1,460)) <u>1,494</u>
7	((1,688)) <u>1,727</u>
8	((1,868)) <u>1,911</u>
9	((2,048)) <u>2,095</u>
10 or more	((2,228)) <u>2,280</u>

WSR 12-24-035
PERMANENT RULES
EMPLOYMENT SECURITY DEPARTMENT

[Filed November 29, 2012, 9:25 a.m., effective December 30, 2012]

Effective Date of Rule: Thirty-one days after filing.

Purpose: Implement section 3 of the Accessible Communities Act, enacted as chapter 215, Laws of 2010 (RCW 50.40.073). Rules are necessary to establish the criteria and procedures applicable to the following: Submission and review of assurances by counties establishing accessible community advisory committees; reimbursement of travel and per diem expenses incurred by accessible community advisory committee members; solicitation, selection, oversight and evaluation of grants for locally initiated projects to improve awareness, inclusion and access for people with disabilities.

Citation of Existing Rules Affected by this Order: Amending chapter 192-50 WAC.

Statutory Authority for Adoption: RCW 50.40.073.

Adopted under notice filed as WSR 12-18-060 on August 30, 2012.

Number of Sections Adopted in Order to Comply with Federal Statute: New 0, Amended 0, Repealed 0; Federal Rules or Standards: New 0, Amended 0, Repealed 0; or Recently Enacted State Statutes: New 3, Amended 0, Repealed 0.

Number of Sections Adopted at Request of a Nongovernmental Entity: New 0, Amended 0, Repealed 0.

Number of Sections Adopted on the Agency's Own Initiative: New 0, Amended 0, Repealed 0.

Number of Sections Adopted in Order to Clarify, Streamline, or Reform Agency Procedures: New 0, Amended 0, Repealed 0.

Number of Sections Adopted Using Negotiated Rule Making: New 0, Amended 0, Repealed 0; Pilot Rule Making: New 0, Amended 0, Repealed 0; or Other Alternative Rule Making: New 3, Amended 0, Repealed 0.

Date Adopted: November 28, 2012.

Paul Trause
Commissioner

Chapter 192-50 WAC

ACCESSIBLE COMMUNITY ADVISORY COMMITTEES REIMBURSEMENT AND GRANT APPLICATION PROCEDURES

NEW SECTION

WAC 192-50-010 Who qualifies to apply for the accessible communities grants and for reimbursement of travel, per diem and reasonable accommodation for county accessible community advisory committee meetings and committee sponsored activities? (RCW 50.40-073) (1) For purposes of RCW 50.40.073, a county establishes that it has an active accessible community advisory committee by submitting a letter of assurance to the governor's committee on disability issues and employment containing the following:

(a) Submittal by the county legislative authority or an agent or officer acting under that authority;

(b) For a voting access advisory committee expansion, signature of the county auditor, or proof of approval by the county auditor;

(c) Description of how the county will ensure that the membership of the committee includes individuals with a diverse range of disabilities, and who are knowledgeable in identifying and eliminating attitudinal, programmatic, communication, and physical barriers encountered by persons with disabilities;

(d) Description of how the county will ensure that the committee is actively involved in the following activities: Advising on addressing the needs of persons with disabilities in emergency plans; advising the county and other local governments within the county on access to programs, services, and activities, new construction or renovation projects, sidewalks, other pedestrian routes of travel, and disability parking enforcement; and developing local initiatives and activities to promote greater awareness of disability issues, and

acceptance, and involvement, and access for persons with disabilities within the community; and

(e) If the committee will serve more than one county, proof of approval by the authorities for each participating county and a recent population count for each participating county including the source of the data. Counties may form joint accessible community advisory committees, as long as no more than one of the participating counties has a population greater than seventy thousand.

(2) The letter of assurance must be renewed at two-year intervals.

Reviser's note: The spelling error in the above section occurred in the copy filed by the agency and appears in the Register pursuant to the requirements of RCW 34.08.040.

NEW SECTION

WAC 192-50-020 What are the criteria for an accessible community advisory committee to be reimbursed for travel, per diem and accommodation expenses for committee members? (1) For travel, per diem, and accommodation expenses to be eligible for reimbursement from this fund, the accessible community advisory committee meeting or sponsored activity must be approved in advance by the governor's committee on disability issues and employment. A form will be available on the accessible communities web site for this purpose, and will require an estimate of the projected travel, per diem, and accommodation expenses for that advisory committee meeting or sponsored activity. Prior approval of an accessible community advisory committee meeting or sponsored activity as eligible for reimbursement of travel, per diem, and accommodation expenses for the participation of committee members will be based on the following:

(a) Availability of funds;

(b) Active committee status;

(c) Elimination of the more significant travel, communication, or physical barriers to participation by people with disabilities in committee meetings or committee sponsored activities; and

(d) Support of opportunities for diverse participation on accessible community advisory committees.

(2) Travel and per diem for preapproved meetings and activities will be reimbursed following receipt, review, and approval of completed travel vouchers. The reimbursement will be at the same rates as those adopted for state employees by the office of financial management.

NEW SECTION

WAC 192-50-030 How does an accessible community advisory committee apply for a grant under the accessible communities act? (1) To the extent money is available, the governor's committee on disability issues and employment will publish on the accessible communities web site any grant opportunities and forms for applying for accessible community grants.

(2) The grant opportunities will be based on emerging issues and opportunities within the state. All evaluation and selection criteria will be included in the opportunity notification.

tion. Grant proposals will be required to include a plan for tracking, reporting and evaluating outcomes.

WSR 12-24-038
PERMANENT RULES
HEALTH CARE AUTHORITY

(Medicaid Program)

[Filed November 29, 2012, 10:31 a.m., effective December 30, 2012]

Effective Date of Rule: Thirty-one days after filing.

Purpose: The health care authority is changing the titles of these rules to clarify the rules' content, removing reference to "state-only" funding from WAC 182-507-0120, changing references from the "department" to the "agency," and correcting cross-references.

Citation of Existing Rules Affected by this Order: Amending WAC 182-507-0110 Alien medical programs, 182-507-0115 Alien emergency medical program (AEM), and 182-507-0120 Alien medical for dialysis and cancer treatment.

Statutory Authority for Adoption: RCW 41.05.021.

Adopted under notice filed as WSR 12-21-111 on October 23, 2012.

Number of Sections Adopted in Order to Comply with Federal Statute: New 0, Amended 0, Repealed 0; Federal Rules or Standards: New 0, Amended 0, Repealed 0; or Recently Enacted State Statutes: New 0, Amended 3, Repealed 0.

Number of Sections Adopted at Request of a Nongovernmental Entity: New 0, Amended 0, Repealed 0.

Number of Sections Adopted on the Agency's Own Initiative: New 0, Amended 0, Repealed 0.

Number of Sections Adopted in Order to Clarify, Streamline, or Reform Agency Procedures: New 0, Amended 0, Repealed 0.

Number of Sections Adopted Using Negotiated Rule Making: New 0, Amended 0, Repealed 0; Pilot Rule Making: New 0, Amended 0, Repealed 0; or Other Alternative Rule Making: New 0, Amended 3, Repealed 0.

Date Adopted: November 29, 2012.

Kevin M. Sullivan
Rules Coordinator

AMENDATORY SECTION (Amending WSR 12-13-056, filed 6/15/12, effective 7/1/12)

WAC 182-507-0110 Alien medical programs. (1) To qualify for an alien medical program (AMP) a person must:

(a) Be ineligible for medicaid or other ~~((DSHS))~~ medicaid agency medical program due to the citizenship/alien status requirements described in WAC 388-424-0010;

(b) Meet the requirements described in WAC ~~((388-438-0115, 388-438-0120, or 388-438-0125))~~ 182-507-0115, 182-507-0120, or 182-507-0125; and

(c) Meet categorical eligibility criteria for one of the following programs, except for the Social Security number or citizenship/alien status requirements:

(i) WAC 388-475-0050, for an SSI-related person;

(ii) WAC ~~((388-505-0220))~~ 182-505-0240, for family medical programs;

(iii) WAC ~~((388-505-0210))~~ 182-505-0210, for a child under the age of nineteen;

(iv) WAC ~~((388-462-0015))~~ 182-505-0115, for a pregnant woman;

(v) WAC 388-462-0020, for the breast and cervical cancer treatment program for women; or

(vi) WAC ~~((388-523-0100))~~ 182-523-0100, for medical extensions.

(2) AMP medically needy (MN) coverage is available for children, adults age sixty-five or over, or persons who meet SSI disability criteria. See WAC 388-519-0100 for MN eligibility and 388-519-0110 for spending down excess income under the MN program.

(3) The ~~((department))~~ agency or its designee does not consider a person's date of arrival in the United States when determining eligibility for AMP.

(4) The ~~((department))~~ agency or its designee does not consider a sponsor's income and resources when determining eligibility for AMP, unless the sponsor makes the income or resources available.

(5) A person is not eligible for AMP if that person entered the state specifically to obtain medical care.

(6) A person who the ~~((department))~~ agency or its designee determines is eligible for AMP may be eligible for retroactive coverage as described in WAC 388-416-0015.

(7) Once the ~~((department))~~ agency or its designee determines financial and categorical eligibility for AMP, the ~~((department))~~ agency or its designee then determines whether a person meets the requirements described in WAC ~~((388-438-0115, 388-438-0120, or 388-438-0125))~~ 182-507-0115, 182-507-0120, or 182-507-0125.

AMENDATORY SECTION (Amending WSR 12-13-056, filed 6/15/12, effective 7/1/12)

WAC 182-507-0115 Alien emergency medical program (AEM). (1) A person nineteen years of age or older who is not pregnant and meets the eligibility criteria under WAC ~~((388-438-0110))~~ 182-507-0110 is eligible for the alien emergency medical program's scope of covered services described in this section if the person meets (a) and (b) ~~((below;))~~ or (c) ~~((below))~~ of this subsection:

(a) The ~~((department's health and recovery services administration))~~ medicaid agency determines that the primary condition requiring treatment meets the definition of an emergency medical condition as defined in WAC ~~((388-500-0005))~~ 182-500-0030, and the condition is confirmed through review of clinical records; and

(b) The person's qualifying emergency medical condition is treated in one of the following hospital settings:

(i) Inpatient;

(ii) Outpatient surgery;

(iii) Emergency room services, which must include an evaluation and management (E&M) visit by a physician; or

(c) Involuntary Treatment Act (ITA) and voluntary inpatient admissions to a hospital psychiatric setting that are authorized by the ~~((department's))~~ agency's inpatient mental health designee (see subsection (5) of this section).

(2) If a person meets the criteria in subsection (1) of this section, the ~~((department))~~ agency will cover and pay for all related medically necessary health care services and professional services provided:

(a) By ~~((a))~~ physicians in ~~((his))~~ their office or in a clinic setting immediately prior to the transfer to the hospital, resulting in a direct admission to the hospital; and

(b) During the specific emergency room visit, outpatient surgery or inpatient admission. These services include, but are not limited to:

- (i) Medications;
- (ii) Laboratory, X ray, and other diagnostics and the professional interpretations;
- (iii) Medical equipment and supplies;
- (iv) Anesthesia, surgical, and recovery services;
- (v) Physician consultation, treatment, surgery, or evaluation services;
- (vi) Therapy services;
- (vii) Emergency medical transportation; and
- (viii) Nonemergency ambulance transportation to transfer the person from a hospital to a long term acute care (LTAC) or an inpatient physical medicine and rehabilitation (PM&R) unit, if that admission is prior authorized by the ~~((department))~~ agency or its designee as described in subsection (3) of this section.

(3) The ~~((department))~~ agency will cover admissions to an LTAC facility or an inpatient PM&R unit if:

(a) The original admission to the hospital meets the criteria as described in subsection (1) of this section;

(b) The person is transferred directly to this facility from the hospital; and

(c) The admission is prior authorized according to LTAC and PM&R program rules (see WAC ~~((388-550-2590))~~ 182-550-2590 for LTAC and WAC ~~((388-550-2561))~~ 182-550-2561 for PM&R).

(4) The ~~((department))~~ agency does not cover any services, regardless of setting, once the person is discharged from the hospital after being treated for a qualifying emergency medical condition authorized by the ~~((department))~~ agency or its designee under this program. Exception: Pharmacy services, drugs, devices, and drug-related supplies listed in WAC ~~((388-530-2000))~~ 182-530-2000, prescribed on the same day and associated with the qualifying visit or service (as described in subsection (1) of this section) will be covered for a one-time fill and retrospectively reimbursed according to pharmacy program rules.

(5) Medical necessity of inpatient psychiatric care in the hospital setting must be determined, and any admission must be authorized by the ~~((department's))~~ agency's inpatient mental health designee according to the requirements in WAC ~~((388-550-2600))~~ 182-550-2600.

(6) There is no precertification or prior authorization for eligibility under this program. Eligibility for the AEM program does not have to be established before an individual begins receiving emergency treatment.

(7) Under this program, certification is only valid for the period of time the person is receiving services under the criteria described in subsection (1) of this section. The exception for pharmacy services is also applicable as described in subsection (4) of this section.

(a) For inpatient care, the certification is only for the period of time the person is in the hospital, LTAC, or PM&R facility - The admission date through the discharge date. Upon discharge the person is no longer eligible for coverage.

(b) For an outpatient surgery or emergency room service the certification is only for the date of service. If the person is in the hospital overnight, the certification will be the admission date through the discharge date. Upon release from the hospital, the person is no longer eligible for coverage.

(8) Under this program, any visit or service not meeting the criteria described in subsection (1) of this section is considered not within the scope of service categories as described in WAC ~~((388-501-0060))~~ 182-501-0060. This includes, but is not limited to:

(a) Hospital services, care, surgeries, or inpatient admissions to treat any condition which is not considered by the ~~((department))~~ agency to be a qualifying emergency medical condition, including but not limited to:

- (i) Laboratory X ray, or other diagnostic procedures;
- (ii) Physical, occupational, speech therapy, or audiology services;
- (iii) Hospital clinic services; or
- (iv) Emergency room visits, surgery, or hospital admissions.

(b) Any services provided during a hospital admission or visit (meeting the criteria described in subsection (1) of this section), which are not related to the treatment of the qualifying emergency medical condition;

(c) Organ transplants, including preevaluations, post operative care, and anti-rejection medication;

(d) Services provided outside the hospital settings described in subsection (1) of this section~~((s))~~ including, but not limited to:

- (i) Office or clinic-based services rendered by a physician, an ARNP, or any other licensed practitioner;
- (ii) Prenatal care, except labor and delivery;
- (iii) Laboratory, radiology, and any other diagnostic testing;

- (iv) School-based services;
- (v) Personal care services;
- (vi) Physical, respiratory, occupational, and speech therapy services;

- (vii) Waiver services;
- (viii) Nursing facility services;
- (ix) Home health services;
- (x) Hospice services;

- (xi) Vision services;
- (xii) Hearing services;
- (xiii) Dental services;
- (xiv) Durable and nondurable medical supplies;

- (xv) Nonemergency medical transportation;
- (xvi) Interpreter services; and
- (xvii) Pharmacy services, except as described in subsection (4) of this section.

(9) The services listed in subsection (8) of this section are not within the scope of service categories for this program and therefore the exception to rule process is not available.

(10) Providers must not bill the ~~((department))~~ agency for visits or services that do not meet the qualifying criteria

described in this section. The ~~((department))~~ agency will identify and recover payment for claims paid in error.

AMENDATORY SECTION (Amending WSR 12-13-056, filed 6/15/12, effective 7/1/12)

WAC 182-507-0120 Alien medical for dialysis and cancer treatment ~~((state-only))~~. In addition to the provisions for emergency care described in WAC 182-507-0115, the medicaid agency also considers the conditions in this section as an emergency, as defined in WAC 182-500-0030.

(1) A person nineteen years of age or older who is not pregnant and meets the eligibility criteria under WAC ~~((388-438-0110))~~ 182-507-0110 may be eligible for the scope of service categories under this program if the condition requires:

(a) Surgery, chemotherapy, and/or radiation therapy to treat cancer;

(b) Dialysis to treat acute renal failure or end stage renal disease (ESRD); or

(c) Anti-rejection medication, if the person has had an organ transplant.

(2) When related to treating the qualifying medical condition, covered services include but are not limited to:

(a) Physician and ARNP services, except when providing a service that is not within the scope of this medical program (as described in subsection (7) of this section);

(b) Inpatient and outpatient hospital care;

(c) Dialysis;

(d) Surgical procedures and care;

(e) Office or clinic based care;

(f) Pharmacy services;

(g) Laboratory, X ray, or other diagnostic studies;

(h) Oxygen services;

(i) Respiratory and intravenous (IV) therapy;

(j) Anesthesia services;

(k) Hospice services;

(l) Home health services, limited to two visits;

(m) Durable and nondurable medical equipment;

(n) Nonemergency transportation; and

(o) Interpreter services.

(3) All hospice, home health, durable and nondurable medical equipment, oxygen and respiratory, IV therapy, and dialysis for acute renal disease services require prior authorization. Any prior authorization requirements applicable to the other services listed above must also be met according to specific program rules.

(4) To be qualified and eligible for coverage for cancer treatment under this program, the diagnosis must be already established or confirmed. There is no coverage for cancer screening or diagnostics for a workup to establish the presence of cancer.

(5) Coverage for dialysis under this program starts the date the person begins dialysis treatment, which includes fistula placement and other required access. There is no coverage for diagnostics or predialysis intervention, such as surgery for fistula placement anticipating the need for dialysis, or any services related to preparing for dialysis.

(6) Certification for eligibility will range between one to twelve months depending on the qualifying condition, the

proposed treatment plan, and whether the client is required to meet a spenddown liability.

(7) The following are not within the scope of service categories for this program:

(a) Cancer screening or work-ups to detect or diagnose the presence of cancer;

(b) Fistula placement while the person waits to see if dialysis will be required;

(c) Services provided by any health care professional to treat a condition not related to, or medically necessary to, treat the qualifying condition;

(d) Organ transplants, including preevaluations and post operative care;

(e) Health department services;

(f) School-based services;

(g) Personal care services;

(h) Physical, occupational, and speech therapy services;

(i) Audiology services;

(j) Neurodevelopmental services;

(k) Waiver services;

(l) Nursing facility services;

(m) Home health services, more than two visits;

(n) Vision services;

(o) Hearing services;

(p) Dental services, unless prior authorized and directly related to dialysis or cancer treatment;

(q) Mental health services;

(r) Podiatry services;

(s) Substance abuse services; and

(t) Smoking cessation services.

(8) The services listed in subsection (7) of this section are not within the scope of service categories for this program. The exception to rule process is not available.

(9) Providers must not bill the ~~((department))~~ agency for visits or services that do not meet the qualifying criteria described in this section.

WSR 12-24-041

PERMANENT RULES

DEPARTMENT OF LICENSING

[Filed November 29, 2012, 2:25 p.m., effective January 1, 2013]

Effective Date of Rule: January 1, 2013.

Purpose: To add a new set of rules, chapter 308-66 WAC, to clarify RCW 46.70.079 where currently no rule exists. The agency and stakeholders have established minimum requirements in areas such as education provider experience, the department's authority over development, maintenance and monitoring of curriculum and testing, and the management of multiple education providers. The need for rule exists due to more than one organization that may qualify to provide dealer training.

Citation of Existing Rules Affected by this Order: New WAC 308-66-270 Vehicle industry organization—Definition, 308-66-280 Course and education provider approval required, 308-66-290 General requirements for course approval, 308-66-300 Disciplinary action—Procedures—Investigation, 308-66-310 Grounds for denial or withdrawal

of education provider or course material, 308-66-320 Hearing procedure, and 308-66-330 Record retention.

Statutory Authority for Adoption: RCW 46.70.170.

Other Authority: RCW 46.70.79 [46.70.079].

Adopted under notice filed as WSR 12-21-137 on October 24, 2012.

Number of Sections Adopted in Order to Comply with Federal Statute: New 0, Amended 0, Repealed 0; Federal Rules or Standards: New 0, Amended 0, Repealed 0; or Recently Enacted State Statutes: New 0, Amended 0, Repealed 0.

Number of Sections Adopted at Request of a Nongovernmental Entity: New 0, Amended 0, Repealed 0.

Number of Sections Adopted on the Agency's Own Initiative: New 0, Amended 0, Repealed 0.

Number of Sections Adopted in Order to Clarify, Streamline, or Reform Agency Procedures: New 0, Amended 0, Repealed 0.

Number of Sections Adopted Using Negotiated Rule Making: New 7, Amended 0, Repealed 0; Pilot Rule Making: New 0, Amended 0, Repealed 0; or Other Alternative Rule Making: New 0, Amended 0, Repealed 0.

Date Adopted: November 29, 2012.

Damon Monroe
Rules Coordinator

NEW SECTION

WAC 308-66-270 Vehicle industry organization—

Definition. The term "vehicle industry organization" means a dues-based business representing the interests of Washington state vehicle dealers that is licensed or registered to conduct business in Washington.

NEW SECTION

WAC 308-66-280 Course and education provider approval required. (1) Education providers must:

(a) Meet the definition of a vehicle industry organization;

(b) Submit a vehicle dealer course curriculum to the department for approval; and

(c) Have the course approved by the department prior to the date the course is offered for education credit.

(2) The director or designee will approve, conditionally approve or disapprove the course content and the education provider based upon criteria established within this chapter. The department will notify the education provider, in writing, of the department's decision and determining factors.

(3) The approval of the education provider and the course will expire three years after the effective date of approval by the department. To renew for an additional three year period, the provider must submit course curriculum and materials as outlined in this chapter.

NEW SECTION

WAC 308-66-290 General requirements for course approval. (1) The application for course approval must be submitted by an education provider that meets the definition of a vehicle industry organization.

(2) The course curriculum must provide for a minimum of either eight hours of initial classroom instruction or five hours of yearly update education, or both.

(3) The curriculum must include a comprehensive test, approved by the department, at the end of the initial eight hour instruction which covers the minimum course curriculum elements.

(4) The minimum course curriculum elements are related to vehicle industry practices in the following areas:

(a) Types of vehicle dealer licenses;

(b) Completing the vehicle dealer application;

(c) Regulatory agencies involved in the vehicle dealer industry;

(d) Federal Trade Commission (FTC) regulations;

(e) Unlawful vehicle dealer activities;

(f) Motor vehicle advertising laws;

(g) Vehicle titling and registration, and use of the electronic vehicle permitting system;

(h) Vehicle warranties;

(i) Standard industry forms;

(j) Trust accounts;

(k) Use of vehicle dealer plates;

(l) Selling vehicles on consignment;

(m) Vehicle financing.

(5) The development of the course curriculum and the test will be a collaborative effort subject to periodic review by both the department and the education provider.

(6) The education provider is responsible for ensuring the curriculum reflects accurate, complete and current information regarding federal and state laws, industry standards and best practices. Changes or updates must occur within thirty days after the effective date of a change in federal, state, or local statutes or rules.

(7) The education provider is responsible for furnishing students with the instruction materials for the approved courses.

(8) The education provider must issue a certificate to the student upon successful completion of the course.

NEW SECTION

WAC 308-66-300 Disciplinary action—Procedures—Investigation. (1) The department has the authority on its own initiative or upon complaint to investigate or audit any course to determine compliance with chapter 46.70 RCW and with the rules and regulations of this chapter.

(2) Complaints from students or citizens concerning approved courses must be made in writing to the department and contain the following information:

(a) Complainant's name, address, and telephone number;

(b) Education provider name, address, and telephone number;

(c) Instructor name(s);

(d) Nature of the complaint and pertinent information supporting the complaint;

(e) An explanation of what efforts, if any, were taken to resolve the problem with the education provider; and

(f) Copies of pertinent documents, publications, and advertisements.

NEW SECTION

WAC 308-66-310 Grounds for denial or withdrawal of education provider or course material. (1) Course or education provider approval may be denied or withdrawn if the education provider:

- (a) Has had any disciplinary action taken against his or her license in this or any other jurisdiction;
 - (b) Falsified any student records or classroom hour certificates;
 - (c) Falsified any application or any other information required to be submitted to the department;
 - (d) Attempted in any manner to either impart to any student candidate, the content of or answer to any test question(s), or both;
 - (e) Violated any provision in chapter 46.70 RCW or the rules promulgated thereunder;
 - (f) Failed to cooperate with the department in any investigation or hearing;
 - (g) Has been convicted of a crime within the preceding ten years;
 - (h) Violated provisions of any local, state, or federal antidiscrimination law;
 - (i) Continued to teach or offer any vehicle industry subject matter whereby the interests of the public are endangered, after the director, by order in writing, stated objections to the continuing subject matter;
 - (j) Offered, sold, or awarded any classroom hours without requiring the student to successfully complete the hours for which the course was approved;
 - (k) Accepted registration fees but did not supply the service or failed to refund the fees, in accordance with the education provider's published refund policy, or both;
 - (l) Represented in any manner that the education provider is associated with a college or university unless it meets the standards and qualifications of, and has been approved by, the state agency having jurisdiction;
 - (m) Represented that an education provider is recommended or endorsed by the state of Washington or by the department, provided that a school authorized to provide education under this chapter may state: "This school is approved under chapter 46.70 RCW;"
 - (n) Advertised, published, printed, or distributed false or misleading information regarding the education provider or course material;
 - (o) Advertised the availability of credit in any manner without affixing the educator name as approved by the department;
 - (p) Failed to teach a course consistent with the approved course content or curriculum;
 - (q) Failed to update curriculum for a change in statute or rules within thirty days of the effective date.
- (2) The department also has the authority to withdraw a course approval or education provider approval if it was approved through the mistake or inadvertence of the director.

NEW SECTION

WAC 308-66-320 Hearing procedure. Upon notice of education provider or course denial, conditional approval, disapproval or withdrawal of course approval, the provider or

proposed provider is entitled to a hearing conducted in accordance with the Administrative Procedure Act, chapter 34.05 RCW.

(1) The provider or proposed provider can exercise the right to a hearing under this section by requesting, in writing, a hearing within twenty days after receipt of notice.

(2) Appeal of the hearing outcome would be through a judicial review under the provisions of the Administrative Procedure Act, chapter 34.05 RCW.

NEW SECTION

WAC 308-66-330 Record retention. (1) Each education provider must:

- (a) Maintain each student's record and each edition of any education related publication for a minimum of three years; and
 - (b) Provide a copy of a student's record to the student upon request.
- (2) Student records must include:
- (a) Full name, address, telephone number, and e-mail address (optional) of the student;
 - (b) Date of attendance and the date of registration agreement;
 - (c) Date the course was completed and the test results.

WSR 12-24-044**PERMANENT RULES****BELLEVUE COLLEGE**

[Filed November 29, 2012, 3:47 p.m., effective December 30, 2012]

Effective Date of Rule: Thirty-one days after filing.

Purpose: The purpose of the proposed changes is to clarify the existing WAC. The college is clarifying the use of college properties for first amendment activities and updating policy to reflect current practices. The revised structure also provides for a more logical sequencing of information to improve understanding of guidelines and the results of violations.

Citation of Existing Rules Affected by this Order: Repealing WAC 132H-142-080; and amending WAC 132H-142-015, 132H-142-020, 132H-142-030, and 132H-142-040.

Statutory Authority for Adoption: RCW 28B.50.140.

Adopted under notice filed as WSR 12-11-130 on May 23, 2010 [2012].

A final cost-benefit analysis is available by contacting Lisa Corcoran, 3000 Landerholm Circle S.E., Bellevue, WA 98007, phone (425) 564-2302, fax (425) 564-2261, e-mail lisa.corcoran@bellevuecollege.edu.

Number of Sections Adopted in Order to Comply with Federal Statute: New 0, Amended 0, Repealed 0; Federal Rules or Standards: New 0, Amended 0, Repealed 0; or Recently Enacted State Statutes: New 0, Amended 0, Repealed 0.

Number of Sections Adopted at Request of a Nongovernmental Entity: New 0, Amended 0, Repealed 0.

Number of Sections Adopted on the Agency's Own Initiative: New 0, Amended 0, Repealed 0.

Number of Sections Adopted in Order to Clarify, Streamline, or Reform Agency Procedures: New 2, Amended 4, Repealed 1.

Number of Sections Adopted Using Negotiated Rule Making: New 0, Amended 0, Repealed 0; Pilot Rule Making: New 0, Amended 0, Repealed 0; or Other Alternative Rule Making: New 0, Amended 0, Repealed 0.

Date Adopted: August 6, 2012.

Lisa Corcoran
Rules Coordinator

AMENDATORY SECTION (Amending WSR 05-07-069, filed 3/14/05, effective 4/14/05)

WAC 132H-142-015 Definitions. For the purposes of this policy noncollege groups shall mean individuals, or combinations of individuals, who are not currently enrolled students or current employees of Bellevue Community College or who are not officially affiliated or associated with a recognized student organization or a recognized employee group of the college.

For purposes of this policy, college groups shall mean individuals who are currently enrolled students or current employees of Bellevue Community College or who are affiliated with a recognized student organization or a recognized employee group of the college.

College facilities include all buildings, structures, grounds, office space and parking lots.

The college is a limited public forum for noncollege groups. The limited public forum does not include college buildings or athletic fields. College buildings, rooms, and athletic fields may be rented in accordance with the college's facilities use policy.

AMENDATORY SECTION (Amending WSR 05-07-069, filed 3/14/05, effective 4/14/05)

WAC 132H-142-020 Statement of purpose. Bellevue Community College District VIII is an educational institution provided and maintained by the people of the state of Washington. College facilities are reserved primarily for educational use including, but not limited to, instruction, research, public assembly of college groups, student activities and other activities directly related to the educational mission of the college. The public character of the college does not grant to individuals an unlimited license to engage in activity which limits, interferes with, or otherwise disrupts the normal activities for and to which the college's buildings, facilities and grounds are dedicated and said buildings, facilities and grounds are not available for unrestricted use by noncollege groups. While said buildings, facilities and grounds are not available for unlimited use by college groups, it is recognized that Bellevue Community College students and employees should be accorded opportunity to utilize the facilities and grounds of the college to the fullest extent possible. The purpose of these time, place and manner regulations is to establish procedures and reasonable controls for the use of college facilities for both noncollege and college groups. It is intended to balance the college's responsibility to fulfill its mission as a state educational institution of Washington with

the interests of noncollege groups or college groups who are interested in using the campus for purposes of constitutionally protected speech, assembly or expression. The college intends to open its facilities to noncollege groups to a lesser extent as set forth herein.

NEW SECTION

WAC 132H-142-025 First amendment activities and protection of the college mission. The college recognizes and supports the rights of groups and individuals to engage in first amendment activities. This policy shall be interpreted and construed to support such activities while simultaneously balancing the needs and interests of the college to fulfill its mission as a state educational institution of Washington.

AMENDATORY SECTION (Amending WSR 05-07-069, filed 3/14/05, effective 4/14/05)

WAC 132H-142-030 Request for use of facilities. Subject to the regulations and requirements of this policy, college or noncollege groups may use the campus limited forums for those activities protected by the first amendment. Examples of first amendment activities would include, but not necessarily be limited to, informational picketing, petition circulation, the distribution of information leaflets or pamphlets, speech-making, demonstrations, rallies, appearances of speakers in outdoor areas, mass protests, meetings to display group feelings or sentiments and/or other types of constitutionally protected assemblies to share information, perspective or viewpoints.

Noncollege groups that intend to be on campus to engage in first amendment activities (hereinafter "the event") ~~((shall))~~ are encouraged to provide notice to the ~~((campus public safety department))~~ student programs office no later than ~~((forty-eight))~~ twenty-four hours prior to the event along with the following information:

- (1) The name, address and telephone number of the individual, group, entity or organization sponsoring the event (hereinafter "the sponsoring organization"); and
- (2) The name, address and telephone number of a contact person for the sponsoring organization; and
- (3) The date, time and requested location of the event; and
- (4) The nature and purpose of the event; and
- (5) The type of sound amplification devices to be used in connection with the event, if any; and
- (6) The estimated number of people expected to participate in the event.

Signs shall be no larger than three feet by five feet (3' x 5') and no individual may carry more than one sign.

~~((If more than thirty people are expected to participate in the event, the event must be held in the southern courtyard, just north of the Carlson Theater.))~~

The use of sound amplification devices is limited to the limited public forum area as long as the sound amplification device is used at a volume which does not disrupt or disturb the normal use of classrooms, offices or laboratories or any previously scheduled college event or activity.

College groups are encouraged to notify the ~~((campus public safety department))~~ student programs office no later

than forty-eight hours in advance of an event. However, unscheduled events are permitted so long as the event does not interfere with any other function occurring at the facility.

College group events shall not last longer than eight hours from beginning to end. Noncollege events shall not last longer than five hours from beginning to end.

There shall be no overnight camping on college facilities or grounds. Camping is defined to include sleeping, carrying on cooking activities, or storing personal belongings for personal habitation, or the erection of tents or other shelters or structures for the purposes of personal habitation.

Information may be distributed as long as it is not obscene or libelous or does not advocate or incite imminent unlawful conduct. The sponsoring organization is encouraged, but not required, to include its name and address on the distributed information. College groups may post information on bulletin boards, kiosks and other display areas designed for that purpose, and may distribute materials throughout the open areas of campus. Noncollege groups may distribute materials only at the site designated for noncollege groups. To avoid excessive littering of the campus and/or greatly increased work requirements for college physical plant employees, groups are asked to cooperate with the college in limiting the distribution of information leaflets or pamphlets to the limited public forum site.

Speech that does no more than propose a commercial transaction shall not occur in connection with the event.

College facilities may not be used for commercial sales, solicitations, advertising or promotional activities, unless:

- Such activities serve educational purposes of the college; and
- Such activities are under the sponsorship of a college department or office or officially chartered student club.

The limited public forum used by the group should be cleaned up and left in its original condition and may be subject to inspection by a representative of the college after the event. Reasonable charges may be assessed against the sponsoring organization for the costs of extraordinary clean-up or for the repair of damaged property.

All fire, safety, sanitation or special regulations specified for the event are to be obeyed.

The college cannot and will not provide utility connections or hook-ups for purposes of first amendment activities conducted pursuant to this policy.

The event must not obstruct vehicular, bicycle, pedestrian or other traffic or otherwise interfere with ingress or egress to the college, or to college buildings or facilities, or to college activities or events.

The event must not create safety hazards or pose unreasonable safety risks to college students, employees or invitees to the college.

The event must not interfere with educational activities inside or outside any college building or otherwise prevent the college from fulfilling its mission and achieving its primary purpose of providing an education to its students.

The event must not materially infringe on the rights and privileges of college students, employees or invitees to the college.

The event must also be in accordance with any other applicable college policies and regulations, regulations and

policies of Bellevue Community College, local ordinances and/or state or federal laws.

AMENDATORY SECTION (Amending WSR 05-07-069, filed 3/14/05, effective 4/14/05)

WAC 132H-142-040 Additional requirements for noncollege groups. The limited public forum may not be used on the same date as any previously scheduled college event or activity at the site (aside from regularly scheduled classes) where it is reasonably anticipated that more than five hundred people will attend the college event or activity.

College buildings, rooms, and athletic fields may be rented by noncollege groups in accordance with the college's facilities use policy. Noncollege groups may otherwise use college facilities as identified in this policy.

The college designates the following area(s) as the sole limited public forum area(s) for use by noncollege groups for first amendment activities on campus:

- Building C courtyard area for groups less than thirty; and
- Southern courtyard, just north of Carlson Theater if over thirty participants are expected.

NEW SECTION

WAC 132H-142-075 Trespass. Noncollege groups who violate these regulations will be advised of the specific nature of the violation, and if they persist in the violation, will be requested by the campus president or designee to leave the college property. Such a request will be deemed to withdraw the license or privilege to enter onto or remain upon any portion of the college facilities of the person or group of persons requested to leave, and subject such individuals to arrest under provisions of chapter 9A.52 RCW or municipal ordinance.

Members of the college community (students, faculty, and staff) who do not comply with these regulations will be reported to the appropriate college office or agency for action in accord with established college policies.

Persons who violate a district policy or rule may have their license or privilege to be on district property revoked and be ordered to withdraw from and refrain from entering upon any district property. Remaining on or reentering district property after one's license or privilege to be on district property has been revoked shall constitute trespass and such individual shall be subject to arrest for criminal trespass.

REPEALER

The following section of the Washington Administrative Code is repealed:

WAC 132H-142-080	First amendment activities and protection of the college mission.
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WSR 12-24-045

PERMANENT RULES

DEPARTMENT OF LICENSING

[Filed November 30, 2012, 8:52 a.m., effective January 1, 2013]

Effective Date of Rule: January 1, 2013.

Purpose: To amend chapter 36-14 WAC due to the passage of ESHB 2301 regarding amateur mixed martial arts.

Citation of Existing Rules Affected by this Order: Repealing WAC 36-14-500 Amateur organization recognition; amending WAC 36-14-010 Definitions, 36-14-100 Rule exceptions, 36-14-110 License fees, renewals and requirements, 36-14-120 Officials compensation fees to be paid by promoter, 36-14-200 Duration of rounds and 36-14-300 Requirements for ring or enclosed area; and new WAC 36-14-1053 Amateur weight difference allowances, 36-14-505 Age requirements, 36-14-510 Amateur mixed martial arts founts, to include amateur mixed martial arts organizations and training facilities, 36-14-515 Amateur mixed martial arts protective equipment, 36-14-520 Amateur mixed martial arts mandatory suspensions, 36-14-525 Amateur mixed martial arts event results, 36-14-530 Responsibilities of amateur mixed martial arts sanctioning organizations and training facilities, 36-14-535 Notification of amateur mixed martial arts events, 36-14-540 Advertisements of events and exhibitions, and 36-14-545 Physician requirements for amateur events.

Statutory Authority for Adoption: RCW 43.24.023, 43.24.086, 67.08.015, 67.08.017, 67.08.105, 67.08.107.

Other Authority: ESHB 2301.

Adopted under notice filed as WSR 12-21-122 on October 24, 2012.

Changes Other than Editing from Proposed to Adopted Version: Removed the kneepad requirement due to the determination that knees to the head are illegal, therefore; the need for kneepads is no longer necessary.

Amended the physician, ambulance, paramedical requirement to require only one of the three to be in attendance at an event at all times.

Number of Sections Adopted in Order to Comply with Federal Statute: New 0, Amended 0, Repealed 0; Federal Rules or Standards: New 0, Amended 0, Repealed 0; or Recently Enacted State Statutes: New 10, Amended 6, Repealed 1.

Number of Sections Adopted at Request of a Nongovernmental Entity: New 0, Amended 0, Repealed 0.

Number of Sections Adopted on the Agency's Own Initiative: New 0, Amended 0, Repealed 0.

Number of Sections Adopted in Order to Clarify, Streamline, or Reform Agency Procedures: New 0, Amended 0, Repealed 0.

Number of Sections Adopted Using Negotiated Rule Making: New 0, Amended 0, Repealed 0; Pilot Rule Making: New 0, Amended 0, Repealed 0; or Other Alternative Rule Making: New 10, Amended 6, Repealed 1.

Date Adopted: November 30, 2012.

Damon Monroe
Rules Coordinator

Chapter 36-14 WAC

PROFESSIONAL AND AMATEUR MARTIAL ARTS

AMENDATORY SECTION (Amending WSR 04-16-045, filed 7/28/04, effective 8/28/04)

WAC 36-14-010 Definitions. The following definition(s) will be used throughout this WAC:

~~("Recognized amateur kickboxing or martial arts organization" means any amateur kickboxing or martial arts organization recognized by the department who has not been exempted by statute and provides written documented proof required by WAC 36-14-500.)~~ (1) "Mixed martial arts" in addition to RCW 67.08.002(20), mixed martial arts does not include muay thai and kickboxing.

(2) "Training facility" is a location licensed and defined under chapter 67.08 RCW to hold amateur mixed martial arts exhibitions in that location.

AMENDATORY SECTION (Amending WSR 99-17-048, filed 8/13/99, effective 9/13/99)

WAC 36-14-100 Rule exceptions. (1) If a martial arts, kickboxing, muay thai ((☞)), pankration, or amateur mixed martial arts event is held, in addition to chapter 36-12 WAC, the department may use the *Rules of Competition* as established by the United Full Contact Federation, association of boxing commissions, or rules of competition established by any other professional martial arts organization that afford a similar level of safety to participants. A copy on any *Rules of Competition* used by the department may be obtained through correspondence to the Washington state department of licensing.

(2) Training facilities and amateur mixed martial arts sanctioning organizations are exempt from chapter 36-14 WAC unless specifically identified. All other amateur mixed martial arts events will be overseen by the department and shall comply with the laws and rules of chapter 67.08 RCW.

NEW SECTION

WAC 36-14-1053 Amateur weight difference allowances. Amateur mixed martial arts sanctioning organizations and training facilities shall, at a minimum, ensure all amateur participants meet the following weight requirements for each bout:

(1) Participants can have no more than a five-pound weight difference allowance for ages fifteen and under.

(2) Participants can have no more than a ten-pound weight difference allowance for ages sixteen and over.

(3) Subsection (1) and (2) of this section do not apply if both participants weigh two hundred five pounds or more.

AMENDATORY SECTION (Amending WSR 10-08-037, filed 4/1/10, effective 5/2/10)

WAC 36-14-110 License fees, renewals and requirements. (1) The license year is one year from date of issue. License fees are paid annually. Fees shall be as follows:

Manager	-	\$65.00
Referee	-	\$65.00
Kickboxer	-	\$25.00
Martial arts participant	-	\$25.00
<u>Amateur mixed martial arts participant</u>	-	<u>\$25.00</u>
Matchmaker	-	\$65.00
Second	-	\$25.00
Inspector	-	\$65.00
Judge	-	\$65.00
Timekeeper	-	\$65.00
Announcer	-	\$65.00
Event physician	-	No charge
Event chiropractor	-	\$65.00
Promoter	-	\$(200.00) <u>500.00</u>
<u>Training facility</u>	=	<u>\$500.00</u>
<u>Amateur mixed martial arts sanctioning organization</u>	=	<u>\$500.00</u>

(2) All renewal fees shall be the same fee as each original license fee.

(3) Licensing requirements:

(a) Completed application on form approved by the department.

(b) Completed physical within one year (kickboxer, martial arts participant, amateur mixed martial arts participant, and referee only).

(c) One small current photograph, not more than two years old (kickboxer ~~((and))~~, martial arts participant, and amateur mixed martial arts participants only).

(d) Payment of license fee.

(e) Certification from an organization approved by the department under RCW 67.08.100(3).

(f) Training facility: Have an established place of business that offers training in one or more of the mixed martial arts and a current tax registration through the department of revenue.

(g) Amateur mixed martial arts sanctioning organizations:

(i) Have an established place of business that offers training in one or more of the mixed martial arts;

(ii) Have a current tax registration through the department of revenue;

(iii) Have a minimum of three years total combined amateur or professional experience in at least three of the following areas: Referee, promoter, judge, inspector, have an established place of business that offers training in one or more of the mixed martial arts;

(iv) Provide to the department a list of authorized representatives who will be in charge of events or exhibitions. Changes to this list will not be accepted within thirty days prior to an event or exhibition.

(4) Applicants may not participate until all licensing requirements are received and approved by the department of licensing.

AMENDATORY SECTION (Amending WSR 02-23-062, filed 11/18/02, effective 1/1/03)

WAC 36-14-120 Officials compensation fees to be paid by promoter. (1) The following minimum fees shall be paid by the promoter of the event to the event officials for nontitle, nontelevised bouts:

Judge	\$75.00
Timekeeper	\$75.00
Referee (preliminary)	\$110.00
Referee (main event)	\$125.00
Physician	\$250.00
Event chiropractor	\$200.00

(2) The following minimum fees shall be paid by the promoter of the event to event officials for nontitle, televised bouts:

Judges	\$100.00
Timekeepers	\$100.00
Referee (preliminary)	\$135.00
Referee (main event)	\$200.00
Physician	\$250.00
Event chiropractor	\$200.00

(3) In the event of a local, state or regional championship, title fight, or local televised fight, event officials shall be paid by the promoter at the respective and prevailing scale of the professional sanctioning organization. The event officials pay rate shall not be lower than the televised rate established in subsection (2) of this section.

(4) In the event of a championship, title fight, or nationally televised fight, event officials shall be paid by the promoter at the respective and prevailing scale of the professional sanctioning organization but shall not be lower than the rates established below:

Judges	\$150.00
Timekeepers	\$150.00
Referee (preliminary)	\$175.00
Referee (main event)	\$225.00
Physician	\$250.00
Event chiropractor	\$200.00

(5) In the event of a "world" title bout, event officials shall be paid by the promoter at the respective and prevailing scale of the professional sanctioning organization but shall not be lower than the rates established in subsection (4) of this section. If the "world" title bout is televised, an additional \$200.00 fee per official will be assessed for each judge, timekeeper and referee if the fees listed in subsection (4) of this section are used.

(6) Travel mileage shall be paid to event officials at the rate listed on schedule A, chapter 10.90.10.b of the *State Administrative and Accounting Manual* as published by the office of financial management.

(7) Amateur mixed martial arts sanctioning organizations and training facilities may set their own compensation fees for officials.

AMENDATORY SECTION (Amending WSR 04-16-045, filed 7/28/04, effective 8/28/04)

WAC 36-14-200 Duration of rounds. ~~((Except with the approval of the department or the on-site representative))~~ All professional and amateur events or exhibitions shall meet the following requirements. This includes amateur mixed martial arts sanctioning organizations and training facilities:

(1) A nonchampionship ~~((contest or exhibition of mixed martial arts))~~ bout shall not exceed three rounds in duration.

(2) A championship ~~((contest of mixed martial arts))~~ bout shall not exceed five rounds in duration.

(3) A round ~~((in a contest or exhibition of mixed martial arts))~~ shall not exceed five minutes in duration ~~((A period of rest in the contest or exhibition of mixed martial arts shall not exceed one minute in duration))~~ for professionals and three minutes for amateurs.

(4) There shall be a one minute rest period between rounds.

AMENDATORY SECTION (Amending WSR 04-16-045, filed 7/28/04, effective 8/28/04)

WAC 36-14-300 Requirements for ring or enclosed area. (1) Mixed martial arts ~~and martial arts~~ contests and exhibitions ~~((may))~~ shall be held in a ring or in an enclosed area.

(2) A ring used for a contest or exhibition of mixed martial arts must meet the following requirements:

(a) The ring must be no smaller than sixteen feet square within the ropes.

(b) The ring floor must extend at least twenty-four inches beyond the ropes. The ring floor must be padded with ensolite or another similar closed-cell foam, with at least a one-inch layer of foam padding. Padding must extend beyond the ring ropes and over the edge of the platform, with a top covering of canvas, duck or similar material tightly stretched and laced to the ring platform.

(c) The ring platform must not be more than four feet above the floor of the building and must have suitable steps for the use of the participants.

(d) Ring posts must be made of metal, not more than three inches in diameter, extending from the floor of the building to a minimum height of fifty-eight inches above the ring floor, and must be properly padded in a manner approved by the department. Ring posts must be at least twenty-four inches away from the ring ropes.

(e) There may be no more than five ring ropes, not less than one inch in diameter and wrapped in soft material. The lowest ring rope must be at least twelve inches above the ring floor.

(f) There must not be any obstruction or object on any part of the ring floor.

(3) An enclosed area used in a contest or exhibition of mixed martial arts must meet the following requirements:

(a) The enclosed area must be circular or have at least four equal sides and must be no smaller than twenty feet wide.

(b) The floor of the enclosed area must be padded with ensolite or another similar closed-cell foam, with at least a one-inch layer of foam padding, with a top covering of canvas, duck or similar material tightly stretched and laced to the platform of the enclosed area.

(c) The platform of the enclosed area must not be more than four feet above the floor of the building and must have suitable steps for the use of the participants.

(d) Enclosure posts must be made of metal, not more than six inches in diameter, extending from the floor of the building to between five and seven feet above the floor of the enclosed area, and must be properly padded in a manner approved by the department.

(e) The material used to construct the enclosed area must be made of a material that will prevent an unarmed combatant from falling out of the enclosed area or breaking through the enclosed area onto the floor of the building or onto the spectators, including, without limitation, chain link fence coated with vinyl.

(f) Any metal material used in the enclosed area must be covered and padded in a manner approved by the department and must not be abrasive to the participants.

(g) The enclosed area must have at least three entrances.

(h) There must not be any obstruction on any part of the enclosure surrounding the area in which the participants are to be competing.

NEW SECTION

WAC 36-14-505 Age requirements. A participant or contestant must be twelve years of age or older to participate in an amateur mixed martial arts exhibition held in a training facility.

NEW SECTION

WAC 36-14-510 Amateur mixed martial arts fouls, to include amateur mixed martial arts sanctioning organizations and training facilities. The following are minimum required fouls and will result in penalties if committed:

- (1) Holding or grabbing the fence or ropes;
- (2) Holding opponent's shorts or gloves;
- (3) Butting with the head;
- (4) Eye gouging of any kind;
- (5) Biting or spitting at an opponent;
- (6) Hair pulling;
- (7) Fish hooking;
- (8) Groin attacks of any kind;
- (9) Intentionally placing a finger into any orifice, or into any cut or laceration of your opponent;
- (10) Downward pointing elbow strikes;
- (11) Small joint manipulation;
- (12) Strikes to the spine or the back of the head;
- (13) Heel kicks to the kidney;
- (14) Throat strikes of any kind, including, without limitation, grabbing the trachea;
- (15) Clawing, pinching, twisting the flesh or grabbing the clavicle;

- (16) Kicking the head of a grounded opponent;
- (17) Kneeing the head of a grounded opponent;
- (18) Stomping of a grounded fighter;
- (19) The use of abusive language in the fighting area;
- (20) Any unsportsmanlike conduct that causes an injury to opponent;
- (21) Attacking an opponent on or during the break;
- (22) Attacking an opponent who is under the care of the referee;
- (23) Timidity (avoiding contact, or consistently dropping the mouthpiece, or faking an injury);
- (24) Interference from a mixed martial artist's seconds/cornerman;
- (25) Throwing an opponent out of the ring or caged area;
- (26) Flagrant disregard of the referee's instructions;
- (27) Spiking the opponent to the canvas onto the head or neck (pile-driving);
- (28) Attacking an opponent after the bell or horn has sounded the end of the period of unarmed combat;
- (29) Heel hooks;
- (30) Elbows to the head;
- (31) Twisting knee locks;
- (32) Knees to head;
- (33) For ages fifteen and under: Closed fist strikes to the head while on the ground.

NEW SECTION

WAC 36-14-515 Amateur mixed martial arts protective equipment. The following is minimum required equipment to be worn during a bout by all amateur participants or contestants at events or exhibitions:

- (1) Training facilities:
 - Martial arts shin guards with instep pads;
 - 6 oz. amateur mixed martial arts sparring style gloves that shall be whole, clean, sanitary, and in good condition.
 - An extra set of gloves shall be at ringside prior to the start of the first bout for use in case gloves are damaged during a bout;
 - Mouthpiece;
 - Groin protector (male participants only).
- (2) Amateur mixed martial arts sanctioning organizations:
 - Martial arts shin guards with instep pads;
 - 6 oz. amateur mixed martial arts sparring style gloves, supplied by the promoter, that shall be whole, clean, sanitary, and in good condition.
 - An extra set of gloves shall be provided by the promoter to the representative in charge of the event prior to the start of the first bout for use in case gloves are damaged during a bout;
 - Mouthpiece;
 - Groin protector (male participants only).
- (3) Department of licensing:
 - 6 oz. amateur mixed martial arts sparring style gloves, supplied by the promoter, that shall be whole, clean, sanitary, and in good condition;
 - An extra set of gloves shall be provided by the promoter to the department representative prior to the start of the first bout for use in case gloves are damaged during a bout;

- Mouthpiece;
- Groin protector (male participants only).

NEW SECTION

WAC 36-14-520 Amateur mixed martial arts mandatory suspensions. (1) The department and amateur mixed martial arts sanctioning organizations shall assess the following suspensions for participating in an amateur mixed martial arts event:

- Six-day minimum suspension;
- Thirty-day suspension for a technical knockout;
- Sixty-day suspension for a knockout;
- A physician may recommend a longer suspension based on the medical condition of the participant.

(2) Amateur mixed martial arts sanctioning organizations shall report suspensions to the department after an event in a manner defined by the department.

NEW SECTION

WAC 36-14-525 Amateur mixed martial arts event results. The department and amateur mixed martial arts sanctioning organization shall report event results to a nationally recognized record keeping data base in a manner defined by the department.

NEW SECTION

WAC 36-14-530 Responsibilities of amateur mixed martial arts sanctioning organizations and training facilities. (1) It is the responsibility of the amateur mixed martial arts sanctioning organization and training facility to ensure the health and safety of the participants and to ensure the laws and rules governing amateur mixed martial arts are followed.

(2) A representative must be present at the event or exhibition location during the entire event or exhibition.

NEW SECTION

WAC 36-14-535 Notification of amateur mixed martial arts events. Amateur mixed martial arts sanctioning organizations must notify the department in writing fourteen days prior to an event with the following information:

- Name of licensed promoter;
- Date and time of event;
- Location of event;
- Name of representative in charge of the event.

NEW SECTION

WAC 36-14-540 Advertisements of events and exhibitions. Promoters, including promoters of amateur mixed martial arts events held under an amateur mixed martial arts sanctioning organization, and training facilities shall state in all advertisements whether the event is professional, professional and amateur, or amateur.

NEW SECTION

WAC 36-14-545 Physician and ambulance or paramedical unit requirements for amateur events. (1) Promoters of an amateur mixed martial arts event held under an amateur mixed martial arts sanctioning organization shall have at least one physician in attendance at the event or an ambulance or paramedical unit with transportation and resuscitation capabilities to be present at the event location at all times during the event.

REPEALER

The following section of the Washington Administrative Code is repealed:

WAC 36-14-500 Amateur organization recognition.

Date Adopted: November 30, 2012.

Damon Monroe
Rules Coordinator

AMENDATORY SECTION (Amending WSR 96-16-032, filed 8/1/96, effective 9/1/96)

WAC 308-89-060 Fees. The department, as authorized in RCW 46.72, shall charge and collect the following fees:

New for hire business application	\$(20.00) <u>110.00</u>
New vehicle certificate	((20.00)) <u>55.00</u>
Vehicle certificate renewal	((20.00)) <u>55.00</u>
Change of vehicle certificate	((20.00)) <u>55.00</u>
Duplicate vehicle certificate	((20.00)) <u>55.00</u>

WSR 12-24-048
PERMANENT RULES
DEPARTMENT OF
LABOR AND INDUSTRIES

[Filed November 30, 2012, 10:50 a.m., effective January 1, 2013]

Effective Date of Rule: January 1, 2013.

Purpose: This rule will amend the tables of classification base premium rates, experience rating plan parameters, experience modification factor calculation limitations and retrospective rating plan size groupings for the workers' compensation insurance program for calendar year 2013. Classification base rates are being amended for updated loss and payroll experience, and to result in no overall increase in premium rates for 2013.

Citation of Existing Rules Affected by this Order: Amending WAC 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 base rates by class of industry, 296-17-89502 Industrial insurance accident fund, medical aid and supplemental pension rates by class of industry for nonhourly rated classifications, 296-17-89504 Horse racing industry industrial insurance, medical aid, and supplemental pension by class, 296-17-920 Assessment for supplemental pension fund, 296-17B-540 Determining loss incurred for each claim, and 296-17B-900 Retrospective rating plans standard premium size ranges.

Statutory Authority for Adoption: RCW 51.16.035 Base rates, 51.32.073 Supplemental pension, 51.08.010 Retrospective rating, and 51.04.020(1), general authority.

Adopted under notice filed as WSR 12-19-076 on September 18, 2012.

Changes Other than Editing from Proposed to Adopted Version: This adoption also corrects an error in the proposed rule making in WAC 296-17-880 Table II primary and excess credibility values. The maximum claim value and the average death value that appeared in the proposed rule was \$253,784, and has been corrected to read \$266,241.

Number of Sections Adopted in Order to Comply with Federal Statute: New 0, Amended 0, Repealed 0; Federal Rules or Standards: New 0, Amended 0, Repealed 0; or

WSR 12-24-046**PERMANENT RULES****DEPARTMENT OF LICENSING**

[Filed November 30, 2012, 9:04 a.m., effective January 1, 2013]

Effective Date of Rule: January 1, 2013.

Purpose: This proposal increases the vehicles for hire licensing fees, as authorized by the 2012 legislative session budget bill, ESHB 2190, section 208(20): "Consistent with RCW 43.135.055 and 43.24.086, during the 2011-2013 fiscal biennium, the legislature authorizes the department to adjust the business and vehicle fees for the for hire licensing program in amounts sufficient to recover the costs of administering the for hire licensing program."

Fiscal analysis and forecasting indicate that full cost recovery would mean that the fees would be as proposed.

Citation of Existing Rules Affected by this Order: Amending WAC 308-89-060 Fees.

Statutory Authority for Adoption: RCW 46.72.120 Rules.

Other Authority: ESHB 2190, section 208(20).

Adopted under notice filed as WSR 12-21-123 on October 24, 2012.

Number of Sections Adopted in Order to Comply with Federal Statute: New 0, Amended 0, Repealed 0; Federal Rules or Standards: New 0, Amended 0, Repealed 0; or Recently Enacted State Statutes: New 0, Amended 1, Repealed 0.

Number of Sections Adopted at Request of a Nongovernmental Entity: New 0, Amended 0, Repealed 0.

Number of Sections Adopted on the Agency's Own Initiative: New 0, Amended 0, Repealed 0.

Number of Sections Adopted in Order to Clarify, Streamline, or Reform Agency Procedures: New 0, Amended 0, Repealed 0.

Number of Sections Adopted Using Negotiated Rule Making: New 0, Amended 0, Repealed 0; Pilot Rule Making: New 0, Amended 0, Repealed 0; or Other Alternative Rule Making: New 0, Amended 0, Repealed 0.

Recently Enacted State Statutes: New 0, Amended 0, Repealed 0.

Number of Sections Adopted at Request of a Nongovernmental Entity: New 0, Amended 0, Repealed 0.

Number of Sections Adopted on the Agency's Own Initiative: New 0, Amended 11, Repealed 0.

Number of Sections Adopted in Order to Clarify, Streamline, or Reform Agency Procedures: New 0, Amended 0, Repealed 0.

Number of Sections Adopted Using Negotiated Rule Making: New 0, Amended 0, Repealed 0; Pilot Rule Making: New 0, Amended 0, Repealed 0; or Other Alternative Rule Making: New 0, Amended 11, Repealed 0.

Date Adopted: November 30, 2012.

Judy Schurke
Director

AMENDATORY SECTION (Amending WSR 11-24-026, filed 12/1/11, effective 1/1/12)

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 expected losses for an average employer reporting the same exposures in each classification. The comparison shall contain actuarial refinements designed to weigh the extent to which the actual experience is credible, 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 factor shall be calculated from the formula:

$$\text{EXPERIENCE MODIFICATION FACTOR} = \frac{(\text{Credible Actual Primary Loss} + \text{Credible Actual Excess Loss}) / \text{Expected Loss}}$$

Where

$$\text{Credible Actual Primary Loss} = \text{Actual Primary Loss} \times \text{Primary Credibility} + \text{Expected Primary Loss} \times (100\% - \text{Primary Credibility})$$

$$\text{Credible Actual Excess Loss} = \text{Actual Excess Loss} \times \text{Excess Credibility} + \text{Expected Excess Loss} \times (100\% - \text{Excess Credibility})$$

The meaning and function of each term in the formula is specified below.

For each claim, the actual primary loss is the first dollar portion of the claim costs, which has been shown in actuarial studies, to have the greater credibility in predicting future experience. These amounts are summed over all claims. For each claim in excess of \$20,112 the actual primary loss shall be determined from the formula:

$$\text{ACTUAL PRIMARY LOSS} = \frac{50,280}{(\text{Total loss} + 30,168)} \times \text{total loss}$$

For each claim, less than \$20,112 the full value of the claim shall be considered a primary loss.

For each claim, the excess actual loss is the remaining portion of the claim costs, which have been shown in actuar-

ial studies to have less credibility in predicting future experience. The excess actual loss for each claim shall be determined by subtracting the primary loss from the total loss. These amounts are summed over all claims.

For any claim without disability benefits (time loss, partial permanent disability, total permanent disability or death) either actually paid or estimated to be paid, the total actual losses for calculating the primary loss and excess loss shall first be reduced by the lesser of $\$((2,330))$ 2,460 or the total cost of the claim. Here are some examples for these claims:

Total Loss	Type of Claim	Total Loss (after deduction)	Primary Loss	Excess Loss
200	Medical Only	0	0	0
2,500	Medical Only	((170)) <u>40</u>	((170)) <u>40</u>	0
2,500	Time Loss	2,500	2,500	0
25,000	Medical Only	((22,670)) <u>22,540</u>	((21,572)) <u>21,502</u>	((1,098)) <u>1,038</u>
25,000	Time Loss	25,000	22,785	2,215
100,000	PPD	100,000	38,627	61,373
2,000,000	TPD Pension	((253,784)) <u>266,241</u>	((44,938)) <u>45,163</u>	((208,846)) <u>221,078</u>

Note: The deduction, $\$((2,330))$ 2,460, is twice the average case incurred cost of these types of claims occurring during the three-year period used for experience rating. On average this results in reducing the average actual loss about seventy percent for these types of claims adjusted. This is done to help make the transition between the two different experience rating methods better by helping make the change in experience factor reasonable for small changes to the actual losses. The \$2,000,000 loss is limited by the Maximum Claim Value before the reduction of $\$((2,330))$ 2,460 is applied.

For each employer, the primary credibility and the excess credibility determines the percentage weight given to the corresponding actual primary losses and the actual excess losses, included in the calculation of the experience modification, based on the volume of expected losses. Primary credibility and excess credibility values are set forth in Table II.

An employer's expected losses shall be determined by summing the expected loss for each of the three years of the experience period, which are calculated by multiplying the reported exposure in each classification during the year by the corresponding classification expected loss rate and rounding the result to the nearest cent. Classification expected loss rates by year are set forth in Table III.

Expected losses in each classification shall be multiplied by the classification "Primary-Ratio" to obtain "expected primary losses" which shall be rounded to the nearest cent. Expected excess losses shall then be calculated by subtracting expected primary losses from expected total losses rounded to the nearest cent. Primary-Ratios are also set forth in Table III.

AMENDATORY SECTION (Amending WSR 11-24-026, filed 12/1/11, effective 1/1/12)

WAC 296-17-875 Table I.

**Primary Losses for Selected Claim Values
Effective January 1, (~~2012~~) 2013**

		(Expected Losses	Primary- Credibility	Excess- Credibility
TOTAL LOSS AFTER		20,552 - 21,300	32%	7%
DEDUCTION	PRIMARY LOSS			
5,000	5,000	21,301 - 22,067	33%	7%
10,000	10,000	22,067 - 22,847	34%	7%
15,000	15,000	22,848 - 23,645	35%	7%
20,112	20,112	23,646 - 24,463	36%	7%
29,834	25,000	24,464 - 25,301	37%	7%
44,627	30,000	25,302 - 26,162	38%	7%
69,102	35,000	26,163 - 27,044	39%	7%
100,000	38,627	27,045 - 27,953	40%	7%
117,385	40,000	27,954 - 28,889	41%	7%
200,000	43,690	28,890 - 29,856	42%	7%
((253,784))	((44,938))	29,857 - 30,857	43%	7%
<u>266,241**</u>	<u>45,163</u>	30,858 - 31,895	44%	7%
		31,896 - 32,975	45%	7%
		32,976 - 34,103	46%	7%
		34,104 - 35,284	47%	7%
		35,285 - 36,531	48%	7%
		36,532 - 37,852	49%	7%
		37,853 - 39,263	50%	7%
		39,264 - 40,785	51%	7%
		40,786 - 42,452	52%	7%
		42,453 - 44,311	53%	7%
		44,312 - 44,500	54%	7%
		44,501 - 46,453	54%	8%
		46,454 - 49,069	55%	8%
		49,070 - 74,262	56%	8%
		74,263 - 81,852	57%	8%
		81,853 - 116,914	57%	9%
		116,915 - 120,419	57%	10%
		120,420 - 152,192	58%	10%
		152,193 - 166,575	58%	11%
		166,576 - 187,691	59%	11%
		187,692 - 212,732	59%	12%
		212,733 - 223,403	60%	12%
		223,404 - 258,889	60%	13%
		258,890 - 259,342	61%	13%
		259,343 - 295,504	61%	14%
		295,505 - 305,045	61%	15%
		305,046 - 331,892	62%	15%
		331,893 - 351,201	62%	16%
		351,202 - 368,508	63%	16%
		368,509 - 397,358	63%	17%
		397,359 - 405,354	64%	17%
		405,355 - 442,433	64%	18%
		442,434 - 443,513	64%	19%
		443,514 - 479,749	65%	19%

** Maximum claim value

AMENDATORY SECTION (Amending WSR 11-24-026, filed 12/1/11, effective 1/1/12)

WAC 296-17-880 Table II.

**PRIMARY AND EXCESS CREDIBILITY VALUES
Effective January 1, (~~2012~~) 2013**

Maximum Claim Value = \$((253,784)) 266,241

Average Death Value = \$((253,784)) 266,241

(Expected Losses	Primary- Credibility	Excess- Credibility
4 - 8,389	12%	7%
8,390 - 8,954	13%	7%
8,955 - 9,528	14%	7%
9,529 - 10,106	15%	7%
10,107 - 10,691	16%	7%
10,692 - 11,285	17%	7%
11,286 - 11,886	18%	7%
11,887 - 12,495	19%	7%
12,496 - 13,111	20%	7%
13,112 - 13,736	21%	7%
13,737 - 14,371	22%	7%
14,372 - 15,014	23%	7%
15,015 - 15,666	24%	7%
15,667 - 16,331	25%	7%
16,332 - 17,005	26%	7%
17,006 - 17,687	27%	7%
17,688 - 18,385	28%	7%
18,386 - 19,092	29%	7%
19,093 - 19,815	30%	7%
19,816 - 20,551	31%	7%

((Expected Losses		Primary- Credibility	Excess- Credibility	((Expected Losses		Primary- Credibility	Excess- Credibility		
479,750	-	489,670	65%	20%	1,458,956	-	1,495,996	87%	44%
489,671	-	517,300	66%	20%	1,495,997	-	1,505,112	87%	45%
517,301	-	535,827	66%	21%	1,505,113	-	1,540,293	88%	45%
535,828	-	555,090	67%	21%	1,540,294	-	1,551,267	88%	46%
555,091	-	581,984	67%	22%	1,551,268	-	1,584,896	89%	46%
581,985	-	593,123	68%	22%	1,584,897	-	1,597,423	89%	47%
593,124	-	628,138	68%	23%	1,597,424	-	1,629,810	90%	47%
628,139	-	631,398	69%	23%	1,629,811	-	1,643,581	90%	48%
631,399	-	669,921	69%	24%	1,643,582	-	1,675,036	91%	48%
669,922	-	674,294	69%	25%	1,675,037	-	1,689,735	91%	49%
674,295	-	708,690	70%	25%	1,689,736	-	1,720,578	92%	49%
708,691	-	720,452	70%	26%	1,720,579	-	1,735,894	92%	50%
720,453	-	747,713	71%	26%	1,735,895	-	1,766,442	93%	50%
747,714	-	766,609	71%	27%	1,766,443	-	1,782,049	93%	51%
766,610	-	786,989	72%	27%	1,782,050	-	1,812,628	94%	51%
786,990	-	812,764	72%	28%	1,812,629	-	1,828,205	94%	52%
812,765	-	826,520	73%	28%	1,828,206	-	1,859,141	95%	52%
826,521	-	858,922	73%	29%	1,859,142	-	1,874,360	95%	53%
858,923	-	866,309	74%	29%	1,874,361	-	1,905,983	96%	53%
866,310	-	905,077	74%	30%	1,905,984	-	1,920,518	96%	54%
905,078	-	906,361	75%	30%	1,920,519	-	1,953,159	97%	54%
906,362	-	946,676	75%	31%	1,953,160	-	1,966,673	97%	55%
946,677	-	951,235	75%	32%	1,966,674	-	2,000,671	98%	55%
951,236	-	987,257	76%	32%	2,000,672	-	2,012,831	98%	56%
987,258	-	997,390	76%	33%	2,012,832	-	2,048,526	99%	56%
997,391	-	1,028,107	77%	33%	2,048,527	-	2,058,986	99%	57%
1,028,108	-	1,043,548	77%	34%	2,058,987	-	2,096,725	100%	57%
1,043,549	-	1,069,230	78%	34%	2,096,726	-	2,145,272	100%	58%
1,069,231	-	1,089,704	78%	35%	2,145,273	-	2,194,170	100%	59%
1,089,705	-	1,110,625	79%	35%	2,194,171	-	2,243,425	100%	60%
1,110,626	-	1,135,860	79%	36%	2,243,426	-	2,293,040	100%	61%
1,135,861	-	1,152,297	80%	36%	2,293,041	-	2,343,017	100%	62%
1,152,298	-	1,182,014	80%	37%	2,343,018	-	2,393,363	100%	63%
1,182,015	-	1,194,249	81%	37%	2,393,364	-	2,444,080	100%	64%
1,194,250	-	1,228,172	81%	38%	2,444,081	-	2,495,173	100%	65%
1,228,173	-	1,236,485	82%	38%	2,495,174	-	2,546,648	100%	66%
1,236,486	-	1,274,329	82%	39%	2,546,649	-	2,598,506	100%	67%
1,274,330	-	1,279,007	83%	39%	2,598,507	-	2,650,752	100%	68%
1,279,008	-	1,320,486	83%	40%	2,650,753	-	2,703,393	100%	69%
1,320,487	-	1,321,817	84%	40%	2,703,394	-	2,756,430	100%	70%
1,321,818	-	1,364,916	84%	41%	2,756,431	-	2,809,869	100%	71%
1,364,917	-	1,366,639	84%	42%	2,809,870	-	2,863,717	100%	72%
1,366,640	-	1,408,310	85%	42%	2,863,718	-	2,917,973	100%	73%
1,408,311	-	1,412,797	85%	43%	2,917,974	-	2,972,648	100%	74%
1,412,798	-	1,452,004	86%	43%	2,972,649	-	3,027,740	100%	75%
1,452,005	-	1,458,955	86%	44%	3,027,741	-	3,083,260	100%	76%

<u>((Expected Losses</u>		<u>Primary</u> <u>Credibility</u>	<u>Excess</u> <u>Credibility</u>	<u>Expected Losses</u>		<u>Primary</u> <u>Credibility</u>	<u>Excess</u> <u>Credibility</u>
3,083,261	- 3,139,210	100%	77%	32,215	= 33,305	45%	7%
3,139,211	- 3,195,597	100%	78%	33,306	= 34,444	46%	7%
3,195,598	- 3,252,424	100%	79%	34,445	= 35,637	47%	7%
3,252,425	- 3,309,697	100%	80%	35,638	= 36,896	48%	7%
3,309,698	- 3,367,424	100%	81%	36,897	= 38,231	49%	7%
3,367,425	- 3,425,603	100%	82%	38,232	= 39,656	50%	7%
3,425,604	- 3,484,247	100%	83%	39,657	= 41,193	51%	7%
3,484,248	- 3,543,356	100%	84%	41,194	= 42,877	52%	7%
3,543,357	- 3,602,942	100%	85%	42,878	= 44,754	53%	7%
3,602,943	& over	100%	86%))	44,755	= 44,945	54%	7%
				44,946	= 46,918	54%	8%
				46,919	= 49,560	55%	8%
				49,561	= 75,005	56%	8%
				75,006	= 82,671	57%	8%
				82,672	= 118,083	57%	9%
				118,084	= 121,623	57%	10%
				121,624	= 153,714	58%	10%
				153,715	= 168,241	58%	11%
				168,242	= 189,568	59%	11%
				189,569	= 214,859	59%	12%
				214,860	= 225,637	60%	12%
				225,638	= 261,478	60%	13%
				261,479	= 261,935	61%	13%
				261,936	= 298,459	61%	14%
				298,460	= 308,095	61%	15%
				308,096	= 335,211	62%	15%
				335,212	= 354,713	62%	16%
				354,714	= 372,193	63%	16%
				372,194	= 401,332	63%	17%
				401,333	= 409,408	64%	17%
				409,409	= 446,857	64%	18%
				446,858	= 447,948	64%	19%
				447,949	= 484,547	65%	19%
				484,548	= 494,567	65%	20%
				494,568	= 522,473	66%	20%
				522,474	= 541,185	66%	21%
				541,186	= 560,641	67%	21%
				560,642	= 587,804	67%	22%
				587,805	= 599,054	68%	22%
				599,055	= 634,419	68%	23%
				634,420	= 637,712	69%	23%
				637,713	= 676,620	69%	24%
				676,621	= 681,037	69%	25%
				681,038	= 715,777	70%	25%
				715,778	= 727,657	70%	26%
				727,658	= 755,190	71%	26%

<u>Expected Losses</u>		<u>Primary</u> <u>Credibility</u>	<u>Excess</u> <u>Credibility</u>
0	= 8,473	12%	7%
8,474	= 9,044	13%	7%
9,045	= 9,623	14%	7%
9,624	= 10,207	15%	7%
10,208	= 10,798	16%	7%
10,799	= 11,398	17%	7%
11,399	= 12,005	18%	7%
12,006	= 12,620	19%	7%
12,621	= 13,242	20%	7%
13,243	= 13,873	21%	7%
13,874	= 14,515	22%	7%
14,516	= 15,164	23%	7%
15,165	= 15,823	24%	7%
15,824	= 16,494	25%	7%
16,495	= 17,175	26%	7%
17,176	= 17,864	27%	7%
17,865	= 18,569	28%	7%
18,570	= 19,283	29%	7%
19,284	= 20,013	30%	7%
20,014	= 20,757	31%	7%
20,758	= 21,513	32%	7%
21,514	= 22,287	33%	7%
22,288	= 23,075	34%	7%
23,076	= 23,881	35%	7%
23,882	= 24,708	36%	7%
24,709	= 25,554	37%	7%
25,555	= 26,424	38%	7%
26,425	= 27,314	39%	7%
27,315	= 28,233	40%	7%
28,234	= 29,178	41%	7%
29,179	= 30,155	42%	7%
30,156	= 31,166	43%	7%
31,167	= 32,214	44%	7%

<u>Expected Losses</u>		<u>Primary</u> <u>Credibility</u>	<u>Excess</u> <u>Credibility</u>	<u>Expected Losses</u>		<u>Primary</u> <u>Credibility</u>	<u>Excess</u> <u>Credibility</u>		
<u>755,191</u>	=	<u>774,275</u>	<u>71%</u>	<u>27%</u>	<u>1,784,107</u>	=	<u>1,799,870</u>	<u>93%</u>	<u>51%</u>
<u>774,276</u>	=	<u>794,859</u>	<u>72%</u>	<u>27%</u>	<u>1,799,871</u>	=	<u>1,830,754</u>	<u>94%</u>	<u>51%</u>
<u>794,860</u>	=	<u>820,892</u>	<u>72%</u>	<u>28%</u>	<u>1,830,755</u>	=	<u>1,846,487</u>	<u>94%</u>	<u>52%</u>
<u>820,893</u>	=	<u>834,785</u>	<u>73%</u>	<u>28%</u>	<u>1,846,488</u>	=	<u>1,877,732</u>	<u>95%</u>	<u>52%</u>
<u>834,786</u>	=	<u>867,511</u>	<u>73%</u>	<u>29%</u>	<u>1,877,733</u>	=	<u>1,893,104</u>	<u>95%</u>	<u>53%</u>
<u>867,512</u>	=	<u>874,972</u>	<u>74%</u>	<u>29%</u>	<u>1,893,105</u>	=	<u>1,925,043</u>	<u>96%</u>	<u>53%</u>
<u>874,973</u>	=	<u>914,128</u>	<u>74%</u>	<u>30%</u>	<u>1,925,044</u>	=	<u>1,939,723</u>	<u>96%</u>	<u>54%</u>
<u>914,129</u>	=	<u>915,425</u>	<u>75%</u>	<u>30%</u>	<u>1,939,724</u>	=	<u>1,972,691</u>	<u>97%</u>	<u>54%</u>
<u>915,426</u>	=	<u>956,143</u>	<u>75%</u>	<u>31%</u>	<u>1,972,692</u>	=	<u>1,986,340</u>	<u>97%</u>	<u>55%</u>
<u>956,144</u>	=	<u>960,747</u>	<u>75%</u>	<u>32%</u>	<u>1,986,341</u>	=	<u>2,020,678</u>	<u>98%</u>	<u>55%</u>
<u>960,748</u>	=	<u>997,130</u>	<u>76%</u>	<u>32%</u>	<u>2,020,679</u>	=	<u>2,032,959</u>	<u>98%</u>	<u>56%</u>
<u>997,131</u>	=	<u>1,007,364</u>	<u>76%</u>	<u>33%</u>	<u>2,032,960</u>	=	<u>2,069,011</u>	<u>99%</u>	<u>56%</u>
<u>1,007,365</u>	=	<u>1,038,388</u>	<u>77%</u>	<u>33%</u>	<u>2,069,012</u>	=	<u>2,079,576</u>	<u>99%</u>	<u>57%</u>
<u>1,038,389</u>	=	<u>1,053,983</u>	<u>77%</u>	<u>34%</u>	<u>2,079,577</u>	=	<u>2,117,692</u>	<u>100%</u>	<u>57%</u>
<u>1,053,984</u>	=	<u>1,079,922</u>	<u>78%</u>	<u>34%</u>	<u>2,117,693</u>	=	<u>2,166,725</u>	<u>100%</u>	<u>58%</u>
<u>1,079,923</u>	=	<u>1,100,601</u>	<u>78%</u>	<u>35%</u>	<u>2,166,726</u>	=	<u>2,216,112</u>	<u>100%</u>	<u>59%</u>
<u>1,100,602</u>	=	<u>1,121,731</u>	<u>79%</u>	<u>35%</u>	<u>2,216,113</u>	=	<u>2,265,859</u>	<u>100%</u>	<u>60%</u>
<u>1,121,732</u>	=	<u>1,147,219</u>	<u>79%</u>	<u>36%</u>	<u>2,265,860</u>	=	<u>2,315,970</u>	<u>100%</u>	<u>61%</u>
<u>1,147,220</u>	=	<u>1,163,820</u>	<u>80%</u>	<u>36%</u>	<u>2,315,971</u>	=	<u>2,366,447</u>	<u>100%</u>	<u>62%</u>
<u>1,163,821</u>	=	<u>1,193,834</u>	<u>80%</u>	<u>37%</u>	<u>2,366,448</u>	=	<u>2,417,297</u>	<u>100%</u>	<u>63%</u>
<u>1,193,835</u>	=	<u>1,206,192</u>	<u>81%</u>	<u>37%</u>	<u>2,417,298</u>	=	<u>2,468,521</u>	<u>100%</u>	<u>64%</u>
<u>1,206,193</u>	=	<u>1,240,454</u>	<u>81%</u>	<u>38%</u>	<u>2,468,522</u>	=	<u>2,520,125</u>	<u>100%</u>	<u>65%</u>
<u>1,240,455</u>	=	<u>1,248,850</u>	<u>82%</u>	<u>38%</u>	<u>2,520,126</u>	=	<u>2,572,114</u>	<u>100%</u>	<u>66%</u>
<u>1,248,851</u>	=	<u>1,287,072</u>	<u>82%</u>	<u>39%</u>	<u>2,572,115</u>	=	<u>2,624,491</u>	<u>100%</u>	<u>67%</u>
<u>1,287,073</u>	=	<u>1,291,797</u>	<u>83%</u>	<u>39%</u>	<u>2,624,492</u>	=	<u>2,677,260</u>	<u>100%</u>	<u>68%</u>
<u>1,291,798</u>	=	<u>1,333,691</u>	<u>83%</u>	<u>40%</u>	<u>2,677,261</u>	=	<u>2,730,427</u>	<u>100%</u>	<u>69%</u>
<u>1,333,692</u>	=	<u>1,335,035</u>	<u>84%</u>	<u>40%</u>	<u>2,730,428</u>	=	<u>2,783,994</u>	<u>100%</u>	<u>70%</u>
<u>1,335,036</u>	=	<u>1,378,565</u>	<u>84%</u>	<u>41%</u>	<u>2,783,995</u>	=	<u>2,837,968</u>	<u>100%</u>	<u>71%</u>
<u>1,378,566</u>	=	<u>1,380,305</u>	<u>84%</u>	<u>42%</u>	<u>2,837,969</u>	=	<u>2,892,354</u>	<u>100%</u>	<u>72%</u>
<u>1,380,306</u>	=	<u>1,422,393</u>	<u>85%</u>	<u>42%</u>	<u>2,892,355</u>	=	<u>2,947,153</u>	<u>100%</u>	<u>73%</u>
<u>1,422,394</u>	=	<u>1,426,925</u>	<u>85%</u>	<u>43%</u>	<u>2,947,154</u>	=	<u>3,002,374</u>	<u>100%</u>	<u>74%</u>
<u>1,426,926</u>	=	<u>1,466,524</u>	<u>86%</u>	<u>43%</u>	<u>3,002,375</u>	=	<u>3,058,017</u>	<u>100%</u>	<u>75%</u>
<u>1,466,525</u>	=	<u>1,473,545</u>	<u>86%</u>	<u>44%</u>	<u>3,058,018</u>	=	<u>3,114,093</u>	<u>100%</u>	<u>76%</u>
<u>1,473,546</u>	=	<u>1,510,956</u>	<u>87%</u>	<u>44%</u>	<u>3,114,094</u>	=	<u>3,170,602</u>	<u>100%</u>	<u>77%</u>
<u>1,510,957</u>	=	<u>1,520,163</u>	<u>87%</u>	<u>45%</u>	<u>3,170,603</u>	=	<u>3,227,553</u>	<u>100%</u>	<u>78%</u>
<u>1,520,164</u>	=	<u>1,555,696</u>	<u>88%</u>	<u>45%</u>	<u>3,227,554</u>	=	<u>3,284,948</u>	<u>100%</u>	<u>79%</u>
<u>1,555,697</u>	=	<u>1,566,780</u>	<u>88%</u>	<u>46%</u>	<u>3,284,949</u>	=	<u>3,342,794</u>	<u>100%</u>	<u>80%</u>
<u>1,566,781</u>	=	<u>1,600,745</u>	<u>89%</u>	<u>46%</u>	<u>3,342,795</u>	=	<u>3,401,098</u>	<u>100%</u>	<u>81%</u>
<u>1,600,746</u>	=	<u>1,613,397</u>	<u>89%</u>	<u>47%</u>	<u>3,401,099</u>	=	<u>3,459,859</u>	<u>100%</u>	<u>82%</u>
<u>1,613,398</u>	=	<u>1,646,108</u>	<u>90%</u>	<u>47%</u>	<u>3,459,860</u>	=	<u>3,519,089</u>	<u>100%</u>	<u>83%</u>
<u>1,646,109</u>	=	<u>1,660,017</u>	<u>90%</u>	<u>48%</u>	<u>3,519,090</u>	=	<u>3,578,790</u>	<u>100%</u>	<u>84%</u>
<u>1,660,018</u>	=	<u>1,691,786</u>	<u>91%</u>	<u>48%</u>	<u>3,578,791</u>	=	<u>3,638,971</u>	<u>100%</u>	<u>85%</u>
<u>1,691,787</u>	=	<u>1,706,632</u>	<u>91%</u>	<u>49%</u>	<u>3,638,972</u>	=	<u>& over</u>	<u>100%</u>	<u>86%</u>
<u>1,706,633</u>	=	<u>1,737,784</u>	<u>92%</u>	<u>49%</u>					
<u>1,737,785</u>	=	<u>1,753,253</u>	<u>92%</u>	<u>50%</u>					
<u>1,753,254</u>	=	<u>1,784,106</u>	<u>93%</u>	<u>50%</u>					

AMENDATORY SECTION (Amending WSR 11-24-026, filed 12/1/11, effective 1/1/12)

WAC 296-17-885 Table III.

Expected Loss Rates and Primary Ratios
by Risk Classification and Fiscal Year
Expected Loss Rates in Dollars Per Worker Hour
Effective January 1, (~~2012~~) 2013

((Class	2008	2009	2010	Primary Ratio	((Class	2008	2009	2010	Primary Ratio
0101	1.4826	1.3888	1.1748	0.401	0604	1.2176	1.1424	0.9652	0.471
0103	1.8753	1.7608	1.4952	0.412	0606	0.6308	0.5865	0.4840	0.520
0104	1.0107	0.9440	0.7911	0.441	0607	0.7540	0.7001	0.5778	0.504
0105	1.5004	1.3944	1.1513	0.501	0608	0.3589	0.3358	0.2819	0.461
0107	1.2527	1.1692	0.9803	0.425	0701	1.9379	1.8087	1.5284	0.338
0108	1.0107	0.9440	0.7911	0.441	0803	0.5836	0.5426	0.4485	0.524
0112	0.7166	0.6706	0.5641	0.445	0901	1.4642	1.3675	1.1478	0.421
0201	2.5321	2.3625	1.9890	0.362	1002	1.0471	0.9824	0.8316	0.436
0202	3.3315	3.1181	2.6297	0.398	1003	0.8911	0.8346	0.7024	0.463
0210	1.1460	1.0672	0.8905	0.424	1004	0.6155	0.5716	0.4721	0.476
0212	1.3433	1.2513	1.0445	0.428	1005	9.0730	8.4492	7.0351	0.421
0214	1.5106	1.4092	1.1801	0.421	1007	0.3831	0.3560	0.2951	0.461
0217	1.1440	1.0655	0.8873	0.454	1101	0.8515	0.7931	0.6587	0.498
0219	1.3421	1.2479	1.0346	0.457	1102	1.5977	1.4892	1.2442	0.436
0301	0.7838	0.7323	0.6121	0.497	1103	1.3365	1.2506	1.0535	0.429
0302	2.1939	2.0482	1.7225	0.390	1104	0.7229	0.6733	0.5573	0.535
0303	1.7907	1.6733	1.4096	0.401	1105	0.9161	0.8540	0.7124	0.454
0306	1.0502	0.9774	0.8135	0.446	1106	0.3734	0.3517	0.2988	0.494
0307	0.9370	0.8717	0.7233	0.470	1108	0.7020	0.6545	0.5445	0.509
0308	0.6123	0.5730	0.4799	0.515	1109	1.6292	1.5227	1.2762	0.460
0403	1.8928	1.7613	1.4617	0.465	1301	0.6301	0.5815	0.4724	0.535
0502	1.3540	1.2617	1.0531	0.423	1303	0.2372	0.2205	0.1817	0.535
0504	1.8017	1.6934	1.4386	0.423	1304	0.0320	0.0298	0.0248	0.498
0507	3.2769	3.0832	2.6273	0.413	1305	0.5548	0.5165	0.4285	0.511
0508	1.8724	1.7511	1.4803	0.371	1401	0.2360	0.2209	0.1851	0.506
0509	1.7950	1.6820	1.4264	0.381	1404	1.0636	0.9878	0.8141	0.545
0510	1.9812	1.8566	1.5686	0.425	1405	0.8223	0.7602	0.6182	0.560
0511	1.6068	1.4941	1.2394	0.460	1407	0.5842	0.5475	0.4601	0.505
0512	1.5554	1.4563	1.2302	0.411	1501	0.6862	0.6350	0.5199	0.522
0513	0.8213	0.7657	0.6391	0.448	1507	0.6622	0.6171	0.5130	0.493
0514	1.9965	1.8553	1.5360	0.472	1701	0.9241	0.8640	0.7249	0.445
0516	1.6942	1.5855	1.3372	0.414	1702	1.8931	1.7720	1.5028	0.349
0517	2.4354	2.2855	1.9393	0.404	1703	1.0030	0.9316	0.7764	0.383
0518	1.4642	1.3675	1.1478	0.421	1704	0.9241	0.8640	0.7249	0.445
0519	1.9071	1.7866	1.5088	0.418	1801	0.4965	0.4684	0.4017	0.403
0521	0.5997	0.5609	0.4721	0.433	1802	0.8277	0.7737	0.6446	0.492
0601	0.6424	0.5983	0.4980	0.458	2002	0.9140	0.8560	0.7190	0.485
0602	0.7642	0.7088	0.5853	0.458	2004	0.8617	0.8047	0.6708	0.501
0603	1.0248	0.9583	0.8083	0.396	2007	0.6174	0.5789	0.4875	0.489
					2008	0.4031	0.3783	0.3196	0.475
					2009	0.4231	0.3958	0.3310	0.521
					2101	0.8828	0.8239	0.6858	0.516
					2102	0.6770	0.6319	0.5264	0.515
					2104	0.3679	0.3458	0.2912	0.569
					2105	0.6300	0.5873	0.4871	0.538
					2106	0.5432	0.5080	0.4242	0.512

((Class	2008	2009	2010	Primary Ratio	((Class	2008	2009	2010	Primary Ratio
2201	0.2763	0.2590	0.2183	0.492	3702	0.5031	0.4679	0.3864	0.525
2202	0.8749	0.8150	0.6770	0.506	3708	0.6586	0.6126	0.5074	0.506
2203	0.5438	0.5082	0.4238	0.539	3802	0.2341	0.2188	0.1825	0.526
2204	0.2763	0.2590	0.2183	0.492	3808	0.4555	0.4258	0.3571	0.450
2401	0.5423	0.5004	0.4062	0.526	3901	0.1889	0.1772	0.1488	0.558
2903	0.7377	0.6897	0.5766	0.510	3902	0.5226	0.4903	0.4122	0.523
2904	0.7803	0.7303	0.6132	0.477	3903	1.2650	1.1915	1.0129	0.490
2905	0.7657	0.7146	0.5947	0.529	3905	0.1713	0.1607	0.1349	0.558
2906	0.3983	0.3743	0.3162	0.493	3906	0.5172	0.4859	0.4109	0.493
2907	0.5934	0.5548	0.4635	0.507	3909	0.3676	0.3439	0.2874	0.529
2908	1.2248	1.1474	0.9663	0.457	4002	1.3834	1.2876	1.0708	0.459
2909	0.4459	0.4176	0.3501	0.509	4101	0.3925	0.3665	0.3060	0.496
3101	0.8081	0.7540	0.6290	0.482	4103	0.6214	0.5786	0.4785	0.548
3102	0.2922	0.2735	0.2296	0.495	4107	0.1813	0.1693	0.1415	0.497
3103	0.5909	0.5528	0.4639	0.464	4108	0.2352	0.2186	0.1805	0.548
3104	0.6936	0.6478	0.5415	0.482	4109	0.2293	0.2148	0.1805	0.493
3105	0.8182	0.7669	0.6446	0.498	4201	0.7725	0.7158	0.5900	0.473
3303	0.5060	0.4710	0.3900	0.523	4301	0.7783	0.7292	0.6120	0.510
3304	0.5864	0.5492	0.4607	0.530	4302	0.8029	0.7466	0.6164	0.524
3309	0.4265	0.4000	0.3381	0.452	4304	1.0552	0.9924	0.8408	0.489
3402	0.5903	0.5524	0.4634	0.475	4305	1.3363	1.2376	1.0157	0.503
3403	0.2314	0.2169	0.1831	0.475	4401	0.4685	0.4423	0.3774	0.468
3404	0.5307	0.4968	0.4167	0.496	4402	0.9698	0.9008	0.7432	0.541
3405	0.3126	0.2927	0.2452	0.515	4404	0.5921	0.5565	0.4704	0.491
3406	0.2927	0.2725	0.2250	0.563	4501	0.2155	0.2015	0.1676	0.571
3407	0.9050	0.8431	0.7020	0.466	4502	0.0476	0.0447	0.0375	0.508
3408	0.2581	0.2381	0.1925	0.579	4504	0.1415	0.1321	0.1093	0.579
3409	0.1877	0.1740	0.1425	0.582	4601	0.8849	0.8254	0.6873	0.490
3410	0.2689	0.2523	0.2124	0.521	4801	3.3315	3.1181	2.6297	0.398
3411	0.5878	0.5486	0.4587	0.467	4802	0.3907	0.3671	0.3101	0.490
3412	0.6547	0.6115	0.5130	0.435	4803	0.3501	0.3289	0.2771	0.562
3414	0.6592	0.6176	0.5201	0.464	4804	0.5561	0.5214	0.4380	0.534
3415	0.9266	0.8736	0.7475	0.406	4805	0.3493	0.3267	0.2727	0.539
3501	1.1780	1.0995	0.9174	0.475	4806	0.0713	0.0670	0.0568	0.507
3503	0.3535	0.3332	0.2829	0.522	4808	0.5378	0.5056	0.4281	0.477
3506	0.9578	0.8875	0.7294	0.480	4809	0.3631	0.3416	0.2894	0.513
3509	0.4565	0.4258	0.3539	0.556	4810	0.1617	0.1523	0.1288	0.536
3510	0.3843	0.3587	0.2983	0.526	4811	0.3954	0.3715	0.3130	0.553
3511	0.6717	0.6314	0.5349	0.451	4812	0.4317	0.4043	0.3389	0.527
3512	0.4310	0.4035	0.3373	0.539	4813	0.1981	0.1859	0.1564	0.541
3513	0.5899	0.5579	0.4787	0.459	4900	0.1852	0.1738	0.1476	0.391
3602	0.1335	0.1247	0.1038	0.520	4901	0.0706	0.0659	0.0550	0.472
3603	0.5332	0.4988	0.4170	0.513	4902	0.1376	0.1278	0.1053	0.532
3604	0.8594	0.8154	0.7042	0.455	4903	0.1781	0.1653	0.1356	0.572
3605	0.5996	0.5575	0.4610	0.502	4904	0.0292	0.0274	0.0228	0.535
3701	0.2922	0.2735	0.2296	0.495	4905	0.4492	0.4221	0.3560	0.539

((Class	2008	2009	2010	Primary Ratio	((Class	2008	2009	2010	Primary Ratio
4906	0.1102	0.1022	0.0838	0.553	6208	0.2968	0.2790	0.2352	0.546
4907	0.0627	0.0589	0.0493	0.524	6209	0.3617	0.3393	0.2854	0.523
4908	0.1018	0.0965	0.0817	0.541	6301	0.1452	0.1350	0.1119	0.463
4909	0.0449	0.0433	0.0378	0.518	6303	0.0863	0.0805	0.0670	0.509
4910	0.5386	0.5035	0.4216	0.492	6304	0.4117	0.3867	0.3259	0.549
4911	0.0680	0.0638	0.0536	0.474	6305	0.1266	0.1182	0.0981	0.563
5001	8.7558	8.2268	7.0179	0.358	6306	0.3340	0.3122	0.2607	0.501
5002	0.6894	0.6398	0.5262	0.521	6308	0.0801	0.0745	0.0617	0.535
5003	2.3130	2.1551	1.8033	0.403	6309	0.2434	0.2279	0.1907	0.520
5004	0.8764	0.8264	0.7066	0.418	6402	0.3269	0.3046	0.2519	0.573
5005	0.7934	0.7424	0.6256	0.409	6403	0.1938	0.1819	0.1531	0.542
5006	1.5351	1.4385	1.2194	0.369	6404	0.3064	0.2871	0.2408	0.533
5101	1.0280	0.9544	0.7870	0.495	6405	0.6136	0.5729	0.4785	0.484
5103	0.9240	0.8652	0.7247	0.535	6406	0.1476	0.1380	0.1149	0.568
5106	0.9240	0.8652	0.7247	0.535	6407	0.3167	0.2959	0.2468	0.542
5108	0.9622	0.8997	0.7512	0.529	6408	0.4992	0.4650	0.3858	0.514
5109	0.6294	0.5841	0.4810	0.501	6409	0.8154	0.7600	0.6333	0.475
5201	0.4371	0.4072	0.3382	0.509	6410	0.3443	0.3217	0.2682	0.525
5204	1.0571	0.9897	0.8344	0.444	6501	0.1839	0.1713	0.1419	0.549
5206	0.4108	0.3850	0.3247	0.457	6502	0.0356	0.0333	0.0278	0.522
5207	0.1728	0.1627	0.1375	0.531	6503	0.0811	0.0753	0.0624	0.489
5208	0.8598	0.8037	0.6709	0.504	6504	0.4365	0.4097	0.3439	0.566
5209	0.7691	0.7206	0.6064	0.465	6505	0.1390	0.1310	0.1102	0.594
5300	0.1433	0.1330	0.1092	0.533	6506	0.1344	0.1256	0.1046	0.557
5301	0.0439	0.0408	0.0336	0.546	6509	0.4218	0.3951	0.3308	0.546
5302	0.0170	0.0159	0.0133	0.483	6510	0.5071	0.4729	0.3948	0.451
5305	0.0667	0.0620	0.0511	0.577	6511	0.4471	0.4179	0.3489	0.530
5306	0.0594	0.0556	0.0464	0.558	6512	0.1726	0.1614	0.1351	0.484
5307	0.7307	0.6783	0.5596	0.500	6601	0.2360	0.2209	0.1851	0.506
5308	0.1190	0.1109	0.0918	0.575	6602	0.6014	0.5633	0.4730	0.518
6103	0.0961	0.0901	0.0753	0.580	6603	0.3675	0.3440	0.2884	0.510
6104	0.4384	0.4091	0.3404	0.537	6604	0.0938	0.0876	0.0731	0.547
6105	0.4400	0.4097	0.3405	0.492	6605	0.4464	0.4160	0.3432	0.573
6107	0.1722	0.1626	0.1381	0.551	6607	0.1907	0.1781	0.1485	0.523
6108	0.5397	0.5051	0.4224	0.537	6608	0.5779	0.5382	0.4508	0.389
6109	0.1203	0.1123	0.0933	0.511	6620	3.7935	3.4911	2.8173	0.558
6110	0.6804	0.6355	0.5306	0.508	6704	0.1552	0.1450	0.1210	0.524
6120	0.3604	0.3339	0.2735	0.527	6705	1.0604	0.9908	0.8245	0.571
6121	0.4066	0.3789	0.3152	0.501	6706	0.3416	0.3226	0.2762	0.483
6201	0.3494	0.3274	0.2758	0.466	6707	5.7762	5.3620	4.3741	0.650
6202	0.7450	0.6971	0.5833	0.498	6708	9.5681	9.2172	8.1794	0.426
6203	0.1288	0.1203	0.0999	0.617	6709	0.3217	0.3009	0.2510	0.536
6204	0.1481	0.1384	0.1156	0.551	6801	0.7538	0.6970	0.5686	0.530
6205	0.2934	0.2748	0.2305	0.517	6802	0.6936	0.6438	0.5287	0.557
6206	0.2701	0.2525	0.2108	0.530	6803	0.8947	0.8423	0.7236	0.325
6207	1.4277	1.3514	1.1599	0.490	6804	0.4083	0.3820	0.3193	0.523

<u>((Class</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>Primary</u> <u>Ratio</u>	<u>Class</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>Primary</u> <u>Ratio</u>
6809	5.5474	5.2119	4.3748	0.536	0101	1.6709	1.4606	1.1832	0.392
6901	0.0227	0.0234	0.0222	0.730	0103	1.9771	1.7366	1.4133	0.414
6902	1.0507	0.9820	0.8277	0.400	0104	1.0969	0.9583	0.7716	0.438
6903	7.2850	6.9225	6.0630	0.301	0105	1.6192	1.4106	1.1234	0.502
6904	0.5914	0.5423	0.4333	0.560	0107	1.2819	1.1160	0.8955	0.432
6905	0.4808	0.4443	0.3614	0.564	0108	1.0969	0.9583	0.7716	0.438
6906	0.2013	0.1973	0.1802	0.651	0112	0.7933	0.6939	0.5588	0.456
6907	1.4762	1.3750	1.1412	0.517	0201	2.4413	2.1188	1.7063	0.349
6908	0.4828	0.4514	0.3775	0.491	0202	3.5066	3.0617	2.4686	0.404
6909	0.1323	0.1239	0.1038	0.539	0210	1.1800	1.0268	0.8237	0.420
7100	0.0361	0.0342	0.0293	0.451	0212	1.4218	1.2367	0.9901	0.439
7101	0.0257	0.0242	0.0207	0.433	0214	1.5645	1.3635	1.0963	0.421
7102	4.9017	4.6618	4.0280	0.535	0217	1.2855	1.1212	0.9005	0.443
7103	0.7672	0.7089	0.5780	0.534	0219	1.3177	1.1473	0.9186	0.443
7104	0.0374	0.0348	0.0288	0.566	0301	0.8574	0.7530	0.6080	0.494
7105	0.0333	0.0310	0.0257	0.556	0302	2.4191	2.1006	1.6834	0.401
7106	0.2931	0.2725	0.2247	0.580	0303	1.9137	1.6685	1.3458	0.409
7107	0.2788	0.2624	0.2221	0.537	0306	1.1171	0.9712	0.7766	0.441
7108	0.2481	0.2324	0.1948	0.550	0307	0.9819	0.8540	0.6810	0.467
7109	0.1783	0.1663	0.1380	0.565	0308	0.6742	0.5939	0.4801	0.526
7110	0.3655	0.3410	0.2852	0.458	0403	2.0317	1.7655	1.4055	0.466
7111	0.5063	0.4713	0.3923	0.449	0502	1.4382	1.2508	1.0023	0.419
7112	0.7921	0.7416	0.6216	0.529	0504	1.9130	1.6879	1.3811	0.421
7113	0.4615	0.4323	0.3625	0.526	0507	3.5999	3.1719	2.5886	0.428
7114	0.6940	0.6490	0.5412	0.581	0508	1.9726	1.7135	1.3773	0.379
7115	0.6382	0.5980	0.5023	0.538	0509	1.7721	1.5464	1.2514	0.381
7116	0.7144	0.6673	0.5571	0.499	0510	2.1685	1.9021	1.5439	0.424
7117	1.4892	1.3920	1.1637	0.516	0511	1.7310	1.5011	1.1925	0.464
7118	1.6677	1.5634	1.3153	0.499	0512	1.6122	1.4092	1.1385	0.417
7119	1.6091	1.4952	1.2338	0.533	0513	0.9095	0.7923	0.6349	0.447
7120	6.9042	6.4609	5.4219	0.483	0514	2.0904	1.8168	1.4467	0.477
7121	6.4598	6.0453	5.0733	0.483	0516	1.7296	1.5121	1.2219	0.413
7122	0.5838	0.5451	0.4538	0.554	0517	2.5877	2.2749	1.8552	0.407
7200	1.6572	1.5263	1.2353	0.528	0518	1.5736	1.3698	1.1002	0.412
7201	1.9112	1.7694	1.4522	0.494	0519	2.0062	1.7558	1.4193	0.425
7202	0.0323	0.0302	0.0253	0.452	0521	0.6281	0.5499	0.4444	0.438
7203	0.1448	0.1376	0.1181	0.562	0601	0.6700	0.5828	0.4656	0.454
7204	0.0000	0.0000	0.0000	0.500	0602	0.7991	0.6908	0.5469	0.456
7205	0.0000	0.0000	0.0000	0.500	0603	0.9873	0.8604	0.6929	0.404
7301	0.4679	0.4402	0.3737	0.471	0604	1.3191	1.1636	0.9472	0.482
7302	1.0482	0.9870	0.8391	0.474	0606	0.6837	0.5966	0.4755	0.521
7307	0.5139	0.4829	0.4083	0.485	0607	0.8420	0.7333	0.5844	0.505
7308	0.4740	0.4435	0.3704	0.556	0608	0.3725	0.3263	0.2631	0.463
7309	0.3197	0.2999	0.2521	0.551	0701	1.9802	1.7123	1.3747	0.339
7400	1.9112	1.7694	1.4522	0.494))	0803	0.6241	0.5445	0.4342	0.525
					0901	1.5736	1.3698	1.1002	0.412

<u>Class</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>Primary</u> <u>Ratio</u>	<u>Class</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>Primary</u> <u>Ratio</u>
<u>1002</u>	<u>1.0738</u>	<u>0.9427</u>	<u>0.7643</u>	<u>0.448</u>	<u>2905</u>	<u>0.8003</u>	<u>0.7030</u>	<u>0.5663</u>	<u>0.525</u>
<u>1003</u>	<u>0.9138</u>	<u>0.8027</u>	<u>0.6501</u>	<u>0.464</u>	<u>2906</u>	<u>0.4373</u>	<u>0.3862</u>	<u>0.3134</u>	<u>0.496</u>
<u>1004</u>	<u>0.6389</u>	<u>0.5551</u>	<u>0.4413</u>	<u>0.477</u>	<u>2907</u>	<u>0.6394</u>	<u>0.5607</u>	<u>0.4506</u>	<u>0.514</u>
<u>1005</u>	<u>9.5750</u>	<u>8.3242</u>	<u>6.6516</u>	<u>0.426</u>	<u>2908</u>	<u>1.3094</u>	<u>1.1513</u>	<u>0.9339</u>	<u>0.459</u>
<u>1007</u>	<u>0.4069</u>	<u>0.3527</u>	<u>0.2802</u>	<u>0.467</u>	<u>2909</u>	<u>0.4854</u>	<u>0.4267</u>	<u>0.3438</u>	<u>0.516</u>
<u>1101</u>	<u>0.9263</u>	<u>0.8075</u>	<u>0.6442</u>	<u>0.505</u>	<u>3101</u>	<u>0.8446</u>	<u>0.7391</u>	<u>0.5943</u>	<u>0.483</u>
<u>1102</u>	<u>1.6900</u>	<u>1.4714</u>	<u>1.1782</u>	<u>0.450</u>	<u>3102</u>	<u>0.3012</u>	<u>0.2646</u>	<u>0.2137</u>	<u>0.496</u>
<u>1103</u>	<u>1.4286</u>	<u>1.2497</u>	<u>1.0085</u>	<u>0.439</u>	<u>3103</u>	<u>0.6125</u>	<u>0.5378</u>	<u>0.4350</u>	<u>0.465</u>
<u>1104</u>	<u>0.7697</u>	<u>0.6736</u>	<u>0.5383</u>	<u>0.532</u>	<u>3104</u>	<u>0.7375</u>	<u>0.6454</u>	<u>0.5191</u>	<u>0.483</u>
<u>1105</u>	<u>0.9543</u>	<u>0.8316</u>	<u>0.6661</u>	<u>0.456</u>	<u>3105</u>	<u>0.8671</u>	<u>0.7629</u>	<u>0.6170</u>	<u>0.500</u>
<u>1106</u>	<u>0.3729</u>	<u>0.3310</u>	<u>0.2711</u>	<u>0.488</u>	<u>3303</u>	<u>0.5443</u>	<u>0.4751</u>	<u>0.3789</u>	<u>0.526</u>
<u>1108</u>	<u>0.7315</u>	<u>0.6406</u>	<u>0.5144</u>	<u>0.506</u>	<u>3304</u>	<u>0.6200</u>	<u>0.5476</u>	<u>0.4442</u>	<u>0.533</u>
<u>1109</u>	<u>1.7797</u>	<u>1.5572</u>	<u>1.2524</u>	<u>0.471</u>	<u>3309</u>	<u>0.4582</u>	<u>0.4026</u>	<u>0.3267</u>	<u>0.459</u>
<u>1301</u>	<u>0.6580</u>	<u>0.5684</u>	<u>0.4456</u>	<u>0.533</u>	<u>3402</u>	<u>0.5878</u>	<u>0.5158</u>	<u>0.4163</u>	<u>0.476</u>
<u>1303</u>	<u>0.2497</u>	<u>0.2177</u>	<u>0.1731</u>	<u>0.533</u>	<u>3403</u>	<u>0.2394</u>	<u>0.2104</u>	<u>0.1705</u>	<u>0.477</u>
<u>1304</u>	<u>0.0337</u>	<u>0.0294</u>	<u>0.0235</u>	<u>0.502</u>	<u>3404</u>	<u>0.5617</u>	<u>0.4922</u>	<u>0.3950</u>	<u>0.513</u>
<u>1305</u>	<u>0.5843</u>	<u>0.5105</u>	<u>0.4090</u>	<u>0.508</u>	<u>3405</u>	<u>0.3333</u>	<u>0.2926</u>	<u>0.2354</u>	<u>0.514</u>
<u>1401</u>	<u>0.2393</u>	<u>0.2133</u>	<u>0.1766</u>	<u>0.429</u>	<u>3406</u>	<u>0.3224</u>	<u>0.2824</u>	<u>0.2256</u>	<u>0.563</u>
<u>1404</u>	<u>1.1049</u>	<u>0.9653</u>	<u>0.7706</u>	<u>0.541</u>	<u>3407</u>	<u>0.9768</u>	<u>0.8509</u>	<u>0.6797</u>	<u>0.477</u>
<u>1405</u>	<u>0.9118</u>	<u>0.7904</u>	<u>0.6208</u>	<u>0.560</u>	<u>3408</u>	<u>0.2868</u>	<u>0.2483</u>	<u>0.1945</u>	<u>0.577</u>
<u>1407</u>	<u>0.6360</u>	<u>0.5610</u>	<u>0.4551</u>	<u>0.514</u>	<u>3409</u>	<u>0.1984</u>	<u>0.1732</u>	<u>0.1378</u>	<u>0.575</u>
<u>1501</u>	<u>0.7598</u>	<u>0.6588</u>	<u>0.5205</u>	<u>0.527</u>	<u>3410</u>	<u>0.2678</u>	<u>0.2369</u>	<u>0.1929</u>	<u>0.520</u>
<u>1507</u>	<u>0.7140</u>	<u>0.6236</u>	<u>0.4992</u>	<u>0.498</u>	<u>3411</u>	<u>0.6379</u>	<u>0.5571</u>	<u>0.4473</u>	<u>0.468</u>
<u>1701</u>	<u>0.9093</u>	<u>0.7970</u>	<u>0.6444</u>	<u>0.441</u>	<u>3412</u>	<u>0.7032</u>	<u>0.6130</u>	<u>0.4920</u>	<u>0.444</u>
<u>1702</u>	<u>1.9051</u>	<u>1.6575</u>	<u>1.3398</u>	<u>0.348</u>	<u>3414</u>	<u>0.7469</u>	<u>0.6551</u>	<u>0.5287</u>	<u>0.475</u>
<u>1703</u>	<u>1.0590</u>	<u>0.9131</u>	<u>0.7260</u>	<u>0.386</u>	<u>3415</u>	<u>0.9505</u>	<u>0.8390</u>	<u>0.6878</u>	<u>0.406</u>
<u>1704</u>	<u>0.9093</u>	<u>0.7970</u>	<u>0.6444</u>	<u>0.441</u>	<u>3501</u>	<u>1.2438</u>	<u>1.0889</u>	<u>0.8757</u>	<u>0.478</u>
<u>1801</u>	<u>0.5159</u>	<u>0.4559</u>	<u>0.3743</u>	<u>0.411</u>	<u>3503</u>	<u>0.3871</u>	<u>0.3438</u>	<u>0.2808</u>	<u>0.528</u>
<u>1802</u>	<u>0.8677</u>	<u>0.7579</u>	<u>0.6041</u>	<u>0.492</u>	<u>3506</u>	<u>1.0352</u>	<u>0.8948</u>	<u>0.7054</u>	<u>0.490</u>
<u>2002</u>	<u>0.9797</u>	<u>0.8616</u>	<u>0.6972</u>	<u>0.490</u>	<u>3509</u>	<u>0.4809</u>	<u>0.4226</u>	<u>0.3399</u>	<u>0.553</u>
<u>2004</u>	<u>0.8732</u>	<u>0.7663</u>	<u>0.6173</u>	<u>0.496</u>	<u>3510</u>	<u>0.4146</u>	<u>0.3634</u>	<u>0.2913</u>	<u>0.526</u>
<u>2007</u>	<u>0.6919</u>	<u>0.6096</u>	<u>0.4944</u>	<u>0.494</u>	<u>3511</u>	<u>0.6905</u>	<u>0.6085</u>	<u>0.4948</u>	<u>0.450</u>
<u>2008</u>	<u>0.4332</u>	<u>0.3813</u>	<u>0.3092</u>	<u>0.481</u>	<u>3512</u>	<u>0.4489</u>	<u>0.3951</u>	<u>0.3182</u>	<u>0.540</u>
<u>2009</u>	<u>0.4386</u>	<u>0.3864</u>	<u>0.3126</u>	<u>0.519</u>	<u>3513</u>	<u>0.6440</u>	<u>0.5729</u>	<u>0.4720</u>	<u>0.471</u>
<u>2101</u>	<u>0.9441</u>	<u>0.8303</u>	<u>0.6701</u>	<u>0.518</u>	<u>3602</u>	<u>0.1390</u>	<u>0.1220</u>	<u>0.0979</u>	<u>0.527</u>
<u>2102</u>	<u>0.7725</u>	<u>0.6754</u>	<u>0.5403</u>	<u>0.517</u>	<u>3603</u>	<u>0.5800</u>	<u>0.5093</u>	<u>0.4097</u>	<u>0.516</u>
<u>2104</u>	<u>0.3808</u>	<u>0.3388</u>	<u>0.2765</u>	<u>0.564</u>	<u>3604</u>	<u>0.8853</u>	<u>0.7903</u>	<u>0.6549</u>	<u>0.459</u>
<u>2105</u>	<u>0.6957</u>	<u>0.6082</u>	<u>0.4855</u>	<u>0.538</u>	<u>3605</u>	<u>0.6387</u>	<u>0.5563</u>	<u>0.4427</u>	<u>0.504</u>
<u>2106</u>	<u>0.5927</u>	<u>0.5210</u>	<u>0.4203</u>	<u>0.513</u>	<u>3701</u>	<u>0.3012</u>	<u>0.2646</u>	<u>0.2137</u>	<u>0.496</u>
<u>2201</u>	<u>0.3033</u>	<u>0.2676</u>	<u>0.2176</u>	<u>0.504</u>	<u>3702</u>	<u>0.5470</u>	<u>0.4772</u>	<u>0.3798</u>	<u>0.531</u>
<u>2202</u>	<u>0.9240</u>	<u>0.8074</u>	<u>0.6461</u>	<u>0.510</u>	<u>3708</u>	<u>0.7330</u>	<u>0.6383</u>	<u>0.5083</u>	<u>0.515</u>
<u>2203</u>	<u>0.5730</u>	<u>0.5040</u>	<u>0.4057</u>	<u>0.537</u>	<u>3802</u>	<u>0.2510</u>	<u>0.2203</u>	<u>0.1771</u>	<u>0.527</u>
<u>2204</u>	<u>0.3033</u>	<u>0.2676</u>	<u>0.2176</u>	<u>0.504</u>	<u>3808</u>	<u>0.4728</u>	<u>0.4132</u>	<u>0.3321</u>	<u>0.452</u>
<u>2401</u>	<u>0.5569</u>	<u>0.4815</u>	<u>0.3786</u>	<u>0.515</u>	<u>3901</u>	<u>0.1924</u>	<u>0.1703</u>	<u>0.1382</u>	<u>0.552</u>
<u>2903</u>	<u>0.8052</u>	<u>0.7073</u>	<u>0.5698</u>	<u>0.513</u>	<u>3902</u>	<u>0.5528</u>	<u>0.4878</u>	<u>0.3950</u>	<u>0.529</u>
<u>2904</u>	<u>0.8070</u>	<u>0.7081</u>	<u>0.5719</u>	<u>0.474</u>	<u>3903</u>	<u>1.3378</u>	<u>1.1874</u>	<u>0.9733</u>	<u>0.494</u>

<u>Class</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>Primary</u> <u>Ratio</u>	<u>Class</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>Primary</u> <u>Ratio</u>
<u>3905</u>	<u>0.1762</u>	<u>0.1561</u>	<u>0.1267</u>	<u>0.561</u>	<u>5002</u>	<u>0.7365</u>	<u>0.6404</u>	<u>0.5077</u>	<u>0.522</u>
<u>3906</u>	<u>0.5576</u>	<u>0.4929</u>	<u>0.4013</u>	<u>0.502</u>	<u>5003</u>	<u>2.4025</u>	<u>2.0829</u>	<u>1.6638</u>	<u>0.414</u>
<u>3909</u>	<u>0.4055</u>	<u>0.3569</u>	<u>0.2880</u>	<u>0.534</u>	<u>5004</u>	<u>0.9078</u>	<u>0.8040</u>	<u>0.6603</u>	<u>0.428</u>
<u>4002</u>	<u>1.4638</u>	<u>1.2732</u>	<u>1.0168</u>	<u>0.464</u>	<u>5005</u>	<u>0.8714</u>	<u>0.7622</u>	<u>0.6158</u>	<u>0.418</u>
<u>4101</u>	<u>0.4125</u>	<u>0.3609</u>	<u>0.2894</u>	<u>0.505</u>	<u>5006</u>	<u>1.5820</u>	<u>1.3830</u>	<u>1.1218</u>	<u>0.372</u>
<u>4103</u>	<u>0.6761</u>	<u>0.5910</u>	<u>0.4716</u>	<u>0.545</u>	<u>5101</u>	<u>1.0945</u>	<u>0.9517</u>	<u>0.7569</u>	<u>0.487</u>
<u>4107</u>	<u>0.1941</u>	<u>0.1703</u>	<u>0.1371</u>	<u>0.504</u>	<u>5103</u>	<u>1.0315</u>	<u>0.9076</u>	<u>0.7309</u>	<u>0.540</u>
<u>4108</u>	<u>0.2467</u>	<u>0.2158</u>	<u>0.1725</u>	<u>0.544</u>	<u>5106</u>	<u>1.0315</u>	<u>0.9076</u>	<u>0.7309</u>	<u>0.540</u>
<u>4109</u>	<u>0.2404</u>	<u>0.2113</u>	<u>0.1708</u>	<u>0.495</u>	<u>5108</u>	<u>1.0191</u>	<u>0.8952</u>	<u>0.7198</u>	<u>0.528</u>
<u>4201</u>	<u>0.8187</u>	<u>0.7082</u>	<u>0.5606</u>	<u>0.480</u>	<u>5109</u>	<u>0.6822</u>	<u>0.5915</u>	<u>0.4676</u>	<u>0.508</u>
<u>4301</u>	<u>0.8154</u>	<u>0.7191</u>	<u>0.5830</u>	<u>0.511</u>	<u>5201</u>	<u>0.4493</u>	<u>0.3926</u>	<u>0.3139</u>	<u>0.508</u>
<u>4302</u>	<u>0.8663</u>	<u>0.7563</u>	<u>0.6028</u>	<u>0.527</u>	<u>5204</u>	<u>1.2009</u>	<u>1.0502</u>	<u>0.8460</u>	<u>0.460</u>
<u>4304</u>	<u>1.1315</u>	<u>1.0029</u>	<u>0.8202</u>	<u>0.496</u>	<u>5206</u>	<u>0.4260</u>	<u>0.3740</u>	<u>0.3031</u>	<u>0.454</u>
<u>4305</u>	<u>1.3564</u>	<u>1.1758</u>	<u>0.9311</u>	<u>0.496</u>	<u>5207</u>	<u>0.1837</u>	<u>0.1629</u>	<u>0.1326</u>	<u>0.534</u>
<u>4401</u>	<u>0.4892</u>	<u>0.4341</u>	<u>0.3556</u>	<u>0.471</u>	<u>5208</u>	<u>0.9082</u>	<u>0.7983</u>	<u>0.6439</u>	<u>0.501</u>
<u>4402</u>	<u>1.0140</u>	<u>0.8856</u>	<u>0.7074</u>	<u>0.538</u>	<u>5209</u>	<u>0.8167</u>	<u>0.7161</u>	<u>0.5774</u>	<u>0.469</u>
<u>4404</u>	<u>0.6099</u>	<u>0.5385</u>	<u>0.4378</u>	<u>0.491</u>	<u>5300</u>	<u>0.1466</u>	<u>0.1275</u>	<u>0.1013</u>	<u>0.533</u>
<u>4501</u>	<u>0.2340</u>	<u>0.2057</u>	<u>0.1646</u>	<u>0.568</u>	<u>5301</u>	<u>0.0445</u>	<u>0.0389</u>	<u>0.0310</u>	<u>0.543</u>
<u>4502</u>	<u>0.0525</u>	<u>0.0463</u>	<u>0.0373</u>	<u>0.516</u>	<u>5302</u>	<u>0.0174</u>	<u>0.0152</u>	<u>0.0122</u>	<u>0.490</u>
<u>4504</u>	<u>0.1479</u>	<u>0.1296</u>	<u>0.1036</u>	<u>0.570</u>	<u>5305</u>	<u>0.0727</u>	<u>0.0636</u>	<u>0.0507</u>	<u>0.577</u>
<u>4601</u>	<u>0.9401</u>	<u>0.8231</u>	<u>0.6614</u>	<u>0.492</u>	<u>5306</u>	<u>0.0598</u>	<u>0.0527</u>	<u>0.0423</u>	<u>0.555</u>
<u>4801</u>	<u>3.5066</u>	<u>3.0617</u>	<u>2.4686</u>	<u>0.404</u>	<u>5307</u>	<u>0.8144</u>	<u>0.7079</u>	<u>0.5626</u>	<u>0.502</u>
<u>4802</u>	<u>0.3905</u>	<u>0.3457</u>	<u>0.2824</u>	<u>0.487</u>	<u>5308</u>	<u>0.1251</u>	<u>0.1096</u>	<u>0.0875</u>	<u>0.569</u>
<u>4803</u>	<u>0.3731</u>	<u>0.3311</u>	<u>0.2699</u>	<u>0.563</u>	<u>6103</u>	<u>0.1049</u>	<u>0.0927</u>	<u>0.0748</u>	<u>0.581</u>
<u>4804</u>	<u>0.6025</u>	<u>0.5313</u>	<u>0.4297</u>	<u>0.540</u>	<u>6104</u>	<u>0.4892</u>	<u>0.4287</u>	<u>0.3436</u>	<u>0.536</u>
<u>4805</u>	<u>0.3782</u>	<u>0.3335</u>	<u>0.2696</u>	<u>0.539</u>	<u>6105</u>	<u>0.4579</u>	<u>0.3994</u>	<u>0.3196</u>	<u>0.490</u>
<u>4806</u>	<u>0.0787</u>	<u>0.0698</u>	<u>0.0570</u>	<u>0.519</u>	<u>6107</u>	<u>0.1739</u>	<u>0.1547</u>	<u>0.1263</u>	<u>0.548</u>
<u>4808</u>	<u>0.5642</u>	<u>0.4986</u>	<u>0.4058</u>	<u>0.488</u>	<u>6108</u>	<u>0.5570</u>	<u>0.4904</u>	<u>0.3950</u>	<u>0.546</u>
<u>4809</u>	<u>0.3839</u>	<u>0.3403</u>	<u>0.2778</u>	<u>0.519</u>	<u>6109</u>	<u>0.1282</u>	<u>0.1120</u>	<u>0.0893</u>	<u>0.523</u>
<u>4810</u>	<u>0.1776</u>	<u>0.1576</u>	<u>0.1285</u>	<u>0.543</u>	<u>6110</u>	<u>0.7494</u>	<u>0.6560</u>	<u>0.5258</u>	<u>0.518</u>
<u>4811</u>	<u>0.4333</u>	<u>0.3838</u>	<u>0.3118</u>	<u>0.555</u>	<u>6120</u>	<u>0.3807</u>	<u>0.3305</u>	<u>0.2611</u>	<u>0.532</u>
<u>4812</u>	<u>0.4492</u>	<u>0.3956</u>	<u>0.3197</u>	<u>0.524</u>	<u>6121</u>	<u>0.4244</u>	<u>0.3714</u>	<u>0.2983</u>	<u>0.500</u>
<u>4813</u>	<u>0.2037</u>	<u>0.1802</u>	<u>0.1465</u>	<u>0.533</u>	<u>6201</u>	<u>0.3634</u>	<u>0.3191</u>	<u>0.2580</u>	<u>0.469</u>
<u>4900</u>	<u>0.1879</u>	<u>0.1644</u>	<u>0.1335</u>	<u>0.387</u>	<u>6202</u>	<u>0.8032</u>	<u>0.7047</u>	<u>0.5666</u>	<u>0.504</u>
<u>4901</u>	<u>0.0749</u>	<u>0.0653</u>	<u>0.0522</u>	<u>0.480</u>	<u>6203</u>	<u>0.1402</u>	<u>0.1239</u>	<u>0.0996</u>	<u>0.611</u>
<u>4902</u>	<u>0.1495</u>	<u>0.1303</u>	<u>0.1036</u>	<u>0.534</u>	<u>6204</u>	<u>0.1592</u>	<u>0.1401</u>	<u>0.1129</u>	<u>0.551</u>
<u>4903</u>	<u>0.1972</u>	<u>0.1716</u>	<u>0.1356</u>	<u>0.569</u>	<u>6205</u>	<u>0.2931</u>	<u>0.2585</u>	<u>0.2097</u>	<u>0.517</u>
<u>4904</u>	<u>0.0300</u>	<u>0.0264</u>	<u>0.0213</u>	<u>0.541</u>	<u>6206</u>	<u>0.2884</u>	<u>0.2535</u>	<u>0.2043</u>	<u>0.533</u>
<u>4905</u>	<u>0.4859</u>	<u>0.4310</u>	<u>0.3512</u>	<u>0.552</u>	<u>6207</u>	<u>1.6079</u>	<u>1.4334</u>	<u>1.1816</u>	<u>0.505</u>
<u>4906</u>	<u>0.1164</u>	<u>0.1013</u>	<u>0.0801</u>	<u>0.549</u>	<u>6208</u>	<u>0.3188</u>	<u>0.2825</u>	<u>0.2296</u>	<u>0.548</u>
<u>4907</u>	<u>0.0663</u>	<u>0.0584</u>	<u>0.0471</u>	<u>0.525</u>	<u>6209</u>	<u>0.3729</u>	<u>0.3292</u>	<u>0.2667</u>	<u>0.522</u>
<u>4908</u>	<u>0.1118</u>	<u>0.0992</u>	<u>0.0799</u>	<u>0.542</u>	<u>6301</u>	<u>0.1486</u>	<u>0.1290</u>	<u>0.1029</u>	<u>0.465</u>
<u>4909</u>	<u>0.0458</u>	<u>0.0415</u>	<u>0.0341</u>	<u>0.514</u>	<u>6303</u>	<u>0.0937</u>	<u>0.0822</u>	<u>0.0659</u>	<u>0.518</u>
<u>4910</u>	<u>0.5514</u>	<u>0.4843</u>	<u>0.3910</u>	<u>0.494</u>	<u>6304</u>	<u>0.4000</u>	<u>0.3548</u>	<u>0.2894</u>	<u>0.539</u>
<u>4911</u>	<u>0.0765</u>	<u>0.0672</u>	<u>0.0543</u>	<u>0.482</u>	<u>6305</u>	<u>0.1318</u>	<u>0.1159</u>	<u>0.0931</u>	<u>0.560</u>
<u>5001</u>	<u>9.5887</u>	<u>8.4028</u>	<u>6.8485</u>	<u>0.360</u>	<u>6306</u>	<u>0.3643</u>	<u>0.3190</u>	<u>0.2559</u>	<u>0.506</u>

<u>Class</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>Primary Ratio</u>	<u>Class</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>Primary Ratio</u>
6308	0.0832	0.0727	0.0579	0.530	6907	1.4815	1.2972	1.0407	0.513
6309	0.2597	0.2283	0.1841	0.520	6908	0.5148	0.4514	0.3633	0.496
6402	0.3277	0.2878	0.2308	0.562	6909	0.1386	0.1220	0.0982	0.538
6403	0.2065	0.1828	0.1483	0.542	7100	0.0381	0.0338	0.0279	0.457
6404	0.3312	0.2923	0.2367	0.538	7101	0.0272	0.0241	0.0196	0.441
6405	0.6766	0.5907	0.4726	0.493	7102	5.1874	4.6799	3.9097	0.537
6406	0.1519	0.1338	0.1078	0.567	7103	0.8623	0.7458	0.5859	0.539
6407	0.3148	0.2766	0.2222	0.541	7104	0.0400	0.0351	0.0279	0.563
6408	0.5349	0.4672	0.3732	0.512	7105	0.0303	0.0266	0.0214	0.533
6409	0.8476	0.7395	0.5918	0.481	7106	0.3237	0.2840	0.2275	0.578
6410	0.3706	0.3245	0.2599	0.525	7107	0.2990	0.2653	0.2165	0.539
6501	0.1853	0.1626	0.1307	0.545	7108	0.2484	0.2202	0.1795	0.545
6502	0.0375	0.0330	0.0265	0.522	7109	0.1829	0.1607	0.1289	0.558
6503	0.0854	0.0742	0.0589	0.493	7110	0.3832	0.3347	0.2692	0.459
6504	0.4714	0.4168	0.3371	0.566	7111	0.5255	0.4571	0.3657	0.446
6505	0.1596	0.1414	0.1140	0.595	7112	0.8662	0.7624	0.6152	0.535
6506	0.1464	0.1286	0.1032	0.557	7113	0.4820	0.4256	0.3454	0.523
6509	0.4325	0.3821	0.3094	0.549	7114	0.7919	0.6985	0.5627	0.581
6510	0.5152	0.4504	0.3624	0.449	7115	0.6401	0.5669	0.4622	0.534
6511	0.4778	0.4205	0.3390	0.540	7116	0.7646	0.6721	0.5428	0.502
6512	0.1678	0.1474	0.1194	0.478	7117	1.4701	1.2919	1.0422	0.505
6601	0.2559	0.2253	0.1819	0.515	7118	1.7969	1.5823	1.2805	0.507
6602	0.6409	0.5655	0.4586	0.527	7119	1.7782	1.5533	1.2401	0.539
6603	0.3908	0.3434	0.2771	0.512	7120	7.3133	6.4231	5.1888	0.487
6604	0.1030	0.0904	0.0727	0.549	7121	6.8444	6.0116	4.8563	0.487
6605	0.4840	0.4230	0.3352	0.571	7122	0.5813	0.5121	0.4133	0.544
6607	0.1887	0.1662	0.1346	0.513	7200	1.7530	1.5132	1.1868	0.520
6608	0.6144	0.5319	0.4247	0.396	7201	2.0607	1.7864	1.4153	0.494
6620	4.0862	3.5191	2.7428	0.555	7202	0.0343	0.0299	0.0241	0.460
6704	0.1578	0.1387	0.1117	0.521	7203	0.1526	0.1371	0.1128	0.564
6705	1.1046	0.9736	0.7845	0.569	7204	0.0000	0.0000	0.0000	0.500
6706	0.3602	0.3209	0.2648	0.488	7205	0.0000	0.0000	0.0000	0.500
6707	6.5030	5.6892	4.4993	0.637	7301	0.5029	0.4434	0.3600	0.487
6708	9.9770	9.0973	7.7497	0.432	7302	1.1385	1.0070	0.8219	0.488
6709	0.3339	0.2942	0.2374	0.532	7307	0.5436	0.4811	0.3926	0.490
6801	0.8792	0.7586	0.5929	0.541	7308	0.4816	0.4249	0.3428	0.550
6802	0.7410	0.6476	0.5163	0.558	7309	0.3448	0.3053	0.2482	0.552
6803	0.8818	0.7716	0.6296	0.327	7400	2.0607	1.7864	1.4153	0.494
6804	0.4125	0.3627	0.2923	0.517					
6809	6.1351	5.4152	4.3578	0.546					
6901	0.0241	0.0237	0.0207	0.758					
6902	1.1084	0.9660	0.7783	0.413					
6903	7.4357	6.5965	5.5025	0.301					
6904	0.7057	0.6050	0.4671	0.556					
6905	0.5696	0.4916	0.3835	0.567					
6906	0.2261	0.2138	0.1894	0.648					

Expected Loss Rates in Dollars Per Sq. Ft. of Wallboard Installed				
<u>Class</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>Primary Ratio</u>
0540	0.0232	0.0217	0.0183	0.435
0541	0.0122	0.0114	0.0095	0.413
0550	0.0242	0.0227	0.0192	0.387

<u>Class</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>Primary Ratio</u>	<u>Expected Loss Range</u>	<u>Maximum Experience Modification</u>
0551	0.0150	0.0140	0.0118	0.379)	48,442 - 56,314 56,315 & Over	0.61 0.60))
<u>Class</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>Primary Ratio</u>	<u>Expected Loss Range</u>	<u>Maximum Experience Modification</u>
0540	0.0265	0.0233	0.0187	0.433	0 - 7,672	0.90
0541	0.0129	0.0113	0.0091	0.414	7,673 - 9,369	0.89
0550	0.0264	0.0230	0.0187	0.399	9,370 - 10,378	0.88
0551	0.0157	0.0136	0.0109	0.392	10,379 - 11,312	0.87

AMENDATORY SECTION (Amending WSR 11-24-026, filed 12/1/11, effective 1/1/12)

WAC 296-17-890 Table IV.

**Maximum experience modifications
for firms with no compensable accidents:
Effective January 1, (~~2012~~) 2013**

<u>Expected Loss Range</u>	<u>Maximum Experience Modification</u>
0 - 7,596	0.90
7,597 - 9,276	0.89
9,277 - 10,275	0.88
10,276 - 11,200	0.87
11,201 - 12,176	0.86
12,177 - 13,198	0.85
13,199 - 14,098	0.84
14,099 - 15,011	0.83
15,012 - 15,961	0.82
15,962 - 16,950	0.81
16,951 - 17,978	0.80
17,979 - 19,045	0.79
19,046 - 20,154	0.78
20,155 - 21,300	0.77
21,301 - 22,489	0.76
22,490 - 23,716	0.75
23,717 - 24,986	0.74
24,987 - 26,296	0.73
26,297 - 27,651	0.72
27,652 - 29,045	0.71
29,046 - 30,484	0.70
30,485 - 31,964	0.69
31,965 - 33,486	0.68
33,487 - 35,053	0.67
35,054 - 36,660	0.66
36,661 - 38,314	0.65
38,315 - 40,889	0.64
40,890 - 44,392	0.63
44,393 - 48,441	0.62

AMENDATORY SECTION (Amending WSR 11-24-026, filed 12/1/11, effective 1/1/12)

WAC 296-17-895 Industrial insurance accident fund base rates, stay at work and medical aid base rates by class of industry. Industrial insurance accident fund, stay at work and medical aid fund base rates by class of industry shall be as set forth below.

Base Rates Effective January 1, ((2012)) 2013				Base Rates Effective January 1, ((2012)) 2013			
Class	Accident Fund	Stay at Work	Medical Aid Fund	Class	Accident Fund	Stay at Work	Medical Aid Fund
((0101	2.2105	0.0466	0.8308	0803	0.7222	0.0151	0.3850
0103	2.6331	0.0554	1.1450	0901	2.2222	0.0469	0.8042
0104	1.4200	0.0299	0.5971	1002	1.4141	0.0297	0.6689
0105	1.9557	0.0410	0.9352	1003	1.1516	0.0241	0.5890
0107	1.8951	0.0400	0.6787	1004	0.8553	0.0180	0.3527
0108	1.4200	0.0299	0.5971	1005	13.3633	0.2821	4.8795
0112	0.9925	0.0208	0.4440	1007	0.5610	0.0118	0.2085
0201	4.3456	0.0924	1.1014	1101	1.0912	0.0229	0.5443
0202	5.0508	0.1066	1.8416	1102	2.3102	0.0487	0.8794
0210	1.7191	0.0363	0.5995	1103	1.8556	0.0390	0.7967
0212	1.9888	0.0420	0.7148	1104	0.8493	0.0177	0.5093
0214	2.2803	0.0482	0.8078	1105	1.2965	0.0273	0.5344
0217	1.6099	0.0339	0.6533	1106	0.4204	0.0087	0.2933
0219	1.9052	0.0402	0.7511	1108	0.8800	0.0184	0.4696
0301	0.9628	0.0201	0.5333	1109	2.1337	0.0447	1.0309
0302	3.5011	0.0742	1.0826	1301	0.8316	0.0175	0.3670
0303	2.7585	0.0583	0.9281	1303	0.2942	0.0061	0.1596
0306	1.5497	0.0327	0.5738	1304	0.0415	0.0009	0.0208
0307	1.3203	0.0278	0.5477	1305	0.6940	0.0145	0.3605
0308	0.6909	0.0143	0.4492	1401	0.2742	0.0057	0.1712
0403	2.6340	0.0554	1.1070	1404	1.2236	0.0255	0.7144
0502	2.0472	0.0433	0.7162	1405	0.9958	0.0208	0.5347
0504	2.3871	0.0500	1.1730	1407	0.6542	0.0136	0.4332
0507	4.4241	0.0928	2.1162	1501	0.9043	0.0190	0.4053
0508	3.0709	0.0651	0.9016	1507	0.8600	0.0180	0.4237
0509	2.8228	0.0597	0.9398	1701	1.2465	0.0262	0.5691
0510	2.7530	0.0579	1.2024	1702	3.1784	0.0675	0.8722
0511	2.3420	0.0494	0.8910	1703	1.7181	0.0366	0.4071
0512	2.3024	0.0486	0.8803	1704	1.2465	0.0262	0.5691
0513	1.1755	0.0248	0.4710	1801	0.6838	0.0143	0.3286
0514	2.8244	0.0595	1.1351	1802	1.1202	0.0234	0.5777
0516	2.4727	0.0521	0.9671	2002	1.1230	0.0234	0.6343
0517	3.4242	0.0720	1.4518	2004	1.0650	0.0222	0.5907
0518	2.2222	0.0469	0.8042	2007	0.7568	0.0158	0.4403
0519	2.7195	0.0572	1.1272	2008	0.5051	0.0105	0.2826
0521	0.8364	0.0176	0.3559	2009	0.4868	0.0101	0.3134
0601	0.9290	0.0196	0.3690	2101	1.0314	0.0215	0.6207
0602	1.1531	0.0244	0.3914	2102	0.8100	0.0169	0.4732
0603	1.5984	0.0338	0.5377	2104	0.3553	0.0073	0.3232
0604	1.5021	0.0313	0.8464	2105	0.7492	0.0156	0.4489
0606	0.7915	0.0166	0.4146	2106	0.6495	0.0135	0.3922
0607	0.9780	0.0205	0.4598	2201	0.3242	0.0067	0.1964
0608	0.4868	0.0102	0.2319	2202	1.0958	0.0229	0.5719
0701	3.4845	0.0742	0.7547	2203	0.6098	0.0126	0.4096

Base Rates Effective January 1, ((2012)) 2013				Base Rates Effective January 1, ((2012)) 2013			
Class	Accident Fund	Stay at Work	Medical Aid Fund	Class	Accident Fund	Stay at Work	Medical Aid Fund
2204	0.3242	0.0067	0.1964	3708	0.8533	0.0179	0.4176
2401	0.7318	0.0154	0.3098	3802	0.2754	0.0057	0.1710
2903	0.8800	0.0183	0.5271	3808	0.6428	0.0135	0.2786
2904	1.0020	0.0210	0.5214	3901	0.1927	0.0040	0.1560
2905	0.8813	0.0183	0.5475	3902	0.5878	0.0122	0.4044
2906	0.4895	0.0102	0.3005	3903	1.4014	0.0290	0.9893
2907	0.7303	0.0152	0.4173	3905	0.1755	0.0036	0.1431
2908	1.5998	0.0335	0.8051	3906	0.5887	0.0122	0.3904
2909	0.5307	0.0110	0.3286	3909	0.4227	0.0088	0.2737
3101	1.0759	0.0226	0.5131	4002	1.9645	0.0414	0.7827
3102	0.3753	0.0078	0.2036	4101	0.4982	0.0104	0.2634
3103	0.7554	0.0158	0.3843	4103	0.7123	0.0148	0.4431
3104	0.9078	0.0190	0.4502	4107	0.2297	0.0048	0.1237
3105	0.9994	0.0208	0.5889	4108	0.2705	0.0056	0.1628
3303	0.6148	0.0128	0.3420	4109	0.2838	0.0059	0.1611
3304	0.6452	0.0134	0.4488	4201	1.1351	0.0240	0.4036
3309	0.5653	0.0118	0.2789	4301	0.8753	0.0181	0.5803
3402	0.7709	0.0161	0.3951	4302	0.9901	0.0207	0.5367
3403	0.3013	0.0063	0.1569	4304	1.1860	0.0246	0.8049
3404	0.6652	0.0139	0.3742	4305	1.8151	0.0382	0.7653
3405	0.3749	0.0078	0.2315	4401	0.5580	0.0116	0.3677
3406	0.3299	0.0068	0.2159	4402	1.1387	0.0237	0.6446
3407	1.2434	0.0261	0.5365	4404	0.7050	0.0146	0.4476
3408	0.3037	0.0063	0.1682	4501	0.2355	0.0049	0.1771
3409	0.2039	0.0042	0.1321	4502	0.0563	0.0012	0.0357
3410	0.2904	0.0060	0.2073	4504	0.1546	0.0032	0.1129
3411	0.7967	0.0167	0.3631	4601	1.1012	0.0230	0.5819
3412	0.9522	0.0201	0.3743	4802	0.4492	0.0093	0.2945
3414	0.8619	0.0180	0.4362	4803	0.3295	0.0067	0.2969
3415	1.2706	0.0266	0.6082	4804	0.6169	0.0128	0.4349
3501	1.5072	0.0316	0.7602	4805	0.3826	0.0079	0.2662
3503	0.3620	0.0074	0.2970	4806	0.0794	0.0016	0.0555
3506	1.4112	0.0298	0.5215	4808	0.6297	0.0131	0.4010
3509	0.4978	0.0103	0.3392	4809	0.3927	0.0081	0.2903
3510	0.4613	0.0096	0.2752	4810	0.1676	0.0034	0.1368
3511	0.8813	0.0184	0.4662	4811	0.4042	0.0083	0.3327
3512	0.4953	0.0103	0.3352	4812	0.5011	0.0104	0.3264
3513	0.6765	0.0140	0.4620	4813	0.2069	0.0043	0.1586
3602	0.1631	0.0034	0.0948	4900	0.2852	0.0060	0.1034
3603	0.6406	0.0133	0.3876	4901	0.0971	0.0020	0.0446
3604	1.0045	0.0208	0.7010	4902	0.1716	0.0036	0.0905
3605	0.7857	0.0165	0.3777	4903	0.2117	0.0044	0.1280
3701	0.3753	0.0078	0.2036	4904	0.0336	0.0007	0.0223
3702	0.6220	0.0130	0.3368	4905	0.4484	0.0092	0.3682

Base Rates Effective January 1, ((2012)) 2013				Base Rates Effective January 1, ((2012)) 2013			
Class	Accident Fund	Stay at Work	Medical Aid Fund	Class	Accident Fund	Stay at Work	Medical Aid Fund
4906	0.1348	0.0028	0.0733	6206	0.3138	0.0065	0.1975
4907	0.0735	0.0015	0.0483	6207	1.4688	0.0302	1.2090
4908	0.1124	0.0023	0.1022	6208	0.2957	0.0061	0.2513
4909	0.0495	0.0010	0.0575	6209	0.4080	0.0084	0.2830
4910	0.6647	0.0139	0.3686	6301	0.2100	0.0044	0.0794
4911	0.0855	0.0018	0.0475	6303	0.1079	0.0023	0.0590
5001	13.4672	0.2846	4.7177	6304	0.4186	0.0086	0.3411
5002	0.8856	0.0186	0.4382	6305	0.1365	0.0028	0.0976
5003	3.5730	0.0756	1.1465	6306	0.4224	0.0088	0.2299
5004	1.1281	0.0236	0.6035	6308	0.0967	0.0020	0.0554
5005	1.1352	0.0239	0.4552	6309	0.2834	0.0059	0.1792
5006	2.3677	0.0501	0.8017	6402	0.3556	0.0074	0.2466
5101	1.3857	0.0291	0.6151	6403	0.2001	0.0041	0.1600
5103	1.0423	0.0216	0.7068	6404	0.3333	0.0069	0.2360
5106	1.0423	0.0216	0.7068	6405	0.8104	0.0170	0.3962
5108	1.1374	0.0236	0.7126	6406	0.1556	0.0032	0.1179
5109	0.8552	0.0180	0.3777	6407	0.3596	0.0075	0.2370
5201	0.5674	0.0119	0.2877	6408	0.6408	0.0134	0.3325
5204	1.4256	0.0299	0.6562	6409	1.1063	0.0232	0.5011
5206	0.5613	0.0118	0.2660	6410	0.4196	0.0087	0.2475
5207	0.1824	0.0038	0.1434	6501	0.2071	0.0043	0.1321
5208	1.0491	0.0219	0.6079	6502	0.0425	0.0009	0.0265
5209	1.0129	0.0212	0.5164	6503	0.1153	0.0024	0.0478
5300	0.1809	0.0038	0.0927	6504	0.4477	0.0092	0.3686
5301	0.0532	0.0011	0.0306	6505	0.1354	0.0028	0.1332
5302	0.0223	0.0005	0.0116	6506	0.1492	0.0031	0.1032
5305	0.0742	0.0015	0.0497	6509	0.4506	0.0093	0.3356
5306	0.0662	0.0014	0.0463	6510	0.6974	0.0147	0.3007
5307	0.9691	0.0204	0.4352	6511	0.4939	0.0102	0.3313
5308	0.1323	0.0027	0.0919	6512	0.2110	0.0044	0.1156
6103	0.0966	0.0020	0.0821	6601	0.2742	0.0057	0.1712
6104	0.5004	0.0104	0.3194	6602	0.6634	0.0137	0.4489
6105	0.5820	0.0122	0.2733	6603	0.4418	0.0092	0.2632
6107	0.1815	0.0037	0.1567	6604	0.1043	0.0022	0.0725
6108	0.6014	0.0124	0.4158	6605	0.5033	0.0104	0.3501
6109	0.1534	0.0032	0.0812	6607	0.2159	0.0045	0.1383
6110	0.8184	0.0171	0.4733	6608	0.9544	0.0203	0.2638
6120	0.4615	0.0097	0.2257	6620	4.9278	0.1035	2.1833
6121	0.5199	0.0109	0.2624	6704	0.1827	0.0038	0.1118
6201	0.4702	0.0099	0.2314	6705	1.0775	0.0222	0.8472
6202	0.9158	0.0191	0.5292	6706	0.3755	0.0078	0.2699
6203	0.1232	0.0025	0.1132	6707	5.5420	0.1134	4.8487
6204	0.1639	0.0034	0.1141	6708	9.2192	0.1867	9.6389
6205	0.3385	0.0070	0.2153	6709	0.3543	0.0073	0.2466

Base Rates Effective January 1, ((2012)) 2013				Base Rates Effective January 1, ((2012)) 2013			
Class	Accident Fund	Stay at Work	Medical Aid Fund	Class	Accident Fund	Stay at Work	Medical Aid Fund
6801	1.0383	0.0218	0.4453	7302	1.2133	0.0252	0.7860
6802	0.8169	0.0170	0.4777	7307	0.5805	0.0120	0.3854
6803	1.4891	0.0316	0.4474	7308	0.4998	0.0103	0.3802
6804	0.4899	0.0102	0.3017	7309	0.3219	0.0066	0.2604
6809	6.2922	0.1299	4.6346	7400	2.5886	0.0545	1.0643))
6901	0.0000	0.0000	0.0602	0101	2.4521	0.0544	0.8672
6902	1.5975	0.0338	0.5472	0103	2.6794	0.0592	1.1423
6903	11.3751	0.2400	4.2906	0104	1.4858	0.0329	0.6091
6904	0.7977	0.0168	0.3227	0105	1.9690	0.0434	0.9560
6905	0.6054	0.0127	0.3071	0107	1.8473	0.0410	0.6658
6906	0.0000	0.0000	0.3071	0108	1.4858	0.0329	0.6091
6907	1.7741	0.0370	0.9916	0112	1.0337	0.0228	0.4616
6908	0.6101	0.0127	0.3290	0201	4.0605	0.0907	1.0336
6909	0.1509	0.0031	0.1027	0202	5.0794	0.1126	1.8737
7100	0.0440	0.0009	0.0269	0210	1.6933	0.0376	0.5936
7101	0.0339	0.0007	0.0186	0212	1.9761	0.0438	0.7294
7102	4.0647	0.0816	4.7986	0214	2.2407	0.0497	0.8127
7103	0.9822	0.0206	0.4542	0217	1.7454	0.0386	0.6949
7104	0.0423	0.0009	0.0281	0219	1.8077	0.0400	0.6968
7105	0.0379	0.0008	0.0244	0301	0.9934	0.0218	0.5550
7106	0.3050	0.0063	0.2178	0302	3.6601	0.0815	1.1392
7107	0.2861	0.0059	0.2341	0303	2.7861	0.0619	0.9609
7108	0.2505	0.0052	0.1981	0306	1.5788	0.0350	0.5780
7109	0.1913	0.0040	0.1348	0307	1.3218	0.0292	0.5398
7110	0.4978	0.0105	0.2183	0308	0.6992	0.0152	0.4697
7111	0.7311	0.0154	0.2817	0403	2.7006	0.0598	1.0958
7112	0.9015	0.0187	0.5976	0502	2.0864	0.0463	0.7219
7113	0.5071	0.0105	0.3508	0504	2.4230	0.0533	1.1955
7114	0.6756	0.0139	0.5716	0507	4.5735	0.1007	2.2194
7115	0.6764	0.0140	0.4946	0508	3.1055	0.0692	0.8958
7116	0.8412	0.0175	0.4952	0509	2.7067	0.0602	0.8784
7117	1.7846	0.0372	1.0579	0510	2.9031	0.0642	1.2429
7118	1.9291	0.0401	1.2187	0511	2.3957	0.0531	0.8983
7119	1.9057	0.0398	1.0695	0512	2.2743	0.0504	0.8712
7120	8.6410	0.1805	4.7014	0513	1.2434	0.0275	0.4905
7121	8.0832	0.1688	4.4057	0514	2.7645	0.0612	1.1382
7122	0.6253	0.0129	0.4452	0516	2.4353	0.0540	0.9330
7200	2.1977	0.0463	0.9131	0517	3.4633	0.0765	1.4857
7201	2.5886	0.0545	1.0643	0518	2.3260	0.0517	0.7983
7202	0.0457	0.0010	0.0196	0519	2.7303	0.0604	1.1198
7203	0.1358	0.0027	0.1483	0521	0.8335	0.0184	0.3552
7204	0.0000	0.0000	0.0000	0601	0.9317	0.0206	0.3622
7205	0.0000	0.0000	0.0000	0602	1.1507	0.0256	0.3819
7301	0.5851	0.0122	0.3433	0603	1.4680	0.0326	0.4980

Base Rates Effective January 1, (2012) 2013				Base Rates Effective January 1, (2012) 2013			
Class	Accident Fund	Stay at Work	Medical Aid Fund	Class	Accident Fund	Stay at Work	Medical Aid Fund
<u>0604</u>	<u>1.5115</u>	<u>0.0331</u>	<u>0.8807</u>	<u>2105</u>	<u>0.7810</u>	<u>0.0171</u>	<u>0.4580</u>
<u>0606</u>	<u>0.7953</u>	<u>0.0175</u>	<u>0.4260</u>	<u>2106</u>	<u>0.6615</u>	<u>0.0145</u>	<u>0.4066</u>
<u>0607</u>	<u>1.0208</u>	<u>0.0225</u>	<u>0.4840</u>	<u>2201</u>	<u>0.3285</u>	<u>0.0072</u>	<u>0.2061</u>
<u>0608</u>	<u>0.4780</u>	<u>0.0105</u>	<u>0.2288</u>	<u>2202</u>	<u>1.0855</u>	<u>0.0239</u>	<u>0.5671</u>
<u>0701</u>	<u>3.4398</u>	<u>0.0770</u>	<u>0.7428</u>	<u>2203</u>	<u>0.6037</u>	<u>0.0131</u>	<u>0.4068</u>
<u>0803</u>	<u>0.7238</u>	<u>0.0159</u>	<u>0.3855</u>	<u>2204</u>	<u>0.3285</u>	<u>0.0072</u>	<u>0.2061</u>
<u>0901</u>	<u>2.3260</u>	<u>0.0517</u>	<u>0.7983</u>	<u>2401</u>	<u>0.7058</u>	<u>0.0156</u>	<u>0.3005</u>
<u>1002</u>	<u>1.3782</u>	<u>0.0304</u>	<u>0.6488</u>	<u>2903</u>	<u>0.8998</u>	<u>0.0197</u>	<u>0.5404</u>
<u>1003</u>	<u>1.1253</u>	<u>0.0247</u>	<u>0.5731</u>	<u>2904</u>	<u>0.9947</u>	<u>0.0219</u>	<u>0.5054</u>
<u>1004</u>	<u>0.8381</u>	<u>0.0185</u>	<u>0.3485</u>	<u>2905</u>	<u>0.8652</u>	<u>0.0189</u>	<u>0.5371</u>
<u>1005</u>	<u>13.3656</u>	<u>0.2965</u>	<u>4.8837</u>	<u>2906</u>	<u>0.5070</u>	<u>0.0111</u>	<u>0.3180</u>
<u>1007</u>	<u>0.5638</u>	<u>0.0125</u>	<u>0.2066</u>	<u>2907</u>	<u>0.7312</u>	<u>0.0160</u>	<u>0.4213</u>
<u>1101</u>	<u>1.1185</u>	<u>0.0246</u>	<u>0.5476</u>	<u>2908</u>	<u>1.6124</u>	<u>0.0355</u>	<u>0.8226</u>
<u>1102</u>	<u>2.2770</u>	<u>0.0504</u>	<u>0.8926</u>	<u>2909</u>	<u>0.5415</u>	<u>0.0118</u>	<u>0.3339</u>
<u>1103</u>	<u>1.8916</u>	<u>0.0418</u>	<u>0.8024</u>	<u>3101</u>	<u>1.0553</u>	<u>0.0232</u>	<u>0.5163</u>
<u>1104</u>	<u>0.8531</u>	<u>0.0187</u>	<u>0.5089</u>	<u>3102</u>	<u>0.3638</u>	<u>0.0080</u>	<u>0.2020</u>
<u>1105</u>	<u>1.2801</u>	<u>0.0283</u>	<u>0.5214</u>	<u>3103</u>	<u>0.7431</u>	<u>0.0163</u>	<u>0.3774</u>
<u>1106</u>	<u>0.4049</u>	<u>0.0088</u>	<u>0.2780</u>	<u>3104</u>	<u>0.9171</u>	<u>0.0202</u>	<u>0.4514</u>
<u>1108</u>	<u>0.8625</u>	<u>0.0189</u>	<u>0.4641</u>	<u>3105</u>	<u>1.0010</u>	<u>0.0219</u>	<u>0.5872</u>
<u>1109</u>	<u>2.1887</u>	<u>0.0482</u>	<u>1.0581</u>	<u>3303</u>	<u>0.6232</u>	<u>0.0137</u>	<u>0.3421</u>
<u>1301</u>	<u>0.8129</u>	<u>0.0180</u>	<u>0.3556</u>	<u>3304</u>	<u>0.6318</u>	<u>0.0137</u>	<u>0.4528</u>
<u>1303</u>	<u>0.2901</u>	<u>0.0064</u>	<u>0.1581</u>	<u>3309</u>	<u>0.5745</u>	<u>0.0126</u>	<u>0.2852</u>
<u>1304</u>	<u>0.0413</u>	<u>0.0009</u>	<u>0.0202</u>	<u>3402</u>	<u>0.7259</u>	<u>0.0160</u>	<u>0.3758</u>
<u>1305</u>	<u>0.6926</u>	<u>0.0152</u>	<u>0.3542</u>	<u>3403</u>	<u>0.2970</u>	<u>0.0065</u>	<u>0.1538</u>
<u>1401</u>	<u>0.2750</u>	<u>0.0060</u>	<u>0.1766</u>	<u>3404</u>	<u>0.6549</u>	<u>0.0144</u>	<u>0.3690</u>
<u>1404</u>	<u>1.1914</u>	<u>0.0261</u>	<u>0.6895</u>	<u>3405</u>	<u>0.3833</u>	<u>0.0084</u>	<u>0.2281</u>
<u>1405</u>	<u>1.0249</u>	<u>0.0225</u>	<u>0.5500</u>	<u>3406</u>	<u>0.3337</u>	<u>0.0073</u>	<u>0.2219</u>
<u>1407</u>	<u>0.6643</u>	<u>0.0145</u>	<u>0.4439</u>	<u>3407</u>	<u>1.2606</u>	<u>0.0278</u>	<u>0.5470</u>
<u>1501</u>	<u>0.9245</u>	<u>0.0204</u>	<u>0.4241</u>	<u>3408</u>	<u>0.3102</u>	<u>0.0068</u>	<u>0.1724</u>
<u>1507</u>	<u>0.8642</u>	<u>0.0190</u>	<u>0.4307</u>	<u>3409</u>	<u>0.2003</u>	<u>0.0044</u>	<u>0.1293</u>
<u>1701</u>	<u>1.1763</u>	<u>0.0260</u>	<u>0.5330</u>	<u>3410</u>	<u>0.2728</u>	<u>0.0059</u>	<u>0.1950</u>
<u>1702</u>	<u>3.1012</u>	<u>0.0692</u>	<u>0.8394</u>	<u>3411</u>	<u>0.8249</u>	<u>0.0182</u>	<u>0.3686</u>
<u>1703</u>	<u>1.7348</u>	<u>0.0388</u>	<u>0.4136</u>	<u>3412</u>	<u>0.9685</u>	<u>0.0214</u>	<u>0.3814</u>
<u>1704</u>	<u>1.1763</u>	<u>0.0260</u>	<u>0.5330</u>	<u>3414</u>	<u>0.9173</u>	<u>0.0202</u>	<u>0.4644</u>
<u>1801</u>	<u>0.6773</u>	<u>0.0149</u>	<u>0.3276</u>	<u>3415</u>	<u>1.2609</u>	<u>0.0278</u>	<u>0.5903</u>
<u>1802</u>	<u>1.1150</u>	<u>0.0245</u>	<u>0.5657</u>	<u>3501</u>	<u>1.5004</u>	<u>0.0330</u>	<u>0.7564</u>
<u>2002</u>	<u>1.1335</u>	<u>0.0248</u>	<u>0.6412</u>	<u>3503</u>	<u>0.3760</u>	<u>0.0081</u>	<u>0.3036</u>
<u>2004</u>	<u>1.0274</u>	<u>0.0225</u>	<u>0.5725</u>	<u>3506</u>	<u>1.4096</u>	<u>0.0312</u>	<u>0.5345</u>
<u>2007</u>	<u>0.7879</u>	<u>0.0172</u>	<u>0.4681</u>	<u>3509</u>	<u>0.4917</u>	<u>0.0107</u>	<u>0.3347</u>
<u>2008</u>	<u>0.5148</u>	<u>0.0113</u>	<u>0.2863</u>	<u>3510</u>	<u>0.4659</u>	<u>0.0102</u>	<u>0.2789</u>
<u>2009</u>	<u>0.4719</u>	<u>0.0103</u>	<u>0.3097</u>	<u>3511</u>	<u>0.8664</u>	<u>0.0190</u>	<u>0.4544</u>
<u>2101</u>	<u>1.0118</u>	<u>0.0221</u>	<u>0.6393</u>	<u>3512</u>	<u>0.4810</u>	<u>0.0105</u>	<u>0.3283</u>
<u>2102</u>	<u>0.8862</u>	<u>0.0194</u>	<u>0.4882</u>	<u>3513</u>	<u>0.6992</u>	<u>0.0152</u>	<u>0.4776</u>
<u>2104</u>	<u>0.3390</u>	<u>0.0073</u>	<u>0.3202</u>	<u>3602</u>	<u>0.1559</u>	<u>0.0034</u>	<u>0.0947</u>

Base Rates Effective January 1, ((2012)) 2013				Base Rates Effective January 1, ((2012)) 2013			
Class	Accident Fund	Stay at Work	Medical Aid Fund	Class	Accident Fund	Stay at Work	Medical Aid Fund
<u>3603</u>	<u>0.6534</u>	<u>0.0143</u>	<u>0.3942</u>	<u>4901</u>	<u>0.0970</u>	<u>0.0021</u>	<u>0.0445</u>
<u>3604</u>	<u>0.9929</u>	<u>0.0216</u>	<u>0.6886</u>	<u>4902</u>	<u>0.1733</u>	<u>0.0038</u>	<u>0.0927</u>
<u>3605</u>	<u>0.7860</u>	<u>0.0173</u>	<u>0.3781</u>	<u>4903</u>	<u>0.2183</u>	<u>0.0048</u>	<u>0.1293</u>
<u>3701</u>	<u>0.3638</u>	<u>0.0080</u>	<u>0.2020</u>	<u>4904</u>	<u>0.0321</u>	<u>0.0007</u>	<u>0.0216</u>
<u>3702</u>	<u>0.6261</u>	<u>0.0137</u>	<u>0.3455</u>	<u>4905</u>	<u>0.4431</u>	<u>0.0095</u>	<u>0.3763</u>
<u>3708</u>	<u>0.8849</u>	<u>0.0195</u>	<u>0.4348</u>	<u>4906</u>	<u>0.1327</u>	<u>0.0029</u>	<u>0.0726</u>
<u>3802</u>	<u>0.2778</u>	<u>0.0061</u>	<u>0.1716</u>	<u>4907</u>	<u>0.0729</u>	<u>0.0016</u>	<u>0.0484</u>
<u>3808</u>	<u>0.6351</u>	<u>0.0140</u>	<u>0.2744</u>	<u>4908</u>	<u>0.1171</u>	<u>0.0025</u>	<u>0.1004</u>
<u>3901</u>	<u>0.1860</u>	<u>0.0040</u>	<u>0.1496</u>	<u>4909</u>	<u>0.0496</u>	<u>0.0010</u>	<u>0.0561</u>
<u>3902</u>	<u>0.5808</u>	<u>0.0126</u>	<u>0.4031</u>	<u>4910</u>	<u>0.6420</u>	<u>0.0141</u>	<u>0.3581</u>
<u>3903</u>	<u>1.4019</u>	<u>0.0305</u>	<u>0.9902</u>	<u>4911</u>	<u>0.0912</u>	<u>0.0020</u>	<u>0.0497</u>
<u>3905</u>	<u>0.1657</u>	<u>0.0036</u>	<u>0.1405</u>	<u>5001</u>	<u>14.2821</u>	<u>0.3172</u>	<u>4.9189</u>
<u>3906</u>	<u>0.5958</u>	<u>0.0130</u>	<u>0.3978</u>	<u>5002</u>	<u>0.8855</u>	<u>0.0195</u>	<u>0.4383</u>
<u>3909</u>	<u>0.4312</u>	<u>0.0094</u>	<u>0.2886</u>	<u>5003</u>	<u>3.5579</u>	<u>0.0792</u>	<u>1.1030</u>
<u>4002</u>	<u>1.9643</u>	<u>0.0435</u>	<u>0.7829</u>	<u>5004</u>	<u>1.1090</u>	<u>0.0243</u>	<u>0.6096</u>
<u>4101</u>	<u>0.4891</u>	<u>0.0107</u>	<u>0.2593</u>	<u>5005</u>	<u>1.1812</u>	<u>0.0261</u>	<u>0.4763</u>
<u>4103</u>	<u>0.7331</u>	<u>0.0160</u>	<u>0.4412</u>	<u>5006</u>	<u>2.3416</u>	<u>0.0520</u>	<u>0.7925</u>
<u>4107</u>	<u>0.2271</u>	<u>0.0050</u>	<u>0.1273</u>	<u>5101</u>	<u>1.4077</u>	<u>0.0311</u>	<u>0.6131</u>
<u>4108</u>	<u>0.2651</u>	<u>0.0058</u>	<u>0.1598</u>	<u>5103</u>	<u>1.0949</u>	<u>0.0238</u>	<u>0.7413</u>
<u>4109</u>	<u>0.2818</u>	<u>0.0062</u>	<u>0.1596</u>	<u>5106</u>	<u>1.0949</u>	<u>0.0238</u>	<u>0.7413</u>
<u>4201</u>	<u>1.1239</u>	<u>0.0249</u>	<u>0.4075</u>	<u>5108</u>	<u>1.1334</u>	<u>0.0248</u>	<u>0.7066</u>
<u>4301</u>	<u>0.8649</u>	<u>0.0188</u>	<u>0.5681</u>	<u>5109</u>	<u>0.8679</u>	<u>0.0192</u>	<u>0.3809</u>
<u>4302</u>	<u>0.9936</u>	<u>0.0218</u>	<u>0.5499</u>	<u>5201</u>	<u>0.5499</u>	<u>0.0121</u>	<u>0.2825</u>
<u>4304</u>	<u>1.1888</u>	<u>0.0258</u>	<u>0.8256</u>	<u>5204</u>	<u>1.5391</u>	<u>0.0340</u>	<u>0.6890</u>
<u>4305</u>	<u>1.7574</u>	<u>0.0389</u>	<u>0.7249</u>	<u>5206</u>	<u>0.5550</u>	<u>0.0122</u>	<u>0.2626</u>
<u>4401</u>	<u>0.5558</u>	<u>0.0121</u>	<u>0.3632</u>	<u>5207</u>	<u>0.1834</u>	<u>0.0040</u>	<u>0.1434</u>
<u>4402</u>	<u>1.1152</u>	<u>0.0244</u>	<u>0.6306</u>	<u>5208</u>	<u>1.0405</u>	<u>0.0228</u>	<u>0.6152</u>
<u>4404</u>	<u>0.6912</u>	<u>0.0151</u>	<u>0.4303</u>	<u>5209</u>	<u>1.0261</u>	<u>0.0226</u>	<u>0.5134</u>
<u>4501</u>	<u>0.2389</u>	<u>0.0052</u>	<u>0.1741</u>	<u>5300</u>	<u>0.1707</u>	<u>0.0038</u>	<u>0.0896</u>
<u>4502</u>	<u>0.0580</u>	<u>0.0013</u>	<u>0.0369</u>	<u>5301</u>	<u>0.0498</u>	<u>0.0011</u>	<u>0.0296</u>
<u>4504</u>	<u>0.1528</u>	<u>0.0033</u>	<u>0.1082</u>	<u>5302</u>	<u>0.0217</u>	<u>0.0005</u>	<u>0.0110</u>
<u>4601</u>	<u>1.1025</u>	<u>0.0242</u>	<u>0.5798</u>	<u>5305</u>	<u>0.0745</u>	<u>0.0016</u>	<u>0.0504</u>
<u>4802</u>	<u>0.4275</u>	<u>0.0093</u>	<u>0.2821</u>	<u>5306</u>	<u>0.0625</u>	<u>0.0014</u>	<u>0.0446</u>
<u>4803</u>	<u>0.3283</u>	<u>0.0070</u>	<u>0.2961</u>	<u>5307</u>	<u>1.0113</u>	<u>0.0223</u>	<u>0.4561</u>
<u>4804</u>	<u>0.6222</u>	<u>0.0135</u>	<u>0.4387</u>	<u>5308</u>	<u>0.1306</u>	<u>0.0028</u>	<u>0.0896</u>
<u>4805</u>	<u>0.3836</u>	<u>0.0083</u>	<u>0.2743</u>	<u>6103</u>	<u>0.0976</u>	<u>0.0021</u>	<u>0.0835</u>
<u>4806</u>	<u>0.0812</u>	<u>0.0018</u>	<u>0.0587</u>	<u>6104</u>	<u>0.5314</u>	<u>0.0116</u>	<u>0.3263</u>
<u>4808</u>	<u>0.6253</u>	<u>0.0136</u>	<u>0.3998</u>	<u>6105</u>	<u>0.5759</u>	<u>0.0127</u>	<u>0.2671</u>
<u>4809</u>	<u>0.3903</u>	<u>0.0085</u>	<u>0.2898</u>	<u>6107</u>	<u>0.1740</u>	<u>0.0037</u>	<u>0.1513</u>
<u>4810</u>	<u>0.1708</u>	<u>0.0037</u>	<u>0.1405</u>	<u>6108</u>	<u>0.5734</u>	<u>0.0125</u>	<u>0.4054</u>
<u>4811</u>	<u>0.4127</u>	<u>0.0089</u>	<u>0.3387</u>	<u>6109</u>	<u>0.1519</u>	<u>0.0033</u>	<u>0.0813</u>
<u>4812</u>	<u>0.4929</u>	<u>0.0107</u>	<u>0.3199</u>	<u>6110</u>	<u>0.8459</u>	<u>0.0185</u>	<u>0.4813</u>
<u>4813</u>	<u>0.2036</u>	<u>0.0044</u>	<u>0.1518</u>	<u>6120</u>	<u>0.4528</u>	<u>0.0100</u>	<u>0.2245</u>
<u>4900</u>	<u>0.2798</u>	<u>0.0062</u>	<u>0.1004</u>	<u>6121</u>	<u>0.5110</u>	<u>0.0112</u>	<u>0.2600</u>

Base Rates Effective January 1, (2012) 2013				Base Rates Effective January 1, (2012) 2013			
Class	Accident Fund	Stay at Work	Medical Aid Fund	Class	Accident Fund	Stay at Work	Medical Aid Fund
6201	0.4640	0.0102	0.2315	6705	1.0472	0.0226	0.8269
6202	0.9320	0.0204	0.5342	6706	0.3749	0.0081	0.2726
6203	0.1224	0.0026	0.1164	6707	5.7200	0.1231	4.9261
6204	0.1641	0.0036	0.1155	6708	9.2814	0.1975	9.6979
6205	0.3159	0.0069	0.2061	6709	0.3464	0.0075	0.2409
6206	0.3115	0.0068	0.2002	6801	1.1170	0.0247	0.4887
6207	1.5595	0.0337	1.2587	6802	0.7898	0.0173	0.4896
6208	0.3017	0.0065	0.2515	6803	1.4287	0.0318	0.4212
6209	0.3984	0.0087	0.2744	6804	0.4717	0.0103	0.2904
6301	0.2032	0.0045	0.0782	6809	6.4856	0.1405	4.9240
6303	0.1074	0.0024	0.0614	6901	0.0000	0.0000	0.0660
6304	0.3904	0.0084	0.3128	6902	1.5931	0.0354	0.5527
6305	0.1324	0.0029	0.0958	6903	11.3132	0.2508	4.2662
6306	0.4339	0.0095	0.2345	6904	0.8761	0.0194	0.3551
6308	0.0955	0.0021	0.0531	6905	0.6698	0.0148	0.3244
6309	0.2859	0.0062	0.1782	6906	0.0000	0.0000	0.3244
6402	0.3363	0.0073	0.2339	6907	1.6832	0.0369	0.9362
6403	0.2007	0.0043	0.1592	6908	0.6082	0.0133	0.3311
6404	0.3352	0.0073	0.2412	6909	0.1499	0.0033	0.1009
6405	0.8424	0.0186	0.4046	7100	0.0442	0.0010	0.0270
6406	0.1486	0.0032	0.1143	7101	0.0347	0.0008	0.0184
6407	0.3394	0.0074	0.2217	7102	4.0666	0.0858	4.8031
6408	0.6453	0.0142	0.3347	7103	1.0239	0.0226	0.4723
6409	1.0812	0.0239	0.4915	7104	0.0422	0.0009	0.0279
6410	0.4269	0.0094	0.2441	7105	0.0333	0.0007	0.0210
6501	0.1945	0.0042	0.1261	7106	0.3079	0.0067	0.2269
6502	0.0422	0.0009	0.0263	7107	0.2901	0.0063	0.2355
6503	0.1137	0.0025	0.0476	7108	0.2335	0.0050	0.1904
6504	0.4536	0.0098	0.3737	7109	0.1859	0.0040	0.1285
6505	0.1447	0.0031	0.1381	7110	0.4966	0.0110	0.2159
6506	0.1519	0.0033	0.1040	7111	0.7247	0.0161	0.2755
6509	0.4253	0.0092	0.3297	7112	0.9217	0.0201	0.6107
6510	0.6737	0.0149	0.2928	7113	0.4995	0.0109	0.3477
6511	0.4844	0.0105	0.3347	7114	0.7211	0.0155	0.6031
6512	0.1963	0.0043	0.1060	7115	0.6305	0.0137	0.4754
6601	0.2750	0.0060	0.1766	7116	0.8409	0.0184	0.5029
6602	0.6545	0.0142	0.4540	7117	1.7056	0.0373	0.9913
6603	0.4433	0.0097	0.2623	7118	1.9595	0.0428	1.2244
6604	0.1073	0.0023	0.0736	7119	1.9361	0.0424	1.1135
6605	0.5161	0.0112	0.3468	7120	8.6413	0.1896	4.7038
6607	0.2010	0.0044	0.1308	7121	8.0855	0.1774	4.4099
6608	0.9685	0.0216	0.2680	7122	0.5889	0.0128	0.4189
6620	4.9459	0.1092	2.1603	7200	2.1784	0.0482	0.9040
6704	0.1750	0.0038	0.1081	7201	2.6166	0.0579	1.0803

**Base Rates Effective
January 1, ((2012)) 2013**

Class	Accident Fund	Stay at Work	Medical Aid Fund
7202	0.0456	0.0010	0.0198
7203	0.1357	0.0029	0.1504
7204	0.0000	0.0000	0.0000
7205	0.0000	0.0000	0.0000
7301	0.5894	0.0129	0.3450
7302	1.2427	0.0271	0.7998
7307	0.5780	0.0126	0.3837
7308	0.4811	0.0104	0.3633
7309	0.3242	0.0070	0.2638
7400	2.6166	0.0579	1.0803

AMENDATORY SECTION (Amending WSR 11-24-026, filed 12/1/11, effective 1/1/12)

WAC 296-17-89502 Industrial insurance accident fund, stay at work, medical aid and supplemental pension rates by class of industry for nonhourly rated classifications. The base rates as set forth below are for classifications whose premium rates are based on units other than hours worked.

Base Rates Effective
January 1, ((2012)) 2013

Class	Accident Fund	Stay at Work	Medical Aid Fund	Supplemental Pension Fund
((0540	0.0325	0.0007	0.0139	0.0007
0541	0.0184	0.0004	0.0064	0.0007
0550	0.0368	0.0008	0.0129	0.0007
0551	0.0239	0.0005	0.0074	0.0007))
0540	0.0361	0.0008	0.0147	0.0007
0541	0.0188	0.0004	0.0065	0.0007
0550	0.0377	0.0008	0.0138	0.0007
0551	0.0236	0.0005	0.0075	0.0007

AMENDATORY SECTION (Amending WSR 11-24-026, filed 12/1/11, effective 1/1/12)

WAC 296-17-89504 Horse racing industry industrial insurance, accident fund, medical aid fund, stay at work and supplemental pension by class.

Base Rates Effective
January 1, ((2012)) 2013

Class	Accident Fund	Stay at Work	Medical Aid Fund	Supplemental Pension Fund
((6614	100*	3*	81*	+
6615	539*	12*	376*	+
6616	19*	0*	10*	+
6617	151*	3*	88*	+
6618	84*	2*	63*	+
6622	102**	3*	84**	+
6623	22**	1*	11**	+))
6614	100*	2*	82*	1
6615	515*	12*	362*	1

Base Rates Effective
January 1, ((2012)) 2013

Class	Accident Fund	Stay at Work	Medical Aid Fund	Supplemental Pension Fund
6616	20*	1*	8*	1
6617	140*	3*	86*	1
6618	80*	2*	67*	1
6622	105**	3*	91**	1
6623	20**	1*	13**	1

* These rates are calculated on a per license basis for parimutuel race tracks and are base rated.

** These rates are calculated on a per horse basis for parimutuel race tracks and are base rated.

AMENDATORY SECTION (Amending WSR 12-11-109, filed 5/22/12, effective 7/1/12)

WAC 296-17-920 Assessment for supplemental pension fund. The amount of ((46.6) 46.4 mils (\$((0.0466) 0.0464)) shall be retained by each employer from the earnings of each worker for each hour or fraction thereof the worker is employed. The amount of money so retained from the employee shall be matched in an equal amount by each employer, except as otherwise provided in these rules, all such moneys shall be remitted to the department on or before the last day of January, April, July and October of each year for the preceding calendar quarter, provided self-insured employers shall remit to the department as provided under WAC 296-15-229. All such moneys shall be deposited in the supplemental pension fund.

AMENDATORY SECTION (Amending WSR 11-24-026, filed 12/1/11, effective 1/1/12)

WAC 296-17B-540 Determining loss incurred for each claim. (1) Calculating the initial loss incurred:

For each of your claims, we will multiply the case incurred loss by the appropriate discounted loss development((, and discount)) factors to determine the initial loss incurred.

If you have a fatality, we will use two hundred ((~~eighty-seven thousand four hundred ten~~) eighty-five thousand dollars as the claim's initial incurred loss for the claim, with two hundred ((~~seventy-five thousand three hundred nine~~) fifty-seven thousand one hundred dollars for accident fund incurred loss and ((~~twelve thousand one hundred one~~) twenty-seven thousand nine hundred dollars for the medical aid incurred loss, regardless of the case incurred loss, and before recovery factors if applicable.

(2) Applying the single loss occurrence limit:

The initial loss incurred for a claim will be the amount we use as the loss incurred unless the single loss occurrence limit applies.

The single loss occurrence limit applies when the sum of all initial losses incurred for your claims arising out of a single event is greater than your selected single loss occurrence limit. In that case, each claim's initial loss incurred will be its proportionate share of your single loss occurrence limit.

(3) Applying the expected loss ratio factors:

The preliminary loss incurred for a claim will be the amount of the initial loss incurred, after application of the single loss limit, multiplied by the appropriate expected loss ratio factor. The accident fund and medical aid fund portions of each claim will have separate expected loss ratio factors applied.

AMENDATORY SECTION (Amending WSR 11-24-026, filed 12/1/11, effective 1/1/12)

WAC 296-17B-900 Retrospective rating plans standard premium size ranges.

**RETROSPECTIVE RATING STANDARD PREMIUM SIZE RANGES
Effective January 1, (~~2012~~) 2013**

Size Group Number	Standard Premium Range	
	From:	To:
1	5,690	6,649
2	6,650	7,529
3	7,530	8,469
4	8,470	9,489
5	9,490	10,579
6	10,580	11,739
7	11,740	12,979
8	12,980	14,299
9	14,300	15,699
10	15,700	17,169
11	17,170	18,749
12	18,750	20,419
13	20,420	22,189
14	22,190	24,069
15	24,070	26,049
16	26,050	28,159
17	28,160	30,379
18	30,380	32,739
19	32,740	35,229
20	35,230	37,869
21	37,870	40,679
22	40,680	43,669
23	43,670	46,829
24	46,830	50,199
25	50,200	53,769
26	53,770	57,569
27	57,570	61,619
28	61,620	65,929
29	65,930	70,519
30	70,520	75,419
31	75,420	80,669
32	80,670	86,289
33	86,290	92,309

Size Group Number	Standard Premium Range	
	From:	To:
34	92,310	98,769
35	98,770	105,699
36	105,700	113,199
37	113,200	121,399
38	121,400	129,999
39	130,000	139,499
40	139,500	149,599
41	149,600	160,499
42	160,500	172,199
43	172,200	184,799
44	184,800	198,599
45	198,600	213,399
46	213,400	229,499
47	229,500	247,099
48	247,100	266,299
49	266,300	287,399
50	287,400	310,399
51	310,400	335,899
52	335,900	364,299
53	364,300	395,899
54	395,900	431,099
55	431,100	470,799
56	470,800	515,899
57	515,900	566,899
58	566,900	625,699
59	625,700	693,499
60	693,500	772,599
61	772,600	865,699
62	865,700	976,799
63	976,800	1,110,999
64	1,111,000	1,275,999
65	1,276,000	1,481,999
66	1,482,000	1,748,999
67	1,749,000	2,100,999
68	2,101,000	2,591,999
69	2,592,000	3,315,999
70	3,316,000	4,510,999
71	4,511,000	6,759,999
72	6,760,000	12,369,999
73	12,370,000	31,659,999
74	31,660,000	and over

WSR 12-24-049
PERMANENT RULES
STATE BOARD OF EDUCATION

[Filed November 30, 2012, 12:32 p.m., effective December 31, 2012]

Effective Date of Rule: Thirty-one days after filing.

Purpose: 1. Meet the requirement of RCW 28A.305.-140(2) to adopt criteria to evaluate the need for a school district waiver from the provisions of RCW 28A.150.200 through 28A.150.220.

2. Meet the requirement of RCW 28A.305.141(3) to adopt criteria to evaluate requests for waivers for a limited number of school districts from the requirement of a minimum one hundred eighty day school year for purposes of economy and efficiency.

3. Simplify the procedure for obtaining expedited waivers under RCW 28A.305.140 by eliminating lengthy provisions in WAC 180-18-050(3) that are excessively difficult for school districts to implement.

4. Establish an expedited procedure for granting of waivers for the purpose of full-day parent-teacher conferences.

5. Make corrections to WAC 180-18-040 and 180-18-050 for clarity, streamlining and consistency with current law.

Citation of Existing Rules Affected by this Order: Amending WAC 180-18-040 and 180-18-050; and new WAC 180-18-065.

Statutory Authority for Adoption: RCW 28A.305.-140(2), 28A.305.141(3).

Adopted under notice filed as WSR 12-17-132 on August 21, 2012.

Number of Sections Adopted in Order to Comply with Federal Statute: New 0, Amended 0, Repealed 0; Federal Rules or Standards: New 0, Amended 0, Repealed 0; or Recently Enacted State Statutes: New 1, Amended 0, Repealed 0.

Number of Sections Adopted at Request of a Nongovernmental Entity: New 0, Amended 0, Repealed 0.

Number of Sections Adopted on the Agency's Own Initiative: New 1, Amended 2, Repealed 0.

Number of Sections Adopted in Order to Clarify, Streamline, or Reform Agency Procedures: New 1, Amended 2, Repealed 0.

Number of Sections Adopted Using Negotiated Rule Making: New 0, Amended 0, Repealed 0; Pilot Rule Making: New 0, Amended 0, Repealed 0; or Other Alternative Rule Making: New 1, Amended 2, Repealed 0.

Date Adopted: November 9, 2012.

Ben Rarick
Executive Director

AMENDATORY SECTION (Amending WSR 10-23-104, filed 11/16/10, effective 12/17/10)

WAC 180-18-040 Waivers from minimum one hundred eighty-day school year requirement (~~and student-to-teacher ratio requirement~~). (1) A district desiring to improve student achievement by enhancing the educational program for all students in the district or for individual schools in the district may apply to the state board of education for a waiver from the provisions of the minimum one

hundred eighty-day school year requirement pursuant to RCW 28A.305.140 and WAC 180-16-215 (~~by~~) while offering the equivalent in annual minimum (~~program~~) instructional hours (~~offerings~~) as prescribed in RCW 28A.150.220 in such grades as are conducted by such school district. The state board of education may grant said (~~initial~~) waiver requests for up to three school years.

(2) (~~A district that is not otherwise ineligible as identified under WAC 180-18-050 (3)(b) may develop and implement a plan that meets the program requirements identified under WAC 180-18-050(3) to improve student achievement by enhancing the educational program for all students in the district or for individual schools in the district for a waiver from the provisions of the minimum one hundred eighty-day school year requirement pursuant to RCW 28A.305.140 and WAC 180-16-215 by offering the equivalent in annual minimum program hour offerings as prescribed in RCW 28A.150.220 in such grades as are conducted by such school district.~~

(3) A district desiring to improve student achievement by enhancing the educational program for all students in the district or for individual schools in the district may apply to the state board of education for a waiver from the student-to-teacher ratio requirement pursuant to RCW 28A.150.250 and WAC 180-16-210, which requires the ratio of the FTE students to kindergarten through grade three FTE classroom teachers shall not be greater than the ratio of the FTE students to FTE classroom teachers in grades four through twelve. The state board of education may grant said initial waiver requests for up to three school years.) The state board of education, pursuant to RCW 28A.305.140(2), shall evaluate the need for a waiver based on whether:

(a) The resolution by the board of directors of the requesting district attests that if the waiver is approved, the district will meet the required annual instructional hour offerings under RCW 28A.150.220(2) in each of the school years for which the waiver is requested;

(b) The purpose and goals of the district's waiver plan are closely aligned with school improvement plans under WAC 180-16-220 and any district improvement plan;

(c) The plan explains goals of the waiver related to student achievement that are specific, measurable, and attainable;

(d) The plan states clear and specific activities to be undertaken that are based in evidence and likely to lead to attainment of the stated goals;

(e) The plan specifies at least one state or locally determined assessment or metric that will be used to collect evidence to show the degree to which the goals were attained;

(f) The plan describes in detail the participation of administrators, teachers, other district staff, parents, and the community in the development of the plan.

(3) In addition to the requirements of subsection (2) of this section, the state board of education shall evaluate requests for a waiver that would represent the continuation of an existing waiver for additional years based on the following:

(a) The degree to which the prior waiver plan's goals were met, based on the assessments or metrics specified in the prior plan;

- (b) The effectiveness of the implemented activities in achieving the goals of the plan for student achievement;
- (c) Any proposed changes in the plan to achieve the stated goals;
- (d) The likelihood that approval of the request would result in advancement of the goals;
- (e) Support by administrators, teachers, other district staff, parents, and the community for continuation of the waiver.

AMENDATORY SECTION (Amending WSR 10-23-104, filed 11/16/10, effective 12/17/10)

WAC 180-18-050 Procedure to obtain waiver. (1) State board of education approval of district waiver requests pursuant to WAC 180-18-030 and 180-18-040 ~~((1) and (3))~~ shall occur at a state board meeting prior to implementation. A district's waiver application shall ~~((be in the form of a resolution adopted by the district board of directors))~~ include, at a minimum, a resolution adopted by the district board of directors, an application form, a proposed school calendar, and a summary of the collective bargaining agreement with the local education association stating the number of professional development days, full instruction days, late-start and early-release days, and the amount of other noninstruction time. The resolution shall identify the basic education requirement for which the waiver is requested and include information on how the waiver will support improving student achievement. The resolution must include a statement attesting that the district will meet the minimum instructional hours requirement of RCW 28A.150.220(2) under the waiver plan. The resolution shall be accompanied by information detailed in the guidelines and application form available on the state board of education's web site.

(2) The application for a waiver and all supporting documentation must be received by the state board of education at least ~~((fifty))~~ forty days prior to the state board of education meeting where consideration of the waiver shall occur. The state board of education shall review all applications and supporting documentation to insure the accuracy of the information. In the event that deficiencies are noted in the application or documentation, districts will have the opportunity to make corrections and to seek state board approval at a subsequent meeting.

~~(((3))~~(a) Under this section, a district meeting the eligibility requirements may develop and implement a plan that meets the program requirements identified under this section and any additional guidelines developed by the state board of education for a waiver from the provisions of the minimum one hundred eighty-day school year requirement pursuant to RCW 28A.305.140 and WAC 180-16-215. The plan must be designed to improve student achievement by enhancing the educational program for all students in the district or for individual schools in the district by offering the equivalent in annual minimum program hour offerings as prescribed in RCW 28A.150.220 in such grades as are conducted by such school district. This section will remain in effect only through August 31, 2018. Any plans for the use of waived days authorized under this section may not extend beyond August 31, 2018.

(b) A district is not eligible to develop and implement a plan under this section if:

- (i) The superintendent of public instruction has identified a school within the district as a persistently low-achieving school; or
- (ii) A district has a current waiver from the minimum one hundred eighty-day school year requirement approved by the board and in effect under WAC 180-18-040.

(c) A district shall involve staff, parents, and community members in the development of the plan.

(d) The plan can span a maximum of three school years.

(e) The plan shall be consistent with the district's improvement plan and the improvement plans of its schools.

(f) A district shall hold a public hearing and have the school board approve the final plan in resolution form.

(g) The maximum number of waived days that a district may use is dependent on the number of learning improvement days, or their equivalent, funded by the state for any given school year. For any school year, a district may use a maximum of three waived days if the state does not fund any learning improvement days. This maximum number of waived days will be reduced for each additional learning improvement day that is funded by the state. When the state funds three or more learning improvement days for a school year, then no days may be waived under this section.

Scenario	Number of learning-improvement days funded by state for a given school year	Maximum number of waived days allowed under this section for the same school year
A	0	3
B	1	2
C	2	1
D	3 or more	0

(h) ~~The plan shall include goals that can be measured through established data collection practices and assessments. At a minimum, the plan shall include goal benchmarks and results that address the following subjects or issues:~~

- ~~(i) Increasing student achievement on state assessments in reading, mathematics, and science for all grades tested;~~
- ~~(ii) Reducing the achievement gap for student subgroups;~~
- ~~(iii) Improving on-time and extended high school graduation rates (only for districts containing high schools).~~

(i) Under this section, a district shall only use one or more of the following strategies in its plan to use waived days:

- (i) Use evaluations that are based in significant measure on student growth to improve teachers' and school leaders' performance;
- (ii) Use data from multiple measures to identify and implement comprehensive, research-based, instructional programs that are vertically aligned from one grade to the next as well as aligned with state academic standards;
- (iii) Promote the continuous use of student data (such as from formative, interim, and summative assessments) to inform and differentiate instruction to meet the needs of individual students;

(iv) Implement strategies designed to recruit, place, and retain effective staff;

(v) Conduct periodic reviews to ensure that the curriculum is being implemented with fidelity, is having the intended impact on student achievement, and is modified if ineffective;

(vi) Increase graduation rates through, for example, credit recovery programs, smaller learning communities, and acceleration of basic reading and mathematics skills;

(vii) Establish schedules and strategies that increase instructional time for students and time for collaboration and professional development for staff;

(viii) Institute a system for measuring changes in instructional practices resulting from professional development;

(ix) Provide ongoing, high-quality, job-embedded professional development to staff to ensure that they are equipped to provide effective teaching;

(x) Develop teacher and school leader effectiveness;

(xi) Implement a school-wide "response-to-intervention" model;

(xii) Implement a new or revised instructional program;

(xiii) Improve student transition from middle to high school through transition programs or freshman academies;

(xiv) Develop comprehensive instructional strategies;

(xv) Extend learning time and community-oriented schools.

(j) The plan must not duplicate activities and strategies that are otherwise provided by the district through the use of late-start and early-release days.

(k) A district shall provide notification to the state board of education thirty days prior to implementing a new plan. The notification shall include the approved plan in resolution form signed by the superintendent, the chair of the school board, and the president of the local education association; include a statement indicating the number of certificated employees in the district and that all such employees will be participating in the strategy or strategies implemented under the plan for a day that is subject to a waiver, and any other required information. The approved plan shall, at least, include the following:

(i) Members of the plan's development team;

(ii) Dates and locations of public hearings;

(iii) Number of school days to be waived and for which school years;

(iv) Number of late-start and early-release days to be eliminated, if applicable;

(v) Description of the measures and standards used to determine success and identification of expected benchmarks and results;

(vi) Description of how the plan aligns with the district and school improvement plans;

(vii) Description of the content and process of the strategies to be used to meet the goals of the waiver;

(viii) Description of the innovative nature of the proposed strategies;

(ix) Details about the collective bargaining agreements, including the number of professional development days (district-wide and individual teacher choice), full instruction days, late-start and early-release days, and the amount of other noninstruction time; and

(x) Include how all certificated staff will be engaged in the strategy or strategies for each day requested.

(l) Within ninety days of the conclusion of an implemented plan a school district shall report to the state board of education on the degree of attainment of the plan's expected benchmarks and results and the effectiveness of the implemented strategies. The district may also include additional information, such as investigative reports completed by the district or third-party organizations, or surveys of students, parents, and staff.

(m) A district is eligible to create a subsequent plan under this section if the summary report of the enacted plan shows improvement in, at least, the following plan's expected benchmarks and results:

(i) Increasing student achievement on state assessments in reading and mathematics for all grades tested;

(ii) Reducing the achievement gap for student subgroups;

(iii) Improving on-time and extended high school graduation rates (only for districts containing high schools).

(n) A district eligible to create a subsequent plan shall follow the steps for creating a new plan under this section. The new plan shall not include strategies from the prior plan that were found to be ineffective in the summary report of the prior plan. The summary report of the prior plan shall be provided to the new plan's development team and to the state board of education as a part of the district's notification to use a subsequent plan.

(o) A district that is ineligible to create a subsequent plan under this section may submit a request for a waiver to the state board of education under WAC 180-18-040(1) and subsections (1) and (2) of this section.)) (3) Under this section, a district seeking to obtain a waiver of no more than five days from the provisions of the minimum one hundred eighty-day school year requirement pursuant to RCW 28A.305.140 solely for the purpose of conducting parent-teacher conferences shall provide notification of the district request to the state board of education at least thirty days prior to implementation of the plan. A request for more than five days must be presented to the state board under subsection (1) of this section for approval. The notice shall provide information and documentation as directed by the state board. The information and documentation shall include, at a minimum:

(a) An adopted resolution by the school district board of directors which shall state, at a minimum, the number of school days and school years for which the waiver is requested, and attest that the district will meet the minimum instructional hours requirement of RCW 28A.150.220(2) under the waiver plan.

(b) A detailed explanation of how the parent-teacher conferences to be conducted under the waiver plan will be used to improve student achievement;

(c) The district's reasons for electing to conduct parent-teacher conferences through full days rather than partial days;

(d) The number of partial days that will be reduced as a result of implementing the waiver plan;

(e) A description of participation by administrators, teachers, other staff and parents in the development of the waiver request;

(f) An electronic link to the collective bargaining agreement with the local education association.

Within thirty days of receipt of the notification, the state board will, on a determination that the required information and documentation have been submitted, notify the requesting district that the requirements of this section have been met and a waiver has been granted.

NEW SECTION

WAC 180-18-065 Waiver from one hundred eighty-day school year requirement for purposes of economy and efficiency—Criteria for evaluation of waiver requests. (1) In order to be granted a waiver by the state board of education under RCW 28A.305.141 to operate one or more schools on a flexible calendar for purposes of economy and efficiency, a school district eligible for such waiver must meet each of the requirements of RCW 28A.305.141(2).

(2) In the event that a greater number of requests for waivers are received that meet the requirement of subsection (1) of this section than may be granted by the state board of education under RCW 28A.305.141(3), priority shall be given to those plans that best redirect monetary savings from the proposed flexible calendar to support student learning.

WSR 12-24-051

PERMANENT RULES

DEPARTMENT OF ECOLOGY

[Order 11-07—Filed November 30, 2012, 12:48 p.m., effective December 31, 2012]

Effective Date of Rule: Thirty-one days after filing.

Other Findings Required by Other Provisions of Law as Precondition to Adoption or Effectiveness of Rule: RCW 43.135.055 requires a majority vote of the legislature to raise or add fees. The 2011 legislature in section 302(2), chapter 50, Laws of 2011, authorizes ecology to increase registration program fees up to thirty-six percent. The 2012 legislature in section 302(9), chapter 158, Laws of 2012, authorizes ecology to reestablish fees for gasoline dispensing facilities.

Purpose: The purpose of this amendment to the Air quality fee regulation, chapter 173-455 WAC, is to:

- Increase fees, including late fees, for periodic registration program sources to more fully cover the actual cost of operating the program.
- Adopt and clarify the process for calculating annual registration program source fees.
- Reestablish fees for gasoline dispensing facilities under ecology's authority to restore its air quality gasoline vapor recovery inspection program.
- Provide a method for increasing most fees in the future. This change will not result in any additional fee increases at this time.
- Make changes to increase the understanding of the rule and clarify the rules' intent. Change the title of this chapter to Air quality fee rule.

Citation of Existing Rules Affected by this Order: Repealing WAC 173-455-110; and amending chapter 173-455 WAC.

Statutory Authority for Adoption: RCW 70.94.151 and chapter 70.94 RCW.

Other Authority: Section 302(2), chapter 50, Laws of 2011 (2ESHB 1087) and section 302(9), chapter 158, Laws of 2012 (3ESHB 2127).

Adopted under notice filed as WSR 12-17-127 on August 21, 2012.

Changes Other than Editing from Proposed to Adopted Version: Ecology expanded applicability to the fee reduction for extreme hardship and payment plan provisions to include gasoline dispensing facilities, noted that fee increases under WAC 173-455-036 must be approved by the legislature, and deleted the requirement that fees collected under this rule are payable to ecology. Refer to the concise explanatory statement for the reasons for these changes.

A final cost-benefit analysis is available by contacting Elena Guilfoil, Department of Ecology, P.O. Box 47600, Olympia, WA 98504-7600, phone (360) 407-6855, fax (360) 407-7534, e-mail Elena.guilfoil@ecy.wa.gov.

Number of Sections Adopted in Order to Comply with Federal Statute: New 0, Amended 0, Repealed 0; Federal Rules or Standards: New 0, Amended 0, Repealed 0; or Recently Enacted State Statutes: New 0, Amended 0, Repealed 0.

Number of Sections Adopted at Request of a Nongovernmental Entity: New 0, Amended 0, Repealed 0.

Number of Sections Adopted on the Agency's Own Initiative: New 1, Amended 6, Repealed 1.

Number of Sections Adopted in Order to Clarify, Streamline, or Reform Agency Procedures: New 1, Amended 6, Repealed 1.

Number of Sections Adopted Using Negotiated Rule Making: New 0, Amended 0, Repealed 0; Pilot Rule Making: New 0, Amended 0, Repealed 0; or Other Alternative Rule Making: New 0, Amended 0, Repealed 0.

Date Adopted: November 30, 2012.

Ted Sturdevant
Director

Chapter 173-455 WAC

AIR QUALITY FEE (~~(REGULATION))~~ RULE

AMENDATORY SECTION (Amending Order 06-14, filed 5/3/07, effective 6/3/07)

WAC 173-455-010 Overview. (~~(It is)~~) The purpose of this chapter is to consolidate most of the air quality related fees into one chapter. This will allow the regulated community easier access to applicable fees.

AMENDATORY SECTION (Amending Order 06-14, filed 5/3/07, effective 6/3/07)

WAC 173-455-030 Applicability. (1) The provisions of this chapter apply to air quality related activities regulated by the department of ecology.

(2) The solid fuel retail sales fee in WAC 173-455-060 and the weather modification fee in WAC 173-455-070 apply statewide. All other provisions of this chapter do not apply in counties regulated by a local air agency.

NEW SECTION

WAC 173-455-036 Fee increases. (1) Ecology must follow the processes in subsections (2) and (3) of this section for increasing any of the following fees:

- (a) Air contaminant source registration fees in WAC 173-455-040;
- (b) Carbon dioxide mitigation program fees in WAC 173-455-050;
- (c) Weather modification fees in WAC 173-455-070;
- (d) Control technology fees in WAC 173-455-100;
- (e) New source review fees in WAC 173-455-120;
- (f) Air pollution standards variance fee in WAC 173-455-130; and
- (g) Nonroad engine permit fee in WAC 173-455-140.

(2) Ecology may propose fee increases in even-numbered years for each year in the upcoming biennium. A workload analysis must support the fee increase. Prior to making any changes, ecology will post the new fees on the agency web site no later than November 30th of the year preceding the date on which the new fees will take place. If directed by RCW 43.135.055, fee increases will only occur after the legislature authorizes the increase.

(3) Ecology may adjust fees by the fiscal growth factor calculated under chapter 43.135 RCW as follows.

$$\text{New fee} = \text{Existing fee} \times (1 + \text{FGF})$$

Where FGF means the annual fiscal growth factor calculated under chapter 43.135 RCW (expressed as a decimal)

AMENDATORY SECTION (Amending Order 06-14, filed 5/3/07, effective 6/3/07)

WAC 173-455-038 Fees not included. This chapter contains all fees required by the air quality program except the following:

- (1) Air operating permit (~~(program)~~) - Fees can be found in chapter 173-401 WAC.
- (2) (~~(Ag)~~) Agricultural burning - Fees can be found in chapter 173-430 WAC.
- (3) Motor vehicle emission inspection - Fees can be found in chapter 173-422A WAC.

AMENDATORY SECTION (Amending Order 06-14, filed 5/3/07, effective 6/3/07)

WAC 173-455-040 Air contaminant source registration fees. (1) (~~(Registration fee determination. In counties~~

~~without an active local air pollution control authority, ecology shall establish registration fees based on workload using the process outlined below. The fees collected shall be sufficient to cover the direct and indirect costs of administering the registration program within ecology's jurisdiction.~~

~~(2) Budget preparation. Ecology shall conduct a workload analysis projecting resource requirements for administering the registration program. Workload estimates shall be prepared on a biennial basis and shall estimate the resources required to perform registration program activities listed in WAC 173-400-099(2). Ecology shall prepare a budget for administering the registration program using workload estimates identified in the workload analysis for the biennium.~~

~~(3) Registration fee schedule. Ecology's registration program budget shall be distributed to sources located in its jurisdiction according to the following:~~

~~(a) Sources requiring periodic registration and inspections shall pay an annual registration fee of four hundred dollars.~~

~~(b) Sources requiring annual registration and inspections shall pay a registration fee comprised of the following three components:)) Ecology will charge a yearly registration fee to cover the cost of implementing the registration program.~~

~~(2) Ecology will determine fee eligibility based on the most current emissions inventory information available for each source.~~

~~(3) A registration program source that shut down during the previous year and is not operating in the current year is not subject to a fee for the current calendar year.~~

~~(4) Periodic registration program source eligibility and fees are determined as follows:~~

~~(a) A source is a periodic registration program source if all of these statements are true:~~

~~(i) A source is included on the source classification list in WAC 173-400-100(1) or the equipment classification list in WAC 173-400-100(2);~~

~~(ii) The source emits at least one pollutant in Table 173-455-040 (4)(c) within the rates in the table; and~~

~~(iii) The source does not emit any pollutant at a rate higher than those in Table 173-455-040 (4)(c).~~

~~(b) The registration fee category and fee for periodic registration program source are determined as follows:~~

~~(i) Ecology will determine whether the periodic sources is in the small, medium, or large category based on the source's most current emissions inventory information.~~

~~(ii) Ecology will determine whether the source's category based on the emission rate of the air contaminant that falls in the category with the highest fee.~~

~~(c) A periodic registration program source must pay the applicable yearly registration fee on Table 173-455-040 (4)(c).~~

**Table 173-455-040 (4)(c)
Periodic Registration Fee Table**

<u>Yearly periodic registration fee</u>	<u>\$450</u>	<u>\$700</u>	<u>\$1,000</u>
<u>Category</u>	<u>Small Periodic Source</u>	<u>Medium Periodic Source</u>	<u>Large Periodic Source</u>

Air Contaminant	Emission Rates		
	Tons per year	Tons per year	Tons per year
Carbon monoxide	5 to < 15	15 to < 30	30 to < 100
Lead	0.005 to < 0.3	0.3 to < 0.45	0.45 to < 0.6
Nitrogen oxides	2.0 to < 5	5 to < 14	14 to < 40
Particulate matter (TSP or total suspended particulates)	1.25 to < 6	6 to < 12	12 to < 25
Particulate matter ₁₀	0.75 to < 3.5	3.5 to < 7	7 to < 15
Particulate matter _{2.5}	0.5 to < 2	2 to < 5	5 to < 10
Sulfur dioxide	2.0 to < 5	5 to < 14	14 to < 40
Volatile organic compounds	2.0 to < 5	5 to < 14	14 to < 40
Toxic air pollutant	> de minimis emissions*	=	=

* "De minimis emissions" means trivial levels of toxic air emissions that do not pose a threat to human health or the environment. WAC 173-460-150 contains the de minimis emission rate of a toxic air pollutant in pounds per averaging period (year, 24-hour, 1-hour).

(5) Annual registration program source fees are determined as follows:

(a) Ecology will determine the annual registration fee based on the most current emissions inventory information.

(b) A source that is included on the source classification list in WAC 173-400-100(1) or the equipment classification list in WAC 173-400-100(2) is an annual registration program source if it meets any of the following criteria:

(i) The source emits one or more air pollutants in Table 173-455-040 (5)(b) at rates greater than those in the table; or

**Table 173-455-040 (5)(b)
Annual Registration Emission Rate Table**

Air Pollutant	Emission Rate
Carbon monoxide	100 tons per year
Lead	0.6 tons per year
Fluorides	3 tons per year
Nitrogen oxides	40 tons per year
Particulate matter	25 tons per year
Particulate matter ₁₀	15 tons per year
Particulate matter _{2.5}	10 tons per year
Reduced sulfur compounds (including H ₂ S)	10 tons per year
Sulfur dioxide	40 tons per year
Sulfuric acid mist	7 tons per year
Total reduced sulfur (including H ₂ S)	10 tons per year

(ii) Annual registration and reporting is necessary to comply with federal reporting requirements or emission standards; or

(iii) Annual registration and reporting is required in a reasonably available control technology determination for the source category; or

(iv) The director of ecology determines that the source poses a potential threat to human health and the environment.

(c) Annual registration program sources must pay a yearly registration fee comprised of the following three components:

Annual Registration Fee Components

Component	Fee Rate
Flat fee	\$1,057 per year
Complexity	\$469 per complexity rating point
Emissions	\$16 per ton

(i) Flat fee component. ((This portion of a source's fee shall be calculated by the equal division of thirty five percent of the budget amount allocated to annual registration sources by the total number of sources requiring annual registration.)) Each source must pay the flat fee component plus the other fees.

(ii) Complexity component. Each source is assigned a complexity rating of 1, 3, or 5 which is based on the estimated amount of time needed by ecology to review and inspect the source. ((This portion of the fee is calculated by dividing forty percent of the budget amount allocated to annually registered sources by the total complexity of sources located in ecology's jurisdiction. The quotient is then multiplied by an individual source's complexity rating to determine that source's complexity portion of the fee.)) The source's complexity rating is multiplied by the complexity fee rate to determine the complexity portion of the yearly registration fee.

(iii) Emissions component. ((This portion of a source's fee is calculated by dividing twenty five percent of the budget amount allocated to annually registered sources by the total billable emissions from those sources. The quotient is then multiplied by an individual source's billable emissions to determine that source's emissions portion of the fee.)) Billable emissions ((include all air pollutants except carbon monoxide and total suspended particulate.

(4) Regulatory orders. Owners or operators registering a source as a synthetic minor must obtain a regulatory order which limits the source's emissions. The owner will be required to pay a fee based on the amount of time required to research and write the order multiplied by an hourly rate of sixty dollars.

(5) Fee reductions for pollution prevention initiatives. Ecology may reduce registration fees for an individual source if that source demonstrates the use of approved pollution pre-

vention measures or best management practices beyond those required of the source.

~~(6)) (in tons per year) include nitrogen oxides, sulfur dioxide, particulate matter (except total suspended particulate), and volatile organic compounds. The source's billable emissions are multiplied by the emissions fee rate to determine the emissions portion of the yearly registration fee.~~

~~(6) Registration fees for gasoline dispensing facilities. Gasoline dispensing facilities must pay a yearly registration fee of one hundred thirty dollars for each storage tank dispensing gasoline.~~

~~(7) Fee reductions for economic hardship(s). If a small business owner ((believes)) who is subject to a periodic registration program fee under subsection (4) of this section or a gasoline dispensing facility subject to subsection (6) of this section thinks the registration fee results in an extreme economic hardship, the small business owner may request ((an extreme hardship)) a fee reduction. The owner or operator must provide sufficient evidence to support a claim of an extreme hardship. ((The factors which ecology may consider in determining whether an owner or operator has special economic circumstances and in setting the extreme hardship fee include: Annual sales; labor force size; market conditions which affect the owner's or operator's ability to pass the cost of the registration fee through to customers; average annual profits; and cumulative effects of multiple site ownership. In no case will a registration fee be reduced below two hundred dollars.~~

~~(7)) The registration fee may be reduced by no more than fifty percent.~~

~~(8) Fee payments.~~

~~(a) A source subject to fees ((specified)) in this section ((shall be paid)) must pay those fees within thirty days of receipt of ecology's billing statement.~~

~~(b) ((All fees collected under this regulation shall be made payable to the Washington department of ecology.)) A late fee ((surcharge)) of ((fifty)) sixty-eight dollars or ten percent of the fee, whichever is more, may be assessed for any fee not received ((after)) within the thirty-day period.~~

~~((8) Dedicated account. All registration fees collected by ecology shall be deposited in the air pollution control account.~~

~~(9) Tracking revenues, time, and expenditures. Ecology shall track revenues collected under this subsection on a source-specific basis. Ecology shall track time and expenditures on the basis of ecology budget functions.~~

~~(10)) (c) A source may request to pay an ecology fee on a payment plan. A late fee will not apply for fees paid by a payment plan as long as the following two conditions are met:~~

~~(i) The source requests a payment plan within thirty days of the receipt of ecology's billing statement.~~

~~(ii) The source pays the fee on time as outlined in the payment plan.~~

~~(9) Additional registration fee for fossil-fueled electric generating facilities. ((A)) Fossil-fueled electric generating ((facility subject to the provisions of chapter 80.70 RCW and RCW 70.94.892, is subject to additional fees pursuant to that chapter)) facilities must pay registration fees required in this~~

section in addition to carbon dioxide mitigation program fees required in WAC 173-455-050.

AMENDATORY SECTION (Amending Order 06-14, filed 5/3/07, effective 6/3/07)

WAC 173-455-100 Control technology fees. (1) General. Ecology may assess and collect a fee as authorized in RCW 70.94.153 or 70.94.154 and described in subsections (2) through (5) of this section.

(2) Fee schedule for source-specific determinations where RACT analysis and determination are performed by ecology.

(a) Basic RACT analysis and determination fee:

(i) Low complexity (the analysis addresses one type of emission unit) - One thousand five hundred dollars;

(ii) Moderate complexity (the analysis addresses two to five types of emissions units) - Seven thousand five hundred dollars;

(iii) High complexity (the analysis addresses more than five types of emission units) - Fifteen thousand dollars.

(b) Additional charges based on criteria pollutant emissions: In addition to those fees required under (a) of this subsection, a fee will be required for a RACT analysis and determination for an emission unit or multiple emission units of uniform design that, individually or in the aggregate, emit one hundred tons per year or more of any criteria pollutant - Two thousand dollars.

(c) Additional charges based on toxic air pollutant emissions: In addition to those fees required under (a) and (b) of this subsection, the following fees will be required as applicable:

(i) RACT analysis and determination for an emissions unit or multiple emissions units of uniform design that, individually or in the aggregate, emit more than two tons per year but not more than ten tons per year of any toxic air pollutant - One thousand dollars; or

(ii) RACT analysis and determination for an emissions unit or multiple emissions units of uniform design that, individually or in the aggregate, emit more than ten tons per year of any toxic air pollutant - Two thousand dollars.

(3) Fee schedule for source-specific determinations where RACT analysis is performed by the source and review and determination conducted by ecology.

(a) Basic RACT review and determination fees:

(i) Low complexity (the analysis addresses one type of emission unit) - One thousand dollars;

(ii) Moderate complexity (the analysis addresses two to five types of emissions units) - Five thousand dollars;

(iii) High complexity (the analysis addresses more than five types of emission units) - Ten thousand dollars.

(b) Additional charges based on criteria pollutant emissions: In addition to those fees required under (a) of this subsection, a fee will be required for a RACT analysis and determination for an emission unit or multiple emissions units of uniform design that, individually or in the aggregate, emit one hundred tons per year or more of any criteria pollutant - One thousand dollars.

(c) Additional charges based on toxic air pollutant emissions: In addition to those fees required under (a) and (b) of

this subsection, the following fees will be required as applicable:

(i) RACT analysis and determination for an emissions unit or multiple emissions units of uniform design that, individually or in the aggregate, emit more than two tons per year but not more than ten tons per year of any toxic air pollutant - Five hundred dollars; or

(ii) RACT analysis and determination for an emissions unit or multiple emissions units of uniform design that, individually or in the aggregate, emit more than ten tons per year of any toxic air pollutant - One thousand dollars.

(4) Fee schedule for reviews authorized under RCW 70.94.153 for the replacement or substantial alteration of control technology.

(a) Notice of construction application. Review and approval of notice of construction application (NOCA) for replacement or substantial alteration of control technology - Three hundred fifty dollars.

(b) RACT analysis and determination. Review and approval of a RACT analysis and determination for affected emission unit - Five hundred dollars.

(5) Fee schedule for categorical RACT determinations. Fees for categorical RACT determinations (for categories with more than three sources) shall be assessed as shown below. The fees described in (a) of this subsection shall be based on the most complex source within a category. Except as provided in (b) and (d) of this subsection, fees for individual sources in the category will be determined by dividing the total source category fee by the number of sources within the category.

(a) RACT analysis and determination (RACT analysis performed by ecology with assistance from sources):

(i) Low complexity source category (average source emissions of individual criteria pollutants are all less than twenty tons per year, average source emissions of individual toxic air pollutants are all less than two tons per year, or the analysis addresses one type of emission unit) - Twenty-five thousand dollars;

(ii) Moderate complexity source category (average source emissions of one or more individual criteria pollutants are greater than twenty tons per year and less than one hundred tons per year, average source emissions of one or more individual toxic air pollutants are greater than two tons per year and less than ten tons per year, or the analysis addresses two to five types of emissions units) - Fifty thousand dollars; or

(iii) High complexity source category (average source emissions of one or more individual criteria pollutants exceed one hundred tons per year, average source emissions of one or more individual toxic air pollutants exceed ten tons per year, or the analysis addresses more than five types of emission units) - One hundred thousand dollars.

(b) If an emission unit is being evaluated for more than one categorical RACT determination within a five-year period, ecology will charge the owner or operator of that emission unit one fee and the fee will reflect the higher complexity categorical RACT determination.

(c) Ecology may adjust the fee to reflect workload savings from source involvement in source category RACT determination.

(d) Ecology may approve alternate methods for allocating the fee among sources within the source category.

(6) Small business fee reduction. The RACT analysis and determination fee identified in subsections (2) through (5) of this section may be reduced for a small business.

(a) To qualify for the small business RACT fee reduction, a business must meet the requirements of "small business" as defined in RCW 43.31.025.

(b) To receive a fee reduction, the owner or operator of a small business must include information in an application demonstrating that the conditions of (a) of this subsection have been met. The application must be signed:

(i) By an authorized corporate officer in the case of a corporation;

(ii) By an authorized partner in the case of a limited or general partnership; or

(iii) By the proprietor in the case of a sole proprietorship.

(c) Ecology may verify the application information and if the owner or operator has made false statements, deny the fee reduction request and revoke previously granted fee reductions.

(d) For small businesses determined to be eligible under (a) of this subsection, the RACT analysis and determination fee shall be reduced to the greater of:

(i) Fifty percent of the RACT analysis and determination fee; or

(ii) Two hundred fifty dollars.

(e) If due to special economic circumstances, the fee reduction determined under (d) of this subsection imposes an extreme hardship on a small business, the small business may request an extreme hardship fee reduction. The owner or operator must provide sufficient evidence to support a claim of an extreme hardship. The factors which ecology may consider in determining whether an owner or operator has special economic circumstances and in setting the extreme hardship fee include: Annual sales; labor force size; market conditions which affect the owner's or operator's ability to pass the cost of the RACT analysis and determination fees through to customers; and average annual profits. In no case will a RACT analysis and determination fee be reduced below one hundred dollars.

(7) Fee reductions for pollution prevention initiatives. Ecology may reduce RACT analysis and determination fees for an individual source if that source is using approved pollution prevention measures.

(8) Fee payments. Fees specified in subsection (4)(a) of this section shall be paid at the time a notice of construction applications is submitted to the department. Other fees specified in subsections (2) through (7) of this section shall be paid no later than thirty days after receipt of an ecology billing statement. For fees specified in subsection (5) of this section, a billing for one-half of the payment from each source will be mailed when the source category rule-making effort is commenced as noted by publication of the CR-101 form in the *Washington State Register*. A billing for the second half of the payment will be mailed when the proposed rule is published in the *Washington State Register*. No order of approval or other action approving or identifying a source to be at RACT will be issued by the department until all fees have been paid by the source. All fees collected under this regula-

tion shall be made payable to the Washington department of ecology.

(9) Dedicated account. All control technology fees collected by the department from permit program sources shall be deposited in the air operating permit account created under RCW 70.94.015. All control technology fees collected by the department from nonpermit program sources shall be deposited in the air pollution control account.

(10) Tracking revenues, time, and expenditures. Ecology shall track revenues on a source-specific basis. For purposes of source-specific determinations under subsections (2) through (4) of this section, ecology shall track time and expenditures on the basis of source complexity categories. For purposes of categorical determinations under subsection (5) of this section, ecology shall track time and expenditures on a source-category basis.

(11) Periodic review. Ecology shall review and, as appropriate, update this section at least once every two years.

AMENDATORY SECTION (Amending Order 10-04, filed 5/31/11, effective 7/1/11)

WAC 173-455-120 New source review fees. (1) General requirements.

(a) The fees in this section apply to:

- (i) Permit applications received on or after July 1, 2011.
- (ii) Requests for ecology review of other actions covered by this section received by ecology on or after July 1, 2011.

(b) Components of permitting fees. Permit fees include initial fees and may include an hourly fee. The initial fee covers up to the number of review hours specified in each fee in this section.

(c) A project may be subject to multiple fees. For example, a project may be subject to both minor and major new source review permit fees and second or third tier review.

(d) An applicant must submit initial fees with an application, notice, or request. An application, notice or request is incomplete until initial fees have been paid.

(i) For purposes of WAC 173-400-111(1), initial fees are considered application fees.

(ii) If ecology determines a project is complex after an applicant submitted the basic project initial fee, then the application is incomplete until the applicant pays the initial complex project fee.

(iii) If ecology determines that a higher initial fee is due after an applicant submitted an application or request, the application or request is considered incomplete until the applicant pays the new initial fee.

(e) If the initial fee paid by an applicant does not cover the cost of processing the application, notice or request, then ecology shall assess a fee based on the actual costs for review in excess of the hours specified in each fee. The assessed fee must be a rate of ninety-five dollars per hour of ecology staff time expended.

(f) Ecology cannot finalize an action covered under this section until all fees are paid. (WAC 173-400-111(3).)

(g) An applicant must pay fees that are due by invoice from ecology within thirty days from the date of the invoice. Ecology will cease processing all applications for which the

required fees have not been received within thirty days of an invoice.

(h) At the time of filing, an applicant must pay all delinquent air quality fees associated with the facility. This is in addition to the fees required by this section. Delinquent fees may include, but are not limited to, registration fees, civil penalties awarded to ecology, or other outstanding fees due under this section.

(i) All fees collected under this rule must be made payable to the department of ecology.

(j) Fees assessed under this section apply without regard to whether ecology approves or denies a request.

Permit fees.

Minor new source review.

(2) Review of new source or modification of an existing source with an emissions increase. (WAC 173-400-110 and 173-400-110(3).)

(a) Basic project: One thousand five hundred dollars plus an hourly rate of ninety-five dollars after sixteen hours.

This fee covers up to sixteen hours of staff time to review the application and issue a final decision. Ecology will bill the applicant ninety-five dollars per hour for each additional hour spent on the application above sixteen hours.

(b) Complex project: Ten thousand dollars plus an hourly rate of ninety-five dollars after one hundred six hours.

(i) This fee covers up to one hundred six hours of staff time to review the application and issue a final decision. Ecology will bill the applicant ninety-five dollars per hour for each additional hour spent on the application above one hundred six hours.

(ii) An application is considered complex if the emissions associated with the application include at least one pollutant for which emissions increases are greater than the levels in the following table:

**Emission Threshold Table
(WAC 173-400-030)**

Air Contaminant	Annual Emission Rate
Carbon monoxide	100 tons per year
Nitrogen oxides	40 tons per year
Sulfur dioxide	40 tons per year
Particulate matter (PM)	25 tons per year of PM emissions
	15 tons per year of PM ₁₀ emissions
	10 tons per year of PM _{2.5} emissions
Volatile organic compounds	40 tons per year
Fluorides	3 tons per year
Lead	0.6 tons per year
Sulfuric acid mist	7 tons per year
Hydrogen sulfide (H ₂ S)	10 tons per year
Total reduced sulfur (including H ₂ S)	10 tons per year
Reduced sulfur compounds (including H ₂ S)	10 tons per year

(iii) Ecology may determine that a project is complex based on consideration of factors that include, but are not limited to:

- (A) Number and complexity of emission units;
- (B) Volume of emissions, including toxicity of emissions;
- (C) Amount and complexity of modeling; or
- (D) Number and kind of applicable state and federal requirements.

(3) Change to an existing order of approval. (WAC 173-400-111(8).)

(a) Ecology will not charge a fee for correcting a mistake by ecology in a permit.

(b) Administrative or simple change: Two hundred dollars plus an hourly rate of ninety-five dollars after three hours.

(i) This fee covers up to three hours of staff time to review the request and issue a final decision. Ecology will bill the applicant ninety-five dollars per hour for each additional hour spent on the request above three hours.

(ii) An administrative or simple change means:

(A) An action not subject to a mandatory public comment period in WAC 173-400-171; and

(B) The reissued approval order requires one hour or less of engineering evaluation and no physical modification of equipment; and

(C) Changes in permit conditions are based on actual operating conditions and the operating conditions require one hour or less of engineering evaluation and the change does not cause a change in allowable emissions.

(c) Complex changes: Eight hundred seventy-five dollars plus an hourly rate of ninety-five dollars after ten hours.

(i) This fee covers up to ten hours of staff time to review the request and issue a final decision. Ecology will bill the applicant ninety-five dollars per hour for each additional hour spent on the request above ten hours.

(ii) This fee excludes an administrative or simple change and changes to an existing permit that result in an emissions increase.

(iii) Examples of complex changes include, but are not limited to:

(A) Changes requiring more than one hour of engineering review;

(B) Consolidation of permits not allowed under simple change;

(C) Request for review of a permit action that is exempt under WAC 173-400-110(5) (Table 110(5) emission-based exemption levels); or

(D) Changes requiring mandatory public comment under WAC 173-400-171.

(d) The fee for a permit modification (as defined in WAC 173-400-030) is located in subsection (2)(a) or (b) of this section.

(4) Request to extend approval to construct or modify a stationary source issued under minor new source review that is set to expire (WAC 173-400-111(7)): One hundred dollars.

An applicant may request an eighteen-month extension of an approval to construct.

(5) Review of general order of approval (WAC 173-400-560).

(a) Category A general order.

(i) SEPA review complete: Five hundred dollars.

(ii) SEPA review required: Seven hundred eighty-five dollars.

(iii) Category A consists of the following general order of approval, including any subsequent updating or replacement:

(A) Concrete batch plants (No. 08-AQG-002);

(B) ~~((Diesel-powered emergency electrical generators (No. 06-AQG-006);~~

~~((C))~~ Rich burn, spark ignition, gaseous fossil fuel-powered emergency electrical generators (No. 06-AQG-005);

~~((D))~~ (C) Perchloroethylene dry cleaners using less than 2100 gallons per year (No. 06-AQG-003);

~~((E))~~ (D) Stationary and portable rock crushers~~((stationary (06-AQG-004)))~~ (No. 11AQ-GO-001);

~~((F))~~ (E) Rock crusher, portable (07-AQG-001);

~~((G))~~ (E) Small water heaters and steam generating boilers (No. ~~((08-AQG-003))~~ 08-AQ-G003); and

~~((H))~~ (F) Automobile body repair and refinishing shops (No. 08-AQG-001).

(b) Category B general order.

(i) SEPA review complete: Eight hundred seventy-five dollars.

(ii) SEPA review required: One thousand one hundred sixty dollars.

(iii) Category B includes a general order of approval developed on or after January 1, 2011. ~~((This))~~ Category B covers, but is not limited to, the following general order of approval, including any subsequent updating or replacement:

(A) Portable and stationary asphalt plants (No. 10AQ-GO-01); and

(B) Dairy manure anaerobic digesters (No. 12AQ-GO-01).

(6) Review of relocation of portable source under WAC 173-400-036, 173-400-110 or 173-400-560.

(a) This fee applies to a portable source who intends to relocate in ecology's jurisdiction with an approval order from another permitting authority.

(i) SEPA review complete: One hundred fifty dollars.

(ii) SEPA review required: Four hundred thirty-five dollars.

(b) This fee applies to a portable source who intends to relocate in ecology's jurisdiction and has operated under an ecology issued approval order or is approved for coverage under an ecology issued general order of approval.

(i) SEPA review complete: No fee.

(ii) SEPA review required: Two hundred eighty-five dollars.

(7) Request to establish a voluntary emission limit (WAC 173-400-091): Five hundred dollars plus an hourly rate of ninety-five dollars after six hours.

(a) This fee covers up to six hours of staff time to review the request and issue a final decision. Ecology will bill the applicant ninety-five dollars per hour for each additional hour spent on the request above six hours.

(b) This fee applies to a regulatory order issued under WAC 173-400-091 that places a limit on emissions.

(i) This fee applies to a request to establish the emission limit in a stand-alone regulatory order.

(ii) This fee does not apply when an emission limit is included as a condition in an approval order for a notice of construction application.

(8) Request to replace or substantially alter control technology: Refer to WAC 173-455-100(4) for fee schedule.

Major new source review preapplication and permit fees.

(9) Request for a written prevention of significant deterioration applicability determination (WAC 173-400-720) or preapplication assistance: Five hundred dollars plus an hourly rate of ninety-five dollars after six hours.

This fee covers up to six hours of staff time to review the request and issue a final decision. Ecology will bill the applicant ninety-five dollars per hour for each additional hour spent on the request above six hours.

(10) Prevention of significant deterioration (PSD) (WAC 173-400-720 and 173-400-730).

(a) PSD permit application: Fifteen thousand dollars plus an hourly rate of ninety-five dollars after one hundred fifty-eight hours.

This fee covers one hundred fifty-eight hours of staff time to review the application and issue a final decision. Ecology will bill the applicant ninety-five dollars per hour for each additional hour spent on the application above one hundred fifty-eight hours.

(b) PSD permit application where greenhouse gases are the sole PSD pollutant being reviewed: Seven thousand five hundred dollars plus an hourly rate of ninety-five dollars after seventy-nine hours.

This fee covers seventy-nine hours of staff time to review the application and issue a final decision. Ecology will bill the applicant ninety-five dollars per hour for each additional hour spent on the application above seventy-nine hours.

(11) Revision to a prevention of significant deterioration permit (WAC 173-400-750).

(a) Administrative revision as defined in WAC 173-400-750(3): One thousand nine hundred dollars plus an hourly rate of ninety-five dollars after twenty hours.

This fee covers twenty hours of staff time to review the application and issue a final decision. Ecology will bill the applicant ninety-five dollars per hour for each additional hour spent on the application above twenty hours.

(b) All other revisions (except major modification): Seven thousand five hundred dollars plus an hourly rate of ninety-five dollars after seventy-nine hours.

This fee covers seventy-nine hours of staff time to review the application and issue a final decision. Ecology will bill the applicant ninety-five dollars per hour for each additional hour spent on the application above seventy-nine hours.

(c) The fee for a major modification of a PSD permit (as defined in WAC 173-400-720) is located in subsection (10)(a) of this section.

(12) Request to extend the following major source approvals that are set to expire: Five hundred dollars. This provision applies to each of the following:

(a) PSD permit, including a major modification;

(b) PSD permit revision;

(c) Approval order for major source nonattainment area permitting; and

(d) A change to an approval order for major source nonattainment area permitting.

(13) Nonattainment area major new source review.

(a) A notice of construction application subject to WAC 173-400-830: Fifteen thousand dollars plus an hourly rate of ninety-five dollars after one hundred fifty-eight hours.

This fee covers one hundred fifty-eight hours of staff time to review the application and issue a final decision. Ecology will bill the applicant ninety-five dollars per hour for each additional hour spent on the application above one hundred fifty-eight hours.

(b) Change to an approval order issued under WAC 173-400-830:

(i) Request to change permit conditions under WAC 173-400-111(8) that is not subject to mandatory public comment in WAC 173-400-171: One thousand nine hundred dollars plus an hourly rate of ninety-five dollars after twenty hours.

This fee covers twenty hours of staff time to review the application and issue a final decision. Ecology will bill the applicant ninety-five dollars per hour for each additional hour spent on the application above twenty hours.

(ii) All other permit changes (except major modification): Seven thousand five hundred dollars plus an hourly rate of ninety-five dollars after seventy-nine hours.

This fee covers seventy-nine hours of staff time to review the application and issue a final decision. Ecology will bill the applicant ninety-five dollars per hour for each additional hour spent on the application above seventy-nine hours.

(iii) The fee for a major modification (as defined in WAC 173-400-810) of an approval order is located in subsection (13)(a) of this section.

(14) Plant-wide applicability limits (WAC 173-400-720).

(a) Request to establish new plant-wide applicability limits: Fifteen thousand dollars plus an hourly rate of ninety-five dollars after one hundred fifty-eight hours.

This fee covers up to one hundred fifty-eight hours of staff time to review the request and establish a plant-wide applicability limit. Ecology will bill the applicant ninety-five dollars per hour for each additional hour spent on the request above one hundred fifty-eight hours.

(b) All other requests, such as increase or renew plant-wide applicability limits; or process an expired plant-wide applicability limit: Seven thousand five hundred dollars plus an hourly rate of ninety-five dollars after seventy-nine hours.

This fee covers up to seventy-nine hours of staff time to increase, renew or process a retired plant-wide applicability limit. Ecology will bill the applicant ninety-five dollars per hour for each additional hour spent on the request above seventy-nine hours.

Other fees.

(15) Second tier review (WAC 173-460-090): Ten thousand dollars plus an hourly rate of ninety-five dollars after one hundred six hours.

(a) This fee covers up to one hundred six hours of staff time to evaluate the health impact assessment protocol and second tier petition, and make a recommendation. Ecology will bill the applicant ninety-five dollars per hour for each additional hour spent on the second tier petition above one hundred six hours.

(b) A second tier petition that becomes subject to third tier review during the course of evaluation continues as a second tier petition for billing purposes. Staff must sum the time spent on this petition and bill the applicant if the total hours exceed one hundred six hours.

(16) Third tier review (WAC 173-460-100): Ten thousand dollars plus an hourly rate of ninety-five dollars after one hundred six hours.

(a) This fee covers up to one hundred six hours of staff time to evaluate the health impact assessment protocol and third tier petition, and make a recommendation. Ecology will bill the applicant ninety-five dollars per hour for each additional hour spent on the second tier petition above one hundred six hours.

(b) This fee does not apply to a second tier petition that becomes a third tier petition.

(17) Ecology may enter into a written cost-reimbursement agreement with an applicant as provided in RCW 70.94.085. Ecology will be reimbursed at a rate of ninety-five dollars per hour.

(18) Small business fee reduction. The new source review fee identified in subsections (2) through (7) of this section may be reduced for a small business.

(a) To qualify for the small business new source review fee reduction, a business must meet the requirements of "small business" as defined in RCW 19.85.020. In RCW 19.85.020, "small business" means any business entity, including a sole proprietorship, corporation, partnership, or other legal entity, that is owned and operated independently from all other businesses, that has the purpose of making a profit, and that has fifty or fewer employees.

(b) To receive a fee reduction, the owner or operator of a small business must include information in the application demonstrating that the conditions of (a) of this subsection have been met. The application must be signed:

(i) By an authorized corporate officer in the case of a corporation;

(ii) By an authorized partner in the case of a limited or general partnership; or

(iii) By the proprietor in the case of a sole proprietorship.

(c) Ecology may verify the application information and, if the owner or operator has made false statements, deny the fee reduction request and revoke previously granted fee reductions.

(d) For small businesses determined to be eligible under (a) of this subsection, the new source review fee shall be reduced to the greater of:

(i) Fifty percent of the new source review fee; or

(ii) Two hundred fifty dollars.

(e) If, due to special economic circumstances, the fee reduction determined under (d) of this subsection imposes an extreme hardship on a small business, the small business may request an extreme hardship fee reduction. The owner or operator must provide sufficient evidence to support a claim

of an extreme hardship. The factors which ecology may consider in determining whether an owner or operator has special economic circumstances and in setting the extreme hardship fee include: Annual sales; labor force size; market conditions which affect the owner's or operator's ability to pass the cost of the new source review fees through to customers; and average annual profits. In no case will a new source review fee be reduced below one hundred dollars.

(19) Fee reductions for pollution prevention initiatives. Ecology may reduce the fees defined in subsections (2) through (7) of this section where the owner or operator of the proposed source demonstrates that approved pollution prevention measures will be used.

(20) Tracking revenues, time, and expenditures. Ecology must track revenues collected under this subsection on a source-specific basis.

(21) Periodic review. To ensure that fees cover the cost of processing the actions in this section, ecology shall review and update this section as necessary.

REPEALER

The following section of the Washington Administrative Code is repealed:

WAC 173-455-110	Registration fees for sources emitting gas vapors.
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WSR 12-24-052

PERMANENT RULES

HEALTH CARE AUTHORITY

[Filed November 30, 2012, 12:50 p.m., effective January 1, 2013]

Effective Date of Rule: January 1, 2013.

Purpose: These rules define the process used by the health care authority's (HCA) medical director to independently access and certify patient decision aids. In addition, the proposed rules allow HCA to charge a fee to the certification applicant to defray the costs of the assessment and certification.

Statutory Authority for Adoption: RCW 7.70.060.

Other Authority: ESHB 2318.

Adopted under notice filed as WSR 12-21-109 on October 23, 2012.

Changes Other than Editing from Proposed to Adopted Version: In response to stakeholders concern, the agency made the following changes to the final rule:

WAC 182-60-005 Authority and purpose.

Under RCW 7.70.060(4), the agency's medical director is authorized to independently assess and certify patient decision aids ~~based on the International Patient Decision Aid Standards.~~

WAC 182-60-010 Definitions.

(2) "**Certification fee**" means a fee assessed by the agency to an individual or organization applicant requesting an independent review of a patient decision aid not already certified by an organization located in the United States ~~and~~ or Canada and recognized by the agency's medical director.

(3) **"Certified patient decision aid"** means a patient decision aid, as defined in this section, for any medical condition or procedure, including abortion as defined in RCW 9.02.170 that:

(a) Is certified by one or more national certifying organizations recognized by the agency's medical director ~~as using review criteria based on the International Patient Decision Aid Standards (IPDAS) developed by the IPDAS Collaboration; or~~

(b) Has been evaluated based on the International Patient Decision Aid Standards by an organization located in the United States ~~and or~~ Canada and has current scores satisfactory to the agency's medical director in each of the following categories: Content criteria, development process criteria, and effectiveness criteria; or

(c) Is independently assessed and certified by the agency's medical director based on the International Patient Decision Aid Standards developed by the IPDAS Collaboration if a current evaluation is not available from an organization located in the United States ~~and or~~ Canada.

(4) **"National certifying organization"** means a group, entity, or organization in the United States ~~and or~~ Canada that ~~is recognized by the agency's medical director uses the International Patient Decision Aid Standards developed by the IPDAS Collaboration to evaluate and certify patient decision aids, and that is determined, based on independent assessment of methods, reliability and validity by the agency's medical director, to meet the requirements in RCW 7.70.060.~~

WAC 182-60-020 National certifying organizations.

The agency's medical director will:

(1) Maintain a list of recognized national certifying organizations so that individuals or organizations seeking certification may identify organizations recognized by the agency's medical director ~~as using the criteria of the International Patient Decision Aid Standards Collaboration and requiring a level of review of the validity and reliability of patient decision aids certified by the organization.~~

WAC 182-60-025 Review process and certification.

(2) A patient decision aid may be ~~used~~ certified if it is reviewed by a national certifying organization and has current scores satisfactory to the agency's medical director in each of the following categories: Content criteria, development process criteria, and effectiveness criteria.

Number of Sections Adopted in Order to Comply with Federal Statute: New 0, Amended 0, Repealed 0; Federal Rules or Standards: New 0, Amended 0, Repealed 0; or Recently Enacted State Statutes: New 0, Amended 0, Repealed 0.

Number of Sections Adopted at Request of a Nongovernmental Entity: New 0, Amended 0, Repealed 0.

Number of Sections Adopted on the Agency's Own Initiative: New 0, Amended 0, Repealed 0.

Number of Sections Adopted in Order to Clarify, Streamline, or Reform Agency Procedures: New 5, Amended 0, Repealed 0.

Number of Sections Adopted Using Negotiated Rule Making: New 0, Amended 0, Repealed 0; Pilot Rule Making: New 0, Amended 0, Repealed 0; or Other Alternative Rule Making: New 5, Amended 0, Repealed 0.

Date Adopted: November 30, 2012.

Kevin M. Sullivan
Rules Coordinator

Chapter 182-60 WAC

PATIENT DECISION AIDS

NEW SECTION

WAC 182-60-005 Authority and purpose. Under RCW 7.70.060(4), the agency's medical director is authorized to independently assess and certify patient decision aids.

NEW SECTION

WAC 182-60-010 Definitions. When used in this chapter:

(1) **"Agency"** means the Washington state health care authority (HCA), created pursuant to chapter 41.05 RCW.

(2) **"Certification fee"** means a fee assessed by the agency to an individual or organization applicant requesting an independent review of a patient decision aid not already certified by an organization located in the United States or Canada and recognized by the agency's medical director.

(3) **"Certified patient decision aid"** means a patient decision aid, as defined in this section, for any medical condition or procedure, including abortion as defined in RCW 9.02.170 that:

(a) Is certified by one or more national certifying organizations recognized by the agency's medical director; or

(b) Has been evaluated based on the International Patient Decision Aid Standards (IPDAS) by an organization located in the United States or Canada and has current scores satisfactory to the agency's medical director in each of the following categories: Content criteria, development process criteria, and effectiveness criteria; or

(c) Is independently assessed and certified by the agency's medical director based on the International Patient Decision Aid Standards developed by the IPDAS Collaboration if a current evaluation is not available from an organization located in the United States or Canada.

(4) **"National certifying organization"** means a group, entity, or organization in the United States or Canada that is recognized by the agency's medical director.

(5) **"Patient decision aid"** means a written, audio-visual, or on-line tool that provides a balanced presentation of the condition and treatment options, benefits, and harms including, if appropriate, a discussion of the limits of scientific knowledge about outcomes and a means to acknowledge that the tool has been fully reviewed and understood.

NEW SECTION

WAC 182-60-020 National certifying organizations. The agency's medical director will:

(1) Maintain a list of recognized national certifying organizations so that individuals or organizations seeking certification may identify organizations recognized by the agency's medical director.

- (2) Consider organizations recommended by applicants for inclusion in the list.
- (3) Update the list as needed.

NEW SECTION

WAC 182-60-025 Review process and certification.

(1) The agency's medical director considers the most current International Patient Decision Aid Standards (IPDAS) developed by the IPDAS Collaboration for evaluation of a patient decision aid.

(2) A patient decision aid may be certified if it is reviewed by a national certifying organization and has current scores satisfactory to the agency's medical director in each of the following categories: Content criteria, development process criteria, and effectiveness criteria.

(3) The applicant requesting review and certification must provide written documentation of the basis for certification as provided in subsection (1) of this section.

(4) The agency's medical director may contract for an assessment of the patient decision aid.

(a) The contract will:

(i) Be with an evidence-based organization or other appropriate entity; and

(ii) Provide an assessment to evaluate the patient decision aid based on the most current International Patient Decision Aid Standards developed by the IPDAS Collaboration using information provided by the applicant and the agency's medical director.

(b) The agency's medical director may use the results of the assessment in whole or part as the basis for a certification determination.

(5) The agency's medical director may establish minimum scores in each of the following criteria: Content criteria, development process criteria, and effectiveness criteria, based on IPDAS Collaboration criteria, necessary to qualify as a certified patient decision aid.

NEW SECTION

WAC 182-60-030 Certification fees.

(1) The agency will charge a certification fee to the applicant to defray the costs of the assessment and certification under this chapter.

(a) Fees will be based on the cost of obtaining an assessment.

(b) One certification fee will apply to each review of a patient decision aid.

(2) Applicants requesting review and certification of a patient decision aid must pay a fee established by the agency to defray the cost of review by a contracted review organization or group.

CLASSIFICATION

Ship length overall (LOA)

Charges:

Per LOA rate schedule in this section.

Boarding charge:

Per each boarding/deboarding at the Port Angeles pilot station.

**WSR 12-24-055
PERMANENT RULES
BOARD OF**

PILOTAGE COMMISSIONERS

[Filed November 30, 2012, 1:58 p.m., effective January 1, 2013]

Effective Date of Rule: January 1, 2013.

Purpose: To establish an annual tariff for pilotage services in the Puget Sound pilotage district.

Citation of Existing Rules Affected by this Order: Amending WAC 363-116-300.

Statutory Authority for Adoption: RCW 88.16.035.

Adopted under notice filed as WSR 12-20-079 on October 3, 2012.

Changes Other than Editing from Proposed to Adopted Version: The proposal to adjust the tariff across-the-board excluding the *training surcharge and transportation to vessels on Puget Sound* categories by an amount in a range between a decrease of ten percent and an increase of fifteen percent was adopted as a three percent increase.

The proposal to create a new tariff category called the *variable expense component* was not adopted.

The proposal to adjust the transportation charge portions of the *British Columbia direct transit charge* category by an amount in a range between a decrease of ten percent and an increase of 5.5 percent was adopted as a three percent increase.

Number of Sections Adopted in Order to Comply with Federal Statute: New 0, Amended 0, Repealed 0; Federal Rules or Standards: New 0, Amended 0, Repealed 0; or Recently Enacted State Statutes: New 0, Amended 0, Repealed 0.

Number of Sections Adopted at Request of a Nongovernmental Entity: New 0, Amended 1, Repealed 0.

Number of Sections Adopted on the Agency's Own Initiative: New 0, Amended 1, Repealed 0.

Number of Sections Adopted in Order to Clarify, Streamline, or Reform Agency Procedures: New 0, Amended 0, Repealed 0.

Number of Sections Adopted Using Negotiated Rule Making: New 0, Amended 0, Repealed 0; Pilot Rule Making: New 0, Amended 0, Repealed 0; or Other Alternative Rule Making: New 0, Amended 1, Repealed 0.

Date Adopted: November 15, 2012.

Peggy Larson
Executive Director

AMENDATORY SECTION (Amending WSR 11-23-176, filed 11/23/11, effective 1/1/12)

WAC 363-116-300 Pilotage rates for the Puget Sound pilotage district. Effective 0001 hours January 1, ~~((2012))~~ 2013, through 2400 hours December 31, ~~((2012))~~ 2013.

RATE

~~\$((48.00))~~ 49.00

CLASSIFICATION

RATE

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
Towing charge - Dead ship:	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.

Compass Adjustment	\$(349.00) <u>359.00</u>
Radio Direction Finder Calibration	\$(349.00) <u>359.00</u>
Launching Vessels	\$(524.00) <u>540.00</u>
Trial Trips, 6 hours or less (minimum \$(984.00) <u>1,014.00</u>)	\$(164.00) <u>169.00</u> per hour
Trial Trips, over 6 hours (two pilots)	\$(328.00) <u>338.00</u> per hour
Shilshole Bay – Salmon Bay	\$(205.00) <u>211.00</u>
Salmon Bay – Lake Union	\$(159.00) <u>164.00</u>
Lake Union – Lake Washington (plus LOA zone from Webster Point)	\$(205.00) <u>211.00</u>
Cancellation Charge	LOA Zone I
Cancellation Charge – Port Angeles:	LOA Zone II

(When a pilot is ordered and vessel proceeds to a port outside the Puget Sound pilotage district without stopping for a pilot or when a pilot order is canceled less than twelve hours prior to the original ETA.)

Waterway and Bridge Charges:

Ships up to 90' beam:

A charge of ~~\$(258.00)~~ 266.00 shall be in addition to bridge charges for any vessel movements both inbound and outbound required to transit south of Spokane Street in Seattle, south of Eleventh Street 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 ~~\$(123.00)~~ 127.00 per bridge.

Ships 90' beam and/or over:

A charge of ~~\$(350.00)~~ 361.00 shall be in addition to bridge charges for any vessel movements both inbound and outbound required to transit south of Spokane Street in Seattle and south of Eleventh Street in any of the Tacoma waterways. Any vessel movements required to transit through bridges shall have an additional charge of ~~\$(244.00)~~ 251.00 per bridge.

(The above charges shall not apply to transit of vessels from Shilshole Bay to the limits of Lake Washington.)

Two or three pilots required:

In a case where two or three pilots are employed for a single vessel waterway or bridge transit, the second and/or third pilot charge shall include the bridge and waterway charge in addition to the harbor shift rate.

Docking Delay After Anchoring:

Applicable harbor shift rate to apply, plus ~~\$(266.00)~~ 274.00 per hour standby. No charge if delay is 60 minutes or less. If the delay is more than 60 minutes, charge is ~~\$(266.00)~~ 274.00 for every hour or fraction thereof.

Sailing Delay:

No charge if delay is 60 minutes or less. If the delay is more than 60 minutes, charge is ~~\$(266.00)~~ 274.00 for every hour or fraction thereof. The assessment of the standby charge shall not exceed a period of twelve hours in any twenty-four-hour period.

Slowdown:

When a vessel chooses not to maintain its normal speed capabilities for reasons determined by the vessel and not the pilot, and when the difference in arrival time is one hour, or greater, from the predicted arrival time had the vessel maintained its normal speed capabilities, a charge of ~~\$(266.00)~~ 274.00 per hour, and each fraction thereof, will be assessed for the resultant difference in arrival time.

Delayed Arrival – Port Angeles:

When a pilot is ordered for an arriving inbound vessel at Port Angeles and the vessel does not arrive within two hours of its ETA, or its ETA is amended less than six hours prior to the original ETA, a charge of ~~\$(266.00)~~ 274.00 for each hour delay, or fraction thereof, shall be assessed in addition to all other appropriate charges.

When a pilot is ordered for an arriving inbound vessel at Port Angeles and the ETA is delayed to six hours or more beyond the original ETA, a cancellation charge shall be assessed, in addition to all other appropriate charges, if the ETA was not amended at least twelve hours prior to the original ETA.

Tonnage Charges:

0 to 20,000 gross tons:

Additional charge to LOA zone mileage of \$~~((0.0082))~~
0.0084 a gross ton for all gross tonnage up to 20,000 gross tons.

20,000 to 50,000 gross tons:

Additional charge to LOA zone mileage of \$~~((0.0846))~~
0.0871 a gross ton for all gross tonnage in excess of 20,000 gross tons up to 50,000 gross tons.

50,000 gross tons and up:

In excess of 50,000 gross tons, the charge shall be \$~~((0.1012))~~ 0.1042 per gross ton.

For vessels where a certificate of international gross tonnage is required, the appropriate international gross tonnage shall apply.

Transportation to Vessels on Puget Sound:

March Point or Anacortes	\$195.00
Bangor	190.00
Bellingham	225.00
Bremerton	167.50
Cherry Point	260.00
Dupont	120.00
Edmonds	42.50
Everett	72.50
Ferndale	247.50
Manchester	162.50
Mukilteo	65.00
Olympia	155.00
Point Wells	42.50
Port Gamble	230.00
Port Townsend (Indian Island)	277.50

Seattle	18.75
Tacoma	87.50

(a) Intraharbor transportation for the Port Angeles port area: Transportation between Port Angeles pilot station and Port Angeles harbor docks - \$15.00.

(b) Interport shifts: Transportation paid to and from both points.

(c) Intraharbor shifts: Transportation to be paid both ways. If intraharbor shift is canceled on or before scheduled reporting time, transportation paid one way only.

(d) 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.

(e) Any new facilities or other seldom used terminals, not covered above, shall be based on mileage x \$2.00 per mile.

Delinquent Payment Charge:

1 1/2% per month after 30 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 charges 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.

British Columbia Direct Transit Charge:

In the event that a pilot consents to board or disembark a vessel at a British Columbia port, which consent shall not unreasonably be withheld, the following additional charges shall apply in addition to the normal LOA, tonnage and other charges provided in this tariff that apply to the portion of the transit in U.S. waters:

Direct Transit Charge \$2,107.00

Sailing Delay Charge. Shall be levied for each hour or fraction thereof that the vessel departure is delayed beyond its scheduled departure from a British Columbia port, provided that no charge will be levied for delays of one hour or less and further provided that the charge shall not exceed a period of 12 hours in any 24 hour period. \$283.00 per hour

Slow Down Charge. Shall be levied for each hour or fraction thereof that a vessel's arrival at a U.S. or BC port is delayed when a vessel chooses not to maintain its normal safe speed capabilities for reasons determined by the vessel and not the pilot, and when the difference in arrival time is one hour, or greater from the arrival time had the vessel maintained its normal safe speed capabilities. \$283.00 per hour

Cancellation Charge. Shall be levied when a pilot arrives at a vessel for departure from a British Columbia port and the job is canceled. The charge is in addition to the applicable direct transit charge, standby, transportation and expenses. \$525.00

Transportation Charge Vancouver Area. Vessels departing or arriving at ports in the Vancouver-Victoria-New Westminster Range of British Columbia. \$~~((499.00))~~ 514.00

Transportation Charge Outports. Vessels departing or arriving at British Columbia ports other than those in the Vancouver-Victoria-New Westminster Range. \$~~((630.00))~~ 649.00

Training Surcharge:

On January 1, 2011, a surcharge of \$15.00 for each pilot trainee then receiving a stipend pursuant to the training program provided in WAC 363-116-078 shall be added to each pilotage assignment.

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	ZONE II	ZONE III	ZONE IV	ZONE V	ZONE VI
(Length Overall)	Intra Harbor	0-30 Miles	31-50 Miles	51-75 Miles	76-100 Miles	101 Miles & Over
((UP to 449	255	396	675	1,006	1,354	1,757
450-459	266	403	679	1,021	1,376	1,766
460-469	268	407	690	1,038	1,395	1,774
470-479	277	419	698	1,059	1,399	1,777
480-489	285	426	701	1,078	1,408	1,785
490-499	289	432	712	1,098	1,424	1,794
500-509	304	440	722	1,110	1,436	1,805
510-519	306	448	729	1,127	1,451	1,812
520-529	310	464	740	1,132	1,464	1,826
530-539	319	470	749	1,145	1,487	1,847
540-549	324	476	766	1,157	1,510	1,864
550-559	331	492	771	1,174	1,522	1,882
560-569	343	512	786	1,185	1,536	1,899
570-579	350	516	789	1,190	1,552	1,912
580-589	365	524	808	1,199	1,561	1,931
590-599	382	536	813	1,205	1,584	1,954
600-609	396	552	824	1,209	1,604	1,963
610-619	418	557	838	1,214	1,619	1,981
620-629	434	564	846	1,229	1,638	2,004
630-639	454	574	855	1,232	1,652	2,021
640-649	472	587	864	1,234	1,666	2,036
650-659	505	597	880	1,244	1,686	2,057
660-669	515	605	887	1,251	1,705	2,073
670-679	534	620	896	1,274	1,724	2,086
680-689	541	630	908	1,284	1,739	2,106
690-699	557	640	922	1,307	1,757	2,150
700-719	582	661	939	1,324	1,791	2,174
720-739	616	679	963	1,342	1,826	2,210
740-759	640	712	982	1,354	1,864	2,250
760-779	665	734	1,006	1,376	1,899	2,279
780-799	698	767	1,021	1,395	1,931	2,320
800-819	726	789	1,041	1,402	1,963	2,355
820-839	749	818	1,065	1,424	2,004	2,382
840-859	781	851	1,086	1,441	2,034	2,423
860-879	810	880	1,105	1,478	2,073	2,458
880-899	838	905	1,127	1,512	2,106	2,494
900-919	863	935	1,146	1,551	2,150	2,528
920-939	890	963	1,174	1,584	2,172	2,563
940-959	922	988	1,191	1,619	2,210	2,594
960-979	943	1,017	1,212	1,652	2,250	2,633
980-999	974	1,041	1,233	1,686	2,279	2,667
1000-1019	1,034	1,108	1,288	1,776	2,387	2,782

LOA	ZONE I	ZONE II	ZONE III	ZONE IV	ZONE V	ZONE VI
(Length Overall)	Intra Harbor	0-30 Miles	31-50 Miles	51-75 Miles	76-100 Miles	101 Miles & Over
1020-1039	1,062	1,141	1,328	1,826	2,459	2,863
1040-1059	1,094	1,169	1,367	1,882	2,529	2,948
1060-1079	1,127	1,210	1,407	1,938	2,608	3,035
1080-1099	1,161	1,244	1,448	1,994	2,684	3,127
1100-1119	1,194	1,282	1,492	2,056	2,765	3,221
1120-1139	1,231	1,323	1,538	2,116	2,848	3,317
1140-1159	1,266	1,360	1,582	2,179	2,934	3,418
1160-1179	1,304	1,399	1,632	2,245	3,021	3,518
1180-1199	1,344	1,442	1,679	2,312	3,113	3,625
1200-1219	1,385	1,485	1,728	2,382	3,206	3,732
1220-1239	1,424	1,530	1,779	2,453	3,300	3,844
1240-1259	1,467	1,575	1,831	2,526	3,400	3,958
1260-1279	1,510	1,621	1,887	2,602	3,503	4,077
1280-1299	1,555	1,671	1,945	2,680	3,605	4,200
1300-1319	1,603	1,718	2,001	2,759	3,714	4,324
1320-1339	1,651	1,771	2,063	2,842	3,824	4,455
1340-1359	1,698	1,824	2,124	2,926	3,939	4,589
1360-1379	1,750	1,877	2,187	3,016	4,055	4,724
1380-1399	1,801	1,933	2,254	3,104	4,178	4,868
1400-1419	1,856	1,992	2,319	3,196	4,302	5,013
1420-1439	1,911	2,052	2,389	3,293	4,433	5,163
1440-1459	1,970	2,114	2,462	3,391	4,565	5,317
1460-1479	2,025	2,175	2,534	3,492	4,702	5,474
1480-1499	2,087	2,240	2,609	3,596	4,841	5,639
1500 & Over	2,150	2,308	2,686	3,706	4,985	5,807))
<u>UP to 449</u>	<u>263</u>	<u>408</u>	<u>695</u>	<u>1,036</u>	<u>1,395</u>	<u>1,810</u>
<u>450 - 459</u>	<u>274</u>	<u>415</u>	<u>699</u>	<u>1,052</u>	<u>1,417</u>	<u>1,819</u>
<u>460 - 469</u>	<u>276</u>	<u>419</u>	<u>711</u>	<u>1,069</u>	<u>1,437</u>	<u>1,827</u>
<u>470 - 479</u>	<u>285</u>	<u>432</u>	<u>719</u>	<u>1,091</u>	<u>1,441</u>	<u>1,830</u>
<u>480 - 489</u>	<u>294</u>	<u>439</u>	<u>722</u>	<u>1,110</u>	<u>1,450</u>	<u>1,839</u>
<u>490 - 499</u>	<u>298</u>	<u>445</u>	<u>733</u>	<u>1,131</u>	<u>1,467</u>	<u>1,848</u>
<u>500 - 509</u>	<u>313</u>	<u>453</u>	<u>744</u>	<u>1,143</u>	<u>1,479</u>	<u>1,859</u>
<u>510 - 519</u>	<u>315</u>	<u>461</u>	<u>751</u>	<u>1,161</u>	<u>1,495</u>	<u>1,866</u>
<u>520 - 529</u>	<u>319</u>	<u>478</u>	<u>762</u>	<u>1,166</u>	<u>1,508</u>	<u>1,881</u>
<u>530 - 539</u>	<u>329</u>	<u>484</u>	<u>771</u>	<u>1,179</u>	<u>1,532</u>	<u>1,902</u>
<u>540 - 549</u>	<u>334</u>	<u>490</u>	<u>789</u>	<u>1,192</u>	<u>1,555</u>	<u>1,920</u>
<u>550 - 559</u>	<u>341</u>	<u>507</u>	<u>794</u>	<u>1,209</u>	<u>1,568</u>	<u>1,938</u>
<u>560 - 569</u>	<u>353</u>	<u>527</u>	<u>810</u>	<u>1,221</u>	<u>1,582</u>	<u>1,956</u>
<u>570 - 579</u>	<u>361</u>	<u>528</u>	<u>813</u>	<u>1,226</u>	<u>1,599</u>	<u>1,969</u>
<u>580 - 589</u>	<u>376</u>	<u>540</u>	<u>832</u>	<u>1,235</u>	<u>1,608</u>	<u>1,989</u>
<u>590 - 599</u>	<u>393</u>	<u>552</u>	<u>837</u>	<u>1,241</u>	<u>1,632</u>	<u>2,013</u>
<u>600 - 609</u>	<u>408</u>	<u>538</u>	<u>849</u>	<u>1,245</u>	<u>1,652</u>	<u>2,022</u>
<u>610 - 619</u>	<u>431</u>	<u>574</u>	<u>863</u>	<u>1,250</u>	<u>1,668</u>	<u>2,040</u>
<u>620 - 629</u>	<u>447</u>	<u>581</u>	<u>871</u>	<u>1,266</u>	<u>1,687</u>	<u>2,064</u>

LOA	ZONE I	ZONE II	ZONE III	ZONE IV	ZONE V	ZONE VI
(Length Overall)	Intra Harbor	0-30 Miles	31-50 Miles	51-75 Miles	76-100 Miles	101 Miles & Over
<u>630 - 639</u>	<u>468</u>	<u>591</u>	<u>881</u>	<u>1,269</u>	<u>1,702</u>	<u>2,082</u>
<u>640 - 649</u>	<u>486</u>	<u>605</u>	<u>890</u>	<u>1,271</u>	<u>1,716</u>	<u>2,097</u>
<u>650 - 659</u>	<u>520</u>	<u>615</u>	<u>906</u>	<u>1,281</u>	<u>1,737</u>	<u>2,119</u>
<u>660 - 669</u>	<u>530</u>	<u>623</u>	<u>914</u>	<u>1,289</u>	<u>1,756</u>	<u>2,135</u>
<u>670 - 679</u>	<u>550</u>	<u>639</u>	<u>923</u>	<u>1,312</u>	<u>1,776</u>	<u>2,149</u>
<u>680 - 689</u>	<u>557</u>	<u>649</u>	<u>935</u>	<u>1,323</u>	<u>1,791</u>	<u>2,169</u>
<u>690 - 699</u>	<u>574</u>	<u>659</u>	<u>950</u>	<u>1,346</u>	<u>1,810</u>	<u>2,215</u>
<u>700 - 719</u>	<u>599</u>	<u>681</u>	<u>967</u>	<u>1,364</u>	<u>1,845</u>	<u>2,239</u>
<u>720 - 739</u>	<u>634</u>	<u>699</u>	<u>992</u>	<u>1,382</u>	<u>1,881</u>	<u>2,276</u>
<u>740 - 759</u>	<u>659</u>	<u>733</u>	<u>1,011</u>	<u>1,395</u>	<u>1,920</u>	<u>2,318</u>
<u>760 - 779</u>	<u>685</u>	<u>756</u>	<u>1,036</u>	<u>1,417</u>	<u>1,956</u>	<u>2,347</u>
<u>780 - 799</u>	<u>719</u>	<u>790</u>	<u>1,052</u>	<u>1,437</u>	<u>1,989</u>	<u>2,390</u>
<u>800 - 819</u>	<u>748</u>	<u>813</u>	<u>1,072</u>	<u>1,444</u>	<u>2,022</u>	<u>2,426</u>
<u>820 - 839</u>	<u>771</u>	<u>843</u>	<u>1,097</u>	<u>1,467</u>	<u>2,064</u>	<u>2,453</u>
<u>840 - 859</u>	<u>804</u>	<u>877</u>	<u>1,119</u>	<u>1,484</u>	<u>2,095</u>	<u>2,496</u>
<u>860 - 879</u>	<u>834</u>	<u>906</u>	<u>1,138</u>	<u>1,522</u>	<u>2,135</u>	<u>2,532</u>
<u>880 - 899</u>	<u>863</u>	<u>932</u>	<u>1,161</u>	<u>1,557</u>	<u>2,169</u>	<u>2,569</u>
<u>900 - 919</u>	<u>889</u>	<u>963</u>	<u>1,180</u>	<u>1,598</u>	<u>2,215</u>	<u>2,604</u>
<u>920 - 939</u>	<u>917</u>	<u>992</u>	<u>1,209</u>	<u>1,632</u>	<u>2,237</u>	<u>2,640</u>
<u>940 - 959</u>	<u>950</u>	<u>1,018</u>	<u>1,227</u>	<u>1,668</u>	<u>2,276</u>	<u>2,672</u>
<u>960 - 979</u>	<u>971</u>	<u>1,048</u>	<u>1,248</u>	<u>1,702</u>	<u>2,318</u>	<u>2,712</u>
<u>980 - 999</u>	<u>1,003</u>	<u>1,072</u>	<u>1,270</u>	<u>1,737</u>	<u>2,347</u>	<u>2,747</u>
<u>1000 - 1019</u>	<u>1,065</u>	<u>1,141</u>	<u>1,327</u>	<u>1,829</u>	<u>2,459</u>	<u>2,865</u>
<u>1020 - 1039</u>	<u>1,094</u>	<u>1,175</u>	<u>1,368</u>	<u>1,881</u>	<u>2,533</u>	<u>2,949</u>
<u>1040 - 1059</u>	<u>1,127</u>	<u>1,204</u>	<u>1,408</u>	<u>1,938</u>	<u>2,605</u>	<u>3,036</u>
<u>1060 - 1079</u>	<u>1,161</u>	<u>1,246</u>	<u>1,449</u>	<u>1,996</u>	<u>2,686</u>	<u>3,126</u>
<u>1080 - 1099</u>	<u>1,196</u>	<u>1,281</u>	<u>1,491</u>	<u>2,054</u>	<u>2,765</u>	<u>3,221</u>
<u>1100 - 1119</u>	<u>1,230</u>	<u>1,320</u>	<u>1,537</u>	<u>2,118</u>	<u>2,848</u>	<u>3,318</u>
<u>1120 - 1139</u>	<u>1,268</u>	<u>1,363</u>	<u>1,584</u>	<u>2,179</u>	<u>2,933</u>	<u>3,417</u>
<u>1140 - 1159</u>	<u>1,304</u>	<u>1,401</u>	<u>1,629</u>	<u>2,244</u>	<u>3,022</u>	<u>3,521</u>
<u>1160 - 1179</u>	<u>1,343</u>	<u>1,441</u>	<u>1,681</u>	<u>2,312</u>	<u>3,112</u>	<u>3,624</u>
<u>1180 - 1199</u>	<u>1,384</u>	<u>1,485</u>	<u>1,729</u>	<u>2,381</u>	<u>3,206</u>	<u>3,734</u>
<u>1200 - 1219</u>	<u>1,427</u>	<u>1,530</u>	<u>1,780</u>	<u>2,453</u>	<u>3,302</u>	<u>3,844</u>
<u>1220 - 1239</u>	<u>1,467</u>	<u>1,576</u>	<u>1,832</u>	<u>2,527</u>	<u>3,399</u>	<u>3,959</u>
<u>1240 - 1259</u>	<u>1,511</u>	<u>1,622</u>	<u>1,886</u>	<u>2,602</u>	<u>3,502</u>	<u>4,077</u>
<u>1260 - 1279</u>	<u>1,555</u>	<u>1,670</u>	<u>1,944</u>	<u>2,680</u>	<u>3,608</u>	<u>4,199</u>
<u>1280 - 1299</u>	<u>1,602</u>	<u>1,721</u>	<u>2,003</u>	<u>2,760</u>	<u>3,713</u>	<u>4,326</u>
<u>1300 - 1319</u>	<u>1,651</u>	<u>1,770</u>	<u>2,061</u>	<u>2,842</u>	<u>3,825</u>	<u>4,454</u>
<u>1320 - 1339</u>	<u>1,701</u>	<u>1,824</u>	<u>2,125</u>	<u>2,927</u>	<u>3,939</u>	<u>4,589</u>
<u>1340 - 1359</u>	<u>1,749</u>	<u>1,879</u>	<u>2,188</u>	<u>3,014</u>	<u>4,057</u>	<u>4,727</u>
<u>1360 - 1379</u>	<u>1,803</u>	<u>1,933</u>	<u>2,253</u>	<u>3,106</u>	<u>4,177</u>	<u>4,866</u>
<u>1380 - 1399</u>	<u>1,855</u>	<u>1,991</u>	<u>2,322</u>	<u>3,197</u>	<u>4,303</u>	<u>5,014</u>
<u>1400 - 1419</u>	<u>1,912</u>	<u>2,052</u>	<u>2,389</u>	<u>3,292</u>	<u>4,431</u>	<u>5,163</u>
<u>1420 - 1439</u>	<u>1,968</u>	<u>2,114</u>	<u>2,461</u>	<u>3,392</u>	<u>4,566</u>	<u>5,318</u>

LOA	ZONE I	ZONE II	ZONE III	ZONE IV	ZONE V	ZONE VI
(Length Overall)	Intra Harbor	0-30 Miles	31-50 Miles	51-75 Miles	76-100 Miles	101 Miles & Over
<u>1440 - 1459</u>	<u>2,029</u>	<u>2,177</u>	<u>2,536</u>	<u>3,493</u>	<u>4,702</u>	<u>5,477</u>
<u>1460 - 1479</u>	<u>2,086</u>	<u>2,240</u>	<u>2,610</u>	<u>3,597</u>	<u>4,843</u>	<u>5,638</u>
<u>1480 - 1499</u>	<u>2,150</u>	<u>2,307</u>	<u>2,687</u>	<u>3,704</u>	<u>4,986</u>	<u>5,808</u>
<u>1500 - Over</u>	<u>2,215</u>	<u>2,377</u>	<u>2,767</u>	<u>3,817</u>	<u>5,135</u>	<u>5,981</u>

WSR 12-24-067
PERMANENT RULES
DEPARTMENT OF
LABOR AND INDUSTRIES

[Filed December 4, 2012, 10:03 a.m., effective January 4, 2013]

Effective Date of Rule: Thirty-one days after filing.

Purpose: To restructure horse racing rates, reporting, and classification rules to better address exposure. The Washington horse racing commission (WHRC) will continue to collect and pay premiums to the department for the industry. The WHRC believes this change will encourage more participation in the industry from those inside and outside Washington state.

Citation of Existing Rules Affected by this Order: Amending WAC 296-17-31021 Units of exposure, 296-17-35203 Special reporting instruction, 296-17A-6708 Jockeys and 296-17A-7302 Parimutuel horse racing: Licensed employments, N.O.C.; new WAC 296-17-89507 Horse racing rates, 296-17A-6625-00 Horse racing—Grooms and assistant trainers (major track), 296-17A-6625-01 Horse racing—Grooms and assistant trainers (nonprofit track), 296-17A-6626-00 Horse racing—Track (major track), 296-17A-6626-01 Horse racing—Track (nonprofit track) and 296-17A-6627 Horse racing—Farm or training center; and repealing WAC 296-17A-6614 Parimutuel horse racing: All employees, except grooms and exercise riders N.O.C.—Major tracks, 296-17A-6615 Parimutuel horse racing: Grooms—Major tracks, 296-17A-6616 Parimutuel horse racing: All employees except grooms and exercise riders, N.O.C.—Nonprofit tracks, 296-17A-6617 Parimutuel horse racing: Grooms—Nonprofit tracks, 296-17A-6622 Parimutuel horse racing: Exercise riders—Major tracks, and 296-17A-6623 Parimutuel horse racing: Exercise riders—Non-profit tracks.

Statutory Authority for Adoption: RCW 51.04.020, 51.16.035, 51.16.210.

Other Authority: RCW 51.16.210.

Adopted under notice filed as WSR 12-21-105 on October 23, 2012.

Changes Other than Editing from Proposed to Adopted Version: Since publication of the proposal, we have clarified language in several places and found one mistake that we have corrected. The proposed rules indicated premiums for classification 6618 for horse owners are calculated on a per horse basis and we have corrected this to indicate premiums

are calculated for classification 6618 on a percentage of ownership in a horse or horses.

Number of Sections Adopted in Order to Comply with Federal Statute: New 0, Amended 0, Repealed 0; Federal Rules or Standards: New 0, Amended 0, Repealed 0; or Recently Enacted State Statutes: New 0, Amended 0, Repealed 0.

Number of Sections Adopted at Request of a Nongovernmental Entity: New 0, Amended 0, Repealed 0.

Number of Sections Adopted on the Agency's Own Initiative: New 6, Amended 4, Repealed 6.

Number of Sections Adopted in Order to Clarify, Streamline, or Reform Agency Procedures: New 0, Amended 0, Repealed 0.

Number of Sections Adopted Using Negotiated Rule Making: New 0, Amended 0, Repealed 0; Pilot Rule Making: New 0, Amended 0, Repealed 0; or Other Alternative Rule Making: New 0, Amended 0, Repealed 0.

Date Adopted: December 4, 2012.

Judy Schurke
 Director

AMENDATORY SECTION (Amending WSR 07-24-045, filed 12/1/07, effective 1/1/08)

WAC 296-17-31021 Units of exposure. (1) What is a "unit of exposure((?)")?"

A unit of exposure is the measure which is used to help determine the premium you will pay. For most businesses the unit of exposure is the **hours** worked by their employees. Because not all employees are compensated based on the hours they work, we have developed reporting alternatives to make reporting to us easier. Those alternatives are outlined in subsection (2) of this section. In other cases, the department *may* authorize some other method in assuming workers hours for premium calculation purposes.

(2) What are the alternatives to actual hours worked?

The exceptions are:

- **Apartment house managers, caretakers, domestic, home care or similar employees:** To determine the number of hours you need to report to us, divide an employee's total compensation, including housing and utility allowances, by the average hourly wage for the classification. The total number of work hours to be reported for each employee is not to exceed 520 hours per quarter. You will need to call us at ((?)360((?))-902-4817 to obtain average hourly wage information.

- **Commission employees - Outside (such as, but not limited to, real estate and insurance sales):** You must select one of the following methods to report your commission employees - Outside:
 - Actual hours worked; or
 - Assumed hours of eight hours per day for part-time employees or one hundred-sixty hours per month for full-time employees.
 All outside commission employees of an employer must be reported by the same method. You cannot report some outside commission employees based on the actual hours they work and others using the eight hours per day for part-time employees or one hundred-sixty hours per month for full-time employees method.
- **Drywall - Stocking, installation, scrapping, taping, and texturing:** Premiums are based on material installed/finished rather than the hours it took to install/finish the drywall.
- **Horse racing - Excluding jockeys:** Employers in the horse racing industry pay premiums on a monthly or daily rate on employees based on a type of license their employees hold rather than the hours the employees work. Premiums are collected by the Washington horse racing commission (~~at the time of licensing~~).
- **Jockeys:** Report ten hours for each race/mount or for any day in which duties are reported.
- **Pilots and flight crew members:** 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.
- **Race car drivers:** Report ten hours for each race/heat.
- **Salaried employees:** You must select one of the following methods to report your salaried employees:
 - Actual hours worked; or
 - Assumed hours of one hundred-sixty hours per month.

All salaried employees of an employer must be reported by the same method. You cannot report some salaried employees based on the actual hours they work and others using the one hundred sixty hours per month method. Provided further, as in the case of contract personnel employed by schools and/or school districts, the school or school district shall report actual hours worked for each employee, one hundred sixty hours per month for each employee, or the department *may* authorize some other method in assuming workers hours for premium calculation purposes.

(3) Can I use assumed work hours for piece workers?

No, if you employ piece workers you must report the actual hours these individuals work for you unless another unit of exposure is required.

Example: *If you have employees engaged in drywall work you would report and pay premiums on the basis of the*

square footage of the material they installed not the hours they worked.

AMENDATORY SECTION (Amending WSR 12-11-109, filed 5/22/12, effective 7/1/12)

WAC 296-17-35203 Special reporting instruction. (1) Professional and semiprofessional athletic teams. Athletes assigned and under contract to a Washington-domiciled sports team are mandatorily covered by Washington industrial insurance. Athletes assigned to a Washington-domiciled sports team but under contract with a parent team domiciled outside of the state are mandatorily covered by Washington industrial insurance unless the player is eligible for coverage in another state, and there is a valid coverage agreement as described below.

A player is eligible for coverage in another state only when both the player and the employer agree in writing that the employment is principally localized in that state.

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 cannot agree to be under California coverage since California doesn't qualify as a state in which the player competes in regularly scheduled games.

(a) Upon request, the department will provide forms to the owners of professional and semiprofessional sports teams for entering into agreements for both the sport player and the sport team. These agreements are referred to as "coverage agreements." Unless coverage is refused in the alternative state, the coverage agreement will determine the worker's home state for workers' compensation coverage.

(b) When a sport team and a player agree to workers' compensation coverage in another state, the following rules apply:

Sport player coverage agreement:

(i) A sport player coverage agreement must be signed by the team (employer) and each individual player (worker) covered out-of-state. Workers' compensation premiums for any work performed by the player before the agreement was signed must be paid to the department. To be valid, an agreement must be:

- Signed by both parties, dated, and show the name of the state where coverage is provided.
- Agree that the player's employment is principally located in that state.
- Kept as part of the employer's records for at least three years after the player is released from the team.

(ii) The employer must provide the department a copy of a sport player coverage agreement when requested. Employers who do not provide the department copies of a sport player coverage agreement when requested are considered not to have secured payment of compensation as required and all premiums and penalties allowed for in Title 51 RCW will apply.

(iii) If the employers' out-of-state workers' compensation insurer rejects an injury claim because the player is a Washington worker, the employer is considered not to have

secured payment of compensation as required and all premium and penalties allowed for in Title 51 RCW apply.

Sport team coverage agreement:

(c) A sport team coverage agreement must be signed by the employer (team) and the qualifying out-of-state workers' compensation insurer. Workers' compensation premiums for work performed before the agreement was signed must be paid to the department. To be valid, an agreement must:

- Be signed by both parties, dated, and show the name of the state where coverage is provided.
- Specify that the team's players are principally localized in that state.
- Specify the insurer agreeing to provide coverage for a team based in Washington.

(d) The sport team coverage agreement must be signed annually. Copies of the agreement along with a current copy of the team's out-of-state insurance policy must be submitted to the department of labor and industries every year the out-of-state coverage is provided.

Premium payments are required for any work performed by Washington players prior to the date the department receives copies of any year's current sports teams' coverage agreement and proof of out-of-state coverage.

(2) **Excluded employments.** Any employer having any person in their employ excluded from industrial insurance whose application for coverage under the elective adoption provisions of RCW 51.12.110 or authority of RCW 51.12.-095 or 51.32.030 has been accepted by the director shall report and pay premium on the actual hours worked for each such person who is paid on an hourly, salaried, part time, percentage of profit or piece basis; or one hundred sixty hours per month for any such person paid on a salary basis employed full time. In the event records disclosing actual hours worked are not maintained by the employer for any person paid on an hourly, salaried, part time, percentage of profits or piece basis, the worker hours of such person shall be determined by dividing the gross wages of such person by the state minimum wage for the purpose of premium calculation. However, when applying the state minimum wage the maximum number of hours assessed for a month will be one hundred sixty.

(3) **Special trucking industry rules.** The following subsection shall apply to all trucking industry employers as applicable.

(a) Insurance liability. Every trucking industry employer operating as an intrastate carrier or a combined intrastate and interstate carrier must insure their workers' compensation insurance liability through the Washington state fund or be self-insured with the state of Washington.

Washington employers operating exclusively in interstate or foreign commerce or any combination of interstate and foreign commerce must insure their workers' compensation insurance liability for their Washington employees with the Washington state fund, be self-insured with the state of Washington, or provide workers' compensation insurance for their Washington employees under the laws of another state when such other state law provides for such coverage.

Interstate or foreign commerce trucking employers who insure their workers' compensation insurance liability under the laws of another state must provide the department with

copies of their current policy and applicable endorsements upon request.

Employers who elect to insure their workers' compensation insurance liability under the laws of another state and who fail to provide updated policy information when requested to do so will be declared an unregistered employer and subject to all the penalties contained in Title 51 RCW.

(b) Reporting. Trucking industry employers insuring their workers' compensation insurance liability with the Washington state fund shall keep and preserve all original time records/books including supporting information from drivers' logs for a period of three calendar years plus three months.

Employers are to report actual hours worked, including time spent loading and unloading trucks, for each driver in their employ. For purposes of this section, actual hours worked does not include time spent during lunch or rest periods or overnight lodging.

Failure of employers to keep accurate records of actual hours worked by their employees will result in the department estimating work hours by dividing gross payroll wages by the state minimum wage for each worker for whom records were not kept. However, in no case will the estimated or actual hours to be reported exceed five hundred twenty hours per calendar quarter for each worker.

(c) Exclusions. Trucking industry employers meeting all of the following conditions are exempted from mandatory coverage.

(i) Must be engaged exclusively in interstate or foreign commerce.

(ii) Must have elected to cover their Washington workers on a voluntary basis under the Washington state fund and must have elected such coverage in writing on forms provided by the department.

(iii) After having elected coverage, withdrew such coverage in writing to the department on or before January 2, 1987.

If all the conditions set forth in (i), (ii), and (iii) of this subsection have not been met, employers must insure their workers' compensation insurance liability with the Washington state fund or under the laws of another state.

(d) Definitions. For purposes of interpretation of RCW 51.12.095(1) and administration of this section, the following terms shall have the meanings given below:

(i) "Agents" means individuals hired to perform services for the interstate or foreign commerce carrier that are intended to be carried out by the individual and not contracted out to others but does not include owner operators as defined in RCW 51.12.095(1).

(ii) "Contacts" means locations at which freight, merchandise, or goods are picked up or dropped off within the boundaries of this state.

(iii) "Doing business" means having any terminals, agents or contacts within the boundaries of this state.

(iv) "Employees" means the same as the term "worker" as contained in RCW 51.08.180.

(v) "Terminals" means a physical location wherein the business activities (operations) of the trucking company are conducted on a routine basis. Terminals will generally

include loading or shipping docks, warehouse space, dispatch offices and may also include administrative offices.

(vi) "Washington" shall be used to limit the scope of the term "employees." When used with the term "employees" it will require the following test for benefit purposes (all conditions must be met).

- The individual must be hired in Washington or must have been transferred to Washington; and
- The individual must perform some work in Washington (i.e., driving, loading, or unloading trucks).

(4) **Forest, range, or timber land services—Industry rule.** Washington law (RCW 51.48.030) requires every employer to make, keep, and preserve records which are adequate to facilitate the determination of premiums due to the state for workers' compensation insurance coverage for their covered workers. In the administration of Title 51 RCW, and as it pertains to the forest, range, or timber land services industry, the department of labor and industries has deemed the records and information required in the various subsections of this section to be essential in the determination of premiums due to the state fund. The records so specified and required, shall be provided at the time of audit to any representative of the department who has requested them.

Failure to produce these required records within thirty days of the request, or within an agreed upon time period, shall constitute noncompliance of this rule and RCW 51.48.-030 and 51.48.040. Employers whose premium computations are made by the department in accordance with (d) of this subsection are barred from questioning, in an appeal before the board of industrial insurance appeals or the courts, the correctness of any assessment by the department on any period for which such records have not been kept, preserved, or produced for inspection as provided by law.

(a) General definitions. For purpose of interpretation of this section, the following terms shall have the meanings given below:

(i) "Actual hours worked" means each workers' composite work period beginning with the starting time of day that the employees' work day commenced, and includes the entire work period, excluding any nonpaid lunch period, and ending with the quitting time each day work was performed by the employee.

(ii) "Work day" shall mean any consecutive twenty-four-hour period.

(b) Employment records. Every employer shall with respect to each worker, make, keep, and preserve original records containing all of the following information for three full calendar years following the calendar year in which the employment occurred:

- (i) The name of each worker;
- (ii) The Social Security number of each worker;
- (iii) The beginning date of employment for each worker and, if applicable, the separation date of employment for each such worker;
- (iv) The basis upon which wages are paid to each worker;
- (v) The number of units earned or produced for each worker paid on a piece-work basis;
- (vi) The risk classification(s) applicable to each worker;

(vii) The number of actual hours worked by each worker, unless another basis of computing hours worked is prescribed in WAC 296-17-31021. For purposes of chapter 296-17 WAC, this record must clearly show, by work day, the time of day the employee commenced work, and the time of day work ended;

(viii) A summary time record for each worker showing the calendar day or days of the week work was performed and the actual number of hours worked each work day;

(ix) In the event a single worker's time is divided between two or more risk classifications, the summary contained in (b)(viii) of this subsection shall be further broken down to show the actual hours worked in each risk classification for the worker;

(x) The workers' total gross pay period earnings;

(xi) The specific sums withheld from the earnings of each worker, and the purpose of each sum withheld;

(xii) The net pay earned by each such worker.

(c) Business, financial records, and record retention. Every employer is required to keep and preserve all original time records completed by their employees for a three-year period. The three-year period is specified in WAC 296-17-352 as the composite period from the date any such premium became due.

Employers who pay their workers by check are required to keep and preserve a record of all check registers and canceled checks; and employers who pay their workers by cash are required to keep and preserve records of these cash transactions which provide a detailed record of wages paid to each worker.

(d) Recordkeeping - Estimated premium computation. Any employer required by this section to make, keep, and preserve records containing the information as specified in (b) and (c) of this subsection, who fails to make, keep, and preserve such records, shall have premiums calculated as follows:

(i) Estimated worker hours shall be computed by dividing the gross wages of each worker for whom records were not maintained and preserved, by the state's minimum wage, in effect at the time the wages were paid or would have been paid. However, the maximum number of hours to be assessed under this provision will not exceed five hundred twenty hours for each worker, per quarter for the first audited period. Estimated worker hours computed on all subsequent audits of the same employer that disclose a continued failure to make, keep, or preserve the required payroll and employment records shall be subject to a maximum of seven hundred eighty hours for each worker, per quarter.

(ii) In the event an employer also has failed to make, keep, and preserve the records containing payroll information and wages paid to each worker, estimated average wages for each worker for whom a payroll and wage record was not maintained will be determined as follows: The employer's total gross income for the audit period (earned, received, or anticipated) shall be reduced by thirty-five percent to arrive at "total estimated wages." Total estimated wages will then be divided by the number of employees for whom a record of actual hours worked was not made, kept, or preserved to arrive at an "estimated average wage" per worker. Estimated hours for each worker will then be computed by dividing the

estimated average wage by the state's minimum wage in effect at the time the wages were paid or would have been paid as described in (d)(i) of this subsection.

(e) Reporting requirements and premium payments.

(i) Every employer who is awarded a forest, range, or timber land services contract must report the contract to the department promptly when it is awarded, and prior to any work being commenced, except as provided in (e)(iii) of this subsection. Employers reporting under the provisions of (e)(iii) of this subsection shall submit the informational report with their quarterly report of premium. The report shall include the following information:

(A) The employers' unified business identification account number (UBI).

(B) Identification of the landowner, firm, or primary contractor who awarded the contract, including the name, address, and phone number of a contact person.

(C) The total contract award.

(D) Description of the forest, range, or timber land services work to be performed under terms of the contract.

(E) Physical location/site where the work will be performed including legal description.

(F) Number of acres covered by the contract.

(G) Dates during which the work will be performed.

(H) Estimated payroll and hours to be worked by employees in performance of the contract.

(ii) Upon completion of every contract issued by a landowner or firm that exceeds a total of ten thousand dollars, the contractor primarily responsible for the overall project shall, in addition to the required informational report described in (e)(i) of this subsection, report the payroll and hours worked under the contract, and submit payment for required industrial insurance premiums. In the event that the contracted work is not completed within a calendar quarter, interim quarterly reports and premium payments are required for each contract for all work done during the calendar quarter. The first such report and payment is due at the end of the first calendar quarter in which the contract work is begun. Additional interim reports and payments will be submitted each quarter thereafter until the contract is completed. This will be consistent with the quarterly reporting cycle used by other employers. Premiums for a calendar quarter, whether reported or not, shall become due and delinquent on the day immediately following the last day of the month following the calendar quarter.

(iii) A contractor may group contracts issued by a landowner, firm, or other contractor that total less than ten thousand dollars together and submit a combined quarterly report of hours, payroll, and the required premium payment in the same manner and periods as nonforestation, range, or timber land services employers.

(f) Out-of-state employers. Forest, range, or timber land services contractors domiciled outside of Washington state must report on a contract basis regardless of contract size for all forest, range, or timber land services work done in Washington state. Out-of-state employers will not be permitted to have an active Washington state industrial insurance account for reporting forest, range, or timber land services work in the absence of an active Washington forest, range, or timber land services contract.

(g) Work done by subcontract. Any firm primarily responsible for work to be performed under the terms of a forest, range, or timber land services contract, that subcontracts out any work under a forest, range, or timber land services contract must send written notification to the department prior to any work being done by the subcontractor. This notification must include the name, address, Social Security number, farm labor contractor number, (UBI) of each subcontractor, and the amount and description of contract work to be done by subcontract.

(h) Forest, range, or timber land services contract release - Verification of hours, payroll, and premium. The department may verify reporting of contractors by way of an on-site visit to an employer's work site. This on-site visit may include close monitoring of employees and employee work hours. Upon receipt of a premium report for a finished contract, the department may conduct an audit of the firm's payroll, employment, and financial records to validate reporting. The entity that awarded the contract can verify the status of the contractors' accounts on-line at the department's web site (www.lni.wa.gov) or by calling the account manager. The landowner, firm, or contractor will not be released from premium liability until the final report for the contract from the primary contractor and any subcontractors has been received and verified by the department.

(i) Premium liability - Work done by contract. Washington law (RCW 51.12.070) places the responsibility for industrial insurance premium payments primarily and directly upon the person, firm, or corporation who lets a contract for all covered employment involved in the fulfillment of the contract terms. Any such person, firm, or corporation letting a contract is authorized to collect from the contractor the full amount payable in premiums. The contractor is in turn authorized to collect premiums from any subcontractor they may employ his or her proportionate amount of the premium payment.

To eliminate premium liability for work done by contract permitted by Title 51 RCW, any person, firm, or corporation who lets a contract for forest, range, or timber land services work must submit a copy of the contract they have let to the department and verify that all premiums due under the contract have been paid.

Each contract submitted to the department must include within its body, or on a separate addendum, all of the following items:

(i) The name of the contractor who has been engaged to perform the work;

(ii) The contractor's UBI number;

(iii) The contractor's farm labor contractor number;

(iv) The total contract award;

(v) The date the work is to be commenced; a description of the work to be performed including any pertinent acreage information;

(vi) Location where the work is to be performed;

(vii) A contact name and phone number of the person, firm, or corporation who let the contract;

(viii) The total estimated wages to be paid by the contractor and any subcontractors;

(ix) The amount to be subcontracted out if such subcontracting is permitted under the terms of the contract;

(x) The total estimated number of worker hours anticipated by the contractor and his/her subcontractors in the fulfillment of the contract terms;

(j) Reports to be mailed to the department. All contracts, reports, and information required by this section are to be sent to:

The Department of Labor and Industries
Reforestation Team 8
P.O. Box 44168
Olympia, Washington 98504-4168

(k) Rule applicability. If any portion of this section is declared invalid, only that portion is repealed. The balance of the section shall remain in effect.

(5) Logging and/or tree thinning—Mechanized operations—Industry rule. The following subsection shall apply to all employers assigned to report worker hours in risk classification 5005, WAC 296-17A-5005.

(a) Every employer having operations subject to risk classification 5005 "logging and/or tree thinning - Mechanized operations" shall have their operations surveyed by labor and industries insurance services staff prior to the assignment of risk classification 5005 to their account. Annual surveys may be required after the initial survey to retain the risk classification assignment.

(b) Every employer assigned to report exposure (work hours) in risk classification 5005 shall supply an addendum report with their quarterly premium report which lists the name of each employee reported under this classification during the quarter, the Social Security number of such worker, the piece or pieces of equipment the employee operated during the quarter, the number of hours worked by the employee during the quarter, and the wages earned by the employee during the quarter.

(6) Special drywall industry rule.

(a) What is the unit of exposure for drywall reporting? Your premiums for workers installing and finishing drywall (reportable in risk classifications 0540, 0541, 0550, and 0551) are based on the amount of material installed and finished, not the number of hours worked.

The amount of material installed equals the amount of material purchased or taken from inventory for a job. No deduction can be made for material scrapped (debris). A deduction is allowed for material returned to the supplier or inventory.

The amount of material finished for a job equals the amount of material installed. No deduction can be made for a portion of the job that is not finished (base layer of double-board application or unfinished rooms).

Example: Drywall installation firm purchases 96 4' x 8' sheets of material for a job which includes some double-wall installation. The firm hangs all or parts of 92 sheets, and returns 4 sheets to the supplier for credit. Drywall finishing firm tapes, primes and textures the same job. Both firms should report 2,944 square feet (4 x 8 x 92) for the job.

(b) I do some of the work myself. Can I deduct material I as an owner install or finish? Yes. Owners (sole proprietors, partners, and corporate officers) who have not elected coverage may deduct material they install or finish.

When you as an owner install (including scrap) or finish (including tape and prime or texture) only part of a job, you may deduct an amount of material proportional to the time you worked on the job, considering the total time you and your workers spent on the job.

To deduct material installed or finished by owners, you must report to the department by job, project, site or location the amount of material you are deducting for this reason. You must file this report at the same time you file your quarterly report:

$$\text{Total owner hours} \div (\text{owner hours} + \text{worker hours}) = \% \text{ of owner discount.}$$

$$\% \text{ of owner discount} \times (\text{total footage of job} - \text{subcontracted footage, if any}) = \text{Total owner deduction of footage.}$$

(c) Can I deduct material installed or finished by subcontractors? You may deduct material installed or taped by subcontractors you are not required to report as your workers. You may not deduct for material only scrapped or primed and textured by subcontractors.

To deduct material installed or taped by subcontractors, you must report to the department by job, project, site or location the amount of material being deducted. You must file this report at the same time you file your quarterly report. You must have and maintain business records that support the number of square feet worked by the subcontractor.

(d) I understand there are discounted rates available for the drywall industry. How do I qualify for them? To qualify for discounted drywall installation and finishing rates, you must:

(i) Have an owner attend two workshops the department offers (one workshop covers claims and risk management, the other covers premium reporting and recordkeeping);

(ii) Provide the department with a voluntary release authorizing the department to contact material suppliers directly about the firm's purchases;

(iii) Have and keep all your industrial insurance accounts in good standing (including the accounts of other businesses in which you have an ownership interest), which includes fully and accurately reporting and paying premiums as they come due, including reporting material deducted as owner or subcontractor work;

(iv) Provide the department with a supplemental report (filed with the firm's quarterly report) showing by employee the employee's name, Social Security number, the wages paid them during the quarter, how they are paid (piece rate, hourly, etc.), their rate of pay, and what work they performed (installation, scrapping, taping, priming/texturing); and

(v) Maintain accurate records about work you subcontracted to others and materials provided to subcontractors (as required by WAC 296-17-31013), and about payroll and employment (as required by WAC 296-17-35201).

The discounted rates will be in effect beginning with the first quarter your business meets all the requirements for the discounted rates.

Note: If you are being audited by the department while your application for the discounted classifications is pending, the department will not make a final decision regarding your rates until the audit is completed.

(e) **Can I be disqualified from using the discounted rates?** Yes. You can be disqualified from using the discounted rates for three years if you:

- (i) Do not file all reports, including supplemental reports, when due;
- (ii) Do not pay premiums on time;
- (iii) Underreport the amount of premium due; or
- (iv) Fail to maintain the requirements for qualifying for the discounted rates.

Disqualification takes effect when a criterion for disqualification exists.

Example: A field audit in 2002 reveals that the drywall installation firm underreported the amount of premium due in the second quarter of 2001. The firm will be disqualified from the discounted rates beginning with the second quarter of 2001, and the premiums it owed for that quarter and subsequent quarters for three years will be calculated using the nondiscounted rates.

If the drywall underwriter learns that your business has failed to meet the conditions as required in this rule, your business will need to comply to retain using the discounted classifications. If your business does not comply promptly, the drywall underwriter may refer your business for an audit.

If, as a result of an audit, the department determines your business has not complied with the conditions in this rule, your business will be disqualified from using the discounted classifications for three years (thirty-six months) from the period of last noncompliance.

(f) **If I discover I have made an error in reporting or paying premium, what should I do?** If you discover you have made a mistake in reporting or paying premium, you should contact the department and correct the mistake. Firms not being audited by the department that find errors in their reporting and paying premiums, and that voluntarily report their errors and pay any required premiums, penalties and interest promptly, will not be disqualified from using the discounted rates unless the department determines they acted in bad faith.

(7) **Safe patient handling rule.** The following subsection will apply to all hospital industry employers as applicable.

(a) Definitions. For the purpose of interpretation of this section, the following terms shall have the meanings given below:

(i) "Hospital" means an "acute care hospital" as defined in (a)(ii) of this subsection, a "mental health hospital" as defined in (a)(iii) of this subsection, or a "hospital, N.O.C. (not otherwise classified)" as defined in (a)(iv) of this subsection.

(ii) "Acute care hospital" means any institution, place, building, or agency providing accommodations, facilities, and services over a continuous period of twenty-four hours or more for observation, diagnosis, or care of two or more individuals not related to the operator who are suffering from illness, injury, deformity, or abnormality, or from any other condition for which obstetrical, medical, or surgical services would be appropriate for care or diagnosis. "Hospital" as used in this rule does not include:

- Hotels, or similar places furnishing only food and lodging, or simply domiciliary care;

- Clinics, or physicians' offices where patients are not regularly kept as bed patients for twenty-four hours or more;
- Nursing homes, as defined and which come within the scope of chapter 18.51 RCW;
- Birthing centers, which come within the scope of chapter 18.46 RCW;
- Psychiatric or alcoholism hospitals, which come within the scope of chapter 71.12 RCW;
- Any other hospital or institution specifically intended for use in the diagnosis and care of those suffering from mental illness, mental retardation, convulsive disorders, or other abnormal mental conditions.

Furthermore, nothing in this chapter will be construed as authorizing the supervision, regulation, or control of the remedial care or treatment of residents or patients in any hospital conducted for those who rely primarily upon treatment by prayer or spiritual means in accordance with the creed or tenets of any well-recognized church or religious denominations.

(iii) "Mental health hospital" means any hospital operated and maintained by the state of Washington for the care of the mentally ill.

(iv) "Hospitals, N.O.C." means health care facilities that do not qualify as acute care or mental health hospitals and may be privately owned facilities established for purposes such as, but not limited to, treating psychiatric disorders and chemical dependencies or providing physical rehabilitation.

(v) "Safe patient handling" means the use of engineering controls, lifting and transfer aids, or assistance devices, by lift teams or other staff, instead of manual lifting to perform the acts of lifting, transferring and repositioning health care patients.

(vi) "Lift team" means hospital employees specially trained to conduct patient lifts, transfers, and repositioning using lifting equipment when appropriate.

(vii) "Department" means the department of labor and industries.

(b) Hospitals will report worker hours in the risk classification that describes the nature of their operations and either their level of implementation of, or need for, the safe patient handling program.

(c) A fully implemented safe patient handling program must include:

(i) Acquisition of at least the minimum number of lifts and/or appropriate equipment for use by lift teams as specified in chapters 70.41 and 72.23 RCW.

(ii) An established safe patient handling committee with at least one-half of its membership being front line, nonmanagerial direct care staff to design and recommend the process for implementing a safe patient handling program.

(iii) Implementation of a safe patient handling policy for all shifts and units.

(iv) Conducting patient handling hazard assessments to include such variables as patient-handling tasks, types of nursing units, patient populations, and the physical environment of patient care areas.

(v) Developing a process to identify appropriate use of safe patient handling policy based on a patient's condition and availability of lifting equipment or lift teams.

(vi) Conducting an annual performance evaluation of the program to determine its effectiveness with results reported to the safe patient handling committee.

(vii) Consideration, when appropriate, to incorporate patient handling equipment or the physical space and construction design needed to incorporate that equipment at a later date during new construction or remodeling.

(viii) Development of procedures that allow employees to choose not to perform or participate in patient handling activities that the employee believes will pose a risk to him/herself or to the patient.

(d) Department staff will conduct an on-site survey of each acute care and mental health hospital before assigning a risk classification. Subsequent surveys may be conducted to confirm whether the assigned risk classification is still appropriate.

(e) To remain in classification 6120-00 or 7200-00, a hospital must submit a copy of the annual performance evaluation of their safe patient handling program, as required by chapters 70.41 and 72.23 RCW, to the Employer Services Program, Department of Labor and Industries, P.O. Box 44140, Olympia, Washington, 98504.

(8) Rules concerning work by Washington employers outside the state of Washington (extraterritorial coverage).

(a) **General definitions.** For purposes of this section, the following terms mean:

(i) "Actual hours worked" means the total hours of each Washington worker's composite work period during which work was performed by the worker beginning with the time the worker's work day commenced, and ending with the quitting time each day excluding any nonpaid lunch period.

(ii) "Work day" means any consecutive twenty-four-hour period.

(iii) "Temporary and incidental" means work performed by Washington employers on jobs or at job sites in another state for thirty or fewer consecutive or nonconsecutive full or partial work days within a calendar year. Temporary and incidental work days are calculated on a per state basis. The thirty-day temporary and incidental period begins on January 1 of each year.

(iv) "Proof of out-of-state coverage" means a copy of a valid certificate of liability insurance for workers' compensation issued by:

(A) An insurer licensed to write workers' compensation insurance coverage in that state; or

(B) A state workers' compensation fund in the state in which the employer will be working.

Note: Most certificates are written for a one-year period. The employer must provide the department with a current certificate of liability insurance for workers' compensation covering all periods the employer works in another state. If the policy is canceled, the employer must provide the department with a current in-force policy.

(v) "Worker" means every person in this state who is engaged in the employment of an employer under Title 51 RCW whether by way of manual labor or otherwise in the course of his or her employment; also every person in this state who is engaged in the employment of or who is working under an independent contract, the essence of which is his or

her personal labor for an employer whether by way of manual labor or otherwise.

(vi) "Employer" means any person, body of persons, corporate or otherwise, and the legal representatives of a deceased employer, all while engaged in this state in any work covered by the provisions of Title 51 RCW, by way of trade or business, or who contracts with one or more workers, the essence of which is the personal labor of such worker or workers.

(b) **Does a Washington employer have to pay premiums in both states while Washington workers are temporarily working in another state?** A Washington employer must continue to pay Washington premiums for Washington workers performing temporary and incidental work in another state. If the Washington employer has Washington workers who work for more than thirty days in another state, that employer will not need to pay premiums in Washington for work in the other state during the calendar year, as long as that employer fulfills the following requirements:

(i) Provides the department with proof of out-of-state coverage for the Washington workers working out-of-state.

(ii) Keeps the policy continuously in force from the date the Washington employer's work exceeds the temporary and incidental period until the date the Washington employer no longer has Washington workers working in the other state. Failure to maintain a policy at the required level of workers' compensation coverage for the number of Washington workers working out-of-state may subject the Washington employer to payment of all premiums, penalties, and interest dues in the state of Washington.

(iii) For the first quarterly reporting period and all subsequent quarters during the same calendar year following the date the Washington employer's work exceeds the temporary and incidental period in the other state, the Washington employer must file a supplemental report of out-of-state work with their workers' compensation employer's quarterly report with the department. This supplemental report is available at: <http://www.LNI.wa.gov/ClaimsIns/Insurance/File/ExtraTerritorial/Default.asp>

(iv) Subitems (b)(i), (ii), and (iii) of this subsection must be met in each state in which the Washington employer has Washington workers working in excess of the temporary and incidental period.

Note: Workers' compensation coverage requirements vary widely among states. Washington employers should contact the regulatory agency in other states to determine the appropriate premium and coverage obligations in those states.

(c) **What if a Washington employer knows the Washington workers' work in another state will exceed the temporary and incidental period?** If the Washington employer knows their Washington workers will be working in another state in excess of the temporary and incidental period, the employer must immediately provide the department with proof of out-of-state coverage in order to avoid Washington premium liability for hours worked during the temporary and incidental period.

Reminder: The temporary and incidental period applies separately to each state in which the Washington employer worked.

(d) **What if a Washington employer anticipates its out-of-state work will exceed the temporary and incidental period, but that does not occur?** If a Washington employer did not pay workers' compensation premium to Washington during the temporary and incidental period, and at the end of the calendar year Washington workers of the Washington employer had worked fewer than thirty consecutive or nonconsecutive days in another state, by the filing of the fourth quarter report, the Washington employer must file amended reports for the calendar year. The employer may be required to pay Washington premiums, penalties, and interest. The fourth quarter report is due by January 31 of the following year.

(e) **What records must the employer keep while employing Washington workers in another state?** In addition to filing the supplemental report of out-of-state work, the Washington employer is required to keep the same records that are kept for Washington workers working in Washington. The records are listed in WAC 296-17-35201 and must be provided at the time of audit to any authorized representative of the department who has requested them.

(f) **What reports does a Washington employer file to avoid paying Washington workers' compensation premiums when employing Washington workers in another state for work that exceeds temporary and incidental?** A Washington employer must submit the workers' compensation employer's quarterly report and a supplemental report of out-of-state work to the department for each state in which that employer has Washington workers performing work. The supplemental report must include the following information:

- (i) The Washington employer's unified business identification number (UBI).
- (ii) The Washington employer's department account identification number.
- (iii) The Social Security numbers for those Washington worker(s) performing work out-of-state.
- (iv) The last name, first name, and middle initial of those Washington worker(s) performing work out-of-state.
- (v) The gross payroll paid during the quarter for those Washington worker(s) performing work out-of-state.
- (vi) The Washington workers' compensation risk classification(s) that would have applied for each Washington worker performing work out-of-state.
- (vii) The total number of hours that each Washington worker performed work out-of-state during the quarter.
- (viii) In addition to completing the supplemental report of out-of-state work, the Washington employer must keep a record of all contracts awarded and worked under each state. Copies of pertinent records must be made available to auditors in the event of an audit.

(g) **Where do Washington workers file their workers' compensation claims if injured in the course of employment outside of Washington state?** Washington workers may file their claim in the state where they were injured or in Washington state.

Washington employers must inform their Washington workers of their right to file for workers' compensation benefits in Washington or the state of injury.

The cost of these claims, if accepted by the department and assigned to the Washington employer's account, will be

used in the calculations that determine the employer's experience factor and the appropriate risk classification base rate.

(h) **If the Washington employer's work in another state exceeds the temporary and incidental period, may the Washington employer obtain a credit or refund for the temporary and incidental period that workers' compensation premiums were paid to Washington?** Yes, but only if the Washington employer:

- (i) Obtained workers' compensation insurance for all hours worked in the other state during the calendar year;
- (ii) Provides proof of out-of-state coverage;
- (iii) Filed the appropriate quarterly reports with the department when due; and
- (iv) Otherwise complied with all statutory and regulatory requirements of Washington state.

(9) **Special for-hire taxi/industry rules.** All for-hire vehicles must be covered for workers' compensation insurance. The owner of the vehicle is responsible for the workers' compensation insurance premiums. Those businesses that provide only cabulance or limousine services must report actual hours worked.

(a) **What is the unit of exposure for taxis?** Flat rate by driver - The rate is based on four hundred eighty hours per driver each quarter.

Flat rate by vehicle - The rate is based on nine hundred sixty hours per vehicle each quarter.

Actual hours - The rate is based on actual hours worked.

(b) **Can I use a flat rate for reporting some vehicles and actual hours for reporting other vehicles?** No, you must choose to report using only one of the three methods: Flat rate per driver, flat rate per vehicle, or actual hours worked. Owners who choose to report by driver or by actual hours worked must maintain verifiable records, such as lease agreements or payroll records. Where verifiable records are not available or not maintained, the owner must pay premiums on the flat rate of nine hundred sixty hours per vehicle each quarter.

(c) **What happens if premiums are not paid?** If the for-hire/taxi vehicle owner does not pay premiums, the department will report nonpayment to the department of licensing. The department of licensing will suspend or revoke the for-hire vehicle certificate until the premiums are paid.

(10) Horse racing industry rules. These rules apply to persons licensed by the Washington horse racing commission (WHRC) and governed by WAC 260-36-250.

(a) Who is responsible for paying industrial insurance premiums?

(i) The trainer will be responsible to pay the industrial insurance premiums owed. Premiums will be paid to the WHRC monthly, at the end of the coverage month or before the trainer leaves the track taking his/her horses when leaving before the end of the coverage month. WHRC will submit premiums to the department of labor and industries on a quarterly basis. The employee must be properly licensed by the WHRC for the duties being performed. This includes all exercise riders and pony riders who need steward approval of their license application, whether at the track or at the farm.

(ii) Licensed trainers shall be assessed:

(A) One unit of premiums in classification 6625 for each licensed groom or assistant trainer employed at any one time:

(B) One unit of premiums in classification 6626 for licensed exercise riders and pony riders charged per stall for each day the trainer has a horse housed in a stall at a licensed track during a licensed meet; and

(C) One unit of premiums in classification 6627 for licensed exercise riders and pony riders for each calendar day a licensed exercise rider or pony rider works under contract for the trainer at a location other than at a licensed track during a licensed meet.

(b) What does the trainer do when an employee leaves the job? Trainers must notify the WHRC within forty-eight hours when any employee leaves their employ. If a trainer fails to notify the WHRC timely, the trainer will be responsible for the full premium payment until notification is made.

(c) When are track employees covered under horse racing classifications?

(i) Track employees are only covered on the grounds of a Washington race track during its licensed race meet and periods of training. The licensed race meet and periods of training apply to that period of time when the WHRC has authority on the grounds, including the period before the live race meet begins, when horses are exercised in preparation for competition, and through the end of the licensed race meet.

(ii) Covered track employees who are licensed exercise riders or pony riders may work off the grounds of a Washington race track, but only after obtaining a farm employee license. The trainer must notify the WHRC when the employee will be working off the grounds, so that the additional per-day farm employee premium can be calculated and assessed to the trainer for each day the track employee works off the grounds.

(iii) Employees working on the grounds of a Washington race track prior to or after this period must be covered as farm employees (classification 6627) to be able to make a claim against the horse racing industry account, or the trainer can cover such employees under another account (classification 7302).

(d) Who can be covered under the farm employee classification (6627)?

(i) Licensed exercise riders and pony riders working at the farm must be assigned to a trainer and not the farm. Such employees cannot be assigned to the owner of the farm or training center unless the owner is licensed as a trainer.

(ii) Covered farm employees who are licensed exercise riders or pony riders may come to the Washington race track to assist the trainer during the live race meet and periods of training. As long as a farm employee is covered at the farm, and the trainer notifies the WHRC when the employee will be working at the track, the farm employee may work at the track without additional premium being owed.

(e) Are employees covered while working in another state?

(i) Trainers with employees from Washington may continue coverage when they are at another recognized race track in another state if the other jurisdiction has a reciprocal agreement with the state of Washington. The trainer must pay the premiums for grooms and assistant trainers in classification 6625, and for exercise riders and pony riders at the farm in the farm classification, 6627. For a list of states with reciprocal agreements with the state of Washington, see WAC 296-17-31009.

(ii) Trainers will need to continue to report Washington employees to the WHRC prior to the start of each month so an assessment can be made.

(iii) Failure to report, or to report correctly, may result in the trainer being referred to the stewards or the executive secretary of the WHRC for action.

(iv) Track employees hired in another state or jurisdiction are not Washington employees. They are to be covered in the state or jurisdiction they were hired in. It is the trainer's responsibility to obtain coverage in the other state or jurisdiction.

(f) Must horse owners pay industrial insurance premiums in Washington? Licensed owners shall be assessed one hundred fifty dollars per year for one hundred percent ownership of one or more horses. Partial owners shall be assessed prorated amounts of the one hundred fifty dollar fee. In no event shall a licensed owner be required to pay more than one hundred fifty dollars. This fee helps fund workers' compensation coverage for injured workers. It does not extend any coverage to owners.

NEW SECTION

WAC 296-17-89507 Horse racing rates. Horse racing industry industrial insurance accident fund, stay at work fund, medical aid fund, supplemental pension fund and composite rate by class.

Base Rates Effective January 4, 2013

Class	Accident Fund	Stay at Work Fund	Medical Aid Fund	Supplemental Pension Fund	Composite Rate
6618*	80.000	2.0000	67.0000	1.0000	150.00
6625**	80.5000	1.8800	56.5900	0.1600	139.1300
6626***	0.6800	0.0200	0.6000	0.0100	1.3100
6627****	9.0200	0.2600	7.8200	0.0900	17.1900

*This rate is calculated on a percentage of ownership in a horse or horses.

**This rate is calculated per month.

***This rate is calculated per horse per day.

****This rate is calculated per day.

Note: These rates are not subject to experience rating or retrospective rating.

NEW SECTION**WAC 296-17A-6625 Classification 6625.****6625-00 Horse racing - Grooms and assistant trainers (major track)
(to be assigned only by the horse racing underwriter)**

Applies to all licensed grooms and licensed assistant trainers employed by a licensed trainer. Coverage applies at a race track, and at a farm or training center. Duties anticipated in this classification include, but are not limited to:

- Cleaning stalls;
- Feeding and watering horses;
- Bandaging and applying tack;
- Applying topical dressings;
- Escorting horses to and from the track for racing;
- Entering horses to run;
- Saddling horses in the paddock for racing; and
- Supervising the other licensed employees of the trainer.

This classification excludes exercise riders, pony riders, and any other employee of the trainer.

Premiums are assessed based on each groom or assistant trainer employed in the coverage month, or on a per day basis. The daily rate is ten percent of the monthly rate. Premiums are paid monthly to the Washington horse racing commission.

If working at a farm or training center, coverage in this classification is limited to licensed duties only. Any other farm work must be covered in the appropriate agricultural classification.

Jockeys while racing are not included in this classification.

**6625-01 Horse racing - Grooms and assistant trainers (nonprofit track)
(to be assigned only by the horse racing underwriter)**

Applies to all licensed grooms and licensed assistant trainers employed by a licensed trainer. Coverage applies at a race track, and at a farm or training center. Duties anticipated in this classification include, but are not limited to:

- Cleaning stalls;
- Feeding and watering horses;
- Bandaging and applying tack;
- Applying topical dressings;
- Escorting horses to and from the track for racing;
- Entering horses to run;
- Saddling horses in the paddock for racing; and
- Supervising the other licensed employees of the trainer.

This classification excludes exercise riders, pony riders, and any other employee of the trainer.

Premiums are assessed based on each groom or assistant trainer employed in the coverage month, or on a per day basis. The daily rate is ten percent of the monthly rate. Premiums are paid monthly to the Washington horse racing commission.

If working at a farm or training center, coverage in this classification is limited to licensed duties only. Any other farm work must be covered in the appropriate agricultural classification.

Jockeys while racing are not included in this classification.

NEW SECTION**WAC 296-17A-6626 Classification 6626.****6626-00 Horse racing - Track (major track)
(to be assigned only by the horse racing underwriter)**

Applies to licensed exercise riders, licensed pony riders and any other licensed employee employed by a licensed trainer and working at a Washington race track during the race track's licensed race meet and periods of training. Duties anticipated in this classification include, but are not limited to:

- Leading/escorting a horse around the track during morning training;
- Escorting a horse from the saddling paddock to the starting gate during the post parade; escorting the horse from the track to the stable area after the running of the race;
- Saddling a race horse prior to a morning workout;
- Riding a race horse on the track during morning conditioning from a jog to a full-speed workout;
- Unsaddling the race horse and cleaning tack used following the morning workout.

This classification excludes all grooms, assistant trainers, and excludes exercise riders and pony riders working off the grounds of a Washington race track.

Premiums to cover licensed exercise riders, pony riders, and any other employee working for a licensed trainer on the grounds of a Washington race track will be assessed on the number of horses, per day, in a month a licensed trainer has horses on the grounds. The number of horses will include all horses of the trainer on the grounds. Premiums will be paid at the end of each month, or before the trainer leaves the track taking his/her horses.

Jockeys while racing are not included in this classification.

**6626-01 Horse racing - Track (nonprofit track)
(to be assigned only by the horse racing underwriter)**

Applies to licensed exercise riders, licensed pony riders and any other licensed employee employed by a licensed trainer and working at a Washington race track during the race track's licensed race meet and periods of training. Duties anticipated in this classification include, but are not limited to:

- Leading/escorting a horse around the track during morning training;
- Escorting a horse from the saddling paddock to the starting gate during the post parade; escorting the horse from the track to the stable area after the running of the race;
- Saddling a race horse prior to a morning workout;
- Riding a race horse on the track during morning conditioning from a jog to a full-speed workout;
- Unsaddling the race horse and cleaning tack used following the morning workout.

This classification excludes all grooms, assistant trainers, and excludes exercise riders and pony riders working off the grounds of a Washington race track.

Premiums to cover licensed exercise riders, pony riders, and any other employee working for a licensed trainer on the grounds of a Washington race track will be assessed on the number of horses, per day, in a month a licensed trainer has horses on the grounds. The number of horses will include all

horses of the trainer on the grounds. Premiums will be paid at the end of each month, or before the trainer leaves the track taking his/her horses.

Jockeys while racing are not included in this classification.

NEW SECTION

WAC 296-17A-6627 Classification 6627.

6627-00 Horse racing - Farm or training center (to be assigned only by the horse racing underwriter)

Applies to licensed exercise riders and licensed pony riders employed by a licensed trainer and working off the grounds of a Washington race track, at a farm or training center, or at an out-of-state race track. Duties anticipated in this classification are licensed duties only and include, but are not limited to:

- Leading/escorting a horse around the farm or training center;
- Saddling a race horse prior to a workout;
- Riding a race horse on the farm or training center during conditioning from a jog to a full-speed workout;
- Unsaddling the race horse and cleaning tack used following the morning workout.

This classification excludes all grooms and assistant trainers, and excludes exercise riders and pony riders, and any other employee of a trainer working at a Washington race track.

Premiums will be based on the number of employees, per day, multiplied by the number of days in the month the trainer reports the employee working. Trainers must report the anticipated work days and hours of work each day at the start of the month.

If working at a farm or training center, coverage in this classification is limited to licensed duties only. Any other farm work must be covered in the appropriate agricultural classification.

Jockeys while racing are not included in this classification.

AMENDATORY SECTION (Amending WSR 12-11-109, filed 5/22/12, effective 7/1/12)

WAC 296-17A-6708 Classification 6708.

6708-01 Jockeys

Applies to jockeys riding horses in a race, or working with the horses in any way, during the dates of a scheduled race meet. Coverage during a race meet is through election of optional coverage and is to be reported at ten hours per mount per race or ten hours per day if not riding in a race. Coverage outside the dates of a race meet is mandatory. Jockeys will be considered exercise riders when employed by a trainer and/or owner at a time other than during the dates of a scheduled race meet and are then reportable in the classification ((6614, 6616, or 7302-as)) that is appropriate ((†)) for their job duties.

6708-02 Professional motor vehicle or watercraft race drivers

Applies to professional motor vehicle/water craft race drivers during a competition. Coverage during a competition is mandatory and is subject to a division of hours as provided in the general exclusion section of the general reporting rules.

When not driving during competition, hours worked are reportable as appropriate to the work being performed:

- Maintenance of a racing motor vehicle and/or pit crew operations which are to be reported separately in classification 3411;

- Assembly of a racing motor vehicle which is to be reported separately in classification 3402; maintenance of a racing water craft and/or pit crew operations which are to be reported separately in classification 3414; assembly of a racing water craft which is to be reported separately in classification 2903, 3402 or 3511 as appropriate; and any other work usually done for this employer which is to be reported separately as appropriate to the employees usual job duties.

This classification excludes piloting an aircraft in a race which is to be reported separately in classification 6803 for a plane or 6801 for a hot air balloon.

Special note: Race car drivers are reported at ten hours for each race/heat.

AMENDATORY SECTION (Amending WSR 07-01-014, filed 12/8/06, effective 12/8/06)

WAC 296-17A-7302 Classification 7302.

7302-00 Farms: Livestock Animal stud service

Applies to establishments engaged in the raising of cattle, pigs, and horses for sale to others. Work contemplated by this classification is of a custodial nature that includes, but is not limited to, tending and feeding animals, raising crops for feed, erecting or mending fences, breeding animals, transporting animals to or from market, and maintaining or installing sprinkler or irrigation systems when performed by employees of an employer subject to this classification. This classification also covers artificial insemination and veterinary care when performed by employees of an employer subject to this classification. This classification also applies to establishments that provide animal stud services for others.

This classification excludes contractors engaged exclusively in the installation of sprinkler or irrigation systems who are to be reported separately in classification 0301 and contractors hired by a farm operator to build or repair fences or structures who are to be reported separately in the appropriate construction classification applicable to the work being performed.

Special note: The term "farm labor contractor" applies to specialty contractors who supply laborers to a farm operation for specified services such as cleaning stalls, grooming or caring for animals, weeding or planting crops, irrigating and fertilizing. Generally the work involves manual labor tasks as opposed to machine operations. Farm labor contractors will be reported in the classification applicable to the farm with which they are contracting. Contractors who provide both equipment or machinery and the machine operators are to be reported in classification 4808 "custom farm ser-

VICES" as the process involved in operating machinery is the same irrespective of the type of farm they are providing service to or the type of crop involved.

7302-02 Riding academies

Applies to establishments engaged as riding academies which offer services such as, but not limited to, instruction on riding horses or on the care of animals and the rental of horses. Work contemplated by this classification is of a custodial nature that includes, but is not limited to, tending and feeding animals, training animals, cleaning stalls and barn areas, raising crops for feed, erecting or mending fences, breeding animals, and maintaining or installing sprinkler or irrigation systems when performed by employees of an employer subject to this classification. This classification also covers artificial insemination and veterinary care when performed by employees of an employer subject to this classification.

This classification excludes contractors engaged exclusively in the installation of sprinkler or irrigation systems who are to be reported separately in classification 0301 and contractors hired by a farm operator to build or repair fences or structures who are to be reported separately in the appropriate construction classification applicable to the work being performed.

Special note: The term "farm labor contractor" applies to specialty contractors who supply laborers to a farm operation for specified services such as cleaning stalls, grooming or caring for animals, weeding or planting crops, irrigating and fertilizing. Generally the work involves manual labor tasks as opposed to machine operations. Farm labor contractors will be reported in the classification applicable to the farm with which they are contracting. Contractors who provide both equipment or machinery and the machine operators are to be reported in classification 4808 "custom farm services" as the process involved in operating machinery is the same irrespective of the type of farm they are providing service to or the type of crop involved.

7302-03 Boarding and/or training stables for pleasure or show horses

Applies to establishments that board and/or train pleasure or show horses for others. Work contemplated by this classification is of a custodial nature that includes, but is not limited to, tending and feeding animals, cleaning stalls and barn areas, training animals, raising crops for feed, erecting or mending fences, and maintaining or installing sprinkler or irrigation systems when performed by employees of an employer subject to this classification.

This classification excludes contractors engaged exclusively in the installation of sprinkler or irrigation systems who are to be reported separately in classification 0301 and contractors hired by a farm operator to build or repair fences or structures who are to be reported separately in the appropriate construction classification applicable to the work being performed.

Special note: The term "farm labor contractor" applies to specialty contractors who supply laborers to a farm operation for specified services such as cleaning stalls, grooming or caring for animals, weeding or planting crops, irrigating and fertilizing. Generally the work involves manual labor

tasks as opposed to machine operations. Farm labor contractors will be reported in the classification applicable to the farm with which they are contracting. Contractors who provide both equipment or machinery and the machine operators are to be reported in classification 4808 "custom farm services" as the process involved in operating machinery is the same irrespective of the type of farm they are providing service to or the type of crop involved.

7302-04 Centers or trainers for race horses - Unlicensed by WHRC

Applies to establishments or individuals who train race horses for others, but who are not licensed as trainers or training centers by the Washington horse racing commission. Work contemplated by this classification is of a custodial nature that includes, but is not limited to, tending and feeding animals, cleaning stalls and barn areas, training animals, raising crops for feed, erecting or mending fences, and maintaining or installing sprinkler or irrigation systems when performed by employees of an employer subject to this classification.

This classification excludes individuals or centers that train nonrace horses which are to be reported separately in classification 7302-03; contractors engaged exclusively in the installation of sprinkler or irrigation systems who are to be reported separately in classification 0301; and contractors hired by a farm operator to build or repair fences or structures who are to be reported separately in the appropriate construction classification applicable to the work being performed.

Special note: The term "farm labor contractor" applies to specialty contractors who supply laborers to a farm operation for specified services such as cleaning stalls, grooming or caring for animals, weeding or planting crops, irrigating and fertilizing. Generally the work involves manual labor tasks as opposed to machine operations. Farm labor contractors will be reported in the classification applicable to the farm with which they are contracting. Contractors who provide both equipment or machinery and the machine operators are to be reported in classification 4808 "custom farm services" as the process involved in operating machinery is the same irrespective of the type of farm they are providing service to or the type of crop involved.

~~(7302-05 Parimutuel horse racing - Licensed employments, N.O.C.~~

~~Applies to employments licensed by the Washington horse racing commission who are not mandatorily covered under Washington workers' compensation insurance laws and are not covered by another classification. This classification is *only* for individuals such as, but not limited to, horse owners, trainers, farriers, and veterinarians, who hold specialty licenses issued by the commission. These individuals are generally owners of a business such as that of a farrier or training services. The business entity could be a proprietorship, partnership, joint venture, or corporation and may or may not have employees. The qualifying factor for this classification is that these individuals are licensed by the horse racing commission, are *not* mandatorily covered under Washington workers' compensation insurance laws, and are *not* included or covered by another classification. For example, a veterinarian who operates a veterinary clinic away from~~

~~a race track and treats various animals such as dogs, cats, eows, and horses would report owner coverage (if elected) in classification 6107, not in classification 7302.)~~

REPEALER

The following sections of the Washington Administrative Code are repealed:

WAC 296-17A-6614	Classification 6614.
WAC 296-17A-6615	Classification 6615.
WAC 296-17A-6616	Classification 6616.
WAC 296-17A-6617	Classification 6617.
WAC 296-17A-6622	Classification 6622.
WAC 296-17A-6623	Classification 6623.

WSR 12-24-070

PERMANENT RULES

STATE BOARD OF HEALTH

[Filed December 4, 2012, 12:07 p.m., effective January 1, 2014]

Effective Date of Rule: January 1, 2014.

Purpose: Chapter 246-291 WAC, Group B public water systems, the rules strengthen requirements for new and expanding water system design and construction, strengthen new source water approval requirements, set more stringent water quality and quantity standards, improve public notification requirements, eliminate ongoing monitoring requirements, and allow local governments to set more stringent standards and waive certain requirements under specific conditions.

Citation of Existing Rules Affected by this Order: Repealing WAC 246-291-020, 246-291-040, 246-291-100, 246-291-110, 246-291-130, 246-291-230, 246-291-240, 246-291-260, 246-291-270, 246-291-310, 246-291-320, 246-291-330, 246-291-340 and 246-291-350; and amending WAC 246-291-001, 246-291-010, 246-291-025, 246-291-030, 246-291-050, 246-291-060, 246-291-120, 246-291-140, 246-291-200, 246-291-210, 246-291-220, 246-291-250, 246-291-300, and 246-291-360.

Statutory Authority for Adoption: RCW 43.20.050.

Other Authority: Chapter 70.119A RCW.

Adopted under notice filed as WSR 12-17-138 on August 21, 2012.

Changes Other than Editing from Proposed to Adopted Version: Nonsubstantive changes were made to the following sections:

WAC 246-291-005 Applicability, corrects an internal cross-reference.

WAC 246-291-025 Bottled water and ice-making facilities, clarifies references to requirements applicable to bottled water and ice-making machines under other rules.

WAC 246-291-060 Waivers, clarifies that a local board of health may grant a waiver from the requirements of this chapter, and that a waiver is valid for up to five years if con-

struction of the Group B system is not completed. Corrects an internal cross-reference.

WAC 246-291-125 Groundwater source approval, corrects an internal cross-reference.

WAC 246-291-140 Water system planning and disclosure requirements, clarifies that a waiver granted under WAC 246-291-060 requires the purveyor to record any required monitoring and reporting on the customer's property title.

WAC 246-291-170 Water quality requirement for groundwater source approval, changes the effective date from January 1, 2013 to 2014, for arsenic public notification requirements in Table 2 and corrects grammatical errors.

WAC 246-291-200 Design standards, corrects an internal cross-reference.

WAC 246-291-205 Drinking water materials and additives, clarifies that materials in contact with water shall conform to ANSI/NSF Standard 61, and removes the definition of "substantial contact." Clarifies that a purveyor shall use materials meeting the new federal safe drinking water standard for low lead content, removes the trade names for hypochlorite compounds, and allows the department to approve additives or materials on a case-by-case basis.

WAC 246-291-280 Existing Group B systems, changes the effective date from January 1, 2013 to 2014, for determining adequacy of an existing system.

WAC 246-291-360 Public notification, changes the effective date from January 1, 2013 to 2014, for notifying consumers when a sample analysis result exceeds the arsenic limit.

A final cost-benefit analysis is available by contacting Theresa Phillips, Department of Health, P.O. Box 47822, Olympia, WA 98504-7822, phone (360) 236-3147, fax (360) 236-2252, e-mail theresa.phillips@doh.wa.gov.

Number of Sections Adopted in Order to Comply with Federal Statute: New 0, Amended 0, Repealed 0; Federal Rules or Standards: New 0, Amended 0, Repealed 0; or Recently Enacted State Statutes: New 7, Amended 14, Repealed 14.

Number of Sections Adopted at Request of a Nongovernmental Entity: New 0, Amended 0, Repealed 0.

Number of Sections Adopted on the Agency's Own Initiative: New 0, Amended 0, Repealed 0.

Number of Sections Adopted in Order to Clarify, Streamline, or Reform Agency Procedures: New 0, Amended 0, Repealed 0.

Number of Sections Adopted Using Negotiated Rule Making: New 0, Amended 0, Repealed 0; Pilot Rule Making: New 0, Amended 0, Repealed 0; or Other Alternative Rule Making: New 7, Amended 14, Repealed 14.

Date Adopted: October 10, 2012.

Michelle A. Davis
Executive Director

AMENDATORY SECTION (Amending WSR 94-14-002, filed 6/22/94, effective 7/23/94)

WAC 246-291-001 Purpose and scope. (1) The purpose of ~~((these rules))~~ this chapter is to ~~((define basic regulatory requirements to))~~ protect the health of consumers ~~((using))~~ by establishing minimum design, construction, and

~~other standards for Group B public drinking water ((supplies)) systems. ((These rules are specifically designed to ensure the provision of high quality drinking water in a reliable manner and in a quantity suitable for intended use.))~~

~~(2) ((The rules set forth are adopted under chapter 43.20 RCW and owners of Group B public water systems shall be responsible for ensuring compliance with these rules.)) This chapter is adopted under chapter 43.20 RCW. A purveyor of a Group B public water system shall comply with this chapter and rules adopted by a local board of health under RCW 70.05.060 or 70.46.060 as applicable.~~

~~(3) Other statutes relating to this chapter are:~~

~~(a) RCW 43.20B.020, Fees for services—Department of health and department of social and health services;~~

~~(b) Chapter 43.70 RCW, Department of health;~~

~~(c) ((Chapter 70.05 RCW, Local health departments, boards, officers—Regulations;~~

~~(d)) Chapter 70.116 RCW, Public Water System Coordination Act of 1977; and~~

~~((e)) (d) Chapter 70.119A RCW, Public water systems—Penalties and compliance.~~

~~((3) Prior to expanding a Group B public water system to a Group A public water system, the entire system shall be brought into compliance with chapter 246-290 WAC.))~~

NEW SECTION

WAC 246-291-005 Applicability. (1) The rules of this chapter apply to a Group B public water system that provides drinking water to fewer than fifteen service connections and:

(a) Fewer than twenty-five people per day; or

(b) Twenty-five or more people per day for fewer than sixty days per year, provided the system does not serve one thousand or more people for two or more consecutive days.

(2) The rules of this chapter do not apply to a Group B system that:

(a) Consists only of distribution or storage facilities and does not have any source or treatment facilities;

(b) Obtains all water from, but is not owned by, a public water system where the rules of this chapter or chapter 246-290 WAC apply; and

(c) Does not sell water directly to any person.

(3) The rules of this chapter do not apply to a Group B system that provides water to one or two service connections, except:

(a) In a county in which a local board of health has adopted requirements for Group B systems with one or two service connections; or

(b) When the department determines that it is necessary to protect public health and safety, such as if the system serves a connection with a use listed under WAC 246-291-010 (62)(a) through (h).

(4) A proposed Group B system shall meet planning, engineering, and design requirements under WAC 246-290-100 through 246-290-250 if:

(a) The design submitted under WAC 246-291-120 proposes to supply water to another public water system and the combined number of service connections or total population served meets the definition of a Group A public water system; or

(b) The proposed system is being designed to serve ten to fourteen residential service connections using average household population standards as required under WAC 246-291-200(2).

AMENDATORY SECTION (Amending WSR 95-20-078, filed 10/4/95, effective 11/4/95)

WAC 246-291-010 Definitions, abbreviations, and acronyms. ((Abbreviations:

~~CSE—comprehensive system evaluation;~~

~~GW—ground water under the direct influence of surface water;~~

~~m—meter;~~

~~MCL—maximum contaminant level;~~

~~mg/L—milligrams per liter;~~

~~ml—milliliter;~~

~~mm—millimeter;~~

~~NTU—nephelometric turbidity unit;~~

~~psi—pounds per square inch;~~

~~umhos/cm—micromhos per centimeter;~~

~~VOC—volatile organic chemical;~~

~~WFI—water facilities inventory form; and~~

~~WHPA—wellhead protection area.~~

~~"Authorized agent" means any person who:~~

~~Makes decisions regarding the operation and management of a public water system whether or not he or she is engaged in the physical operation of the system;~~

~~Makes decisions whether to improve, expand, purchase, or sell the system; or~~

~~Has discretion over the finances of the system.~~

~~"Coliform sample" means a sample of water collected from the distribution system at or after the first service and analyzed for coliform presence in compliance with this chapter.~~

~~"Comprehensive system evaluation (CSE)" means a review, inspection and assessment of a public water system, including, but not limited to: Source; facilities; equipment; operation and administration; maintenance; records; planning documents and schedules; and monitoring, for the purpose of ensuring that safe and adequate drinking water is provided.~~

~~"Confirmation" means to demonstrate the results of a sample to be precise by analyzing a repeat sample. Confirmation occurs when analysis results fall within plus or minus thirty percent of the original sample.)) The definitions, abbreviations, and acronyms in this section apply throughout this chapter unless the context clearly indicates otherwise.~~

~~(1) "Acute" means posing an immediate risk to human health.~~

~~(2) "ADD (average day demand)" means the total volume of water produced from all sources of supply over a calendar year divided by three hundred sixty-five.~~

~~(3) "APWA" means American Public Works Association.~~

~~(4) "ASTM" means American Society for Testing and Materials.~~

~~(5) "AWWA" means American Water Works Association.~~

~~(6) "Board" means the Washington state board of health.~~

(7) **"Certified lab"** means an analytical laboratory meeting requirements under chapters 246-390 and 173-50 WAC for one or more drinking water analytical parameters.

(8) **"Coliform bacteria"** means a group of rod-shaped bacteria found in the gastrointestinal tract of vertebrate animals. The presence of coliform bacteria in water is an indicator of possible fecal contamination.

(9) **"Contaminant"** means a substance present in drinking water which may adversely affect the health of the consumer or the aesthetic qualities of the water.

(10) **"Critical water supply service area"** means a geographical area characterized by a proliferation of small, inadequate water systems, or by water supply problems that threaten the present or future water quality or reliability of service in a manner that efficient and orderly development may best be achieved through coordinated planning by the water utilities in the area.

(11) **"Cross-connection"** means (a physical arrangement connecting a public water system, directly or indirectly, with anything other than another potable water system, and capable of contaminating the public water system) any actual or potential physical connection between a public water system or a consumer's water system and any source of nonpotable liquid, solid, or gas that could contaminate the potable water supply by backflow.

(12) **"Cross-connection control plan"** means a document that identifies the procedures the purveyor uses to protect the Group B system from contamination from cross-connections.

(13) **"Department"** means the Washington state department of health ((or health officer as identified in a joint plan of operation in accordance with WAC 246-291-030(1))).

(14) **"Disinfection"** means the use of chlorine or other agent or process the department approves for killing or inactivating microbiological organisms, including pathogenic and indicator organisms.

(15) **"Distribution system"** means ((that portion)) all piping components of a ((public water supply)) Group B system ((which stores, transmits, pumps, and distributes water to consumers)) that serve to convey water from transmission mains linked to source, storage, and treatment facilities to the consumer excluding individual services.

(16) **"Drilled well"** means a well where the well hole is excavated by mechanical means such as rotary, cable tool, or auger drilling equipment.

(17) **"Dwelling unit"** means a structure, or unit within a structure, with independent living facilities for one or more persons that includes permanent provisions for living, sleeping, eating, cooking, and sanitation. A dwelling unit includes, but is not limited to:

(a) A single-family residence; or

(b) Each unit of an apartment building or multifamily building.

(18) **"Ecology"** means the Washington state department of ecology.

(19) **"Equalizing storage"** means the volume of storage needed to supplement supply to consumers when the peak hourly demand exceeds the total source pumping capacity.

(20) **"Expanding ((public water)) Group B system"** means a ((public water)) Group B system installing additions,

extensions, changes, or alterations to ((their)) its existing source, transmission, storage, or distribution facilities ((which)) that will enable the system to increase ((it)) the size of its existing service area ((and/or)) or ((its)) the number of approved service connections.

(21) **"Fire flow"** means the maximum rate and duration of water flow needed to ((fight)) suppress a fire((s)) under WAC 246-293-640 or ((adopted city, town, or county)) as required under local fire protection authority standards.

(22) **"Fire suppression storage"** means the volume of stored water available during fire suppression activities maintaining a pressure of at least 20 psi (140 kPa) at all points throughout the distribution system, and under the condition where the designed volume of fire suppression and equalizing storage has been depleted.

(23) **"Generator disconnect switch"** means an electrical ((circuit arranged to allow connection of a generator to the power supply for the pumping equipment while prohibiting)) device that physically prevents electrical current from flowing back into the main service line.

~~(24) **"Ground water under the direct influence of surface water (GWI)"** means any water beneath the surface of the ground, which the department determines has the following characteristics:~~

~~Significant occurrence of insects or other macroorganisms, algae, or large-diameter pathogens such as *Giardia lamblia* *Cryptosporidium*; or~~

~~Significant and relatively rapid shifts in water characteristics such as turbidity, temperature, conductivity, or pH closely correlating to climatological or surface water conditions.~~

~~**"Group B water system"** means a public water system:~~

~~Constructed to serve less than fifteen residential services regardless of the number of people; or~~

~~Constructed to serve an average nonresidential population of less than twenty five per day for sixty or more days within a calendar year; or~~

~~Any number of people for less than sixty days within a calendar year.)~~ (24) **"gpm"** means gallons per minute.

(25) **"Group A public water system"** is defined and referenced under WAC 246-290-020.

(26) **"Group B public water system"** or **"Group B system"** means a public water system that is not a Group A public water system, and is defined and referenced under WAC 246-291-005.

(27) **"Guideline"** means a department document assisting ((the owner)) a purveyor in meeting a rule or statutory requirement.

(28) **"GWI (groundwater under the direct influence of surface water)"** means any water beneath the surface of the ground, that the department determines has the following characteristics:

(a) Presence of insects or other macroorganisms, algae, or larger-diameter pathogens such as *Giardia lamblia* or *Cryptosporidium*; or

(b) Significant and relatively rapid shifts in water conditions such as turbidity, temperature, conductivity, or pH closely correlating to weather or surface water conditions, where natural conditions cannot prevent the introduction of

surface water pathogens into the source at the systems' point of withdrawal.

(29) **"Health officer"** means the health officer of the ((city, county, city-county)) local health ((department or district)) jurisdiction, or an authorized representative.

(30) **"Human consumption"** means the use of water for drinking, bathing, showering, handwashing, cooking, food preparation, dishwashing, ice-making, or oral hygiene.

(31) **"Hydraulic analysis"** means the study of the ((water system network evaluating water flows within the distribution system under worst case conditions such as, peak hourly design flow plus fire flow, when required. Hydraulic analysis includes consideration of all factors affecting system energy losses)) Group B system's distribution main and storage network to determine the system's present or future adequacy for providing service to consumers within the established design parameters for the system under peak flow conditions, including fire flow. The analysis establishes the adequacy of design for distribution system components such as piping, elevated storage, booster stations or similar facilities used to pump and convey water to consumers.

(32) **"Infiltration gallery"** means a water collection system built of perforated pipe or conduit and placed in permeable earth, for collecting shallow groundwater. An infiltration gallery is usually located close to springs, wetlands, streams, or ponds.

(33) **"Intertie"** means an interconnection between public water systems permitting the exchange or delivery of water between those systems.

(34) **"JPR (joint plan of responsibility)"** means a written agreement between the department and local health jurisdiction that:

(a) Lists the roles and responsibilities of the department and health officer for reviewing and approving Group B system designs;

(b) Provides for a level of supervision necessary to effectively achieve the responsibilities in the JPR;

(c) Is signed by an authorized representative from the department and local health jurisdiction; and

(d) Is reviewed at least once every five years and updated as needed.

(35) **"kPa"** means kilo pascal (Standard International units of pressure).

(36) **"Local board of health"** means the governing body of a county health department under chapter 70.05 RCW, or a health district under chapter 70.46 RCW.

(37) **"Local health jurisdiction"** means a county health department under chapter 70.05 RCW, city-county health department under chapter 70.08 RCW, or health district under chapter 70.46 RCW.

(38) **"Local permitting authority"** means the local building official, health officer, or authorized representative that makes determinations regarding building permits and development proposals.

(39) **"MCL (maximum contaminant level ((MCL)))"** means the maximum permissible level of a contaminant in water ((delivered)) the purveyor delivers to any ((public water)) Group B system ((user)) consumer, measured at the source before entry to the distribution system.

((~~"Maximum contaminant level violation"~~ means a confirmed measurement above the MCL and for a duration of time, where applicable.

~~"Owner"~~ means any agency, subdivision of the state, municipal corporation, firm, company, mutual or cooperative association, institution, partnership, or person or any other entity that holds as property, a public water system.)) (40) **"MDD (maximum day demand)"** means the highest actual or estimated quantity of water that is, or is expected to be, used over a twenty-four hour period, excluding unusual events or emergencies.

(41) **"mg/L"** means milligrams per liter (1mg/L = 1 part per million).

(42) **"ml"** means milliliter.

(43) **"mm"** means millimeter.

(44) **"Nonresidential service connection"** means a connection to a public water system that provides potable water including, but not limited to a:

(a) Commercial property;

(b) Industrial property;

(c) Civic property;

(d) Municipal property;

(e) Institutional property;

(f) School;

(g) Recreational use as defined in this section; or

(h) Any other authorized use that provides potable water to a nonresidential population.

(45) **"PAS"** means pitless adaptor standard.

(46) **"PHD (peak hourly ((design-flow)) demand)"** means the maximum rate of water use, excluding fire flow((; which)) that can ((be expected to ever)) occur within a defined service area over a continuous sixty minute time period. PHD is typically expressed in gallons per minute (gpm).

(47) **"Potable"** means water ((suitable)) safe for ((drinking by the public)) human consumption.

((~~"Pressure zone"~~ means a distribution system whereby an established minimum and maximum pressure range can be maintained without the use of ancillary control equipment (e.g., booster pumps, pressure reducing valves, etc.)) (48)

"Potential GWI" means a source identified by the department or local health jurisdiction as possibly under the direct influence of surface water including, but not limited to a:

(a) Well that has a screened interval fifty feet or less from the ground surface at the wellhead and is located within two hundred feet of a freshwater surface water body;

(b) Ranney well;

(c) Infiltration gallery; or

(d) Spring.

(49) **"Primary ((standards)) MCL"** means a standard((s)) based on chronic, nonacute, or acute human health effects.

(50) **"psi"** means pounds per square inch.

(51) **"Public water system"** means any system providing water for human consumption through pipes or other constructed conveyances, excluding a system serving only one single-family residence and a system with four or fewer service connections all of which serve residences on the same farm((; providing piped water for human consumption, including)). The term includes:

(a) Collection, treatment, storage, or distribution facilities under the control of a purveyor and used primarily in connection with ((such)) the system((-

"Repeat sample" means a sample collected to confirm the results of a previous analysis.)); and

(b) Collection, or pretreatment storage facilities not under the control of a purveyor, and primarily used in connection with the system.

(52) "Purveyor" means an agency, subdivision of the state, municipal corporation, firm, company, mutual or cooperative association, institution, partnership, or person or other entity owning or operating a public water system, or applying to create a public water system. Purveyor also means the authorized agents of these entities.

(53) "Raney well" means a water well or collection system including a central chamber with horizontal perforated pipes extending out into an aquifer. The perforated pipes may extend out under a surface water body such as a lake or river.

(54) "Recreational service connection" means a connection to a public water system that provides potable water to each:

(a) Campsite; or

(b) Recreational vehicle site.

(55) "Residential service connection" means a connection to a public water system that provides potable water to a dwelling unit.

(56) "Same farm" means a parcel of land or series of parcels ((which are)) connected by covenants and devoted to the production of livestock or agricultural commodities for commercial purposes ((and does not qualify as a Group A water system)).

(57) "Sanitary survey" means a review, inspection, and assessment of a public water system by the department or local health jurisdiction.

(58) "SCA (sanitary control area)" is defined under WAC 246-291-125(5).

(59) "SMA (satellite system management agency)" means a person or entity approved by the department in accordance with chapter 246-295 WAC to own or operate public water systems on a regional or county-wide basis without the necessity for a physical connection between the systems.

(60) "Secondary ((standards)) MCL" means a standard((s)) based on factors other than health effects ((such as taste and odor)).

((("Sell" means to bill separately for drinking water or to include drinking water as part of an itemized listing in a bill delivered to customers, where the amount billed is an increase over what the purveyor pays for water. The presence of centralized source or individual service meters does not affect whether the water is being sold.))

(61) "Service connection" means a ((connection to a public water system designed to provide potable water)) residential, nonresidential, or recreational service connection as defined in this section.

((("Special purpose sample" means a sample collected for reasons other than the monitoring compliance specified in this chapter.

"Standard methods" means the 18th edition of the book, titled *Standard Methods for the Examination of Water and Waste Water*, jointly published by the American Public Health Association, American Water Works Association (AWWA), and Water Pollution Control Federation. This book is available through public libraries or may be ordered from AWWA, 6666 West Quinney Avenue, Denver, Colorado 80235.

"State board of health" and "board" means the board created by RCW 43.20.030.)) (62) "Single family residence" means a structure in which one or more persons maintain a common household. A structure is not a single family residence if it is used for an activity requiring a permit or license under one or more of the following rules:

(a) Food service, chapter 246-215 WAC;

(b) Food inspection, chapter 16-165 WAC;

(c) Residential treatment facility, chapter 246-337 WAC;

(d) Transient accommodations, chapter 246-360 WAC;

(e) Boarding homes licensing rules, chapter 388-78A WAC;

(f) Minimum licensing requirements for child care centers, chapter 170-295 WAC;

(g) School-age child care center minimum licensing requirements, chapter 170-151 WAC; or

(h) Adult family home minimum licensing requirements, chapter 388-76 WAC.

(63) "Spring" means a source of water where the aquifer comes in contact with the land surface.

(64) "Surface water" means a body of water open to the atmosphere and subject to surface runoff, including captured rainfall.

((("Volatile organic chemical (VOC)" means a manufactured carbon-based chemical that vaporizes quickly at standard pressure and temperature.

"Water facilities inventory form (WFI)" means the department form summarizing each public water system's characteristics.

"Well field" means a group of wells one system owns or controls which:

Draw from the same aquifer or aquifers as determined by comparable inorganic chemical analysis; and

Discharge water through a common pipe and the common pipe shall allow for collection of a single sample before the first distribution system connection.)) (65) "WSDOT" means Washington state department of transportation.

(66) "Water right" means a permit, claim, or other authorization, on record with or accepted by the department of ecology, authorizing the beneficial use of water in accordance with all applicable state laws.

(67) "Well site inspection" means a physical inspection of the area near an existing or proposed well location, and completion of a department or health officer-approved form that identifies the suitability of the site for a public water supply well.

AMENDATORY SECTION (Amending WSR 95-20-078, filed 10/4/95, effective 11/4/95)

WAC 246-291-025 Bottled water and ice-making facilities. ~~((1) Any)~~ Water sources used (for bottling, regardless of size,) by a facility regulated under chapter 16-165 WAC that produces bottled water or ice for public consumption shall meet the (minimum) requirements ((in accordance with)) under chapter 246-290 WAC.

~~((2) In addition to the requirements imposed by the department, the processing of bottled water is regulated by the state department of agriculture and the United States Food and Drug Administration.))~~

AMENDATORY SECTION (Amending WSR 95-20-078, filed 10/4/95, effective 11/4/95)

WAC 246-291-030 General administration. (1) The department administers this chapter unless:

(a) A local board of health adopts rules under RCW 70.05.060 or 70.46.060 to implement this chapter that are at least as stringent as this chapter: or

(b) The ((department and the health officer for each local health jurisdiction may develop a joint plan of operation. Responsibility for administering these rules shall remain with the department of health unless there is a joint plan of operation in place. This plan shall:

(a) List the roles and responsibilities and specifically designate those systems for which the department and local health officer have primary responsibility;

(b) Provide a list of water system requirements and procedures which the local board of health may waive for systems within its jurisdiction;

(c) Provide for a level of water system supervision necessary to effectively achieve listed responsibilities;

(d) Be signed by the department and the local health department or district; and

(e) Be reviewed at least once every five years and updated as needed.

Wherever in these rules the term "department" is used, the term "health officer" may be substituted based on the terms of this joint plan of operation.

~~(2) The)) local health jurisdiction has accepted primary responsibility for administering this chapter in a JPR.~~

(2) Existing local rules shall remain in effect, except requirements of this chapter that are more stringent than the local board of health rules.

(3) In addition to the requirements of this chapter for Group B systems, local board of health rules may include, but are not limited to:

(a) System operations and maintenance;

(b) Ongoing water quality and water use monitoring;

(c) Reporting of water quality and water use monitoring data to the local health jurisdiction;

(d) System inspections or sanitary surveys;

(e) Public notification;

(f) Additional requirements for existing systems to be considered in compliance; and

(g) Regulation of systems with one or two service connections.

~~(4) A local board of health may adopt rules ((pursuant to RCW 70.05.060 governing public water systems for which the health officer has assumed primary responsibility. Adopted local board of health rules shall be:~~

~~(a) No less stringent and may be more stringent than this chapter; and~~

~~(b) Revised, if necessary, within twelve months after the effective date of revised state board of health rules. During this time period, existing local rules shall remain in effect, except provisions of the revised state board of health rules which are more stringent than the local board of health rules shall apply.~~

~~(3) For residential systems with only two services, the department may eliminate any or all requirements of these rules.~~

~~(4) For any residential system, the department may eliminate all ongoing requirements of these rules, except for recordkeeping and reporting requirements under WAC 246-291-260, provided the system has been granted an initial approval or an existing system has been categorized as fully approved/adequate or provisionally approved.~~

~~(5) The health officer may approve design reports and water system plans which reflect good engineering practice such as those found in the department guideline titled *Group B Water System Approval*, for those public water systems where the health officer has assumed primary responsibility.~~

~~(6) The health officer may allow system owners to substitute results of a calculated fixed radius method and a ten year time of travel criteria instead of using the six hundred foot radius prescribed in WAC 246-291-100 (2)(f) and 246-291-110 (3)(f).~~

~~(7) The department may develop and distribute guidelines to clarify sections of the rules as needed.~~

~~(8) Fees may be charged by the department of health as authorized in RCW 43.20B.020 and by local health agencies as authorized in RCW 70.05.060 to recover all or a portion of the costs incurred in administering these rules)) that require a purveyor of a Group B system to obtain an annual operating permit as authorized under RCW 70.119A.130.~~

AMENDATORY SECTION (Amending WSR 94-14-002, filed 6/22/94, effective 7/23/94)

WAC 246-291-050 Enforcement. (1) When a Group B system is out of compliance with ~~((these rules)) this chapter~~, the department may initiate ~~((appropriate))~~ enforcement actions ~~((, regardless of any prior approvals issued by the department, including, but not limited to:~~

~~(a) Issuance of a compliance schedule;~~

~~(b) Issuance of departmental orders requiring submission of water system plans, design reports, and construction report forms;~~

~~(c) Issuance of departmental orders requiring specific actions or ceasing unacceptable activities within a designated time period;~~

~~(d) Issuance of departmental orders to stop work and/or refrain from using any public water system or improvements thereto until all written approvals required by statute or rule are obtained;~~

~~(e) Imposition of civil penalties as authorized under chapter 70.119A RCW or local authority where applicable; and~~

~~(f) Legal action by the attorney general or local prosecutor.~~

~~(2) When enforcing the MCLs under this chapter, the department shall enforce compliance with the primary MCLs as its first priority)) under RCW 70.119A.030 and 70.119A.-040.~~

(2) A health officer may initiate enforcement actions as authorized under RCW 70.46.060 and 70.119A.050, and as authorized under local board of health rules.

AMENDATORY SECTION (Amending WSR 94-14-002, filed 6/22/94, effective 7/23/94)

WAC 246-291-060 Waivers. (1) ~~((The state board of health or the local health officer in those counties having a joint plan of operation, may grant waivers of the requirements of this chapter, provided that procedures used are consistent with WAC 246-290-060 (5)(b) and in the case where a local health officer is authorized to grant the waiver, procedures used shall be approved by the department of health as part of the joint plan of operation.~~

~~(2) Consideration by the board or local health officer of requests for waivers shall))~~ A health officer or local board of health may grant a waiver from the requirements of this chapter, provided that:

(a) The local health jurisdiction has:

(i) Adopted rules under RCW 70.05.060 or 70.46.060 that are at least as stringent as this chapter; or

(ii) Accepted primary responsibility for administering this chapter in a JPR;

(b) The health officer or local board of health conditions the approval of a waiver to include, at a minimum:

(i) Water quality treatment;

(ii) Monitoring; or

(iii) Maintenance and oversight; and

(c) The health officer or local board of health obtains sufficient evidence from a purveyor that a proposed Group B system will deliver drinking water that does not exceed a primary MCL under WAC 246-291-170, and will provide an adequate supply of water under WAC 246-291-125.

(2) The health officer or local board of health shall not grant a waiver from the residential population requirement for each dwelling unit under WAC 246-291-200(2).

(3) A request for a waiver is not ((be)) considered an adjudicative proceeding((s)) as ((that term is)) defined ((in)) under chapter 34.05 RCW.

~~((3) Statements and written material regarding the request may be presented to the board or local health officer wherein the approval will be considered.))~~

(4) ((The board or local health officer may grant a waiver if it determines the water system is unable to comply with the requirements and granting of the waiver will not result in an unreasonable risk to the health of consumers. No waivers may be granted for exceedance of a primary MCL.

(5)) A waiver granted under this section shall ((lapse two)) be valid for up to five years from the date of issuance ((unless the water system project has been completed or an

extension is granted)) as specified by the health officer or local board of health if construction of the Group B system is not completed.

NEW SECTION

WAC 246-291-090 Public Water System Coordination Act and satellite management. (1) A purveyor of a new or expanding Group B system shall comply with the applicable coordinated water system plan created under chapter 246-293 WAC and 70.116 RCW if located within the boundaries of a critical water supply service area.

(2) The department or health officer shall approve a new or expanding Group B system consistent with requirements under WAC 246-293-190 and RCW 70.116.060(3).

(3) A new Group B system must comply with SMA requirements under RCW 70.119A.060.

AMENDATORY SECTION (Amending WSR 94-14-002, filed 6/22/94, effective 7/23/94)

WAC 246-291-120 Design report approval. (1) ~~((Design reports shall be submitted to the department for))~~ A purveyor shall receive written department or health officer approval of a design report prior to ((installation of any)):

(a) Installing a new ((water)) Group B system((, or water system extension or improvement with the following exceptions:

(a) Installation of valves, fittings, and meters); or

(b) ((Repair of a system component or replacement with a similar component of the same capacity; and

(c) Maintenance or painting of surfaces not contacting potable water.)) Providing service to more than the current approved number of service connections.

(2) ~~((Design reports submitted for approval by owners of systems required to have a water system plan, will not be considered for approval unless there is a current approved water system plan and the plan adequately addresses the project.~~

~~(3) Design reports shall include, at a minimum, the following.))~~ To obtain design report approval for a Group B system, a purveyor shall provide a copy of the following, at a minimum, to the department or health officer:

(a) ((Alternatives. Verify contacts with other water system owners as applicable in accordance with WAC 246-291-140(2);)) Documentation that creating a new system or expanding an existing system does not conflict with any applicable coordinated water system plan adopted under chapter 246-293 WAC;

(b) ((Legal considerations. Identify legal aspects such as ownership, right of way, sanitary control area, and restrictive covenants;)) Documentation that creating a new system complies with the SMA requirements under RCW 70.119A.-060(2);

(c) ((Engineering calculations. Describe how the project complies with the design considerations;)) Source approval under WAC 246-291-125 or 246-291-135;

(d) ((Drawings. Include detailed drawings of each project component;)) Documentation that all requirements under WAC 246-291-140 are met;

(e) A system design that complies with the requirements under WAC 246-291-200 including, but not limited to:

(i) Drawings of each project component, including:

(A) Location;

(B) Orientation;

(C) Size; and

(D) Easements for:

(I) Future access and maintenance of distribution system pipelines located on private property, or franchise agreements necessary for distribution system pipelines located within public right of way; and

(II) Other system components, including access and maintenance of reservoirs, wells, and pumping stations.

(ii) Material specifications(~~(- List detailed material specifications))~~) for each project component;

(~~((f))~~) (iii) Construction specifications(~~(- List detailed construction specifications))~~) and assembly techniques (~~(for carrying out the project)~~);

(~~((g))~~) (iv) Testing(~~(- Identify testing))~~) criteria and procedures (~~(for each applicable portion of the project)~~); and

(~~((h))~~) (v) A description of disinfection(~~(- Identify specific disinfection))~~) procedures (~~(which must conform with American Water Works Association standards or other standards acceptable by the department)~~;

(i) Inspection. Identify provisions for inspection of the installation of each project component. See WAC 246-291-040 for construction reporting requirements; and

(j) Change orders. All changes except for minor field revisions must be submitted to and approved by the department in writing.

(4) Approval of design reports shall be in effect for two years unless the department determines a need to withdraw the approval. An extension of the approval may be obtained by submitting a status report and a written schedule for completion. Extensions may be subject to additional terms and conditions imposed by the department)) as required under WAC 246-291-220.

(3) The design report shall be prepared, sealed, and signed in accordance with chapter 196-23 WAC by a professional engineer who:

(a) Is licensed in the state of Washington under chapter 18.43 RCW; and

(b) Has specific expertise regarding design, operation, and maintenance of public water systems.

(4) A local health jurisdiction that has accepted primary responsibility in a JPR under WAC 246-291-030 may adopt by rule, an exception to the professional engineer requirement for Group B systems that:

(a) Do not use a variable speed pump;

(b) Do not provide fire flow;

(c) Do not have special hydraulic considerations;

(d) Do not have atmospheric storage in which the bottom elevation of the storage reservoir is below the ground surface; and

(e) Serve fewer than ten service connections.

(5) A purveyor shall submit a "Construction Completion Report for Public Water System Projects" to the department or health officer on a form approved by the department or health officer within sixty days of construction completion, and before use of any approved Group B system. The form must:

(a) Be signed by a professional engineer, unless the health officer approves the project as meeting the requirements under subsection (4) of this section;

(b) Include a statement that the project is constructed and completed according to the design report requirements under this chapter; and

(c) Include a statement that the installation, testing, and disinfection of the Group B system is completed in accordance with this chapter.

(6) All design changes, except for minor field revisions, must be submitted in writing to, and approved by, the department or health officer.

NEW SECTION

WAC 246-291-125 Groundwater source approval.

(1) Groundwater sources submitted to the department or health officer for design approval under WAC 246-291-120 must comply with the following requirements:

(a) Drinking water shall be obtained from the highest quality source feasible.

(b) All permanent groundwater sources must:

(i) Be designed to be physically connected to the distribution system;

(ii) Be a drilled well constructed in accordance with chapter 173-160 WAC; and

(iii) Meet water quality requirements under WAC 246-291-170.

(c) The department or health officer shall not approve a design for a new or expanding Group B system using a GWI source.

(d) The department or health officer shall not approve a design for a new or expanding Group B system using a potential GWI source until a hydrogeologic evaluation is completed by a licensed hydrogeologist or engineer that determines the source is not GWI. The GWI evaluation and determination must be completed before the department or health officer will review the Group B design report.

(2) Before pursuing groundwater source approval under this section, a purveyor shall contact the department or local health jurisdiction to identify any additional requirements.

(3) A purveyor shall provide a copy of the following to the department or health officer to obtain groundwater source approval:

(a) The water right permit, if required, for the source, quantity, type, and place of use;

(b) The water well report, as required under WAC 173-160-141;

(c) The well site inspection report form completed by the department or local health jurisdiction, or designee;

(d) A map showing:

(i) The project location;

(ii) A six hundred foot radius around the well site designating the preliminary short-term groundwater contribution area; and

(iii) The perimeter of a one hundred foot SCA, meeting the requirements in subsection (5) of this section.

(e) A map showing topography, distances to the well from existing property lines, buildings, potential sources of contamination within the six hundred foot radius around the

well, and any other natural or man-made features that could affect the quality or quantity of water;

- (f) The recorded legal documents for the SCA;
- (g) Results from an initial analysis of raw source water quality from a certified lab, including, at a minimum:
 - (i) Coliform bacteria;
 - (ii) Inorganic chemical and physical parameters under WAC 246-291-170, Tables 2, 3, and 4; and
 - (iii) Other contaminants, as directed by the department or health officer in areas where it determines that other contamination may be present.
- (h) Pump test data establishing groundwater source capacity including, but not limited to:
 - (i) Static water level;
 - (ii) Sustainable yield;
 - (iii) Drawdown;
 - (iv) Recovery rate; and
 - (v) Duration of pumping.
- (i) Additional pump testing in locations where water resource limitations or known seasonal groundwater fluctuations may affect future reliability as directed by the department or health officer.

(4) Groundwater source capacity.

(a) A groundwater source for a Group B system with residential connections must be pump tested to determine if the well(s) and aquifer are capable of reliably supplying water that meets the minimum requirements under Table 1 of this section.

(b) A groundwater source must be pump tested to determine if the well(s) and aquifer are capable of supplying water at the rate required to provide the water volume as determined under WAC 246-291-200 for a source supplying a Group B system with:

- (i) Nonresidential service connections; or
- (ii) Both residential and nonresidential service connections.

(c) Where a locally adopted watershed plan or ecology watershed rule under Title 173 WAC establishes a higher water supply requirement, the purveyor shall use the higher value to assess the adequacy of the source of supply.

(d) A purveyor shall design the Group B system to meet the requirements under Table 1, even if a locally adopted watershed plan or watershed rule under Title 173 WAC limits water use below the values in Table 1.

Table 1

Minimum Source Capacity and Water Supply for Residential Service Connections

County	Gallons per day per dwelling unit
Clallam, Clark, Cowlitz, Grays Harbor, Island, Jefferson, King, Kitsap, Lewis, Mason, Pacific, Pierce, San Juan, Skamania, Skagit, Snohomish, Thurston, Wahkiakum, and Whatcom	750

County	Gallons per day per dwelling unit
Adams, Asotin, Benton, Chelan, Columbia, Douglas, Ferry, Franklin, Garfield, Grant, Kittitas, Klickitat, Lincoln, Okanogan, Pend Oreille, Spokane, Stevens, Walla Walla, Whitman, and Yakima	1,250

(5) SCA.

(a) A purveyor shall establish the SCA around each groundwater source to protect it from contamination.

(b) The SCA must have a minimum radius of one hundred feet, unless technical justification submitted by a licensed hydrogeologist or engineer to the department or health officer supports a smaller area. The justification must address geological and hydrogeological data, well construction details, and other relevant factors necessary to provide adequate sanitary control.

(c) The department or health officer may require a larger SCA if geological and hydrological data support such a decision.

(d) A purveyor shall own the SCA, or the purveyor shall have the right to exercise complete sanitary control of the land through other legal provisions.

(e) A purveyor shall record a restrictive covenant to the title of each property that is sited partially or completely within the SCA to protect the SCA in perpetuity.

NEW SECTION

WAC 246-291-135 Interties. (1) A purveyor submitting a new or expanding Group B system design for approval using a nonemergency intertie source shall provide the following to the department or health officer:

- (a) A copy of the intertie agreement under subsection (2) of this section;
- (b) Evidence that the supplying water system currently operates in compliance with chapter 246-290 or 246-291 WAC;
- (c) Location of the proposed intertie;
- (d) Information on any water quality issues and treatment being used;
- (e) Demonstration of the source capacity and hydraulic capacity of the supply and receiving systems at the designed flow rate through the intertie;
- (f) A copy of the water right or water right change issued by ecology, if required under RCW 90.03.383;
- (g) Identification of alternative sources that will be used when the intertie agreement expires if the water is not being provided in perpetuity; and
- (h) Verification that a source meter has been installed to measure water received.

(2) An intertie agreement between purveyors must identify:

- (a) Specific time periods in which water will be provided;
- (b) The volume of water available for use, including any seasonal or other restrictions; and
- (c) How operations will be coordinated.

AMENDATORY SECTION (Amending WSR 95-20-078, filed 10/4/95, effective 11/4/95)

WAC 246-291-140 Water system planning and dis-closure requirements. ~~((1) Water system plan:~~

~~(a) The water system plan shall:~~
~~(i) Identify present and future needs;~~
~~(ii) Set forth means for meeting those needs; and~~
~~(iii) Do so in a manner consistent with other relevant plans and local, state, and federal laws.~~

~~(b) Owners of the following categories of systems shall ensure the development and submittal of a water system plan for review and approval by the department:~~

~~(i) All systems as required by chapter 70.116 RCW the Public Water System Coordination Act of 1977 and chapter 246-293 WAC;~~

~~(ii) Any system experiencing problems related to planning, operation, and/or management as determined by the department and outlined in a departmental order;~~

~~(iii) Any proposed or expanding system as determined by the department; and~~

~~(iv) Any system which installs treatment, other than simple chlorination disinfection equipment, after the effective date of these regulations.~~

~~(c) A department guideline titled *Group B Water System Approval* is available from the department to assist owners in developing this plan. Design reports may be combined with a water system plan. To the extent to which they are applicable, the water system plan shall address the following elements:~~

~~(i) Description of system management and ownership;~~

~~(ii) Description of appropriate water quality monitoring and reporting requirements;~~

~~(iii) Service area and identification of existing and proposed major facilities;~~

~~(iv) Maximum number of connections the system can safely and reliably support;~~

~~(v) Water conservation program. Systems which are developed or expanded after the effective date of this rule shall develop a conservation program;~~

~~(vi) Relationship and compatibility with other plans;~~

~~(vii) Description of water source(s) including compliance with applicable source approval and protection under WAC 246-291-100 and 246-291-110;~~

~~(viii) Source protection (including required protective covenants, wellhead protection and watershed control where applicable); and~~

~~(ix) Financial viability.~~

~~(2) Prior to developing a new water system, the developer of the proposed system shall follow the steps listed below as applicable:~~

~~(a) The developer shall ensure that the new system is owned or operated by a department-approved satellite management agency (SMA), or if a department-approved SMA is not available, that the proposed new system has a department-approved water system plan in accordance with WAC 246-291-140;~~

~~(b) Department approval of any system created after July 22, 1995, that is not owned or operated by a SMA shall be conditioned upon future management or ownership by a SMA, if such management or ownership can be made with~~

~~reasonable economy and efficiency, or upon periodic review of the system's operational history to determine its ability to meet the department's financial viability and other operating requirements.~~

~~(c) If the proposed system is located within the boundaries of a critical water supply service area, the ability to develop an independent system shall be governed by the provisions of the Public Water System Coordination Act, chapter 70.116 RCW and chapter 246-293 WAC, and will be subject to the jurisdictional coordinated water system plan; or~~

~~(d) If the proposed system consists of a surface water or GWI source, ensure that the proposed system will be owned and operated by a department-approved satellite system management agency.~~

~~(3) For systems approved after the effective date of these rules, a summary of the following shall be recorded, by the system owner, on all affected property titles as a means of providing information about the system to property owners, lending institutions, and other potentially affected parties:~~

~~(a) Notice that the property is served by a public water system;~~

~~(b) The initial water system plan, planning section of the *Group B Water System Guideline*, or equivalent information from other documents as determined by the department;~~

~~(c) Notice that the system is subject to state and local rules;~~

~~(d) Recommendation to check with the jurisdictional regulatory authority on the current system status;~~

~~(e) Notice that fees may be assessed by the department for providing information on a public water system;~~

~~(f) Requirement for satellite management, if applicable;~~

~~(g) Notice of any waivers granted to the system; and~~

~~(h) Other information required by the department.)~~ **(1)**

A purveyor submitting a new or expanding Group B system design for approval shall provide the following information to the department or health officer:

(a) The system's management and ownership;

(b) The system's service area and existing and proposed major facilities;

(c) The maximum number of service connections the system can safely and reliably supply;

(d) The relationship and compatibility with other locally adopted plans;

(e) The amount of revenue needed to operate and maintain the system, and a plan to meet revenue needs;

(f) A cross-connection control plan if any existing cross-connections are identified;

(g) Security measures under the strict control of the purveyor to be provided to protect the water source, water storage reservoir, and the distribution system;

(h) For systems that will use sources with a well pump test indicating a yield of 5.0 gpm or less, a contingency plan describing short-term and long-term measures to restore water to consumers in the event the well(s) cannot provide an adequate supply of water;

(i) The public notification procedures that the purveyor will use as required under WAC 246-291-360.

(2) A purveyor shall record the following information on each customer's property title before providing water from the Group B system to any service connection:

- (a) System name and a department issued public water system identification number;
- (b) System owner name and contact information;
- (c) The following statement: "This property is served by a Group B public water system that has a design approval under chapter 246-291 Washington Administrative Code";
- (d) Parcel numbers to be served by the system;
- (e) Indicate if the system is designed and constructed to provide fire suppression;
- (f) A copy of any waiver granted under WAC 246-291-060 to the purveyor and any required monitoring and reporting;
- (g) Indicate:
 - (i) If service connections are metered or not;
 - (ii) If the purveyor intends to monitor the system for contaminants;
 - (iii) How often monitoring will occur; and
 - (iv) How the consumers of the system will be notified of monitoring results;
- (h) Contact information for the approving authority (department or local health jurisdiction);
 - (i) The type of source treatment provided for any contaminants that exceed secondary MCLs;
 - (j) Instructions about how to obtain a copy of the agreements for consumers, if one exists; and
 - (k) Other information, as directed by the department or health officer.

NEW SECTION

WAC 246-291-170 Water quality requirements for groundwater source approval. (1) All water quality samples collected under this section must be:

- (a) Collected without chlorine, ultraviolet light, ozone, or other disinfectant in use to treat the source;
 - (b) Collected after the well has been pumped long enough to allow for collection of a representative sample of the aquifer, as described in the *Group B Water System Design Guidelines (2012)*; and
 - (c) Analyzed by a certified lab.
- (2) To meet the requirements for design approval under WAC 246-291-120, a purveyor shall obtain, at a minimum:
- (a) Satisfactory results from two raw source water samples analyzed for coliform bacteria;
 - (b) Results from one raw source water sample that has been analyzed for, and does not exceed, any primary MCL in Table 2 of this section; and
 - (c) In areas known or suspected to have contaminants of public health concern, one raw source water sample analyzed for the contaminant(s) as directed by the department or health officer.

- (3) When analytical results indicate a presence of coliform bacteria, a purveyor shall do the following:
 - (a) Disinfect the source using procedures under WAC 246-291-220; and
 - (b) Collect two repeat samples and analyze for coliform bacteria by a certified lab.
- (4) A purveyor shall collect a confirmation raw source water sample and have the sample analyzed for each parameter that exceeded the MCL in the initial sample, if:

- (a) An analysis exceeds a primary MCL in Table 2 of this section; or
 - (b) A contaminant of public health concern under subsection (2)(c) of this section exceeds the primary MCL under WAC 246-290-310.
- (5) The department or health officer shall not approve the proposed source if:
- (a) The average concentration from all samples for each substance taken under this section exceeds a primary MCL in Table 2 of this section;
 - (b) The repeat sample results collected under subsection (3) of this section indicate a presence of coliform bacteria; or
 - (c) A contaminant of public health concern collected under this section exceeds the primary MCL under WAC 246-290-310.
- (6) When an analysis exceeds a secondary MCL in Table 3 or 4 of this section, a purveyor shall include treatment in the Group B system design under WAC 246-291-200 so that drinking water delivered to consumers does not exceed a secondary MCL.

**Table 2
Primary Inorganic Chemical Contaminants**

Substance	MCLs (mg/L)
Antimony (Sb)	0.006
Arsenic (As)	0.010*
Barium (Ba)	2.0
Beryllium (Be)	0.004
Cadmium (Cd)	0.005
Chromium (Cr)	0.1
Cyanide (HCN)	0.2
Fluoride (F)	4.0
Mercury (Hg)	0.002
Nitrate (as N)	10.0
Nitrite (as N)	1.0
Selenium (Se)	0.05
Thallium (Tl)	0.002

Note: *The arsenic MCL in Table 2 applies to new and expanding Group B systems. For Group B systems constructed prior to January 1, 2014, the arsenic MCL is 0.05 mg/L. WAC 246-291-360 (3) and (4) establish public notification requirements for Group B systems constructed prior to January 1, 2014, with an arsenic concentration exceeding 0.010 mg/L.

**Table 3
Secondary Inorganic Chemical Contaminants**

Substance	MCLs (mg/L)
Chloride (Cl)	250.0
Fluoride (F)	2.0
Iron (Fe)	0.3
Manganese (Mn)	0.05
Silver (Ag)	0.1

Substance	MCLs (mg/L)
Sulfate (SO ₄)	250.0
Zinc (Zn)	5.0

Table 4
Secondary Physical Characteristics

Substance	MCLs
Color	15 color units
Specific conductivity	700 umhos/cm
Total dissolved solids (TDS)	500 mg/L

AMENDATORY SECTION (Amending WSR 94-14-002, filed 6/22/94, effective 7/23/94)

WAC 246-291-200 Design standards. (1) ~~((Water system owners))~~ A purveyor submitting a new or expanding Group B system design for approval shall ((ensure that)) use good engineering practices ((are used in the design of all public water systems. Information on what is good engineering practice is available from)) and apply industry standards in the design, such as those in:

(a) The department ((in the)) guideline titled *Group B Water System ((Approval)) Design Guidelines* (2012);

(b) *Water Systems Council PAS-97(04) Pitless Adapters and Watertight Well Caps* (2004);

(c) Standard specifications of the:

(i) American Public Works Association;

(ii) American Society of Civil Engineers;

(iii) American Water Works Association; and

(iv) American Society for Testing and Materials.

(d) Minimum standards for construction and maintenance of wells, chapter 173-160 WAC;

(e) *Recommended Standards for Water Works, A Committee Report of the Great Lakes - Upper Mississippi River Board of State Public Health and Environmental Managers* (2007);

(f) *Standard Specifications for Road, Bridge and Municipal Construction* (WSDOT/APWA 2012);

(g) *USC Manual of Cross-Connection Control*, 10th edition (October 2009);

(h) *PNWS-AWWA Cross-Connection Control Manual*, sixth edition (1996);

(i) International Building Code (IBC) (2012); and

(j) Uniform Plumbing Code (UPC) (2012).

(2) ~~((In addition, owners of new or expanding public water systems shall ensure the following factors are addressed:~~

~~(a) Local conditions, plans and/or regulations;~~

~~(b) Public Water System Coordination Act considerations where appropriate; and~~

~~(c) Other requirements as determined by the department.~~

(3) ~~Any pipe, pipe fittings, solder, or flux used in the installation or repair of a public water system shall be lead-free. Within the context of this section, lead-free shall mean having no more than eight percent lead in pipes and pipe fittings, and no more than two-tenths of one percent lead in solder and flux. This prohibition shall not apply to leaded joints~~

~~necessary for the repair of cast iron pipes.))~~ A purveyor submitting a new or expanding Group B system design for approval shall:

(a) Calculate residential population by using 2.5 persons per dwelling unit;

(b) Use full-time occupancy for each dwelling unit; and

(c) Use planning, engineering and design criteria under WAC 246-290-100 through 246-290-250 if the system is being designed to serve ten to fourteen residential service connections.

(3) A purveyor shall demonstrate that the source(s) of supply, pipes and other constructed conveyances are capable of meeting the minimum residential water supply as required under WAC 246-291-125(4) Table 1.

(4) A new or expanding Group B system must be designed with the capacity to deliver the PHD at 30 psi (210 kPa) measured along property lines adjacent to distribution mains, under the following conditions:

(a) When all equalizing storage has been depleted, if the system is designed to supply PHD in part with equalizing storage; and

(b) At the "pump-on" pressure setting for the pump directly supplying the distribution system, when the water system is designed to supply PHD without any equalizing storage.

(5) If the design PHD exceeds the total source pumping capacity, then sufficient equalizing storage must be provided.

(6) The minimum design flow and duration required for fire flow and fire suppression storage, if provided, shall be determined by:

(a) The local fire protection authority; or

(b) As required under chapter 246-293 WAC for Group B systems within the boundaries of a designated critical water supply service area.

(7) In the design of a new or expanding Group B system that does not have to comply with minimum fire flow standards, a purveyor shall coordinate with the local fire protection authority to assess if any hydrants create adverse pressure problems as a result of expected fire suppression activities, and address any pressure problems in the design.

(8) If fire flow is provided, the distribution system must be designed to provide the MDD for the entire Group B system and the required fire flow at a pressure of at least 20 psi (140 kPa) at all points throughout the distribution system when the designed volume of fire suppression and equalizing storage has been depleted.

(9) The Group B system design must contain a water meter that measures the water use of the entire water system (totalizing source meter) and a source sample tap.

(10) The use of individual service booster pumps to meet the requirements of this section is prohibited.

(11) A purveyor shall equip a new or expanding Group B system with a generator disconnect switch.

(12) A purveyor shall use generally accepted industry standards and practices in the elimination or control of all cross-connections, such as:

(a) *USC Manual of Cross-Connection Control*, Tenth Edition, October 2009; and

(b) *PNWS-AWWA Cross-Connection Control Manual*, Sixth Edition (1996).

(13) A pitless unit, pitless adaptor, and vented sanitary well cap must conform with the product, material, installation, and testing standards under the *Water Systems Council PAS-97(04) Pitless Adapters and Watertight Well Caps (2004)*.

NEW SECTION

WAC 246-291-205 Drinking water materials and additives. (1) In the design of a new or expanding Group B system, all materials in contact with potable water shall conform to the ANSI/NSF Standard 61.

(2) Pipes, pipe fittings, fittings, fixtures, solder, or flux used in the design of a new or expanding Group B system shall be lead-free. For the purposes of this section, lead-free means:

(a) Not more than a weighted average of twenty-five one-hundredths of one percent lead for wetted surfaces of pipes and pipe fittings; and

(b) No more than two-tenths of one percent lead in solder and flux.

(3) Any chemicals specified for use in the design of treatment for secondary MCLs in Table 3 under WAC 246-291-170, with the exception of unscented commercial grade hypochlorite compounds, shall comply with ANSI/NSF Standard 60. The design dosage shall not exceed the maximum application dosage recommended for the product as certified by the ANSI/NSF Standard 60.

(4) The department may review and approve the use of materials or additives that are not ANSI/NSF Standard 60 or 61 certified on a case-by-case basis.

AMENDATORY SECTION (Amending WSR 94-14-002, filed 6/22/94, effective 7/23/94)

WAC 246-291-210 Distribution systems. (1) ~~((All distribution reservoirs shall have suitable watertight roofs or covers preventing))~~ Storage reservoirs shall be designed to:

(a) Prevent entry by birds, animals, insects, ~~((and))~~ excessive dust ~~((and shall include appropriate provisions to safeguard against trespass, vandalism, and sabotage. All new distribution reservoirs shall be able to be drained by gravity to daylight)), and other potential sources of external contamination;~~

(b) Include:

(i) A weathertight roof;

(ii) A lockable access hatch;

(iii) A screened roof vent;

(iv) An overflow pipe with atmospheric discharge or other suitable means to prevent a cross-connection;

(v) A sample tap;

(vi) A drain to daylight, or an alternative design approved by the department or health officer that is adequate to protect against cross-connection;

(vii) Tank isolation in order to perform maintenance procedures; and

(viii) Other appurtenances appropriate for the protection of stored water from contamination;

(c) Be above normal ground surface level. If the bottom elevation of a storage reservoir must be below normal ground surface;

(i) The storage reservoir must be placed above the groundwater table; and

(ii) The top of a partially buried storage reservoir must be at least two feet above normal ground surface.

~~(2) ((The owner shall ensure that the distribution system is sized and evaluated using a hydraulic analysis acceptable to the department.~~

~~(3)) A Group B system(s) designed to ~~((provide))~~ supply fire hydrants ~~((shall))~~ must have a minimum distribution main size of six inches (150 mm) supplying each hydrant.~~

~~((4)) New water systems or additions to existing systems shall provide a design quantity of water at a positive pressure of at least thirty psi throughout the system under peak hourly design flow conditions measured at any customer's water meter or at the property line if no meter exists.~~

~~(5) If fire flow is to be provided, the distribution system shall be designed to provide the required fire flow at a pressure of at least twenty psi throughout the system during peak hourly design flow conditions.~~

~~(6) Booster pumps needed for individual services shall be subject to review and approval by the department. Installation shall be made under the supervision of the owner to ensure cross-connection control requirements are met. Installation of booster pumps which are an integral part of the system design shall be inspected and certified by the engineer.))~~

AMENDATORY SECTION (Amending WSR 94-14-002, filed 6/22/94, effective 7/23/94)

WAC 246-291-220 Group B system disinfection ~~((of facilities))~~. ~~((No portion of a public water system containing potable water shall be put into service, nor, if service has been terminated, shall service resume, until the facility has been effectively disinfected. The procedure used for disinfection shall conform to the American Water Works Association standards or other standards acceptable to the department. In cases of new construction, drinking water shall not be furnished to the consumer until satisfactory bacteriological samples have been analyzed by a laboratory certified by the state.))~~ (1) A purveyor shall disinfect a Group B system before providing service to any consumer.

(2) The water system disinfection procedures must conform to the following standards:

(a) AWWA C651-05 or APWA/WSDOT (2010 revision), for water main disinfection;

(b) AWWA C652-02, for reservoir disinfection; and

(c) AWWA C654-03, for well disinfection.

AMENDATORY SECTION (Amending WSR 94-14-002, filed 6/22/94, effective 7/23/94)

WAC 246-291-250 Continuity of service. ~~((1))~~ Notification shall include a time schedule for transferring responsibilities, identification of the new owner, and under what authority the new ownership will operate. If the system is a corporation, identification of the registered agent shall also be provided.

~~(2) The system transferring ownership shall ensure all health-related standards are met during transfer and shall~~

inform and train the new owner regarding operation of the system.

(3) No owner shall end utility operations without providing written notice to all customers and the department at least one year prior to termination of service.

(4) Nothing in these rules shall prohibit an owner from terminating service to a specific customer if the customer fails to pay normal fees for service in a timely manner or if the customer allows or installs an unauthorized service connection to the system.

(5) Where this section may be in conflict with existing state statutes, the more stringent statute shall prevail.)) (1) A purveyor of a Group B system shall notify all the system's consumers in writing before transferring ownership. The notification must include a time schedule for transferring responsibilities, identification of the new owner, and under what type of authority the new ownership will operate.

(2) At least one year prior to terminating system operation, a purveyor of a Group B system shall notify all consumers in writing and provide a copy of the written notice to the department and health officer.

NEW SECTION

WAC 246-291-280 Existing Group B systems. (1) A purveyor of a Group B system shall apply for and obtain design approval under WAC 246-291-120, or approval under subsection (3) of this section before the system:

(a) Expands to serve a new service connection needing potable water; or

(b) Provides potable water for a new use of an existing service connection if a local permitting authority requires an approved public water supply as a condition of an approval of the new use.

(2) A local permitting authority may determine a Group B system constructed before January 1, 2014, without design approval under this chapter, to be adequate for existing connections if, at a minimum, the following requirements are met:

(a) The system's source(s) must meet well construction standards, under chapter 173-160 WAC;

(b) A well site inspection completed by the department, local health jurisdiction, or designee has documented that there are no sources of contamination in the SCA that could create a public health risk;

(c) The system meets water quality standards under WAC 246-291-170, Table 2; and

(d) The system is capable of maintaining a minimum 20 psi at all points throughout the distribution system during peak demand.

(3) A purveyor of a Group B system approved prior to January 1, 2014, may provide potable water to additional service connections provided that:

(a) The expanded use is consistent with the existing design approval;

(b) The expanded use does not exceed the number of approved service connections; and

(c) The purveyor complies with all locally adopted requirements.

AMENDATORY SECTION (Amending WSR 94-14-002, filed 6/22/94, effective 7/23/94)

WAC 246-291-300 General ((~~monitoring~~) requirements. (1) A purveyor of a Group B system shall provide potable water to the system's consumers.

(2) The department or health officer may require ((additional monitoring when it determines contamination is present or suspected in the water system or when it determines the source may be vulnerable to contamination.

(2) Special purpose samples shall not count toward fulfillment of the monitoring requirements of this chapter.

(3) The owner shall ensure samples required by this chapter are collected, transported, and submitted for analysis according to department approved methods. The analyses shall be performed by the state public health laboratory or another laboratory certified by the department. Qualified water utility, certified laboratory, or department personnel may conduct measurements for pH, temperature, residual disinfectant concentration and turbidity as required by this chapter, provided, these measurements are made in accordance with *Standard Methods*.

(4) ~~When one Group B water system sells water to another public water system and the cumulative number of services or population served meet the definition of a Group A system, the owner of the selling system shall ensure that source monitoring is conducted in accordance with the minimum requirements for Group A community systems found in chapter 246-290 WAC.)~~ a purveyor to collect water quality samples, have the samples analyzed by a certified lab, and report results as required under WAC 246-291-360, when the department or health officer:

(a) Determines a public health risk exists;

(b) Receives information documenting contamination;

(c) Receives a report of suspected or known waterborne illness from a health care provider as required under chapter 246-101 WAC; or

(d) Is aware of, or observes, a situation in which the source may be vulnerable to contamination. For example, a source is vulnerable to contamination from a flood event.

AMENDATORY SECTION (Amending WSR 94-14-002, filed 6/22/94, effective 7/23/94)

WAC 246-291-360 Public notification. ~~((1) Responsibility. Within fourteen days of the violation, the owner shall ensure that water system users are notified when the system has a violation of a primary MCL.~~

(2) ~~Content. Notices shall provide:~~

(a) ~~A clear, concise, and simple explanation of the violation;~~

(b) ~~Discussion of potential adverse health effects and any segments of the population that may be at higher risk;~~

(c) ~~A list of steps the owner has taken or is planning to take to remedy the situation;~~

(d) ~~A list of steps the consumer should take, including advice on seeking an alternative water supply if necessary;~~

(e) ~~The owner's and manager's names and phone numbers; and~~

(f) ~~When appropriate, notices shall be multilingual.~~

The owner may provide additional information to further explain the situation:

~~(3) Distribution.— Owners shall ensure that a written notice is distributed to all water system users within fourteen days of a violation unless otherwise directed by the department.~~

~~(4) When circumstances dictate the owner give a broader or more immediate notice to protect public health, the department may require notification by whatever means necessary.~~

~~(5) When a system is granted a waiver for reduction of water quality standards, the owner shall ensure that customers are notified. The owner shall provide a notice annually and send a copy to the department.)~~ (1) A purveyor of a Group B system shall notify the department, health officer, and all system consumers in writing within twenty-four hours when the purveyor:

(a) Obtains a water quality sample analysis from a certified lab indicating the presence of *E. coli*;

(b) Obtains a water quality sample analysis from a certified lab indicating the presence of nitrate at a concentration at or above 10.0 mg/L; or

(c) Is aware of circumstances that pose a threat of acute contamination, such as a flood event.

(2) A purveyor of a Group B system required to monitor water quality under WAC 246-291-300 that is not required to notify consumers within twenty-four hours under subsection (1) of this section shall notify the department, health officer, and all system consumers, in writing, within thirty days of receiving the results from a certified lab if directed by the department or health officer.

(3) If a Group B system constructed prior to January 1, 2014, has an arsenic concentration exceeding 0.010 mg/L, the purveyor shall notify consumers in writing:

(a) By March 31, 2014, if the sample analysis result from a certified lab was obtained prior to January 1, 2014;

(b) Within thirty days of receiving a sample analysis result from a certified lab; or

(c) Within thirty days of adding a new service connection under WAC 246-291-280(3).

(4) The public notification must include the following information:

(a) A description of contamination and any known problem(s);

(b) What the purveyor is doing to resolve the problem(s);

(c) Where to get information about potential health effects;

(d) What the consumers should do to protect their health, including the use of another source of water;

(e) When the purveyor expects the problem(s) to be resolved; and

(f) Group B system contact information, including address, phone number, and if available, an e-mail address.

REPEALER

The following sections of the Washington Administrative Code are repealed:

WAC 246-291-020	Applicability.
WAC 246-291-040	Requirements for engineers.

WAC 246-291-100	Ground water source approval and protection.
WAC 246-291-110	Surface water and GWI source approval and protection.
WAC 246-291-130	Existing system approval.
WAC 246-291-230	Treatment design and operations.
WAC 246-291-240	Reliability.
WAC 246-291-260	Recordkeeping and reporting.
WAC 246-291-270	Cross-connection control.
WAC 246-291-310	General follow-up.
WAC 246-291-320	Bacteriological.
WAC 246-291-330	Inorganic chemical and physical.
WAC 246-291-340	Turbidity.
WAC 246-291-350	Other substances.

WSR 12-24-071
PERMANENT RULES
DEPARTMENT OF
LABOR AND INDUSTRIES

[Filed December 4, 2012, 12:28 p.m., effective January 4, 2013]

Effective Date of Rule: Thirty-one days after filing.

Purpose: This rule making complies with an Occupational Safety and Health Administration (OSHA) requirement to adopt rule changes consistent with the final phase of their standards improvement project. This is the third phase in the OSHA standards improvement project initiative that periodically reviews OSHA regulations with the goal of improving them, and eliminating those that are confusing, outdated, duplicative, or inconsistent.

Citation of Existing Rules Affected by this Order: Amending chapter 296-24 WAC, General safety and health standards.

- WAC 296-24-29419 Safe operating practices.
- WAC 296-24-29423 Alloy steel chain slings.
- WAC 296-24-29425 Wire rope slings.
- WAC 296-24-29427 Metal mesh slings.
- WAC 296-24-29429 Natural and synthetic fiber rope slings.
- WAC 296-24-29431 Synthetic web slings.

Chapter 296-37 WAC, Standards for commercial diving operations.

- WAC 296-37-575 Recordkeeping requirements.

Chapter 296-56 WAC, Safety standards—Longshore, stevedore and waterfront related operations.

- WAC 296-56-60005 Definitions.

- WAC 296-56-60229 Sanitation.

Chapter 296-62 WAC, General occupational health standards, Part F—Carcinogens.

- WAC 296-62-07306 Requirements for areas containing carcinogens listed in WAC 296-62-07302.
- WAC 296-62-07314 Medical surveillance.

Chapter 296-62 WAC, General occupational health standards, Part G—Carcinogens (specific).

- WAC 296-62-07329 Vinyl chloride.
- WAC 296-62-07336 Acrylonitrile.
- WAC 296-62-07342 1,2-Dibromo-3-chloropropane.
- WAC 296-62-07460 Butadiene.

Chapter 296-62 WAC, General occupational health standards, Part I—Air contaminants (specific).

- WAC 296-62-07521 Lead.
- WAC 296-62-07631 Recordkeeping.

Chapter 296-62 WAC, General occupational health standards, Part N—Cotton dust.

- WAC 296-62-14533 Cotton dust.

Chapter 296-62 WAC, General occupational health standards, Part O—Coke ovens.

- WAC 296-62-20023 Recordkeeping.

Chapter 296-155 WAC, Safety standards for construction work, Part B-1 occupational health and environmental control.

- WAC 296-155-140 Sanitation.
- WAC 296-155-17621 Medical surveillance.
- WAC 296-155-17623 Medical removal protection.
- WAC 296-155-17629 Recordkeeping.

Chapter 296-304 WAC, Safety standards for ship repairing, shipbuilding and shipbreaking.

- WAC 296-304-02013 Appendix B—Compliance assistance guidelines for confined and enclosed spaces and other dangerous atmospheres.
- WAC 296-304-07003 Ropes, chains and slings.
- WAC 296-304-07005 Shackles and hooks.
- WAC 296-304-07011 Use of gear.

Chapter 296-307 WAC, Safety standards for agriculture, Part G field sanitation.

- WAC 296-307-09506 What definitions apply to this section?

Chapter 296-800 WAC, Safety and health core rules—Bathrooms and washing facilities.

- WAC 296-800-23025 Provide convenient and clean washing facilities.

Chapter 296-800 WAC, Safety and health core rules—Exit routes and employee alarm systems.

- WAC 296-800-310 Summary.

Chapter 296-800 WAC, Safety and health core rules—Using standards from national organizations and federal agencies.

- WAC 296-800-370 Definitions.

Chapter 296-802 WAC, Employee medical and exposure records.

- WAC 296-802-60005 Transfer or dispose of employee medical and exposure records when you go out of business.

Chapter 296-823 WAC, Occupational exposure to bloodborne pathogens.

- WAC 296-823-200 Definitions.

Chapter 296-842 WAC, Respirators.

- WAC 296-842-13005 Select and provide appropriate respirators.
- WAC 296-842-20010 Prevent conditions that could create a hazardous breathing air supply.

Statutory Authority for Adoption: RCW 49.17.010, 49.17.040, 49.17.050, 49.17.060.

Other Authority: Chapter 49.17 RCW.

Adopted under notice filed as WSR 12-17-124 on August 21, 2012.

Number of Sections Adopted in Order to Comply with Federal Statute: New 0, Amended 0, Repealed 0; Federal Rules or Standards: New 0, Amended 35, Repealed 0; or Recently Enacted State Statutes: New 0, Amended 0, Repealed 0.

Number of Sections Adopted at Request of a Nongovernmental Entity: New 0, Amended 0, Repealed 0.

Number of Sections Adopted on the Agency's Own Initiative: New 0, Amended 35, Repealed 0.

Number of Sections Adopted in Order to Clarify, Streamline, or Reform Agency Procedures: New 0, Amended 35, Repealed 0.

Number of Sections Adopted Using Negotiated Rule Making: New 0, Amended 0, Repealed 0; Pilot Rule Making: New 0, Amended 0, Repealed 0; or Other Alternative Rule Making: New 0, Amended 0, Repealed 0.

Date Adopted: December 4, 2012.

Judy Schurke
Director

AMENDATORY SECTION (Amending Order 76-6, filed 3/1/76)

WAC 296-24-29419 Safe operating practices. Whenever any sling is used, the following practices shall be observed:

(1) Slings that are damaged or defective shall not be used.

(2) Slings shall not be shortened with knots or bolts or other makeshift devices.

(3) Sling legs shall not be kinked.

(4) ~~((Slings shall not be loaded in excess of their rated capacities.))~~ Employers must not load a sling in excess of its recommended safe working load as prescribed by the sling

manufacturer on the identification markings permanently affixed to the sling.

(5) Slings used in a basket hitch shall have the loads balanced to prevent slippage.

(6) Slings shall be securely attached to their loads.

(7) Slings shall be padded or protected from the sharp edges of their loads.

(8) Suspended loads shall be kept clear of all obstructions.

(9) All employees shall be kept clear of loads about to be lifted and of suspended loads.

(10) Hands or fingers shall not be placed between the sling and its load while the sling is being tightened around the load.

(11) Shock loading is prohibited.

(12) A sling shall not be pulled from under a load when the load is resting on the sling.

(13) Employers must not use slings without affixed and legible identification markings.

AMENDATORY SECTION (Amending Order 76-29, filed 9/30/76)

WAC 296-24-29423 Alloy steel chain slings. (1) Sling identification. Alloy steel chain slings shall have permanently affixed durable identification stating size, grade, rated capacity and reach.

(2) Attachments.

(a) Hooks, rings, oblong links, pear shaped links, welded or mechanical coupling links or other attachments shall have a rated capacity at least equal to that of the alloy steel chain with which they are used or the sling shall not be used in excess of the rated capacity of the weakest component.

(b) Makeshift links or fasteners formed from bolts or rods, or other such attachments, shall not be used.

(3) Inspections.

(a) In addition to the inspection required by WAC 296-24-29421, a thorough periodic inspection of alloy steel chain slings in use shall be made on a regular basis, to be determined on the basis of:

(i) Frequency of sling use;

(ii) Severity of service conditions;

(iii) Nature of lifts being made; and

(iv) Experience gained on the service life of slings used in similar circumstances. Such inspections shall in no event be at intervals greater than once every 12 months.

(b) The employer shall make and maintain a record of the most recent month in which each alloy steel chain sling was thoroughly inspected, and shall make such record available for examination.

(c) The thorough inspection of alloy steel chain slings shall be performed by a competent person designated by the employer, and shall include a thorough inspection for wear, defective welds, deformation and increase in length. Where such defects or deterioration are present, the sling shall be immediately removed from service.

(4) Proof testing. The employer shall ensure that before use, each new, repaired, or reconditioned alloy steel chain sling, including all welded components in the sling assembly, shall be proof tested by the sling manufacturer or equivalent

entity, in accordance with paragraph 5.2 of the American Society of Testing and Materials Specification A391-65 (ANSI G61.1-1968). The employer shall retain a certificate of the proof test and shall make it available for examination.

~~(5) ((Sling use. Alloy steel chain slings shall not be used with loads in excess of the rated capacities prescribed in Table D-1. Slings not included in this table shall be used only in accordance with the manufacturer's recommendations.~~

~~(6) Safe operating temperatures. Alloy steel chain slings shall be permanently removed from service if they are heated above 1000°F. When exposed to service temperatures in excess of 600°F maximum working load limits permitted in Table D-1 shall be reduced in accordance with the chain or sling manufacturer's recommendations.~~

(7)) Safe operating temperatures. Employers must permanently remove an alloy steel-chain sling from service if it is heated above 1000°F. When exposed to service temperatures in excess of 600°F, employers must reduce the maximum working load limits permitted by the chain manufacturer in accordance with the chain or sling manufacturer's recommendations.

(6) Repairing and reconditioning alloy steel chain slings.

(a) Worn or damaged alloy steel chain slings or attachments shall not be used until repaired. When welding or heat testing is performed, slings shall not be used unless repaired, reconditioned and proof tested by the sling manufacturer or an equivalent entity.

(b) Mechanical coupling links or low carbon steel repair links shall not be used to repair broken lengths of chain.

~~((8)) (7) Effects of wear. If the chain size at any point of any links is less than that stated in Table ((D-2)) D-1, the sling shall be removed from service.~~

~~((9)) (8) Deformed attachments.~~

(a) Alloy steel chain sling with cracked or deformed master links, coupling links or other components shall be removed from service.

(b) Slings shall be removed from service if hooks are cracked, have been opened more than 15 percent of the normal throat opening measured at the narrowest point or twisted more than 10 degrees from the plane of the unbent hook.

AMENDATORY SECTION (Amending Order 79-9, filed 7/31/79)

WAC 296-24-29425 Wire rope slings. (1) Sling use. ~~((Wire rope slings shall not be used with loads in excess of the rated capacities shown in Tables D-3 through D-14. Slings not included in these tables shall be used only in accordance with the manufacturer's recommendations.))~~ Employers must use only wire rope slings that have permanently affixed and legible identification markings as prescribed by the manufacturer, and that indicate the recommended safe working load for the type(s) of hitch(es) used, the angle upon which it is based, and the number of legs if more than one.

(2) Minimum sling lengths.

(a) Cable laid and 6x19 and 6x37 slings shall have a minimum clear length of wire rope 10 times the component rope diameter between splices, sleeves or end fittings.

(b) Braided slings shall have a minimum clear length of wire rope 40 times the component rope diameter between the loops or end fittings.

(c) Cable laid grommets, strand laid grommets and endless slings shall have a minimum circumferential length of 96 times their body diameter.

(3) Safe operating temperatures. Fiber core wire rope slings of all grades shall be permanently removed from service if they are exposed to temperatures in excess of 200°F. When nonfiber core wire rope slings of any grade are used at temperatures above 400°F or below minus 60°F, recommendations of the sling manufacturer regarding use at that temperature shall be followed.

(4) End attachments.

(a) Welding of end attachments, except covers to thimbles, shall be performed prior to the assembly of the sling.

(b) All welded end attachments shall not be used unless proof tested by the manufacturer or equivalent entity at twice their rated capacity prior to initial use. The employer shall retain a certificate of the proof test, and make it available for examination.

(5) Removal from service. Wire rope slings shall be immediately removed from service if any of the following conditions are present:

(a) Ten randomly distributed broken wires in one rope lay, or five broken wires in one strand in one rope lay.

(b) Wear or scraping of one-third the original diameter of outside individual wires.

(c) Kinking, crushing, bird caging or any other damage resulting in distortion of the wire rope structure.

(d) Evidence of heat damage.

(e) End attachments that are cracked, deformed or worn.

(f) Hooks that have been opened more than 15 percent of the normal throat opening measured at the narrowest point or twisted more than 10 degrees from the plane of the unbent hook.

(g) Corrosion of the rope or end attachments.

AMENDATORY SECTION (Amending Order 76-6, filed 3/1/76)

WAC 296-24-29427 Metal mesh slings. (1) Sling marking. Each metal mesh sling shall have permanently affixed to it a durable marking that states the rated capacity for vertical basket hitch and choker hitch loadings.

(2) Handles. Handles shall have a rated capacity at least equal to the metal fabric and exhibit no deformation after proof testing.

(3) Attachments of handles to fabric. The fabric and handles shall be joined so that:

(a) The rated capacity of the sling is not reduced.

(b) The load is evenly distributed across the width of the fabric.

(c) Sharp edges will not damage the fabric.

(4) Sling coatings. Coatings which diminish the rated capacity of a sling shall not be applied.

(5) Sling testing. All new and repaired metal mesh slings, including handles, shall not be used unless proof tested by the manufacturer or equivalent entity at a minimum

of 1-1/2 times their rated capacity. Elastomer impregnated slings shall be proof tested before coating.

~~(6) ((Proper use of metal mesh slings. Metal mesh slings shall not be used to lift loads in excess of their rated capacities as prescribed in Table D-15. Slings not included in this table shall be used only in accordance with the manufacturer's recommendations.~~

(7)) Safe operating temperatures. Metal mesh slings which are not impregnated with elastomers may be used in a temperature range from minus 20°F to plus 550°F without decreasing the working load limit. Metal mesh slings impregnated with polyvinyl chloride or neoprene may be used only in a temperature range from zero degrees to plus 200°F. For operations outside these temperature ranges or for metal mesh slings impregnated with other materials, the sling manufacturer's recommendations shall be followed.

~~((8))~~ (7) Repairs.

(a) Metal mesh slings which are repaired shall not be used unless repaired by a metal mesh sling manufacturer or an equivalent entity.

(b) Once repaired, each sling shall be permanently marked or tagged, or a written record maintained, to indicate the date and nature of the repairs and the person or organization that performed the repairs. Records of repairs shall be made available for examination.

~~((9))~~ (8) Removal from service. Metal mesh slings shall be immediately removed from service if any of the following conditions are present:

(a) A broken weld or broken brazed joint along the sling edge.

(b) Reduction in wire diameter of 25 percent due to abrasion or 15 percent due to corrosion.

(c) Lack of flexibility due to distortion of the fabric.

(d) Distortion of the female handle so that the depth of the slot is increased more than 10 percent.

(e) Distortion of either handle so that the width of the eye is decreased more than 10 percent.

(f) A 15 percent reduction of the original cross sectional area of metal at any point around the handle eye.

(g) Distortion of either handle out of its plane.

AMENDATORY SECTION (Amending Order 76-6, filed 3/1/76)

WAC 296-24-29429 Natural and synthetic fiber rope slings. (1) Sling use.

~~(a) ((Fiber rope slings made from conventional three strand construction fiber rope shall not be used with loads in excess of the rated capacities prescribed in Tables D-16 through D-19.))~~ Employers must use natural and synthetic fiber rope slings that have permanently affixed and legible identification markings stating the rated capacity for the type(s) of hitch(es) used and the angle upon which it is based, type of fiber material, and the number of legs if more than one.

(b) Fiber rope slings shall have a diameter of curvature meeting at least the minimums specified in Figs. D-4 and D-5.

(c) Slings not included in these tables shall be used only in accordance with the manufacturer's recommendations.

(2) Safe operating temperatures. Natural and synthetic fiber rope slings, except for wet frozen slings, may be used in a temperature range from minus 20°F to plus 180°F without decreasing the working load limit. For operations outside this temperature range and for wet frozen slings, the sling manufacturer's recommendations shall be followed.

(3) Splicing. Spliced fiber rope slings shall not be used unless they have been spliced in accordance with the following minimum requirements and in accordance with any additional recommendations of the manufacturer:

(a) In manila rope, eye splices shall consist of at least three full tucks, and short splices shall consist of at least six full tucks, three on each side of the splice center line.

(b) In synthetic fiber rope, eye splices shall consist of at least four full tucks, and short splices shall consist of at least eight full tucks, four on each side of the center line.

(c) Strand end tails shall not be trimmed flush with the surface of the rope immediately adjacent to the full tucks. This applies to all types of fiber rope and both eye and short splices. For fiber rope under one inch in diameter, the tail shall project at least six rope diameters beyond the last full tuck. For fiber rope one inch in diameter and larger, the tail shall project at least six inches beyond the last full tuck. Where a projecting tail interferes with the use of the sling, the tail shall be tapered and spliced into the body of the rope using at least two additional tucks (which will require a tail length of approximately six rope diameters beyond the last full tuck).

(d) Fiber rope slings shall have a minimum clear length of rope between eye splices equal to 10 times the rope diameter.

(e) Knots shall not be used in lieu of splices.

(f) Clamps not designed specifically for fiber ropes shall not be used for splicing.

(g) For all eye splices, the eye shall be of such size to provide an included angle of not greater than 60 degrees at the splice when the eye is placed over the load or support.

(4) End attachments. Fiber rope slings shall not be used if end attachments in contact with the rope have sharp edges or projections.

(5) Removal from service. Natural and synthetic fiber rope slings shall be immediately removed from service if any of the following conditions are present:

(a) Abnormal wear.

(b) Powdered fiber between strands.

(c) Broken or cut fibers.

(d) Variations in the size or roundness of strands.

(e) Discoloration or rotting.

(f) Distortion of hardware in the sling.

(6) Repairs. Only fiber rope slings made from new rope shall be used. Use of repaired or reconditioned fiber rope slings is prohibited.

AMENDATORY SECTION (Amending Order 76-6, filed 3/1/76)

WAC 296-24-29431 Synthetic web slings. (1) Sling identification. Each sling shall be marked or coded to show the rated capacities for each type of hitch and type of synthetic web material.

(2) Webbing. Synthetic webbing shall be of uniform thickness and width and selvage edges shall not be split from the webbing's width.

(3) Fittings. Fittings shall be:

(a) Of a minimum breaking strength equal to that of the sling; and

(b) Free of all sharp edges that could in any way damage the webbing.

(4) Attachment of end fittings to webbing and formation of eyes. Stitching shall be the only method used to attach end fittings to webbing and to form eyes. The thread shall be in an even pattern and contain a sufficient number of stitches to develop the full breaking strength of the sling.

~~(5) ((Sling use. Synthetic web slings illustrated in Figure D-6 shall not be used with loads in excess of the rated capacities specified in Tables D-20 through D-22. Slings not included in these tables shall be used only in accordance with the manufacturer's recommendations.~~

~~(6))~~ Environmental conditions. When synthetic web slings are used, the following precautions shall be taken:

(a) Nylon web slings shall not be used where fumes, vapors, sprays, mists or liquids of acids or phenolics are present.

(b) Polyester and polypropylene web slings shall not be used where fumes, vapors, sprays, mists or liquids of caustics are present.

(c) Web slings with aluminum fittings shall not be used where fumes, vapors, sprays, mists or liquids of caustics are present.

~~((7))~~ (6) Safe operating temperatures. Synthetic web slings of polyester and nylon shall not be used at temperatures in excess of 180°F. Polypropylene web slings shall not be used at temperatures in excess of 200°F.

~~((8))~~ (7) Repairs.

(a) Synthetic web slings which are repaired shall not be used unless repaired by a sling manufacturer or an equivalent entity.

(b) Each repaired sling shall be proof tested by the manufacturer or equivalent entity to twice the rated capacity prior to its return to service. The employer shall retain a certificate of the proof test and make it available for examination.

(c) Slings, including webbing and fittings, which have been repaired in a temporary manner shall not be used.

~~((9))~~ (8) Removal from service. Synthetic web slings shall be immediately removed from service if any of the following conditions are present:

(a) Acid or caustic burns;

(b) Melting or charring of any part of the sling surface;

(c) Snags, punctures, tears or cuts;

(d) Broken or worn stitches; or

(e) Distortion of fittings.

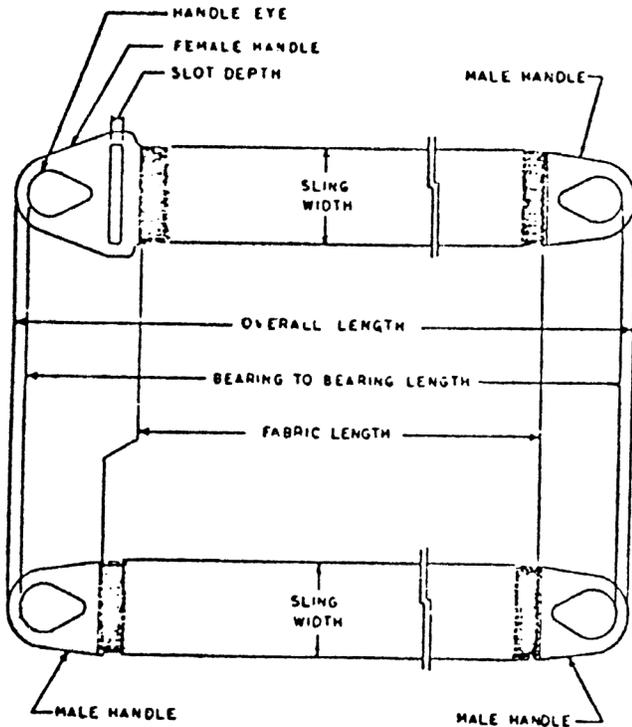


Figure D-1
Metal Mesh Sling (Typical)

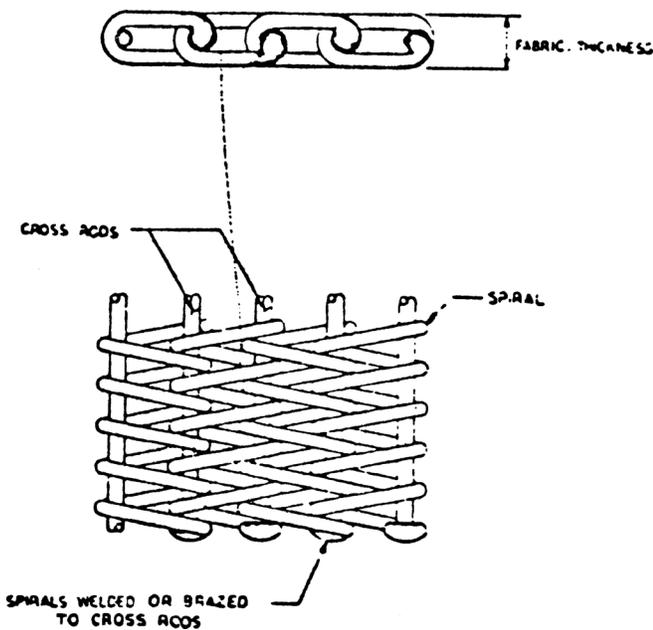


Figure D-2
Metal Mesh Construction

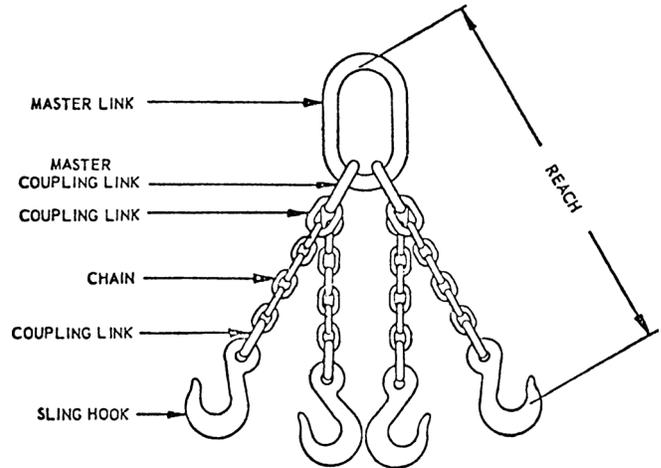


Figure D-3
Major Components of a Quadruple Sling

((TABLE D-1

RATED CAPACITY (WORKING LOAD LIMIT), FOR ALLOY STEEL-
CHAIN SLINGS* RATED CAPACITY (WORKING LOAD LIMIT),
POUNDS

TABLE D-1: Part 1 — Double Slings

Chain Size, Inches	Single-Branch Sling— 90 degree- Loading	30- degree	Double-Sling Vertical Angle ¹ 45- degree	60 degree
		60- degree	Horizontal Angle ² 45- degree	30 degree
1/4	3,250	5,650	4,550	3,250
3/8	6,600	11,400	9,300	6,600
1/2	11,250	19,500	15,900	11,250
5/8	16,500	28,500	23,300	16,500
3/4	23,000	39,800	32,500	23,000
7/8	28,750	49,800	40,600	28,750
1	38,750	67,100	54,800	38,750
1-1/8	44,500	77,000	63,000	44,500
1-1/4	57,500	99,500	81,000	57,500
1-3/8	67,000	116,000	94,000	67,000
1-1/2	80,000	138,000	112,500	80,000
1-3/4	100,000	172,000	140,000	100,000

⁽¹⁾Rating of multileg slings adjusted for angle of loading measured as the included angle between the inclined leg and the vertical as shown in Figure D-5.

⁽²⁾Rating of multileg slings adjusted for angle of loading between the inclined leg and the horizontal plane of the load, as shown in Figure D-5.

⁽³⁾Quadruple sling rating is same as triple sling because normal lifting practice may not distribute load uniformly to all 4 legs.

TABLE D-1: Part 2 Triple and Quadruple Slings

Chain Size, Inches	Single Branch Sling - 90 degree Loading	Triple and Quadruple Sling ⁽²⁾		
		30 degree Vertical Angle ⁽¹⁾	45 degree Horizontal Angle ⁽²⁾	60 degree 30 degree
1/4	3,250	8,400	6,800	4,900
3/8	6,600	17,000	14,000	9,900
1/2	11,250	29,000	24,000	17,000
5/8	16,500	43,000	35,000	24,500
3/4	23,000	59,500	48,500	34,500
7/8	28,750	74,500	61,000	43,000
1	38,750	101,000	82,000	58,000
1-1/8	44,500	115,500	94,500	66,500
1-1/4	57,500	149,000	121,500	86,000
1-3/8	67,000	174,000	141,000	100,500
1-1/2	80,000	207,000	169,000	119,500
1-3/4	100,000	258,000	210,000	150,000

⁽¹⁾Rating of multileg slings adjusted for angle of loading measured as the included angle between the inclined leg and the vertical as shown in Figure D-5.

⁽²⁾Rating of multileg slings adjusted for angle of loading between the inclined leg and the horizontal plane of the load, as shown in Figure D-5.

⁽³⁾Quadruple sling rating is same as triple sling because normal lifting practice may not distribute load uniformly to all 4 legs.))

TABLE ((D-2)) D-1

MINIMUM ALLOWABLE CHAIN SIZE AT ANY POINT OF LINK

Chain Size, Inches	Minimum Allowable Chain Size, Inches
1/4	13/64
3/8	19/64
1/2	25/64
5/8	31/64
3/4	19/32
7/8	45/64
1	13/16
1- 1/8	29/32
1- 1/4	1
1- 3/8	1- 3/32
1- 1/2	1- 3/16
1- 3/4	1-13/32

((TABLE D-3

RATED CAPACITIES FOR SINGLE LEG SLINGS 6x19 AND 6x37 CLASSIFICATION IMPROVED PLOW STEEL GRADE ROPE WITH FIBER CORE (FC)

Rope Dia. (Inches)	Constr.	Rated Capacities, Tons (2,000 lb)								
		Vertical			Choker			Vertical Basket*		
		HT	MS	S	HT	MS	S	HT	MS	S
1/4	6x19	0.49	0.51	0.55	0.37	0.38	0.41	0.99	1.0	1.1

Rope Dia. (Inches)	Constr.	Rated Capacities, Tons (2,000 lb)								
		Vertical			Choker			Vertical Basket*		
		HT	MS	S	HT	MS	S	HT	MS	S
5/16	6x19	0.76	0.79	0.85	0.57	0.59	0.64	1.5	1.6	1.7
3/8	6x19	1.1	1.1	1.2	0.80	0.85	0.91	2.1	2.2	2.4
7/16	6x19	1.4	1.5	1.6	1.1	1.1	1.2	2.9	3.0	3.3
1/2	6x19	1.8	2.0	2.1	1.4	1.5	1.6	3.7	3.9	4.3
9/16	6x19	2.3	2.5	2.7	1.7	1.9	2.0	4.6	5.0	5.4
5/8	6x19	2.8	3.1	3.3	2.1	2.3	2.5	5.6	6.2	6.7
3/4	6x19	3.9	4.4	4.8	2.9	3.3	3.6	7.8	8.8	9.5
7/8	6x19	5.1	5.9	6.4	3.9	4.5	4.8	10.0	12.0	13.0
1	6x19	6.7	7.7	8.4	5.0	5.8	6.3	13.0	15.0	17.0
1-1/8	6x19	8.4	9.5	10.0	6.3	7.1	7.9	17.0	19.0	21.0
1-1/4	6x37	9.8	11.0	12.0	7.4	8.3	9.2	20.0	22.0	25.0
1-3/8	6x37	12.0	13.0	15.0	8.9	10.0	11.0	24.0	27.0	30.0
1-1/2	6x37	14.0	16.0	17.0	10.0	12.0	13.0	28.0	32.0	35.0
1-5/8	6x37	16.0	18.0	21.0	12.0	14.0	15.0	33.0	37.0	41.0
1-3/4	6x37	19.0	21.0	24.0	14.0	16.0	18.0	38.0	43.0	48.0
2	6x37	25.0	28.0	31.0	18.0	21.0	23.0	49.0	55.0	62.0

HT = Hand tucked splice and hidden tuck splice
 For hidden tuck splice (IWRC) use value in HT columns.
 MS = Mechanical splice.
 S = Swaged or zinc poured socket.
 * These values only apply when the D/d ratio for HT slings is 10 or greater, and for MS and S slings is 20 or greater where:
 D = Diameter of curvature around which the body of the sling is bent.
 d = Diameter of rope.

TABLE D-4

RATED CAPACITIES FOR SINGLE LEG SLINGS 6x19 AND 6x37 CLASSIFICATION IMPROVED PLOW STEEL GRADE ROPE WITH INDEPENDENT WIRE ROPE CORE (IWRC)

Rope Dia. (Inches)	Constr.	Rated Capacities, Tons (2,000 lb)								
		Vertical			Choker			Vertical Basket*		
		HT	MS	S	HT	MS	S	HT	MS	S
1/4	6x19	0.53	0.56	0.59	0.40	0.42	0.44	1.0	1.1	1.2
5/16	6x19	0.81	0.87	0.92	0.61	0.65	0.69	1.6	1.7	1.8
3/8	6x19	1.1	1.2	1.3	0.86	0.93	0.98	2.3	2.5	2.6
7/16	6x19	1.5	1.7	1.8	1.2	1.3	1.3	3.1	3.4	3.5
1/2	6x19	2.0	2.2	2.3	1.5	1.6	1.7	3.9	4.4	4.6
9/16	6x19	2.5	2.7	2.9	1.8	2.1	2.2	4.9	5.5	5.8
5/8	6x19	3.0	3.4	3.6	2.2	2.5	2.7	6.0	6.8	7.2
3/4	6x19	4.2	4.9	5.1	3.1	3.6	3.8	8.4	9.7	10.0
7/8	6x19	5.5	6.6	6.9	4.1	4.9	5.2	11.0	13.0	14.0
1	6x19	7.2	8.5	9.0	5.4	6.4	6.7	14.0	17.0	18.0
1-1/8	6x19	9.0	10.0	11.0	6.8	7.8	8.5	18.0	21.0	23.0
1-1/4	6x37	10.0	12.0	13.0	7.9	9.2	9.9	21.0	24.0	26.0
1-3/8	6x37	13.0	15.0	16.0	9.6	11.0	12.0	25.0	29.0	32.0
1-1/2	6x37	15.0	17.0	19.0	11.0	13.0	14.0	30.0	35.0	38.0
1-5/8	6x37	18.0	20.0	22.0	13.0	15.0	17.0	35.0	41.0	44.0
1-3/4	6x37	20.0	24.0	26.0	15.0	18.0	19.0	41.0	47.0	51.0
2	6x37	26.0	30.0	33.0	20.0	23.0	25.0	53.0	61.0	66.0

HT = Hand tucked splice.
 For hidden tuck splice (IWRC) use Table I value in HT columns.
 MS = Mechanical splice.
 S = Swaged or zinc poured socket.

* These values only apply when the D/d ratio for HT slings is 10 or greater, and for MS and S slings is 20 or greater where:
 D = Diameter of curvature around which the body of the sling is bent.
 d = Diameter of rope.

TABLE D-5

RATED CAPACITIES FOR SINGLE LEG SLINGS CABLE LAID ROPE - MECHANICAL SPLICE ONLY 7x7x7 AND 7x7x19 CONSTRUCTIONS GALVANIZED AIRCRAFT GRADE ROPE 7x6x19 IWRC CONSTRUCTION IMPROVED PLOW STEEL GRADE ROPE

Rope		Rated Capacities, Tons (2,000 lb)		
Dia. (Inches)	Constr.	Vertical	Vertical	
			Choker	Basket*
1/4	7x7x7	0.50	0.38	1.0
3/8	7x7x7	1.1	0.81	2.0
1/2	7x7x7	1.8	1.4	3.7
5/8	7x7x7	2.8	2.1	5.5
3/4	7x7x7	3.8	2.9	7.6
5/8	7x7x19	2.9	2.2	5.8
3/4	7x7x19	4.1	3.0	8.1
7/8	7x7x19	5.4	4.0	11.0
1	7x7x19	6.9	5.1	14.0
1-1/8	7x7x19	8.2	6.2	16.0
1-1/4	7x7x19	9.9	7.4	20.0
3/4	7x6x19 IWRC	3.8	2.8	7.6
7/8	7x6x19 IWRC	5.0	3.8	10.0
1	7x6x19 IWRC	6.4	4.8	13.0
1-1/8	7x6x19 IWRC	7.7	5.8	15.0
1-1/4	7x6x19 IWRC	9.2	6.9	18.0
1-5/16	7x6x19 IWRC	10.0	7.5	20.0
1-3/8	7x6x19 IWRC	11.0	8.2	22.0
1-1/2	7x6x19 IWRC	13.0	9.6	26.0

* These values only apply when the D/d ratio is 10 or greater where:
 D = Diameter of curvature around which the body of the sling is bent.
 d = Diameter of rope.

TABLE D-6

RATED CAPACITIES FOR SINGLE LEG SLINGS 8-PART AND 6-PART BRAIDED ROPE 6x7 AND 6x19 CONSTRUCTION IMPROVED PLOW STEEL GRADE ROPE 7x7 CONSTRUCTION GALVANIZED AIRCRAFT GRADE ROPE

Component Ropes		Rated Capacities, Tons (2,000 lb)					
Diameter (inches)	Constr.	Vertical		Choker		Basket-Vertical to 30 degrees*	
		8-Part	6-Part	8-Part	6-Part	8-Part	6-Part
1/8	6x7	-0.76	-0.57	-0.57	-0.42	-1.3	-0.98
3/16	6x7	-1.7	-1.3	-1.3	-0.94	-2.9	-2.2
3/32	7x7	-0.51	-0.39	-0.38	-0.29	-0.89	-0.67
1/8	7x7	-0.95	-0.71	-0.71	-0.53	-1.6	-1.2
3/16	7x7	-2.1	-1.5	-1.5	-1.2	-3.6	-2.7
3/16	6x19	-1.7	-1.3	-1.3	-0.98	-3.0	-2.2
1/4	6x19	-3.1	-2.3	-2.3	-1.7	-5.3	-4.0
5/16	6x19	-4.8	-3.6	-3.6	-2.7	-8.3	-6.2

3/8	6x19	-6.8	-5.1	-5.1	-3.8	12.0	-8.9
7/16	6x19	-9.3	-6.9	-6.9	-5.2	16.0	12.0
1/2	6x19	12.0	-9.0	-9.0	-6.7	21.0	15.0
9/16	6x19	15.0	11.0	11.0	-8.5	26.0	20.0
5/8	6x19	19.0	14.0	14.0	10.0	32.0	24.0
3/4	6x19	27.0	20.0	20.0	15.0	46.0	35.0
7/8	6x19	36.0	27.0	27.0	20.0	62.0	47.0
1	6x19	47.0	35.0	35.0	26.0	81.0	61.0

* These values only apply when the D/d ratio is 20 or greater where:
 D = Diameter of curvature around which the body of the sling is bent.
 d = Diameter of component rope.

TABLE D-7

RATED CAPACITIES FOR 2-LEG AND 3-LEG BRIDLE SLINGS 6x19 AND 6x37 CLASSIFICATION IMPROVED PLOW STEEL GRADE ROPE WITH FIBER CORE (FC)

TABLE D-7: Part 1 — 2 Leg Bridle Slings

Rope		Rated Capacities, Tons (2,000 lb)					
Dia. (Inches)	Constr.	2-Leg Bridle Slings					
		Vert 30 degree		45 degree		Vert 60 degree	
		Horz 60 degree	Angle	Horz 30 degree	Angle	Horz 30 degree	Angle
1/4	6x19	-0.85	-0.88	-0.70	-0.72	-0.49	-0.51
5/16	6x19	-1.3	-1.4	-1.1	-1.1	-0.76	-0.79
3/8	6x19	-1.8	-1.9	-1.5	-1.6	-1.1	-1.1
7/16	6x19	-2.5	-2.6	-2.0	-2.2	-1.4	-1.5
1/2	6x19	-3.2	-3.4	-2.6	-2.8	-1.8	-2.0
9/16	6x19	-4.0	-4.3	-3.2	-3.5	-2.3	-2.5
5/8	6x19	-4.8	-5.3	-4.0	-4.4	-2.8	-3.1
3/4	6x19	-6.8	-7.6	-5.5	-6.2	-3.9	-4.4
7/8	6x19	-8.9	10.0	-7.3	-8.4	-5.1	-5.9
1	6x19	11.0	13.0	-9.4	11.0	-6.7	-7.7
1-1/8	6x19	14.0	16.0	12.0	13.0	-8.4	-9.5
1-1/4	6x37	17.0	19.0	14.0	16.0	-9.8	11.0
1-3/8	6x37	20.0	23.0	17.0	19.0	12.0	13.0
1-1/2	6x37	24.0	27.0	20.0	22.0	14.0	16.0
1-5/8	6x37	28.0	32.0	23.0	26.0	16.0	18.0
1-3/4	6x37	33.0	37.0	27.0	30.0	19.0	21.0
2	6x37	43.0	48.0	35.0	39.0	25.0	28.0

HT = Hand tucked splice.
 MS = Mechanical splice.

TABLE D-7: Part 2 — 3 Leg Bridle Slings

Rope		Rated Capacities, Tons (2,000 lb)					
Dia. (Inches)	Constr.	3-Leg Bridle Slings					
		Vert 30 degree		45 degree		Vert 60 degree	
		Horz 60 degree	Angle	Horz 30 degree	Angle	Horz 30 degree	Angle
1/4	6x19	1.3	1.3	1.0	1.1	0.74	0.76
5/16	6x19	2.0	2.0	1.6	1.7	1.1	1.2
3/8	6x19	2.8	2.9	2.3	2.4	1.6	1.7
7/16	6x19	3.7	4.0	3.0	3.2	2.1	2.3

Rope		Rated Capacities, Tons (2,000 lb)					
		3-Leg Bridle Slings					
Dia. (Inches)	Constr.	Vert 30 degree		45 degree		Vert 60 degree	
		Horz 60 degree	Angle	Horz 30 degree	Angle	Horz 30 degree	Angle
		HT	MS	HT	MS	HT	MS
1/2	6x19	4.8	5.1	3.9	4.2	2.8	3.0
9/16	6x19	6.0	6.5	4.9	5.3	3.4	3.7
5/8	6x19	7.3	8.0	5.9	6.5	4.2	4.6
3/4	6x19	10.0	11.0	8.3	9.3	5.8	6.6
7/8	6x19	13.0	15.0	11.0	13.0	7.7	8.9
1	6x19	17.0	20.0	14.0	16.0	10.0	11.0
1-1/8	6x19	22.0	24.0	18.0	20.0	13.0	14.0
1-1/4	6x37	25.0	29.0	21.0	23.0	15.0	17.0
1-3/8	6x37	31.0	35.0	25.0	28.0	18.0	20.0
1-1/2	6x37	36.0	41.0	30.0	33.0	21.0	24.0
1-5/8	6x37	43.0	48.0	35.0	39.0	25.0	28.0
1-3/4	6x37	49.0	56.0	40.0	45.0	28.0	32.0
2	6x37	64.0	72.0	52.0	59.0	37.0	41.0

HT = Hand tucked splice.
MS = Mechanical splice.

TABLE D-8

RATED CAPACITIES FOR 2-LEG AND 3-LEG BRIDLE SLINGS 6x19 AND 6x37 CLASSIFICATION IMPROVED PLOW STEEL GRADE ROPE WITH INDEPENDENT WIRE ROPE CORE (IWRC)

TABLE D-8: Part 1 — 2 Leg Bridle Sling

Rope		Rated Capacities, Tons (2,000 lb)					
		2-Leg Bridle Slings					
Dia. (Inches)	Constr.	Vert 30 degree		45 degree		Vert 60 degree	
		Horz 60 degree	Angle	Horz 30 degree	Angle	Horz 30 degree	Angle
		HT	MS	HT	MS	HT	MS
1/4	6x19	0.92	0.97	0.75	0.79	0.53	0.56
5/16	6x19	1.4	1.5	1.1	1.2	0.81	0.87
3/8	6x19	2.0	2.1	1.6	1.8	1.1	1.2
7/16	6x19	2.7	2.9	2.2	2.4	1.5	1.7
1/2	6x19	3.4	3.8	2.8	3.1	2.0	2.2
9/16	6x19	4.3	4.8	3.5	3.9	2.5	2.7
5/8	6x19	5.2	5.9	4.2	4.8	3.0	3.4
3/4	6x19	7.3	8.4	5.9	6.9	4.2	4.9
7/8	6x19	9.6	11.0	7.8	9.3	5.5	6.6
1	6x19	12.0	15.0	10.0	12.0	7.2	8.5
1-1/8	6x19	16.0	18.0	13.0	15.0	9.0	10.0
1-1/4	6x37	18.0	21.0	15.0	17.0	10.0	12.0
1-3/8	6x37	22.0	25.0	18.0	21.0	13.0	15.0
1-1/2	6x37	26.0	30.0	21.0	25.0	15.0	17.0
1-5/8	6x37	31.0	35.0	25.0	29.0	18.0	20.0
1-3/4	6x37	35.0	41.0	29.0	33.0	20.0	24.0
2	6x37	46.0	53.0	37.0	43.0	26.0	30.0

HT = Hand tucked splice.
MS = Mechanical splice.

TABLE D-8: Part 2 — 3 Leg Bridle Slings

Rope		Rated Capacities, Tons (2,000 lb)					
		2-Leg Bridle Sling					
Dia. (Inches)	Constr.	Vert 30 degree		45 degree		Vert 60 degree	
		Horz 60 degree	Angle	Horz 30 degree	Angle	Horz 30 degree	Angle
		HT	MS	HT	MS	HT	MS
1/4	6x19	1.4	1.4	1.1	1.2	0.79	0.84
5/16	6x19	2.1	2.3	1.7	1.8	1.2	1.3
3/8	6x19	3.0	3.2	2.4	2.6	1.7	1.9
7/16	6x19	4.0	4.4	3.3	3.6	2.3	2.5
1/2	6x19	5.1	5.7	4.2	4.6	3.0	3.3
9/16	6x19	6.4	7.1	5.2	5.8	3.7	4.1
5/8	6x19	7.8	8.8	6.4	7.2	4.5	5.1
3/4	6x19	11.0	13.0	8.9	10.0	6.3	7.3
7/8	6x19	14.0	17.0	12.0	14.0	8.3	9.9
1	6x19	19.0	22.0	15.0	18.0	11.0	13.0
1-1/8	6x19	23.0	27.0	19.0	22.0	13.0	16.0
1-1/4	6x37	27.0	32.0	22.0	26.0	16.0	18.0
1-3/8	6x37	33.0	38.0	27.0	31.0	19.0	22.0
1-1/2	6x37	39.0	45.0	32.0	37.0	23.0	26.0
1-5/8	6x37	46.0	53.0	38.0	43.0	27.0	31.0
1-3/4	6x37	53.0	61.0	43.0	50.0	31.0	35.0
2	6x37	68.0	79.0	56.0	65.0	40.0	46.0

HT = Hand tucked splice.
MS = Mechanical splice.

TABLE D-9

RATED CAPACITIES FOR 2-LEG AND 3-LEG BRIDLE SLINGS CABLE LAID ROPE — MECHANICAL SPLICE ONLY 7x7x7 AND 7x7x19 CONSTRUCTIONS GALVANIZED AIRCRAFT GRADE ROPE 7x6x19 IWRC CONSTRUCTION IMPROVED PLOW STEEL GRADE ROPE

TABLE D-9: Part 1 — 2 Leg Bridle Slings

Rope		Rated Capacities, Tons (2,000 lb)		
		2-Leg Bridle Sling		
Dia. (Inches)	Constr.	Vert 30 degree	45 degree	Vert 60 degree
		Horz 60 degree	Angle	Horz 30 degree
1/4	7x7x7	0.87	0.71	0.50
3/8	7x7x7	1.9	1.5	1.1
1/2	7x7x7	3.2	2.6	1.8
5/8	7x7x7	4.8	3.9	2.8
3/4	7x7x7	6.6	5.4	3.8
5/8	7x7x19	5.0	4.1	2.9
3/4	7x7x19	7.0	5.7	4.1
7/8	7x7x19	9.3	7.6	5.4
1	7x7x19	12.0	9.7	6.9
1-1/8	7x7x19	14.0	12.0	8.2
1-1/4	7x7x19	17.0	14.0	9.9
3/4	7x6x19 IWRC	6.6	5.4	3.8
7/8	7x6x19 IWRC	8.7	7.1	5.0
1	7x6x19 IWRC	11.0	9.0	6.4
1-1/8	7x6x19 IWRC	13.0	11.0	7.7
1-1/4	7x6x19 IWRC	16.0	13.0	9.2
1-5/16	7x6x19 IWRC	17.0	14.0	10.0
1-3/8	7x6x19 IWRC	19.0	15.0	11.0

Rope		Rated Capacities, Tons (2,000 lb)			
		2-Leg Bridle Sling			
-Dia- (Inches)	Constr.	Vert 30 degree Horz 60 degree	45 degree Angle	Vert 60 degree Horz 30 degree	
1-1/2	7x6x19 IWRC	22.0	18.0	13.0	

TABLE D-9: Part 2 — 3 Leg Bridle Slings

Rope		Rated Capacities, Tons (2,000 lb)			
		3-Leg Bridle Sling			
-Dia- (Inches)	Constr.	Vert 30 degree Horz 60 degree	45 degree Angle	Vert 60 degree Horz 30 degree	
1/4	7x7x7	1.3	1.1	0.75	
3/8	7x7x7	2.8	2.3	1.6	
1/2	7x7x7	4.8	3.9	2.8	
5/8	7x7x7	7.2	5.9	4.2	
3/4	7x7x7	9.9	8.1	5.7	
5/8	7x7x19	7.5	6.1	4.3	
3/4	7x7x19	10.0	8.6	6.1	
7/8	7x7x19	14.0	11.0	8.1	
1	7x7x19	18.0	14.0	10.0	
1-1/8	7x7x19	21.0	17.0	12.0	
1-1/4	7x7x19	26.0	21.0	15.0	
3/4	7x6x19 IWRC	9.9	8.0	5.7	
7/8	7x6x19 IWRC	13.0	11.0	7.5	
1	7x6x19 IWRC	17.0	13.0	9.6	
1-1/8	7x6x19 IWRC	20.0	16.0	11.0	
1-1/4	7x6x19 IWRC	24.0	20.0	14.0	
1-5/16	7x6x19 IWRC	26.0	21.0	15.0	
1-3/8	7x6x19 IWRC	28.0	23.0	16.0	
1-1/2	7x6x19 IWRC	33.0	27.0	19.0	

TABLE D-10

RATED CAPACITIES FOR 2-LEG AND 3-LEG BRIDLE SLINGS 8-PART AND 6-PART BRAIDED ROPE 6x7 AND 6x19 CONSTRUCTION-IMPROVED PLOW STEEL GRADE ROPE 7x7 CONSTRUCTION GALVANIZED AIRCRAFT GRADE ROPE

TABLE D-10: Part 1 — 2 Leg Bridle Slings

Rope		Rated Capacities, Tons (2,000 lb)					
		2-Leg Bridle Slings					
-Dia- (Inches)	Constr.	Vert 30 degree Horz 60 degree		45 degree Angle		Vert 60 degree Horz 30 degree	
		8-Part	6-Part	8-Part	6-Part	8-Part	6-Part
3/32	6x7	0.74	0.55	0.60	0.45	0.42	0.32
1/8	6x7	1.3	0.98	1.1	0.80	0.76	0.57
3/16	6x7	2.9	2.2	2.4	1.8	1.7	1.3
3/32	7x7	0.89	0.67	0.72	0.55	0.51	0.39
1/8	7x7	1.6	1.2	1.3	1.0	0.95	0.71
3/16	7x7	3.6	2.7	2.9	2.2	2.1	1.5
3/16	6x19	3.0	2.2	2.4	1.8	1.7	1.3
1/4	6x19	5.3	4.0	4.3	3.2	3.1	2.3
5/16	6x19	8.3	6.2	6.7	5.0	4.8	3.6
3/8	6x19	12.0	8.9	9.7	7.2	6.8	5.1
7/16	6x19	16.0	12.0	13.0	9.8	9.3	6.9

Rope		Rated Capacities, Tons (2,000 lb)					
		2-Leg Bridle Slings					
-Dia- (Inches)	Constr.	Vert 30 degree Horz 60 degree		45 degree Angle		Vert 60 degree Horz 30 degree	
		8-Part	6-Part	8-Part	6-Part	8-Part	6-Part
1/2	6x19	21.0	15.0	17.0	13.0	12.0	9.0
9/16	6x19	26.0	20.0	21.0	16.0	15.0	11.0
5/8	6x19	32.0	24.0	26.0	20.0	19.0	14.0
3/4	6x19	46.0	35.0	38.0	28.0	27.0	20.0
7/8	6x19	62.0	47.0	51.0	38.0	36.0	27.0
1	6x19	81.0	61.0	66.0	50.0	47.0	35.0

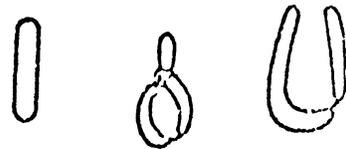
TABLE D-10: Part 2 — 3 Leg Bridle Slings

Rope		Rated Capacities, Tons (2,000 lb)					
		3-Leg Bridle Slings					
-Dia- (Inches)	Constr.	Vert 30 degree Horz 60 degree		45 degree Angle		Vert 60 degree Horz 30 degree	
		8-Part	6-Part	8-Part	6-Part	8-Part	6-Part
3/32	6x7	1.1	0.83	0.90	0.68	0.64	0.48
1/8	6x7	2.0	1.5	1.6	1.2	1.1	0.85
3/16	6x7	4.4	3.3	3.6	2.7	2.5	1.9
3/32	7x7	1.3	1.0	1.1	0.82	0.77	0.58
1/8	7x7	2.5	1.8	2.0	1.5	1.4	1.1
3/16	7x7	5.4	4.0	4.4	3.3	3.1	2.3
3/16	6x19	4.5	3.4	3.7	2.8	2.6	1.9
1/4	6x19	8.0	6.0	6.5	4.9	4.6	3.4
5/16	6x19	12.0	9.3	10.0	7.6	7.1	5.4
3/8	6x19	18.0	13.0	14.0	11.0	10.0	7.7
7/16	6x19	24.0	18.0	20.0	15.0	14.0	10.0
1/2	6x19	31.0	23.0	25.0	19.0	18.0	13.0
9/16	6x19	39.0	29.0	32.0	24.0	23.0	17.0
5/8	6x19	48.0	36.0	40.0	30.0	28.0	21.0
3/4	6x19	69.0	52.0	56.0	42.0	40.0	30.0
7/8	6x19	94.0	70.0	76.0	57.0	54.0	40.0
1	6x19	122.0	91.0	99.0	74.0	70.0	53.0

TABLE D-11

RATED CAPACITIES FOR STRAND LAID GROMMET - HAND TUCKED IMPROVED PLOW STEEL GRADE ROPE

ROPE BODY		RATED CAPACITIES, TONS (2,000 lb)		
-Dia- (Inches)	Constr.	Vertical	Choker	Vertical Basket*
1/4	7x19	0.85	0.64	1.7
5/16	7x19	1.3	1.0	2.6
3/8	7x19	1.9	1.4	3.8



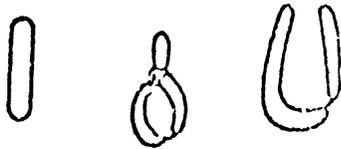
7/16	7x19	2.6	1.9	5.2
1/2	7x19	3.3	2.5	6.7
9/16	7x19	4.2	3.1	8.4
5/8	7x19	5.2	3.9	10.00
3/4	7x19	7.4	5.6	15.0
7/8	7x19	10.0	7.5	20.0
1	7x19	13.0	9.7	26.0
1-1/8	7x19	16.0	12.0	32.0
1-1/4	7x37	18.0	14.0	37.0
1-3/8	7x37	22.0	16.0	44.0
1-1/2	7x37	26.0	19.0	52.0

* These values only apply when the D/d ratio is 5 or greater where:
 D= Diameter of curvature around which rope is bent.
 d= Diameter of rope body.

TABLE D-12

RATED CAPACITIES FOR CABLE LAID GROMMET—HAND-TUCKED 7x6x7 AND 7x6x19 CONSTRUCTIONS IMPROVED PLOW STEEL GRADE ROPE 7x7x7 CONSTRUCTION GALVANIZED AIRCRAFT GRADE ROPE

CABLE BODY	RATED CAPACITIES, TONS (2,000 lb)			
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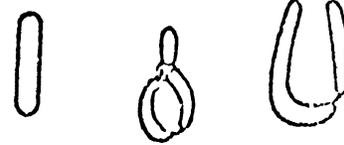
—Dia.— (Inches)	—Constr.—	Vertical	Choker	Vertical Basket*
3/8	7x6x7	1.3	0.95	2.5
9/16	7x6x7	2.8	2.1	5.6
5/8	7x6x7	3.8	2.8	7.6
3/8	7x7x7	1.6	1.2	3.2
9/16	7x7x7	3.5	2.6	6.9
5/8	7x7x7	4.5	3.4	9.0
5/8	7x6x19	3.9	3.0	7.9
3/4	7x6x19	5.1	3.8	10.0
15/16	7x6x19	7.9	5.9	16.0
1-1/8	7x6x19	11.0	8.4	22.0
1-5/16	7x6x19	15.0	11.0	30.0
1-1/2	7x6x19	19.0	14.0	39.0
1-11/16	7x6x19	24.0	18.0	49.0
1-7/8	7x6x19	30.0	22.0	60.0
2-1/4	7x6x19	42.0	31.0	84.0
2-5/8	7x6x19	56.0	42.0	112.0

* These values only apply when the D/d ratio is 5 or greater where:
 D= Diameter of curvature around which cable body is bent.
 d= Diameter of cable body.

TABLE D-13

RATED CAPACITIES FOR STRAND LAID ENDLESS SLINGS—MECHANICAL JOINT IMPROVED PLOW STEEL GRADE ROPE

ROPE BODY	RATED CAPACITIES, TONS (2,000 lb)			
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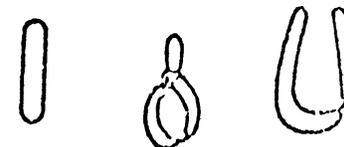
—Dia.— (Inches)	Constr.	Vertical	Choker	Vertical Basket*
1/4	6x19 IWRC	0.92	0.69	1.8
3/8	6x19 IWRC	2.0	1.5	4.1
1/2	6x19 IWRC	3.6	2.7	7.2
5/8	6x19 IWRC	5.6	4.2	11.0
3/4	6x19 IWRC	8.0	6.0	16.0
7/8	6x19 IWRC	11.0	8.1	21.0
1	6x19 IWRC	14.0	10.0	28.0
1-1/8	6x19 IWRC	18.0	13.0	35.0
1-1/4	6x37 IWRC	21.0	15.0	41.0
1-3/8	6x37 IWRC	25.0	19.0	50.0
1-1/2	6x37 IWRC	29.0	22.0	59.0

* These values only apply when the D/d ratio is 5 or greater where:
 D= Diameter of curvature around which rope is bent.
 d= Diameter of rope body.

TABLE D-14

RATED CAPACITIES FOR CABLE LAID ENDLESS SLINGS—MECHANICAL JOINT 7x7x7 AND 7x7x19 CONSTRUCTIONS GALVANIZED AIRCRAFT GRADE ROPE 7x6x19 IWRC CONSTRUCTION IMPROVED PLOW STEEL GRADE ROPE

CABLE BODY	RATED CAPACITIES, TONS (2,000 lb)			
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—Dia.— (Inches)	Constr.	Vertical	Choker	Vertical Basket*
1/4	7x7x7	0.83	0.62	1.6
3/8	7x7x7	1.8	1.3	3.5
1/2	7x7x7	3.0	2.3	6.1
5/8	7x7x7	4.5	3.4	9.1
3/4	7x7x7	6.3	4.7	12.0
5/8	7x7x19	4.7	3.5	9.5
3/4	7x7x19	6.7	5.0	13.0
7/8	7x7x19	8.9	6.6	18.0
1	7x7x19	11.0	8.5	22.0
1-1/8	7x7x19	14.0	10.0	28.0
1-1/4	7x7x19	17.0	12.0	33.0

Nominal in Inches	Nominal Weight per 100 ft. in Pounds	Vertical Hitch	Choker Hitch	Angle of Rope to Vertical			
				90°	60°	45°	30°
				0°	30°	45°	60°
1/2	7.5	865	430	1,730	1,500	1,220	865
9/16	10.4	1,120	560	2,230	1,930	1,580	1,120
5/8	13.3	1,420	710	2,840	2,460	2,010	1,420
3/4	16.7	1,750	875	3,490	3,020	2,470	1,750
13/16	19.5	2,110	1,050	4,210	3,650	2,980	2,110
7/8	22.5	2,500	1,250	5,000	4,330	3,540	2,500
1"	27.0	2,920	1,460	5,830	5,050	4,120	2,920
1-1/16	31.3	3,400	1,700	6,800	5,890	4,810	3,400
1-1/8	36.0	3,890	1,940	7,780	6,730	5,500	3,890
1-1/4	41.7	4,370	2,190	8,750	7,580	6,190	4,370
1-5/16	47.9	4,860	2,430	9,720	8,420	6,870	4,860
1-1/2	59.9	5,990	3,000	12,000	10,400	8,480	5,990
1-5/8	74.6	7,290	3,650	14,600	12,600	10,300	7,290
1-3/4	89.3	8,590	4,290	17,200	14,900	12,100	8,590
2"	107.5	10,000	5,020	20,100	17,400	14,200	10,000
2-1/8	125.0	11,700	5,830	23,300	20,200	16,500	11,700
2-1/4	146.0	13,300	6,640	26,600	23,000	18,800	13,300
2-1/2	166.7	15,100	7,530	30,100	26,100	21,300	15,100
2-5/8	190.8	16,800	8,420	33,700	29,200	23,800	16,800

See Figures D-4 and D-5 for sling configuration description.

TABLE D-17

NYLON ROPE SLINGS

TABLE D-17: Part 1 — Eye and Eye Sling

Rope Diameter	EYE & EYE SLING						
	BASKET HITCH						
	Angle of Rope to Horizontal				Angle of Rope to Vertical		
Nominal in Inches	Nominal Weight per 100 ft. in Pounds	Vertical Hitch	Choker Hitch	90°	60°	45°	30°
1/2	6.5	635	320	1,270	1,100	900	635
9/16	8.3	790	395	1,580	1,370	1,120	790
5/8	10.5	1,030	515	2,060	1,780	1,460	1,030
3/4	14.5	1,410	705	2,820	2,440	1,990	1,410
13/16	17.0	1,680	840	3,360	2,910	2,380	1,680
7/8	20.0	1,980	990	3,960	3,430	2,800	1,980
1"	26.0	2,480	1,240	4,960	4,300	3,510	2,480
1-1/16	29.0	2,850	1,430	5,700	4,940	4,030	2,850
1-1/8	34.0	3,270	1,640	6,540	5,660	4,620	3,270
1-1/4	40.0	3,710	1,860	7,420	6,430	5,250	3,710
1-5/16	45.0	4,260	2,130	8,520	7,380	6,020	4,260
1-1/2	55.0	5,250	2,630	10,500	9,090	7,420	5,250
1-5/8	68.0	6,440	3,220	12,900	11,200	9,110	6,440
1-3/4	83.0	7,720	3,860	15,400	13,400	10,900	7,720
2"	95.0	9,110	4,560	18,200	15,800	12,900	9,110
2-1/8	109.0	10,500	5,250	21,000	18,200	14,800	10,500

2-1/4	129.0	12,400	6,200	24,800	21,500	17,500	12,400
2-1/2	149.0	13,900	6,950	27,800	24,100	19,700	13,900
2-5/8	168.0	16,000	8,000	32,000	27,700	22,600	16,000

See Figures D-4 and D-5 for sling configuration description.

TABLE D-17: Part 2 — Endless Sling

Rope Diameter	ENDLESS SLING						
	BASKET HITCH						
	Angle of Rope to Horizontal				Angle of Rope to Vertical		
Nominal in Inches	Nominal Weight per 100 ft. in Pounds	Vertical Hitch	Choker Hitch	90°	60°	45°	30°
1/2	6.5	1,140	570	2,290	1,980	1,620	1,140
9/16	8.3	1,420	710	2,840	2,460	2,010	1,420
5/8	10.5	1,850	925	3,710	3,210	2,620	1,850
3/4	14.5	2,540	1,270	5,080	4,400	3,590	2,540
13/16	17.0	3,020	1,510	6,050	5,240	4,280	3,020
7/8	20.0	3,560	1,780	7,130	6,170	5,040	3,560
1"	26.0	4,460	2,230	8,930	7,730	6,310	4,460
1-1/16	29.0	5,130	2,570	10,300	8,890	7,260	5,130
1-1/8	34.0	5,890	2,940	11,800	10,200	8,330	5,890
1-1/4	40.0	6,680	3,340	13,400	11,600	9,450	6,680
1-5/16	45.0	7,670	3,830	15,300	13,300	10,800	7,670
1-1/2	55.0	9,450	4,730	18,900	16,400	13,400	9,450
1-5/8	68.0	11,600	5,800	23,200	20,100	16,400	11,600
1-3/4	83.0	13,900	6,950	27,800	24,100	19,700	13,900
2"	95.0	16,400	8,200	32,800	28,400	23,200	16,400
2-1/8	109.0	18,900	9,450	37,800	32,700	26,700	18,900
2-1/4	129.0	22,300	11,200	44,600	38,700	31,600	22,300
2-1/2	149.0	25,000	12,500	50,000	43,300	35,400	25,000
2-5/8	168.0	28,800	14,400	57,600	49,900	40,700	28,800

See Figures D-4 and D-5 for sling configuration description.

TABLE D-18

POLYESTER ROPE SLINGS

TABLE D-18: Part 1 — Eye and Eye Sling

Rope Diameter	EYE & EYE SLING						
	BASKET HITCH						
	Angle of Rope to Horizontal				Angle of Rope to Vertical		
Nominal in Inches	Nominal Weight per 100 ft. in Pounds	Vertical Hitch	Choker Hitch	90°	60°	45°	30°
1/2	8.0	635	320	1,270	1,100	900	635
9/16	10.2	790	395	1,580	1,370	1,120	790
5/8	13.0	990	495	1,980	1,710	1,400	990
3/4	17.5	1,240	620	2,480	2,150	1,750	1,240

13/16	21.0	1,540	770	3,080	2,670	2,180	1,540
7/8	25.0	1,780	890	3,560	3,080	2,520	1,780
1"	30.5	2,180	1,090	4,360	3,780	3,080	2,180
1-1/16	34.5	2,530	1,270	5,060	4,380	3,580	2,530
1-1/8	40.0	2,920	1,460	5,840	5,060	4,130	2,920
1-1/4	46.3	3,290	1,650	6,580	5,700	4,650	3,290
1-5/16	52.5	3,710	1,860	7,420	6,430	5,250	3,710
1-1/2	66.8	4,630	2,320	9,260	8,020	6,550	4,630
1-5/8	82.0	5,640	2,820	11,300	9,770	7,980	5,640
1-3/4	98.0	6,710	3,360	13,400	11,600	9,490	6,710
2"	118.0	7,920	3,960	15,800	13,700	11,200	7,920
2-1/8	135.0	9,110	4,460	18,200	15,800	12,900	9,110
2-1/4	157.0	10,600	5,300	21,200	18,400	15,000	10,600
2-1/2	181.0	12,100	6,050	24,200	21,000	17,100	12,100
2-5/8	205.0	13,600	6,800	27,200	23,600	19,200	13,600

See Figures D-4 and D-5 for sling configuration description.

TABLE D-18: Part 2 — Endless Sling

Rope Diameter	ENDLESS SLING						
	BASKET HITCH						
	Angle of Rope to Horizontal						
Nominal Weight per 100 ft. in Pounds	Vertical Hitch	Choker Hitch	90°	60°	45°	30°	Nominal Weight per 100 ft. in Pounds
			Angle of Rope to Vertical				
Inches			0°	30°	45°	60°	
1/2	8.0	1,140	570	2,290	1,980	1,620	1,140
9/16	10.2	1,420	710	2,840	2,460	2,010	1,420
5/8	13.0	1,780	890	3,570	3,090	2,520	1,780
3/4	17.5	2,230	1,120	4,470	3,870	3,160	2,230
13/16	21.0	2,770	1,390	5,540	4,800	3,920	2,770
7/8	25.0	3,200	1,600	6,410	5,550	4,530	3,200
1"	30.5	3,920	1,960	7,850	6,800	5,550	3,920
1-1/16	34.5	4,550	2,280	9,110	7,990	6,440	4,550
1-1/8	40.0	5,260	2,630	10,500	9,100	7,440	5,260
1-1/4	46.3	5,920	2,960	11,800	10,300	8,380	5,920
1-5/16	52.5	6,680	3,340	13,400	11,600	9,450	6,680
1-1/2	66.8	8,330	4,170	16,700	14,400	11,800	8,330
1-5/8	82.0	10,200	5,080	20,300	17,600	14,400	10,200
1-3/4	98.0	12,100	6,040	24,200	20,900	17,100	12,100
2"	118.0	14,300	7,130	28,500	24,700	20,200	14,300
2-1/8	135.0	16,400	8,200	32,800	28,400	23,200	16,400
2-1/4	157.0	19,100	9,540	38,200	33,100	27,000	19,100
2-1/2	181.0	21,800	10,900	43,600	37,700	30,800	21,800
2-5/8	205.0	24,500	12,200	49,000	42,400	34,600	24,500

See Figures D-4 and D-5 for sling configuration description.

TABLE D-19

POLYPROPYLENE ROPE SLINGS

TABLE D-19: Part 1 — Eye and Eye Sling

Rope Diameter	EYE & EYE SLING						
	BASKET HITCH						
	Angle of Rope to Horizontal						
Nominal Weight per 100 ft. in Pounds	Vertical Hitch	Choker Hitch	90°	60°	45°	30°	Nominal Weight per 100 ft. in Pounds
			Angle of Rope to Vertical				
Inches			0°	30°	45°	60°	
1/2	4.7	645	325	1,290	1,120	910	645
9/16	6.1	780	390	1,560	1,350	1,100	780
5/8	7.5	950	475	1,900	1,650	1,340	950
3/4	10.7	1,300	650	2,600	2,250	1,840	1,300
13/16	12.7	1,520	760	3,040	2,630	2,150	1,520
7/8	15.0	1,760	880	3,520	3,050	2,490	1,760
1"	18.0	2,140	1,070	4,280	3,700	3,030	2,140
1-1/16	20.4	2,450	1,230	4,900	4,240	3,460	2,450
1-1/8	23.7	2,800	1,400	5,600	4,850	3,960	2,800
1-1/4	27.0	3,210	1,610	6,420	5,560	4,540	3,210
1-5/16	30.5	3,600	1,800	7,200	6,240	5,090	3,600
1-1/2	38.5	4,540	2,270	9,080	7,860	6,420	4,540
1-5/8	47.5	5,510	2,760	11,000	9,540	7,790	5,510
1-3/4	57.0	6,580	3,290	13,200	11,400	9,300	6,580
2"	69.0	7,960	3,980	15,900	13,800	11,300	7,960
2-1/8	80.0	9,330	4,670	18,700	16,200	13,200	9,330
2-1/4	92.0	10,600	5,300	21,200	18,400	15,000	10,600
2-1/2	107.0	12,200	6,100	24,400	21,100	17,300	12,200
2-5/8	120.0	13,800	6,900	27,600	23,900	19,600	13,800

See Figures D-4 and D-5 for sling configuration description.

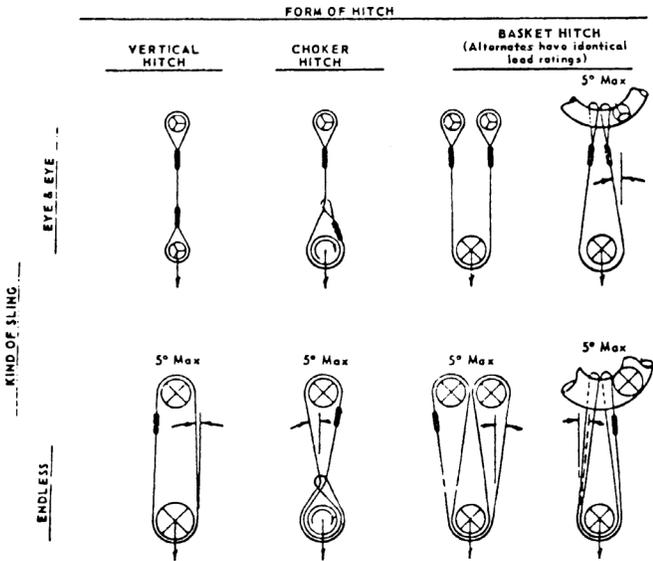
TABLE D-19: Part 2 — Endless Sling

Rope Diameter	ENDLESS SLING						
	BASKET HITCH						
	Angle of Rope to Horizontal						
Nominal Weight per 100 ft. in Pounds	Vertical Hitch	Choker Hitch	90°	60°	45°	30°	Nominal Weight per 100 ft. in Pounds
			Angle of Rope to Vertical				
Inches			0°	30°	45°	60°	
1/2	4.7	1,160	580	2,320	2,010	1,640	1,160
9/16	6.1	1,400	700	2,810	2,430	1,990	1,400
5/8	7.5	1,710	855	3,420	2,960	2,420	1,710
3/4	10.7	2,340	1,170	4,680	4,050	3,310	2,340
13/16	12.7	2,740	1,370	5,470	4,740	3,870	2,740
7/8	15.0	3,170	1,580	6,340	5,490	4,480	3,170
1"	18.0	3,850	1,930	7,700	6,670	5,450	3,860
1-1/16	20.4	4,410	2,210	8,820	7,640	6,240	4,410
1-1/8	23.7	5,040	2,520	10,100	8,730	7,130	5,040
1-1/4	27.0	5,780	2,890	11,600	10,000	8,170	5,780
1-5/16	30.5	6,480	3,240	13,000	11,200	9,170	6,480

1-1/2	38.5	8,170	4,090	16,300	14,200	11,600	8,170
1-5/8	47.5	9,920	4,960	19,800	17,200	14,000	9,920
1-3/4	57.0	11,800	5,920	23,700	20,500	16,800	11,800
2"	69.0	14,300	7,160	28,700	24,800	20,300	14,300
2-1/8	80.0	16,800	8,400	33,600	29,100	23,800	16,800
2-1/4	92.0	19,100	9,540	38,200	33,100	27,000	19,100
2-1/2	107.0	22,000	11,000	43,900	38,000	31,100	22,000
2-5/8	120.0	24,800	12,400	49,700	43,000	35,100	24,800

See Figures D-4 and D-5 for sling configuration description.))

⊙ Represents a load in a choker hitch and illustration the rotary force on the load and/or the slippage of the rope in contact with the load. Diameter of curvature of load surface shall be at least double the diameter of the rope.



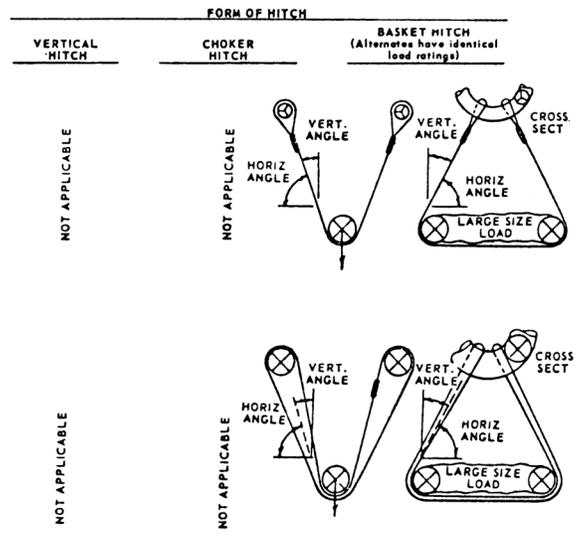
Notes: Angles of 5° or less from the vertical may be considered vertical angles. For slings with legs more than 5° off vertical, the actual angle as shown in Figure D-5 must be considered.

EXPLANATION OF SYMBOLS: Minimum diameter of curvature

- ⊙ Represents a contact surface which shall have a diameter of curvature at least double the diameter of the rope.
- ⊗ Represents a contact surface which shall have a diameter of curvature at least 8 times the diameter of the rope.

Figure D-4

Basic Sling Configurations with Vertical Legs



Notes: For vertical angles of 5° or less, refer to Figure D-4 "basic sling configuration with vertical legs."

See Figure D-4 for explanation of symbols.

Figure D-5

Sling Configurations with Angled Legs

Basic Synthetic Web Sling
Constructions

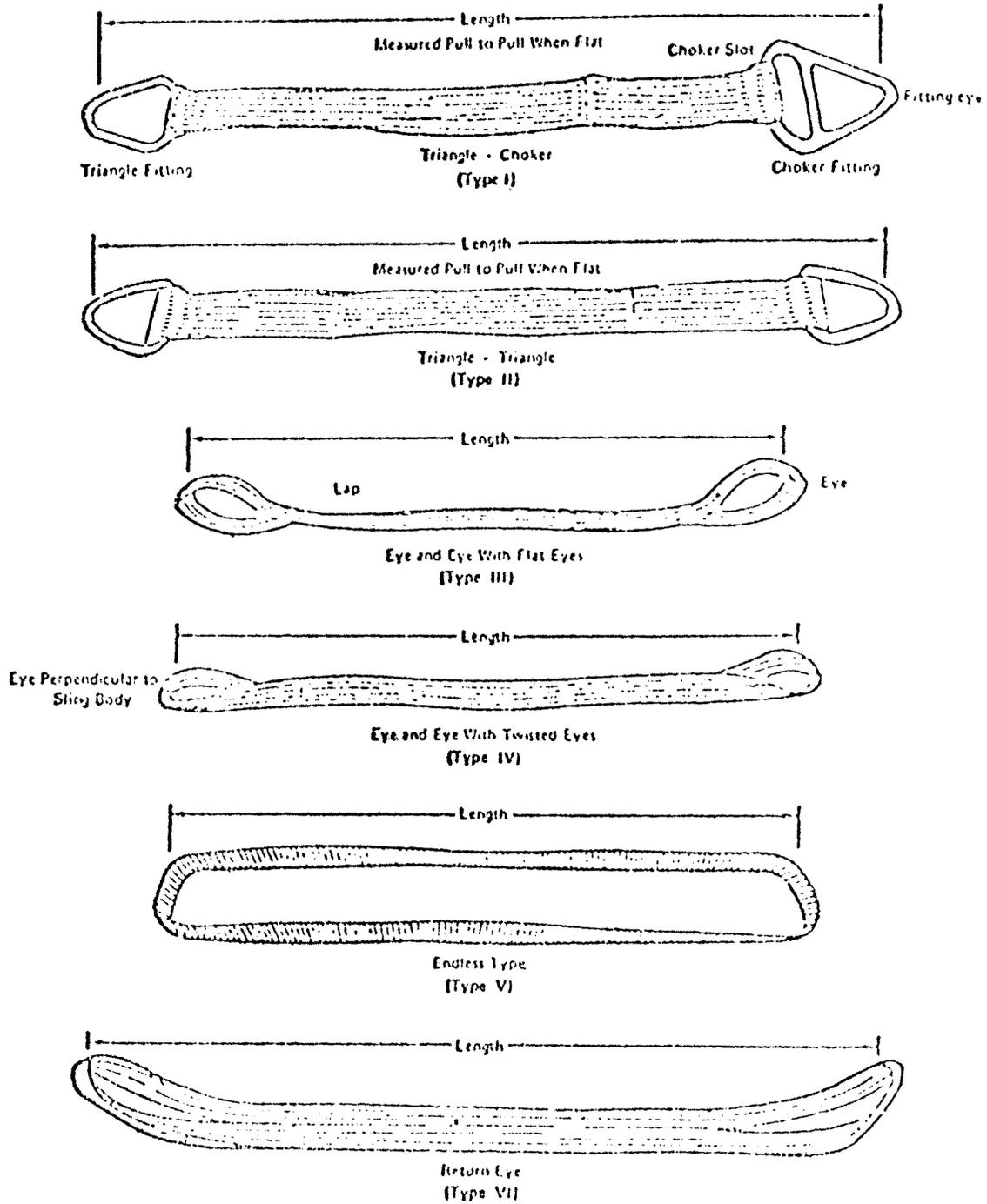


Figure D-6

Basic Synthetic Web Sling Constructions

((TABLE D-20

RATED CAPACITY IN POUNDS SYNTHETIC WEB SLINGS 1,000-LBS. PER INCH OF WIDTH SINGLE PLY

(TABLE D-20: Part 1 Types I, II, III, and IV)

Sling Body Width, Inches	Triangle—Choker Slings, Type I Triangle—Triangle Slings, Type II Eye & Eye with Flat Eye Slings, Type III Eye & Eye with Twisted Eye Slings, Type IV					
	Vert.	Choker	Vert. Basket	30° Basket	45° Basket	60° Basket
1	1,000	750	2,000	1,700	1,400	1,000
2	2,000	1,500	4,000	3,500	2,800	2,000
3	3,000	2,200	6,000	5,200	4,200	3,000
4	4,000	3,000	8,000	6,900	5,700	4,000
5	5,000	3,700	10,000	8,700	7,100	5,000
6	6,000	4,500	12,000	10,400	8,500	6,000

Notes: 1. All angles shown are measured from the vertical.
2. Capacities for intermediate widths not shown may be obtained by interpolation.

(TABLE D-20: Part 2 Type V)

Sling Body Width, Inches	Endless Slings, Type V					
	Vert.	Choker	Vert. Basket	30° Basket	45° Basket	60° Basket
1	1,600	1,300	3,200	2,800	2,300	1,600
2	3,200	2,600	6,400	5,500	4,500	3,200
3	4,800	3,800	9,600	8,300	6,800	4,800
4	6,400	5,100	12,800	11,100	9,000	6,400
5	8,000	6,400	16,000	13,900	11,300	8,000
6	9,600	7,700	19,200	16,600	13,600	9,600

Notes: 1. All angles shown are measured from the vertical.
2. Capacities for intermediate widths not shown may be obtained by interpolation.

(TABLE D-20: Part 3 Type VI)

Sling Body Width, Inches	Return Eye Slings, Type VI					
	Vert.	Choker	Vert. Basket	30° Basket	45° Basket	60° Basket
1	800	650	1,600	1,400	1,150	800
2	1,600	1,300	3,200	2,800	2,300	1,600
3	2,400	1,950	4,800	4,150	3,400	2,400
4	3,200	2,600	6,400	5,500	4,500	3,200
5	4,000	3,250	8,000	6,900	5,650	4,000

Sling Body Width, Inches	Return Eye Slings, Type VI					
	Vert.	Choker	Vert. Basket	30° Basket	45° Basket	60° Basket
6	4,800	3,800	9,600	8,300	6,800	4,800

Notes: 1. All angles shown are measured from the vertical.
2. Capacities for intermediate widths not shown may be obtained by interpolation.

TABLE D-21

RATED CAPACITY IN POUNDS SYNTHETIC WEB SLINGS 1,200-LBS. PER INCH OF WIDTH SINGLE PLY

(TABLE D-21: Part 1 Types I, II, III, and IV)

Sling Body Width, Inches	Triangle—Choker Slings, Type I Triangle—Triangle Slings, Type II Eye & Eye with Flat Eye Slings, Type III Eye & Eye with Twisted Eye Slings, Type IV					
	Vert.	Choker	Vert. Basket	30° Basket	45° Basket	60° Basket
1	1,200	900	2,400	2,100	1,700	1,200
2	2,400	1,800	4,800	4,200	3,400	2,400
3	3,600	2,700	7,200	6,200	5,100	3,600
4	4,800	3,600	9,600	8,300	6,800	4,800
5	6,000	4,500	12,000	10,400	8,500	6,000
6	7,200	5,400	14,400	12,500	10,200	7,200

Notes: 1. All angles shown are measured from the vertical.
2. Capacities for intermediate widths not shown may be obtained by interpolation.

(TABLE D-21: Part 2 Type V)

Sling Body Width, Inches	Endless Slings, Type V					
	Vert.	Choker	Vert. Basket	30° Basket	45° Basket	60° Basket
1	1,900	1,500	3,800	3,300	2,700	1,900
2	3,800	3,000	7,600	6,600	5,400	3,800
3	5,800	4,600	11,600	10,000	8,200	5,800
4	7,700	6,200	15,400	13,300	10,900	7,700
5	9,600	7,700	19,200	16,600	13,600	9,600
6	11,500	9,200	23,000	19,900	16,300	11,500

Notes: 1. All angles shown are measured from the vertical.
2. Capacities for intermediate widths not shown may be obtained by interpolation.

(TABLE D-21: Part 3 Type VI)

Sling Body Width, Inches	Return Eye Slings, Type VI					
	Vert.	Choker	Vert. Basket	30° Basket	45° Basket	60° Basket
1	950	750	1,900	1,650	1,350	950

Sling Body Width, Inches	Return Eye Slings, Type VI					
	Vert.	Choker	Vert. Basket	30° Basket	45° Basket	60° Basket
2	1,900	1,500	3,800	3,300	2,700	1,900
3	2,850	2,250	5,700	4,950	4,050	2,850
4	3,800	3,000	7,600	6,600	5,400	3,800
5	4,750	3,750	9,500	8,250	6,750	4,750
6	5,800	4,600	11,600	10,000	8,200	5,800

Notes: 1. All angles shown are measured from the vertical.
2. Capacities for intermediate widths not shown may be obtained by interpolation.

TABLE D-22

RATED CAPACITY IN POUNDS SYNTHETIC WEB SLINGS 1,600-LBS. PER INCH OF WIDTH SINGLE PLY

~~(TABLE D-22: Part 1 - Types I, H, III, and IV)~~

Sling Body Width, Inches	Triangle - Choker Slings, Type I Triangle - Triangle Slings, Type II Eye & Eye with Flat Eye Slings, Type III Eye & Eye with Twisted Eye Slings, Type IV					
	Vert.	Choker	Vert. Basket	30° Basket	45° Basket	60° Basket
1	1,600	1,200	3,200	2,800	2,300	1,600
2	3,200	2,400	6,400	5,500	4,500	3,200
3	4,800	3,600	9,600	8,300	6,800	4,800
4	6,400	4,800	12,800	11,100	9,000	6,400
5	8,000	6,000	16,000	13,800	11,300	8,000
6	9,600	7,200	19,200	16,600	13,600	9,600

Notes: 1. All angles shown are measured from the vertical.
2. Capacities for intermediate widths not shown may be obtained by interpolation.

Sling Body Width, Inches	Endless Slings, Type V					
	Vert.	Choker	Vert. Basket	30° Basket	45° Basket	60° Basket
1	2,600	2,100	5,200	4,500	3,700	2,600
2	5,100	4,100	10,200	8,800	7,200	5,100
3	7,700	6,200	15,400	13,300	10,900	7,700
4	10,100	8,200	20,400	17,700	14,400	10,200
5	12,800	10,200	25,600	22,200	18,100	12,800
6	15,400	12,300	30,800	26,700	21,800	15,400

Notes: 1. All angles shown are measured from the vertical.
2. Capacities for intermediate widths not shown may be obtained by interpolation.

~~(TABLE D-22: Part 3 - Type VI)~~

Sling Body Width, Inches	Return Eye Slings, Type VI					
	Vert.	Choker	Vert. Basket	30° Basket	45° Basket	60° Basket
1	1,050	1,050	2,600	2,250	1,850	1,300
2	2,600	2,100	5,200	4,500	3,700	2,600
3	3,900	3,150	7,800	6,750	5,500	3,900
4	5,100	4,100	10,200	8,800	7,200	5,100
5	6,400	5,150	12,800	11,050	9,050	6,400
6	7,700	6,200	15,400	13,300	10,900	7,700

Notes: 1. All angles shown are measured from the vertical.
2. Capacities for intermediate widths not shown may be obtained by interpolation.)

AMENDATORY SECTION (Amending WSR 08-05-012, filed 2/8/08, effective 4/1/08)

WAC 296-37-575 Recordkeeping requirements. (1) Recording and reporting.

(a) The employer shall comply with the requirements of chapters 296-27, 296-800, and 296-900 WAC.

(b) The employer shall record the occurrence of any diving-related injury or illness which requires any dive team member to be hospitalized, specifying the circumstances of the incident and the extent of any injuries or illnesses.

(2) Availability of records.

(a) Upon the request of the director of the department of labor and industries or his duly authorized designees, the employer shall make available for inspection and copying any record or document required by this standard.

(b) Records and documents required by this standard shall be provided upon request to employees, designated representatives, and the assistant director in accordance with chapter 296-802 WAC. Safe practices manuals (WAC 296-37-530), depth-time profiles (WAC 296-37-540), recording of dives (WAC 296-37-545), decompression procedure assessment evaluations (WAC 296-37-545), and records of hospitalizations (WAC 296-37-575) shall be provided in the same manner as employee exposure records or analyses using exposure or medical records. Equipment inspections and testing records which pertain to employees (WAC 296-37-570) shall also be provided upon request to employees and their designated representatives.

(c) Records and documents required by this standard shall be retained by the employer for the following period:

(i) Dive team member medical records (physician's reports) (WAC 296-37-525) - Five years;

(ii) Safe practices manual (WAC 296-37-530) - Current document only;

(iii) Depth-time profile (WAC 296-37-540) - Until completion of the recording of dive, or until completion of decompression procedure assessment where there has been an incident of decompression sickness;

(iv) Recording dive (WAC 296-37-545) one year, except five years where there has been an incident of decompression sickness;

(v) Decompression procedure assessment evaluations (WAC 296-37-545) - Five years;

(vi) Equipment inspections and testing records (WAC 296-37-570) - Current entry or tag, or until equipment is withdrawn from service;

(vii) Records of hospitalizations (WAC 296-37-575) - Five years.

(d) After the expiration of the retention period of any record required to be kept for five years, the employer shall forward such records to the National Institute for Occupational Safety and Health, Department of Health and Human Services. The employer shall also comply with any additional requirements set forth in chapter 296-802 WAC.

~~((e) In the event the employer ceases to do business:~~

~~(i) The successor employer shall receive and retain all dive and employee medical records required by this standard; or~~

~~(ii) If there is no successor employer, dive and employee medical records shall be forwarded to the National Institute for Occupational Safety and Health, Department of Health and Human Services.))~~

AMENDATORY SECTION (Amending WSR 05-03-093, filed 1/18/05, effective 3/1/05)

WAC 296-56-60005 Definitions. "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.

"Assistant director for the division of WISHA services" means the assistant director of WISHA services, department of labor and industries or his/her authorized representative.

"Authorized," in reference to an employee's assignment, means selected by the employer for that purpose.

"Cargo door" (transit shed door) means a door designed to permit transfer of cargo to and from a marine terminal structure.

"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.

"Confined space" means a space that:

- Is large enough and so configured that an employee can bodily enter and perform assigned work; and
- Has limited or restricted means for entry or exit (for example, tanks, vessels, silos, storage bins, hoppers, vaults, and pits are spaces that may have limited means of entry); and
- Is not designed for continuous employee occupancy.

"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.

"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.

"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.

"Dock" means a wharf or pier forming all or part of a waterfront facility, including marginal or quayside berthing facilities; not to be confused with "loading dock" as at a transit shed or container freight station, or with the body of water between piers or wharves.

"Dock facilities" includes 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.

"Dockboards" (car and bridge plates) mean devices for spanning short distances between rail cars or highway vehicles and loading platforms that do not expose employees to falls greater than 4 feet (1.22 m).

"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.

"Examination," as applied to material handling devices required to be certified by this chapter, means a comprehensive survey consisting of the criteria outlined in WAC 296-56-60093 through 296-56-60097. The examination is supplemented by a unit proof test in the case of annual survey.

"Flammable atmosphere" means an atmosphere containing more than ten percent of the lower flammable limit (LEL) of a flammable or combustible vapor or dust mixed with air. Such atmospheres are usually toxic as well as flammable.

"Front-end attachments."

- As applied to power-operated industrial trucks, means the various devices, such as roll clamps, rotating and side-shifting 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.

- As applied to cranes, means various attachments applied to the basic machine for the performance of functions such as lifting, clamshell or magnet services.

"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.

"Hazardous cargo, material, substance or atmosphere" means:

- Any substance listed in chapters 296-62 and 296-841 WAC;

- Any material in the hazardous materials table and hazardous materials communications regulations of the Department of Transportation, 49 CFR Part 172;

- 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;

- Atmospheres having concentrations of airborne chemicals in excess of permissible exposure limits as defined in chapter 296-62 WAC; or

- Any atmosphere with an oxygen content of less than nineteen and one-half percent by volume.

"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.

"Inspection," as applied to material handling devices required to be certified by this chapter, includes a complete visual examination of all visible parts of the device.

"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.

"Loose gear" means removable or 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 include shackles and snatch blocks.

"Marina" means a small harbor or boat basin providing dockage, supplies, and services for small craft.

"Marine terminal" means wharves, bulkheads, quays, piers, docks and other berthing locations and adjacent storage or contiguous areas and structures associated with the primary movement of cargo or materials from vessel to shore or shore to vessel. It includes structures which are devoted to receiving, handling, holding, consolidation, loading or delivery of waterborne shipments and passengers, and 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 storage facilities directly associated with those production or manufacturing areas.

"Permit-required confined space (permit space)" means a confined space that has one or more of the following characteristics:

- Contains or has a potential to contain a hazardous atmosphere;
- Contains a material that has the potential for engulfing an entrant;
- Has an internal configuration such that an entrant could be trapped or asphyxiated by inwardly converging walls or by a floor which slopes downward and tapers to a smaller cross-section; or
- Contains any other recognized serious safety or health hazard.

"Ramps" mean other flat-surface devices for passage between levels and across openings not covered under "dock-boards."

"Ship's stores" means materials that are aboard a vessel for the upkeep, maintenance, safety, operation, or navigation of the vessel, or for the safety or comfort of the vessel's passengers or crew.

AMENDATORY SECTION (Amending Order 92-06, filed 10/30/92, effective 12/8/92)

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 (when cargo handling is conducted at locations without permanent facilities, containers of 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.

(b) Separate toilet facilities shall be provided for male and female employees except when toilet rooms are occupied by only one person at a time. A means of locking shall be provided.

(c) 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 area of overboard discharges from the vessel's sanitary lines unless employees are protected from the garbage or discharge by a baffle or splash boards.

AMENDATORY SECTION (Amending WSR 09-15-145, filed 7/21/09, effective 9/1/09)

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, fore-arms, 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(12) 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) Each employee engaged in handling operations involving the following carcinogens must be provided with and required to wear and use a ~~((full face, supplied air respirator, of the continuous flow or pressure demand type as required in chapter 296-842 WAC.))~~ NIOSH-certified self-contained breathing apparatus that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode, or any supplied air respirator that has a full facepiece and is operated in a pressure-demand or other positive pressure mode in combination with an auxiliary self-contained positive-pressure breathing apparatus as required in chapter 296-842 WAC. A respirator affording higher levels of protection than this respirator may be substituted.

- Methyl Chloromethyl Ether;
- bis-Chloromethyl Ether;
- Ethylenimine;
- beta-Propiolactone;
- 4-Amino Diphenyl.

(v) Each employee((s)) engaged in handling operations involving((:)) the following carcinogens must be provided with, and required to wear and use, NIOSH-certified air-purifying, half-mask respirator with particulate filters as required in chapter 296-842 WAC. A respirator affording higher levels of protection than this respirator may be substituted.

- 4-Nitrobiphenyl;
- alpha-Naphthylamine;
- 4-4'Methylene bis(2-Chloroaniline);
- 3-3'Dichlorobenzidine (and its salts);
- beta-Naphthylamine;

- Benzidine;
- 2-acetyl-amino fluorene;
- ~~((4-dimethylaminobenzene))~~
4-imethylaminoazobenzene;
- n-nitrosodimethylamine,

must be provided with, and required to wear and use, a half-face, filter-type respirator certified for solid or liquid particulates with minimum efficiency rating of 95% as required in chapter 296-842 WAC. A respirator affording higher levels of protection than this respirator may be substituted.

(vi) 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).

(vii) Employees shall be required to wash hands, fore-arms, face and neck on each exit from the regulated area, close to the point of exit, and before engaging in other activities.

(viii) Employees shall be required to shower after the last exit of the day.

(ix) 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 WAC 296-800-160, and respiratory protective equipment required by this chapter 296-842 WAC;

(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.

AMENDATORY SECTION (Amending WSR 04-10-026, filed 4/27/04, effective 8/1/04)

WAC 296-62-07314 Medical surveillance. (1) At no cost to the employee, a program of medical surveillance must be established and implemented for employees considered for assignment to enter regulated areas, and for authorized employees.

(2) Examinations.

(a) Before an employee is assigned to enter a regulated area, a preassignment physical examination by a physician must be provided and must include a personal history of the employee and/or his/her family and occupational background, including genetic and environmental factors.

(i) Taking of employees' medical history and background history must be considered to be a routine part of standard medical practice.

(ii) This provision does not require "genetic testing" of any employee.

(iii) This provision does not require the exclusion of otherwise qualified employees from jobs on the basis of genetic factors.

(b) Authorized employees must be provided periodic physical examination, not less often than annually, following the preassignment examination.

(c) In all physical examinations, the examining physician must be requested to consider whether there exist conditions of increased risk, including reduced immunological competence, pregnancy, cigarette smoking, and those undergoing treatment with steroids or cytotoxic agents.

(3) Records.

(a) Employers of employees examined pursuant to this subdivision must maintain complete and accurate records of all such medical examinations. Records must be maintained for the duration of the employee's employment. ~~((Upon termination of the employee's employment, including retirement or death, or in the event that the employer ceases business without a successor, records, or notarized true copies thereof, must be forwarded by registered mail to the director.))~~ The employer shall ensure that medical records are maintained and made available in accordance with chapter 296-802 WAC, Employee medical and exposure records.

(b) Records required by this section must be provided upon request to employees, designated representatives, and the director in accordance with chapter 296-802 WAC.

(c) Any employer who requests a physical examination of an employee or prospective employee as required by this section must obtain from the physician a statement of the employee's suitability for employment in the specific exposure.

AMENDATORY SECTION (Amending WSR 09-15-145, filed 7/21/09, effective 9/1/09)

WAC 296-62-07329 Vinyl chloride. (1) Scope and application.

(a) This section includes requirements for the control of employee exposure to vinyl chloride (chloroethene), Chemical Abstracts Service Registry No. 75014.

(b) This section applies to the manufacture, reaction, packaging, repackaging, storage, handling or use of vinyl chloride or polyvinyl chloride, but does not apply to the handling or use of fabricated products made of polyvinyl chloride.

(c) This section applies to the transportation of vinyl chloride or polyvinyl chloride except to the extent that the department of transportation may regulate the hazards covered by this section.

(2) Definitions.

(a) "Action level" means a concentration of vinyl chloride of 0.5 ppm averaged over an eight-hour work day.

(b) "Authorized person" means any person specifically authorized by the employer whose duties require him/her to enter a regulated area or any person entering such an area as a designated representative of employees for the purpose of exercising an opportunity to observe monitoring and measuring procedures.

(c) "Director" means the director of department of labor and industries or his/her designated representative.

(d) "Emergency" means any occurrence such as, but not limited to, equipment failure, or operation of a relief device which is likely to, or does, result in massive release of vinyl chloride.

(e) "Fabricated product" means a product made wholly or partly from polyvinyl chloride, and which does not require further processing at temperatures, and for times, sufficient to cause mass melting of the polyvinyl chloride resulting in the release of vinyl chloride.

(f) "Hazardous operation" means any operation, procedure, or activity where a release of either vinyl chloride liquid or gas might be expected as a consequence of the operation or because of an accident in the operation, which would result in an employee exposure in excess of the permissible exposure limit.

(g) "Polyvinyl chloride" means polyvinyl chloride homopolymer or copolymer before such is converted to a fabricated product.

(h) "Vinyl chloride" means vinyl chloride monomer.

(3) Permissible exposure limit.

(a) No employee may be exposed to vinyl chloride at concentrations greater than 1 ppm averaged over any 8-hour period, and

(b) No employee may be exposed to vinyl chloride at concentrations greater than 5 ppm averaged over any period not exceeding 15 minutes.

(c) No employee may be exposed to vinyl chloride by direct contact with liquid vinyl chloride.

(4) Monitoring.

(a) A program of initial monitoring and measurement shall be undertaken in each establishment to determine if there is any employee exposed, without regard to the use of respirators, in excess of the action level.

(b) Where a determination conducted under subdivision (a) of this subsection shows any employee exposures without regard to the use of respirators, in excess of the action level, a program for determining exposures for each such employee shall be established. Such a program:

(i) Shall be repeated at least monthly where any employee is exposed, without regard to the use of respirators, in excess of the permissible exposure limit.

(ii) Shall be repeated not less than quarterly where any employee is exposed, without regard to the use of respirators, in excess of the action level.

(iii) May be discontinued for any employee only when at least two consecutive monitoring determinations, made not less than five working days apart, show exposures for that employee at or below the action level.

(c) Whenever there has been a production, process or control change which may result in an increase in the release of vinyl chloride, or the employer has any other reason to suspect that any employee may be exposed in excess of the action level, a determination of employee exposure under subdivision (a) of this subsection shall be performed.

(d) The method of monitoring and measurement shall have an accuracy (with a confidence level of 95 percent) of not less than plus or minus fifty percent from 0.25 through 0.5 ppm, plus or minus thirty-five percent from over 0.5 ppm through 1.0 ppm, plus or minus twenty-five percent over 1.0 ppm, (methods meeting these accuracy requirements are available from the director).

(e) Employees or their designated representatives shall be afforded reasonable opportunity to observe the monitoring and measuring required by this subsection.

(5) Regulated area.

(a) A regulated area shall be established where:

(i) Vinyl chloride or polyvinyl chloride is manufactured, reacted, repackaged, stored, handled or used; and

(ii) Vinyl chloride concentrations are in excess of the permissible exposure limit.

(b) Access to regulated areas shall be limited to authorized persons.

(6) Methods of compliance. Employee exposures to vinyl chloride shall be controlled to at or below the permissible exposure limit provided in subsection (3) of this section by engineering, work practice, and personal protective controls as follows:

(a) Feasible engineering and work practice controls shall immediately be used to reduce exposures to at or below the permissible exposure limit.

(b) Wherever feasible engineering and work practice controls which can be instituted immediately are not sufficient to reduce exposures to at or below the permissible exposure limit, they shall nonetheless be used to reduce exposures to the lowest practicable level, and shall be supplemented by respiratory protection in accordance with subsection (7) of this section. A program shall be established and implemented to reduce exposures to at or below the permissible exposure limit, or to the greatest extent feasible, solely by means of engineering and work practice controls, as soon as feasible.

(c) Written plans for such a program shall be developed and furnished upon request for examination and copying to the director. Such plans shall be updated at least every six months.

(7) Respiratory protection.

(a) General. For employees who use respirators required by this section, the employer must provide each employee an appropriate respirator that complies with the requirements of this section.

(b) Respirator program. The employer must develop, implement, and maintain a respiratory protection program as required in chapter 296-842 WAC, Respirators, which covers each employee required by this chapter to use a respirator. Exception: The requirements in WAC 296-842-13005 that address change out of vapor or gas respirator cartridges or canisters.

(c) Respirator selection. The employer must:

(i) Select and provide to employees appropriate respirators as specified in this section and WAC 296-842-13005 in the respirator rule.

(ii) Provide organic vapor cartridges that have a service life of at least one hour when employees use air-purifying respirators in vinyl chloride concentrations up to 10 parts per million (ppm).

(iii) Make sure the following respirators, when selected, are equipped with a canister with a service life of at least four hours when used in vinyl chloride concentrations up to 25 ppm:

(A) Helmet, hood, or full-facepiece PAPRs

OR

(B) Gas masks with a front- or back-mounted canister.

(d) Where air-purifying respirators are used:

(i) Air-purifying canisters or cartridges must be replaced prior to the expiration of their service life or the end of the shift in which they are first used, whichever occurs first, and

(ii) A continuous monitoring and alarm system must be provided when concentrations of vinyl chloride could reasonably exceed the allowable concentrations for the devices in use. Such system shall be used to alert employees when vinyl chloride concentrations exceed the allowable concentrations for the devices in use, and

(iii) Respirators specified for higher concentrations may be used for lower concentration.

(8) Hazardous operations.

(a) Employees engaged in hazardous operations, including entry of vessels to clean polyvinyl chloride residue from vessel walls, shall be provided and required to wear and use;

(i) Respiratory protection in accordance with subsections (3) and (7) of this section; and

(ii) Protective garments to prevent skin contact with liquid vinyl chloride or with polyvinyl chloride residue from vessel walls. The protective garments shall be selected for the operation and its possible exposure conditions.

(b) Protective garments shall be provided clean and dry for each use.

(c) Emergency situations. A written operational plan for emergency situations shall be developed for each facility storing, handling, or otherwise using vinyl chloride as a liquid or compressed gas. Appropriate portions of the plan shall be implemented in the event of an emergency. The plan shall specifically provide that:

(i) Employees engaged in hazardous operations or correcting situations of existing hazardous releases shall be equipped as required in subdivisions (a) and (b) of this subsection;

(ii) Other employees not so equipped shall evacuate the area and not return until conditions are controlled by the methods required in subsection (6) of this section and the emergency is abated.

(9) Training. Each employee engaged in vinyl chloride or polyvinyl chloride operations shall be provided training in a program relating to the hazards of vinyl chloride and precautions for its safe use.

(a) The program shall include:

(i) The nature of the health hazard from chronic exposure to vinyl chloride including specifically the carcinogenic hazard;

(ii) The specific nature of operations which could result in exposure to vinyl chloride in excess of the permissible limit and necessary protective steps;

(iii) The purpose for, proper use, and limitations of respiratory protective devices;

(iv) The fire hazard and acute toxicity of vinyl chloride, and the necessary protective steps;

(v) The purpose for and a description of the monitoring program;

(vi) The purpose for and a description of, the medical surveillance program;

(vii) Emergency procedures:

(A) Specific information to aid the employee in recognition of conditions which may result in the release of vinyl chloride; and

(B) A review of this standard at the employee's first training and indoctrination program, and annually thereafter.

(b) All materials relating to the program shall be provided upon request to the director.

(10) Medical surveillance. A program of medical surveillance shall be instituted for each employee exposed, without regard to the use of respirators, to vinyl chloride in excess of the action level. The program shall provide each such employee with an opportunity for examinations and tests in accordance with this subsection. All medical examinations and procedures shall be performed by or under the supervision of a licensed physician and shall be provided without cost to the employee.

(a) At the time of initial assignment, or upon institution of medical surveillance;

(i) A general physical examination shall be performed with specific attention to detecting enlargement of liver, spleen or kidneys, or dysfunction in these organs, and for abnormalities in skin, connective tissues and the pulmonary system (see Appendix A).

(ii) A medical history shall be taken, including the following topics:

(A) Alcohol intake,

(B) Past history of hepatitis,

(C) Work history and past exposure to potential hepatotoxic agents, including drugs and chemicals,

(D) Past history of blood transfusions, and

(E) Past history of hospitalizations.

(iii) A serum specimen shall be obtained and determinations made of:

(A) Total bilirubin,

(B) Alkaline phosphatase,

(C) Serum glutamic oxalacetic transaminase (SGOT),

(D) Serum glutamic pyruvic transaminase (SGPT), and

(E) Gamma glutamyl transpeptidase.

(b) Examinations provided in accordance with this subdivision shall be performed at least:

(i) Every six months for each employee who has been employed in vinyl chloride or polyvinyl chloride manufacturing for ten years or longer; and

(ii) Annually for all other employees.

(c) Each employee exposed to an emergency shall be afforded appropriate medical surveillance.

(d) A statement of each employee's suitability for continued exposure to vinyl chloride including use of protective

equipment and respirators, shall be obtained from the examining physician promptly after any examination. A copy of the physician's statement shall be provided each employee.

(e) If any employee's health would be materially impaired by continued exposure, such employee shall be withdrawn from possible contact with vinyl chloride.

(f) Laboratory analyses for all biological specimens included in medical examinations shall be performed in laboratories licensed under 42 CFR Part 74.

(g) If the examining physician determines that alternative medical examinations to those required by subdivision (a) of this subsection will provide at least equal assurance of detecting medical conditions pertinent to the exposure to vinyl chloride, the employer may accept such alternative examinations as meeting the requirements of subdivision (a) of this subsection, if the employer obtains a statement from the examining physician setting forth the alternative examinations and the rationale for substitution. This statement shall be available upon request for examination and copying to authorized representatives of the director.

(11) Signs and labels.

(a) Entrances to regulated areas shall be posted with legible signs bearing the legend:

CANCER-SUSPECT AGENT AREA AUTHORIZED PERSONNEL
ONLY

(b) Areas containing hazardous operations or where an emergency currently exists shall be posted with legible signs bearing the legend:

CANCER-SUSPECT AGENT IN THIS AREA PROTECTIVE
EQUIPMENT REQUIRED AUTHORIZED PERSONNEL ONLY

(c) Containers of polyvinyl chloride resin waste from reactors or other waste contaminated with vinyl chloride shall be legibly labeled:

CONTAMINATED WITH VINYL CHLORIDE CANCER-SUSPECT
AGENT

(d) Containers of polyvinyl chloride shall be legibly labeled:

POLYVINYL CHLORIDE (OR TRADE NAME) CONTAINS VINYL
CHLORIDE VINYL CHLORIDE IS A CANCER-SUSPECT AGENT

(e) Containers of vinyl chloride shall be legibly labeled either:

VINYL CHLORIDE EXTREMELY FLAMMABLE GAS UNDER
PRESSURE CANCER-SUSPECT AGENT

(or)

(f) In accordance with 49 CFR Part 173, Subpart H, with the additional legends:

CANCER-SUSPECT AGENT

Applied near the label or placard.

(g) No statement shall appear on or near any required sign, label or instruction which contradicts or detracts from the effect of any required warning, information or instruction.

(12) Records.

(a) All records maintained in accordance with this section shall include the name and Social Security number of each employee where relevant.

(b) Records of required monitoring and measuring and medical records shall be provided upon request to employees, designated representatives, and the director in accordance with chapter 296-802 WAC. These records shall be provided upon request to the director. Authorized personnel rosters shall also be provided upon request to the director.

(i) Monitoring and measuring records shall:

(A) State the date of such monitoring and measuring and the concentrations determined and identify the instruments and methods used;

(B) Include any additional information necessary to determine individual employee exposures where such exposures are determined by means other than individual monitoring of employees; and

(C) Be maintained for not less than 30 years.

(ii) Medical records shall be maintained for the duration of the employment of each employee plus 20 years, or 30 years, whichever is longer.

(c) ~~(In the event that the employer ceases to do business and there is no successor to receive and retain his/her records for the prescribed period, these records shall be transmitted by registered mail to the director, and each employee individually notified in writing of this transfer.)~~ The employer shall ~~(also)~~ comply with any additional requirements set forth in chapter 296-802 WAC.

(d) Employees or their designated representatives shall be provided access to examine and copy records of required monitoring and measuring.

(e) Former employees shall be provided access to examine and copy required monitoring and measuring records reflecting their own exposures.

(f) Upon written request of any employee, a copy of the medical record of that employee shall be furnished to any physician designated by the employee.

(13) Reports.

(a) Not later than 1 month after the establishment of a regulated area, the following information shall be reported to the director. Any changes to such information shall be reported within fifteen days.

(i) The address and location of each establishment which has one or more regulated areas; and

(ii) The number of employees in each regulated area during normal operations, including maintenance.

(b) Emergencies and the facts obtainable at that time, shall be reported within twenty-four hours to the director. Upon request of the director, the employer shall submit additional information in writing relevant to the nature and extent of employee exposures and measures taken to prevent future emergencies of similar nature.

(c) Within ten working days following any monitoring and measuring which discloses that any employee has been exposed, without regard to the use of respirators, in excess of the permissible exposure limit, each such employee shall be

notified in writing of the results of the exposure measurement and the steps being taken to reduce the exposure to within the permissible exposure limit.

(14) Appendix A supplementary medical information.

When required tests under subsection (10)(a) of this section show abnormalities, the tests should be repeated as soon as practicable, preferably within three to four weeks. If tests remain abnormal, consideration should be given to withdrawal of the employee from contact with vinyl chloride, while a more comprehensive examination is made.

Additional tests which may be useful:

~~((A))~~ (a) For kidney dysfunction: Urine examination for albumin, red blood cells, and exfoliative abnormal cells.

~~((B))~~ (b) Pulmonary system: Forced vital capacity, forced expiratory volume at one second, and chest roentgenogram (posterior-anterior, 14 x 17 inches).

~~((C))~~ (c) Additional serum tests: Lactic acid dehydrogenase, lactic acid dehydrogenase isoenzyme, protein determination, and protein electrophoresis.

~~((D))~~ (d) For a more comprehensive examination on repeated abnormal serum tests: Hepatitis B antigen, and liver scanning.

AMENDATORY SECTION (Amending WSR 09-15-145, filed 7/21/09, effective 9/1/09)

WAC 296-62-07336 Acrylonitrile. (1) Scope and application.

(a) This section applies to all occupational exposure to acrylonitrile (AN), Chemical Abstracts Service Registry No. 000107131, except as provided in (b) and (c) of this subsection.

(b) This section does not apply to exposures which result solely from the processing, use, and handling of the following materials:

(i) ABS resins, SAN resins, nitrile barrier resins, solid nitrile elastomers, and acrylic and modacrylic fibers, when these listed materials are in the form of finished polymers, and products fabricated from such finished polymers;

(ii) Materials made from and/or containing AN for which objective data is reasonably relied upon to demonstrate that the material is not capable of releasing AN in airborne concentrations in excess of 1 ppm as an eight-hour time-weighted average, under the expected conditions of processing, use, and handling which will cause the greatest possible release; and

(iii) Solid materials made from and/or containing AN which will not be heated above 170°F during handling, use, or processing.

(c) An employer relying upon exemption under (1)(b)(ii) shall maintain records of the objective data supporting that exemption, and of the basis of the employer's reliance on the data as provided in subsection (17) of this section.

(2) Definitions, as applicable to this section:

(a) "Acrylonitrile" or "AN" - Acrylonitrile monomer, chemical formula $\text{CH}_2=\text{CHCN}$.

(b) "Action level" - A concentration of AN of 1 ppm as an eight-hour time-weighted average.

(c) "Authorized person" - 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 opportunity to observe monitoring procedures under subsection (18) of this section.

(d) "Decontamination" means treatment of materials and surfaces by water washdown, ventilation, or other means, to assure that the materials will not expose employees to airborne concentrations of AN above 1 ppm as an eight-hour time-weighted average.

(e) "Director" - The director of labor and industries, or his authorized representative.

(f) "Emergency" - Any occurrence such as, but not limited to, equipment failure, rupture of containers, or failure of control equipment, which is likely to, or does, result in unexpected exposure to AN in excess of the ceiling limit.

(g) "Liquid AN" means AN monomer in liquid form, and liquid or semiliquid polymer intermediates, including slurries, suspensions, emulsions, and solutions, produced during the polymerization of AN.

(h) "Polyacrylonitrile" or "PAN" - Polyacrylonitrile homopolymers or copolymers, except for materials as exempted under subsection (1)(b) of this section.

(3) Permissible exposure limits.

(a) Inhalation.

(i) Time-weighted average limit (TWA). The employer shall assure that no employee is exposed to an airborne concentration of acrylonitrile in excess of two parts acrylonitrile per million parts of air (2 ppm), as an eight-hour time-weighted average.

(ii) Ceiling limit. The employer shall assure that no employee is exposed to an airborne concentration of acrylonitrile in excess of 10 ppm as averaged over any fifteen-minute period during the working day.

(b) Dermal and eye exposure. The employer shall assure that no employee is exposed to skin contact or eye contact with liquid AN or PAN.

(4) Notification of use and emergencies.

(a) Use. Within ten days of the effective date of this standard, or within fifteen days following the introduction of AN into the workplace, every employer shall report, unless he has done so pursuant to the emergency temporary standard, the following information to the director for each such workplace:

(i) The address and location of each workplace in which AN is present;

(ii) A brief description of each process of operation which may result in employee exposure to AN;

(iii) The number of employees engaged in each process or operation who may be exposed to AN and an estimate of the frequency and degree of exposure that occurs; and

(iv) A brief description of the employer's safety and health program as it relates to limitation of employee exposure to AN. Whenever there has been a significant change in the information required by this subsection, the employer shall promptly amend such information previously provided to the director.

(b) Emergencies and remedial action. Emergencies, and the facts obtainable at that time, shall be reported within twenty-four hours of the initial occurrence to the director. Upon request of the director, the employer shall submit addi-

tional information in writing relevant to the nature and extent of employee exposures and measures taken to prevent future emergencies of a similar nature.

(5) Exposure monitoring.

(a) General.

(i) Determinations of airborne exposure levels shall be made from air samples that are representative of each employee's exposure to AN over an eight-hour period.

(ii) For the purposes of this section, employee exposure is that which would occur if the employee were not using a respirator.

(b) Initial monitoring. Each employer who has a place of employment in which AN is present shall monitor each such workplace and work operation to accurately determine the airborne concentrations of AN to which employees may be exposed. Such monitoring may be done on a representative basis, provided that the employer can demonstrate that the determinations are representative of employee exposures.

(c) Frequency.

(i) If the monitoring required by this section reveals employee exposure to be below the action level, the employer may discontinue monitoring for that employee. The employer shall continue these quarterly measurements until at least two consecutive measurements taken at least seven days apart, are below the action level, and thereafter the employer may discontinue monitoring for that employee.

(ii) If the monitoring required by this section reveals employee exposure to be at or above the action level but below the permissible exposure limits, the employer shall repeat such monitoring for each such employee at least quarterly.

(iii) If the monitoring required by this section reveals employee exposure to be in excess of the permissible exposure limits, the employer shall repeat these determinations for each such employee at least monthly. The employer shall continue these monthly measurements until at least two consecutive measurements, taken at least seven days apart, are below the permissible exposure limits, and thereafter the employer shall monitor at least quarterly.

(d) Additional monitoring. Whenever there has been a production, process, control or personnel change which may result in new or additional exposure to AN, or whenever the employer has any other reason to suspect a change which may result in new or additional exposures to AN, additional monitoring which complies with this subsection shall be conducted.

(e) Employee notification.

(i) Within five working days after the receipt of monitoring results, the employer shall notify each employee in writing of the results which represent that employee's exposure.

(ii) Whenever the results indicate that the representative employee exposure exceeds the permissible exposure limits, the employer shall include in the written notice a statement that the permissible exposure limits were exceeded and a description of the corrective action being taken to reduce exposure to or below the permissible exposure limits.

(f) Accuracy of measurement. The method of measurement of employee exposures shall be accurate, to a confidence level of ninety-five percent, to within plus or minus twenty-five percent for concentrations of AN at or above the

permissible exposure limits, and plus or minus thirty-five percent for concentrations of AN between the action level and the permissible exposure limits.

(g) Weekly survey of operations involving liquid AN. In addition to monitoring of employee exposures to AN as otherwise required by this subsection, the employer shall survey areas of operations involving liquid AN at least weekly to detect points where AN liquid or vapor are being released into the workplace. The survey shall employ an infra-red gas analyzer calibrated for AN, a multipoint gas chromatographic monitor, or comparable system for detection of AN. A listing of levels detected and areas of AN release, as determined from the survey, shall be posted prominently in the workplace, and shall remain posted until the next survey is completed.

(6) Regulated areas.

(a) The employer shall establish regulated areas where AN concentrations are in excess of the permissible exposure limits.

(b) Regulated areas shall be demarcated and segregated from the rest of the workplace, in any manner that minimizes the number of persons who will be exposed to AN.

(c) Access to regulated areas shall be limited to authorized persons or to persons otherwise authorized by the act or regulations issued pursuant thereto.

(d) The employer shall assure that in the regulated area, food or beverages are not present or consumed, smoking products are not present or used, and cosmetics are not applied, (except that these activities may be conducted in the lunchrooms, change rooms and showers required under subsection((s)) (13)(a) (~~(13)~~) through (c) of this section.

(7) Methods of compliance.

(a) Engineering and work practice controls.

(i) The employer shall institute engineering or work practice controls to reduce and maintain employee exposures to AN, to or below the permissible exposure limits, except to the extent that the employer establishes that such controls are not feasible.

(ii) Wherever the engineering and work practice controls which can be instituted are not sufficient to reduce employee exposures to or below the permissible exposure limits, the employer shall nonetheless use them to reduce exposures to the lowest levels achievable by these controls and shall supplement them by the use of respiratory protection which complies with the requirements of subsection (8) of this section.

(b) Compliance program.

(i) The employer shall establish and implement a written program to reduce employee exposures to or below the permissible exposure limits solely by means of engineering and work practice controls, as required by subsection (7)(a) of this section.

(ii) Written plans for these compliance programs shall include at least the following:

(A) A description of each operation or process resulting in employee exposure to AN above the permissible exposure limits;

(B) Engineering plans and other studies used to determine the controls for each process;

(C) A report of the technology considered in meeting the permissible exposure limits;

(D) A detailed schedule for the implementation of engineering or work practice controls; and

(E) Other relevant information.

(iii) The employer shall complete the steps set forth in the compliance program by the dates in the schedule.

(iv) Written plans for such a program shall be submitted upon request to the director, and shall be available at the worksite for examination and copying by the director, or any affected employee or representative.

(v) The plans required by this subsection shall be revised and updated at least every six months to reflect the current status of the program.

(8) Respiratory protection.

(a) General. For employees who use respirators required by this section, the employer must provide each employee an appropriate respirator that complies with the requirements of this subsection. Respirators must be used during:

(i) Periods necessary to install or implement feasible engineering and work-practice controls;

(ii) Work operations, such as maintenance and repair activities or reactor cleaning, for which the employer establishes that engineering and work-practice controls are not feasible;

(iii) Work operations for which feasible engineering and work-practice controls are not yet sufficient to reduce employee exposure to or below the permissible exposure limits;

(iv) In emergencies.

(b) Respirator program.

Employers must develop, implement and maintain a respiratory protection program in accordance with chapter 296-842 WAC, Respirators, which covers each employee required by this chapter to use a respirator.

(c) Respirator selection. The employer must:

(i) Select and provide to employees appropriate respirators by following the requirements in this section and WAC 296-842-13005 in the respirator rule.

(ii) Provide to employees, for escape, any organic vapor, air-purifying respirator or any self-contained breathing apparatus (SCBA) that meets the selection requirements of WAC 296-842-13005 in the respirator rule.

(9) Emergency situations.

(a) Written plans.

(i) A written plan for emergency situations shall be developed for each workplace where AN is present. 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 as required in subsection (8) of this section until the emergency is abated.

(b) Alerting employees.

(i) Where there is the possibility of employee exposure to AN in excess of the ceiling limit due to the occurrence of an emergency, a general alarm shall be installed and maintained to promptly alert employees of such occurrences.

(ii) Employees not engaged in correcting the emergency shall be evacuated from the area and shall not be permitted to return until the emergency is abated.

(10) Protective clothing and equipment.

(a) Provision and use. Where eye or skin contact with liquid AN or PAN may occur, the employer shall provide at no cost to the employee, and assure that employees wear, appropriate protective clothing or other equipment in accordance with WAC 296-800-160 to protect any area of the body which may come in contact with liquid AN or PAN.

(b) Cleaning and replacement.

(i) The employer shall clean, launder, maintain, or replace protective clothing and equipment required by this subsection, as needed to maintain their effectiveness. In addition, the employer shall provide clean protective clothing and equipment at least weekly to each affected employee.

(ii) The employer shall assure that impermeable protective clothing which contacts or is likely to have contacted liquid AN shall be decontaminated before being removed by the employee.

(iii) The employer shall assure that AN- or PAN-contaminated protective clothing and equipment is placed and stored in closable containers which prevent dispersion of the AN or PAN outside the container.

(iv) The employer shall assure that an employee whose nonimpermeable clothing becomes wetted with liquid AN shall immediately remove that clothing and proceed to shower. The clothing shall be decontaminated before it is removed from the regulated area.

(v) The employer shall assure that no employee removes AN- or PAN-contaminated protective equipment or clothing from the change room, except for those employees authorized to do so for the purpose of laundering, maintenance, or disposal.

(vi) The employer shall inform any person who launders or cleans AN- or PAN-contaminated protective clothing or equipment of the potentially harmful effects of exposure to AN.

(vii) The employer shall assure that containers of contaminated protective clothing and equipment which are to be removed from the workplace for any reason are labeled in accordance with subsection (16)(c)(ii) of this section, and that such labels remain affixed when such containers leave the employer's workplace.

(11) Housekeeping.

(a) All surfaces shall be maintained free of accumulations of liquid AN and of PAN.

(b) For operations involving liquid AN, the employer shall institute a program for detecting leaks and spills of liquid AN, including regular visual inspections.

(c) Where spills of liquid AN are detected, the employer shall assure that surfaces contacted by the liquid AN are decontaminated. Employees not engaged in decontamination activities shall leave the area of the spill, and shall not be permitted in the area until decontamination is completed.

(d) Liquids. Where AN is present in a liquid form, or as a resultant vapor, all containers or vessels containing AN shall be enclosed to the maximum extent feasible and tightly covered when not in use, with adequate provision made to avoid any resulting potential explosion hazard.

(e) Surfaces.

(i) Dry sweeping and the use of compressed air for the cleaning of floors and other surfaces where AN and PAN are found is prohibited.

(ii) Where vacuuming methods are selected, either portable units or a permanent system may be used.

(A) If a portable unit is selected, the exhaust shall be attached to the general workplace exhaust ventilation system or collected within the vacuum unit, equipped with high efficiency filters or other appropriate means of contaminant removal, so that AN is not reintroduced into the workplace air; and

(B) Portable vacuum units used to collect AN may not be used for other cleaning purposes and shall be labeled as prescribed by subsection (16)(c)(ii) of this section.

(iii) Cleaning of floors and other contaminated surfaces may not be performed by washing down with a hose, unless a fine spray has first been laid down.

(12) Waste disposal. AN and PAN waste, scrap, debris, bags, containers or equipment, shall be disposed of in sealed bags or other closed containers which prevent dispersion of AN outside the container, and labeled as prescribed in subsection (16)(c)(ii) of this section.

(13) Hygiene facilities and practices. Where employees are exposed to airborne concentrations of AN above the permissible exposure limits, or where employees are required to wear protective clothing or equipment pursuant to subsection (11) of this section, or where otherwise found to be appropriate, the facilities required by WAC 296-800-230 shall be provided by the employer for the use of those employees, and the employer shall assure that the employees use the facilities provided. In addition, the following facilities or requirements are mandated.

(a) Change rooms. The employer shall provide clean change rooms in accordance with WAC 296-800-230.

(b) Showers.

(i) The employer shall provide shower facilities in accordance with WAC 296-800-230.

(ii) In addition, the employer shall also assure that employees exposed to liquid AN and PAN shower at the end of the work shift.

(iii) The employer shall assure that, in the event of skin or eye exposure to liquid AN, the affected employee shall shower immediately to minimize the danger of skin absorption.

(c) Lunchrooms.

(i) Whenever food or beverages are consumed in the workplace, the employer shall provide lunchroom facilities which have a temperature controlled, positive pressure, filtered air supply, and which are readily accessible to employees exposed to AN above the permissible exposure limits.

(ii) In addition, the employer shall also assure that employees exposed to AN above the permissible exposure limits wash their hands and face prior to eating.

(14) Medical surveillance.

(a) General.

(i) The employer shall institute a program of medical surveillance for each employee who is or will be exposed to AN above the action level. The employer shall provide each such employee with an opportunity for medical examinations and tests in accordance with this subsection.

(ii) The employer shall assure that all medical examinations and procedures are performed by or under the supervi-

sion of a licensed physician, and shall be provided without cost to the employee.

(b) Initial examinations. At the time of initial assignment, or upon institution of the medical surveillance program, the employer shall provide each affected employee an opportunity for a medical examination, including at least the following elements:

(i) A work history and medical history with special attention to skin, respiratory, and gastrointestinal systems, and those nonspecific symptoms, such as headache, nausea, vomiting, dizziness, weakness, or other central nervous system dysfunctions that may be associated with acute or chronic exposure to AN.

(ii) A physical examination giving particular attention to central nervous system, gastrointestinal system, respiratory system, skin and thyroid.

(iii) A 14" x 17" posteroanterior chest X ray.

(iv) Further tests of the intestinal tract, including fecal occult blood screening, and proctosigmoidoscopy, for all workers forty years of age or older, and for any other affected employees for whom, in the opinion of the physician, such testing is appropriate.

(c) Periodic examinations.

(i) The employer shall provide examinations specified in this subsection at least annually for all employees specified in subsection (14)(a) of this section.

(ii) If an employee has not had the examinations prescribed in subsection (14)(b) of this section within six months of termination of employment, the employer shall make such examination available to the employee upon such termination.

(d) Additional examinations. If the employee for any reason develops signs or symptoms commonly associated with exposure to AN, the employer shall provide appropriate examination and emergency medical treatment.

(e) Information provided to the physician. The employer shall provide the following information to the examining physician:

(i) A copy of this standard and its appendices;

(ii) A description of the affected employee's duties as they relate to the employee's exposure;

(iii) The employee's representative exposure level;

(iv) The employee's anticipated or estimated exposure level (for preplacement examinations or in cases of exposure due to an emergency);

(v) A description of any personal protective equipment used or to be used; and

(vi) Information from previous medical examinations of the affected employee, which is not otherwise available to the examining physician.

(f) Physician's written opinion.

(i) The employer shall obtain a written opinion from the examining physician which shall include:

(A) The results of the medical examination and test performed;

(B) The physician's opinion as to whether the employee has any detected medical condition which would place the employee at an increased risk of material impairment of the employee's health from exposure to AN;

(C) Any recommended limitations upon the employee's exposure to AN or upon the use of protective clothing and equipment such as respirators; and

(D) A statement that the employee has been informed by the physician of the results of the medical examination and any medical conditions which require further examination or treatment.

(ii) The employer shall instruct the physician not to reveal in the written opinion specific findings or diagnoses unrelated to occupational exposure to AN.

(iii) The employer shall provide a copy of the written opinion to the affected employee.

(15) Employee information and training.

(a) Training program.

(i) The employer shall train each employee exposed to AN above the action level, each employee whose exposures are maintained below the action level by engineering and work practice controls, and each employee subject to potential skin or eye contact with liquid AN in accordance with the requirements of this section. The employer shall institute a training program and ensure employee participation in the training program.

(ii) The training program shall be provided at the time of initial assignment, or upon institution of the training program, and at least annually thereafter, and the employer shall assure that each employee is informed of the following:

(A) The information contained in Appendices A, B and C;

(B) The quantity, location, manner of use, release or storage of AN and the specific nature of operations which could result in exposure to AN, as well as any necessary protective steps;

(C) The purpose, proper use, and limitations of respirators and protective clothing;

(D) The purpose and a description of the medical surveillance program required by subsection (14) of this section;

(E) The emergency procedures developed, as required by subsection (9) of this section; and

(F) The engineering and work practice controls, their function and the employee's relationship thereto; and

(G) A review of this standard.

(b) Access to training materials.

(i) The employer shall make a copy of this standard and its appendices readily available to all affected employees.

(ii) The employer shall provide, upon request, all materials relating to the employee information and training program to the director.

(16) Signs and labels.

(a) General.

(i) The employer may use labels or signs required by other statutes, regulations, or ordinances in addition to, or in combination with, signs and labels required by this subsection.

(ii) The employer shall assure that no statement appears on or near any sign or label, required by this subsection, which contradicts or detracts from such effects of the required sign or label.

(b) Signs.

(i) The employer shall post signs to clearly indicate all workplaces where AN concentrations exceed the permissible exposure limits. The signs shall bear the following legend:

DANGER
ACRYLONITRILE (AN)
CANCER HAZARD
AUTHORIZED PERSONNEL ONLY
RESPIRATORS REQUIRED

(ii) The employer shall assure that signs required by this subsection are illuminated and cleaned as necessary so that the legend is readily visible.

(c) Labels.

(i) The employer shall assure that precautionary labels are affixed to all containers of AN, and to containers of PAN and products fabricated from PAN, except for those materials for which objective data is provided as to the conditions specified in subsection (1)(b) of this section. The employer shall assure that the labels remain affixed when the AN or PAN are sold, distributed or otherwise leave the employer's workplace.

(ii) The employer shall assure that the precautionary labels required by this subsection are readily visible and legible. The labels shall bear the following legend:

DANGER
CONTAINS ACRYLONITRILE (AN)
CANCER HAZARD

(17) Recordkeeping.

(a) Objective data for exempted operations.

(i) Where the processing, use, and handling of products fabricated from PAN are exempted pursuant to subsection (1)(b) 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 the following information:

(A) The relevant condition in subsection (1)(b) upon which exemption is based;

(B) The source of the objective data;

(C) The testing protocol, results of testing, and/or analysis of the material for the release of AN;

(D) A description of the operation exempted and how the data supports the exemption; and

(E) Other data relevant to the operations, materials, and processing 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 monitoring.

(i) The employer shall establish and maintain an accurate record of all monitoring required by subsection (5) of this section.

(ii) This record shall include:

(A) The dates, number, duration, and results of each of the samples taken, including a description of the sampling procedure used to determine representative employee exposure;

(B) A description of the sampling and analytical methods used and the data relied upon to establish that the methods

used meet the accuracy and precision requirements of subsection (5)(f) of this section;

(C) Type of respiratory protective devices worn, if any; and

(D) Name, Social Security number and job classification of the employee monitored and of all other employees whose exposure the measurement is intended to represent.

(ii) The employer shall maintain this record for at least 40 years or the duration of employment plus 20 years, whichever is longer.

(c) Medical surveillance.

(i) The employer shall establish and maintain an accurate record for each employee subject to medical surveillance as required by subsection (14) of this section.

(ii) This record shall include:

(A) A copy of the physicians' written opinions;

(B) Any employee medical complaints related to exposure to AN;

(C) A copy of the information provided to the physician as required by subsection (14)(f) of this section; and

(D) A copy of the employee's medical and work history.

(iii) The employer shall assure that this record be maintained for at least forty years or for the duration of employment plus twenty years, whichever is longer.

(d) Availability.

(i) The employer shall assure that all records required to be maintained by this section be made available upon request to the director for examination and copying.

(ii) Records required by subdivisions (a) through (c) of this subsection shall be provided upon request to employees, designated representatives, and the assistant director in accordance with chapter 296-802 WAC. Records required by subdivision (a) of this section shall be provided in the same manner as exposure monitoring records.

(iii) The employer shall assure that employee medical records required to be maintained by this section, be made available, upon request, for examination and copying, to the affected employee or former employee, or to a physician designated by the affected employee, former employee, or designated representative.

(e) Transfer of records.

(i) Whenever the employer ceases to do business, the successor employer shall receive and retain all records required to be maintained by this section.

~~(ii) ((Whenever the employer ceases to do business and there is no successor employer to receive and retain the records for the prescribed period, these records shall be transmitted to the director.~~

~~(iii) At the expiration of the retention period for the records required to be maintained pursuant to this section, the employer shall transmit these records to the director.~~

~~(iv))~~ The employer shall also comply with any additional requirements involving transfer of records set forth in ~~(chapter 296-802))~~ WAC 296-802-60005.

(18) 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 AN conducted pursuant to subsection (5) of this section.

(b) Observation procedures.

(i) Whenever observation of the monitoring of employee exposure to AN requires entry into an area where the use of protective clothing or equipment is required, the employer shall provide the observer with personal protective clothing or equipment required to be worn by employees working in the area, assure the use of such clothing and equipment, and require the observer to comply with all other applicable safety and health procedures.

(ii) Without interfering with the monitoring, observers shall be entitled:

(A) To receive an explanation of the measurement procedures;

(B) To observe all steps related to the measurement of airborne concentrations of AN performed at the place of exposure; and

(C) To record the results obtained.

(19) Appendices. The information contained in the appendices is not intended, by itself, to create any additional obligation not otherwise imposed, or to detract from any obligation.

AMENDATORY SECTION (Amending WSR 09-15-145, filed 7/21/09, effective 9/1/09)

WAC 296-62-07342 1,2-Dibromo-3-chloropropane.

(1) Scope and application.

(a) This section applies to occupational exposure to 1,2-dibromo-3-chloropropane (DBCP).

(b) This section does not apply to:

(i) Exposure to DBCP which results solely from the application and use of DBCP as a pesticide; or

(ii) The storage, transportation, distribution or sale of DBCP in intact containers sealed in such a manner as to prevent exposure to DBCP vapors or liquids, except for the requirements of subsections (11), (16) and (17) of this section.

(2) Definitions applicable to this section:

(a) "Authorized person" - Any person specifically authorized by the employer and whose duties require the person to be present in areas where DBCP is present; and any person entering this area as a designated representative of employees exercising an opportunity to observe employee exposure monitoring.

(b) "DBCP" - 1,2-dibromo-3-chloropropane, Chemical Abstracts Service Registry Number 96-12-8, and includes all forms of DBCP.

(c) "Director" - The director of labor and industries, or his authorized representative.

(d) "Emergency" - Any occurrence such as, but not limited to equipment failure, rupture of containers, or failure of control equipment which may, or does, result in unexpected release of DBCP.

(3) Permissible exposure limits.

(a) Inhalation.

(i) Time-weighted average limit (TWA). The employer shall assure that no employee is exposed to an airborne concentration in excess of one part DBCP per billion part of air (ppb) as an eight-hour time-weighted average.

(ii) Ceiling limit. The employer shall assure that no employee is exposed to an airborne concentration in excess

of five parts DBCP per billion parts of air (ppb) as averaged over any fifteen minutes during the working day.

(b) Dermal and eye exposure. The employer shall assure that no employee is exposed to eye or skin contact with DBCP.

(4) Notification of use. Within ten days of the effective date of this section or within ten days following the introduction of DBCP into the workplace, every employer who has a workplace where DBCP is present shall report the following information to the director for each such workplace:

(a) The address and location of each workplace in which DBCP is present;

(b) A brief description of each process or operation which may result in employee exposure to DBCP;

(c) The number of employees engaged in each process or operation who may be exposed to DBCP and an estimate of the frequency and degree of exposure that occurs;

(d) A brief description of the employer's safety and health program as it relates to limitation of employee exposure to DBCP.

(5) Regulated areas. The employer shall establish, within each place of employment, regulated areas wherever DBCP concentrations are in excess of the permissible exposure limit.

(a) The employer shall limit access to regulated areas to authorized persons.

(b) All employees entering or working in a regulated area shall wear respiratory protection in accordance with Table I.

(6) Exposure monitoring.

(a) General. Determinations of airborne exposure levels shall be made from air samples that are representative of each employee's exposure to DBCP over an eight-hour period. (For the purposes of this section, employee exposure is that exposure which would occur if the employee were not using a respirator.)

(b) Initial. Each employer who has a place of employment in which DBCP is present shall monitor each workplace and work operation to accurately determine the airborne concentrations of DBCP to which employees may be exposed.

(c) Frequency.

(i) If the monitoring required by this section reveals employee exposures to be below the permissible exposure limits, the employer shall repeat these determinations at least quarterly.

(ii) If the monitoring required by this section reveals employee exposure to be in excess of the permissible exposure limits, the employer shall repeat these determinations for each such employee at least monthly. The employer shall continue these monthly determinations until at least two consecutive measurements, taken at least seven days apart, are below the permissible exposure limit, thereafter the employer shall monitor at least quarterly.

(d) Additional. Whenever there has been a production process, control or personnel change which may result in any new or additional exposure to DBCP, or whenever the employer has any other reason to suspect a change which may result in new or additional exposure to DBCP, additional monitoring which complies with subsection (6) shall be conducted.

(e) Employee notification.

(i) Within five working days after the receipt of monitoring results, the employer shall notify each employee in writing of results which represent the employee's exposure.

(ii) Whenever the results indicate that employee exposure exceeds the permissible exposure limit, the employer shall include in the written notice a statement that the permissible exposure limit was exceeded and a description of the corrective action being taken to reduce exposure to or below the permissible exposure limits.

(f) Accuracy of measurement. The method of measurement shall be accurate, to a confidence level of ninety-five percent, to within plus or minus twenty-five percent for concentrations of DBCP at or above the permissible exposure limits.

(7) Methods of compliance.

(a) Priority of compliance methods. The employer shall institute engineering and work practice controls to reduce and maintain employee exposures to DBCP at or below the permissible exposure limit, except to the extent that the employer establishes that such controls are not feasible. Where feasible engineering and work practice controls are not sufficient to reduce employee exposures to within the permissible exposure limit, the employer shall nonetheless use them to reduce exposures to the lowest level achievable by these controls, and shall supplement them by use of respiratory protection.

(b) Compliance program.

(i) The employer shall establish and implement a written program to reduce employee exposure to DBCP to or below the permissible exposure limit solely by means of engineering and work practice controls as required by this section.

(ii) The written program shall include a detailed schedule for development and implementation of the engineering and work practice controls. These plans shall be revised at least every six months to reflect the current status of the program.

(iii) Written plans for these compliance programs shall be submitted upon request to the director, and shall be available at the worksite for examination and copying by the director, and any affected employee or designated representative of employees.

(iv) The employer shall institute and maintain at least the controls described in his most recent written compliance program.

(8) Respiratory protection.

(a) General. For employees who are required to use respirators under this section, the employer must provide each employee an appropriate respirator that complies with the requirements of this subsection. Respirators must be used during:

(i) Period necessary to install or implement feasible engineering and work-practice controls;

(ii) Maintenance and repair activities for which engineering and work-practice controls are not feasible;

(iii) Work operations for which feasible engineering and work-practice controls are not yet sufficient to reduce employee exposure to or below the permissible exposure limit;

(iv) Emergencies.

(b) The employer must establish, implement, and maintain a respiratory protection program as required by chapter 296-842 WAC, Respirators, which covers each employee required by this chapter to use a respirator.

(c) Respirator selection. The employer must:

(i) Select and provide to employees appropriate respirators according to this chapter and WAC 296-842-13005 in the respirator rule.

(ii) Provide employees with one of the following respirator options to use for entry into, or escape from, unknown DBCP concentrations:

(A) A combination respirator that includes a full-facepiece air-line respirator operated in a pressure-demand or other positive-pressure mode or continuous-flow mode and an auxiliary self-contained breathing apparatus (SCBA) operated in a pressure-demand or positive-pressure mode;

OR

(B) A full-facepiece SCBA operated in a pressure-demand or other positive-pressure mode.

(9) Reserved.

(10) Emergency situations.

(a) Written plans.

(i) A written plan for emergency situations shall be developed for each workplace in which DBCP is present.

(ii) Appropriate portions of the plan shall be implemented in the event of an emergency.

(b) Employees engaged in correcting conditions shall be equipped as required in subsection (11) of this section until the emergency is abated.

(c) Evacuation. Employees not engaged in correcting the emergency shall be removed and restricted from the area and normal operations in the affected area shall not be resumed until the emergency is abated.

(d) Alerting employees. Where there is a possibility of employee exposure to DBCP due to the occurrence of an emergency, a general alarm shall be installed and maintained to promptly alert employees of such occurrences.

(e) Medical surveillance. For any employee exposed to DBCP in an emergency situation, the employer shall provide medical surveillance in accordance with subsection (14) of this section.

(f) Exposure monitoring.

(i) Following an emergency, the employer shall conduct monitoring which complies with subsection (6) of this section.

(ii) In workplaces not normally subject to periodic monitoring, the employer may terminate monitoring when two consecutive measurements indicate exposures below the permissible exposure limit.

(11) Protective clothing and equipment.

(a) Provision and use. Where eye or skin contact with liquid or solid DBCP may occur, employers shall provide at no cost to the employee, and assure that employees wear impermeable protective clothing and equipment in accordance with WAC 296-800-160 to protect the area of the body which may come in contact with DBCP.

(b) Cleaning and replacement.

(i) The employer shall clean, launder, maintain, or replace protective clothing and equipment required by this subsection to maintain their effectiveness. In addition, the

employer shall provide clean protective clothing and equipment at least daily to each affected employee.

(ii) Removal and storage.

(A) The employer shall assure that employees remove DBCP contaminated work clothing only in change rooms provided in accordance with subsection (13) of this section.

(B) The employer shall assure that employees promptly remove any protective clothing and equipment which becomes contaminated with DBCP-containing liquids and solids. This clothing shall not be reworn until the DBCP has been removed from the clothing or equipment.

(C) The employer shall assure that no employee takes DBCP contaminated protective devices and work clothing out of the change room, except those employees authorized to do so for the purpose of laundering, maintenance, or disposal.

(iii) The employer shall assure that DBCP-contaminated protective work clothing and equipment is placed and stored in closed containers which prevent dispersion of DBCP outside the container.

(iv) The employer shall inform any person who launders or cleans DBCP-contaminated protective clothing or equipment of the potentially harmful effects of exposure to DBCP.

(v) The employer shall assure that the containers of contaminated protective clothing and equipment which are to be removed from the workplace for any reason are labeled in accordance with subsection (16)(c) of this section.

(vi) The employer shall prohibit the removal of DBCP from protective clothing and equipment by blowing or shaking.

(12) Housekeeping.

(a) Surfaces.

(i) All surfaces shall be maintained free of accumulations of DBCP.

(ii) Dry sweeping and the use of air for the cleaning of floors and other surfaces where DBCP dust or liquids are found is prohibited.

(iii) Where vacuuming methods are selected, either portable units or a permanent system may be used.

(A) If a portable unit is selected, the exhaust shall be attached to the general workplace exhaust ventilation system or collected within the vacuum unit, equipped with high efficiency filters or other appropriate means of contaminant removal, so that DBCP is not reintroduced into the workplace air; and

(B) Portable vacuum units used to collect DBCP may not be used for other cleaning purposes and shall be labeled as prescribed by subsection (16)(c) of this section.

(iv) Cleaning of floors and other contaminated surfaces may not be performed by washing down with a hose, unless a fine spray has first been laid down.

(b) Liquids. Where DBCP is present in a liquid form, or as a resultant vapor, all containers or vessels containing DBCP shall be enclosed to the maximum extent feasible and tightly covered when not in use.

(c) Waste disposal. DBCP waste, scrap, debris, bags, containers or equipment, shall be disposed in sealed bags or other closed containers which prevent dispersion of DBCP outside the container.

(13) Hygiene facilities and practices.

(a) Change rooms. The employer shall provide clean change rooms equipped with storage facilities for street clothes and separate storage facilities for protective clothing and equipment whenever employees are required to wear protective clothing and equipment in accordance with subsections (8), (9) and (11) of this section.

(b) Showers.

(i) The employer shall assure that employees working in the regulated area shower at the end of the work shift.

(ii) The employer shall assure that employees whose skin becomes contaminated with DBCP-containing liquids or solids immediately wash or shower to remove any DBCP from the skin.

(iii) The employer shall provide shower facilities in accordance with WAC 296-800-230.

(c) Lunchrooms. The employer shall provide lunchroom facilities which have a temperature controlled, positive pressure, filtered air supply, and which are readily accessible to employees working in regulated areas.

(d) Lavatories.

(i) The employer shall assure that employees working in the regulated area remove protective clothing and wash their hands and face prior to eating.

(ii) The employer shall provide a sufficient number of lavatory facilities which comply with WAC 296-800-230.

(e) Prohibition of activities in regulated areas. The employer shall assure that, in regulated areas, food or beverages are not present or consumed, smoking products and implements are not present or used, and cosmetics are not present or applied.

(14) Medical surveillance.

(a) General. The employer shall institute a program of medical surveillance for each employee who is or will be exposed, without regard to the use of respirators, to DBCP. The employer shall provide each such employee with an opportunity for medical examinations and tests in accordance with this subsection. All medical examinations and procedures shall be performed by or under the supervision of a licensed physician, and shall be provided without cost to the employee.

(b) Frequency and content. At the time of initial assignment, annually thereafter, and whenever exposure to DBCP occurs, the employer shall provide a medical examination for employees who work in regulated areas, which includes at least the following:

(i) A complete medical and occupational history with emphasis on reproductive history.

(ii) A complete physical examination with emphasis on the genito-urinary tract, testicle size, and body habitus including the following tests:

(A) Sperm count;

(B) Complete urinalysis (U/A);

(C) Complete blood count; and

(D) Thyroid profile.

(iii) A serum specimen shall be obtained and the following determinations made by radioimmunoassay techniques utilizing National Institutes of Health (NIH) specific antigen or one of equivalent sensitivity:

(A) Serum multiphasic analysis (SMA 12);

(B) Serum follicle stimulating hormone (FSH);

(C) Serum luteinizing hormone (LH); and

(D) Serum estrogen (females).

(iv) Any other tests deemed appropriate by the examining physician.

(c) Additional examinations. If the employee for any reason develops signs or symptoms commonly associated with exposure to DBCP, the employer shall provide the employee with a medical examination which shall include those elements considered appropriate by the examining physician.

(d) Information provided to the physician. The employer shall provide the following information to the examining physician:

(i) A copy of this standard and its appendices;

(ii) A description of the affected employee's duties as they relate to the employee's exposure;

(iii) The level of DBCP to which the employee is exposed; and

(iv) A description of any personal protective equipment used or to be used.

(e) Physician's written opinion.

(i) For each examination under this section, the employer shall obtain and provide the employee with a written opinion from the examining physician which shall include:

(A) The results of the medical tests performed;

(B) The physician's opinion as to whether the employee has any detected medical condition which would place the employee at an increased risk of material impairment of health from exposure to DBCP;

(C) Any recommended limitations upon the employee's exposure to DBCP or upon the use of protective clothing and equipment such as respirators; and

(D) A statement that the employee was informed by the physician of the results of the medical examination, and any medical conditions which require further examination or treatment.

(ii) The employer shall instruct the physician not to reveal in the written opinion specific findings or diagnoses unrelated to occupational exposure to DBCP.

(iii) The employer shall provide a copy of the written opinion to the affected employee.

(f) Emergency situations. If the employee is exposed to DBCP in an emergency situation, the employer shall provide the employee with a sperm count test as soon as practicable, or, if the employee is unable to produce a semen specimen, the hormone tests contained in subsection (14)(b) of this section. The employer shall provide these same tests three months later.

(15) Employee information and training.

(a) Training program.

(i) Within thirty days of the effective date of this standard, the employer shall institute a training program for all employees who may be exposed to DBCP and shall assure their participation in such training program.

(ii) The employer shall assure that each employee is informed of the following:

(A) The information contained in Appendices A, B and C;

(B) The quantity, location, manner of use, release or storage of DBCP and the specific nature of operations which

could result in exposure to DBCP as well as any necessary protective steps;

(C) The purpose, proper use, limitations, and other training requirements covering respiratory protection as required in chapter 296-62 WAC, Part E;

(D) The purpose and description of the medical surveillance program required by subsection (14) of this section; and

(E) A review of this standard.

(b) Access to training materials.

(i) The employer shall make a copy of this standard and its appendices readily available to all affected employees.

(ii) The employer shall provide, upon request, all materials relating to the employee information and training program to the director.

(16) Signs and labels.

(a) General.

(i) The employer may use labels or signs required by other statutes, regulations, or ordinances in addition to or in combination with, signs and labels required by this subsection.

(ii) The employer shall assure that no statement appears on or near any sign or label required by this subsection which contradicts or detracts from the required sign or label.

(b) Signs.

(i) The employer shall post signs to clearly indicate all work areas where DBCP may be present. These signs shall bear the legend:

DANGER

1,2-Dibromo-3-chloropropane

(Insert appropriate trade or common names)

CANCER HAZARD

AUTHORIZED PERSONNEL ONLY

(ii) Where airborne concentrations of DBCP exceed the permissible exposure limits, the signs shall bear the additional legend:

RESPIRATOR REQUIRED

(c) Labels.

(i) The employer shall assure that precautionary labels are affixed to all containers of DBCP and of products containing DBCP, and that the labels remain affixed when the DBCP or products containing DBCP are sold, distributed, or otherwise leave the employer's workplace. Where DBCP or products containing DBCP are sold, distributed or otherwise leave the employer's workplace bearing appropriate labels required by EPA under the regulations in 40 CFR Part 162, the labels required by this subsection need not be affixed.

(ii) The employer shall assure that the precautionary labels required by this subsection are readily visible and legible. The labels shall bear the following legend:

DANGER

1,2-Dibromo-3-chloropropane

CANCER HAZARD

(17) Recordkeeping.

(a) Exposure monitoring.

(i) The employer shall establish and maintain an accurate record of all monitoring required by subsection (6) of this section.

(ii) This record shall include:

(A) The dates, number, duration and results of each of the samples taken, including a description of the sampling procedure used to determine representative employee exposure;

(B) A description of the sampling and analytical methods used;

(C) Type of respiratory worn, if any; and

(D) Name, Social Security number, and job classification of the employee monitored and of all other employees whose exposure the measurement is intended to represent.

(iii) The employer shall maintain this record for at least forty years or the duration of employment plus twenty years, whichever is longer.

(b) Medical surveillance.

(i) The employer shall establish and maintain an accurate record for each employee subject to medical surveillance required by subsection (14) of this section.

(ii) This record shall include:

(A) The name and Social Security number of the employee;

(B) A copy of the physician's written opinion;

(C) Any employee medical complaints related to exposure to DBCP;

(D) A copy of the information provided the physician as required by subsection (14)(c) of this section; and

(E) A copy of the employee's medical and work history.

(iii) The employer shall maintain this record for at least forty years or the duration of employment plus twenty years, whichever is longer.

(c) Availability.

(i) The employer shall assure that all records required to be maintained by this section be made available upon request to the director for examination and copying.

(ii) Employee exposure monitoring records and employee medical records required by this subsection shall be provided upon request to employees' designated representatives and the assistant director in accordance with chapter 296-802 WAC.

(d) Transfer of records.

(i) If the employer ceases to do business, the successor employer shall receive and retain all records required to be maintained by this section for the prescribed period.

(ii) ~~(If 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 transmit these records by mail to the director.~~

~~(iii) At the expiration of the retention period for the records required to be maintained under this section, the employer shall transmit these records by mail to the director.~~

(iv)) The employer shall also comply with any additional requirements involving transfer of records set forth in (~~chapter 296-802~~) WAC 296-802-60005.

(18) 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 DBCP conducted under subsection (6) of this section.

(b) Observation procedures.

(i) Whenever observation of the measuring or monitoring of employee exposure to DBCP requires entry into an area where the use of protective clothing or equipment is required, the employer shall provide the observer with personal protective clothing or equipment required to be worn by employees working in the area, assure the use of such clothing and equipment, and require the observer to comply with all other applicable safety and health procedures.

(ii) Without interfering with the monitoring or measurement, observers shall be entitled to:

(A) Receive an explanation of the measurement procedures;

(B) Observe all steps related to the measurement of airborne concentrations of DBCP performed at the place of exposure; and

(C) Record the results obtained.

(19) 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.

AMENDATORY SECTION (Amending WSR 09-15-145, filed 7/21/09, effective 9/1/09)

WAC 296-62-07460 Butadiene. (1) Scope and application.

(a) This section applies to all occupational exposures to 1,3-Butadiene (BD), Chemical Abstracts Service Registry No. 106-99-0, except as provided in (b) of this subsection.

(b)(i) Except for the recordkeeping provisions in subsection (13)(a) of this section, this section does not apply to the processing, use, or handling of products containing BD or to other work operations and streams in which BD is present where objective data are reasonably relied upon that demonstrate the work operation or the product or the group of products or operations to which it belongs may not reasonably be foreseen to release BD in airborne concentrations at or above the action level or in excess of the STEL under the expected conditions of processing, use, or handling that will cause the greatest possible release or in any plausible accident.

(ii) This section also does not apply to work operations, products or streams where the only exposure to BD is from liquid mixtures containing 0.1% or less of BD by volume or the vapors released from such liquids, unless objective data become available that show that airborne concentrations generated by such mixtures can exceed the action level or STEL under reasonably predictable conditions of processing, use or handling that will cause the greatest possible release.

(iii) Except for labeling requirements and requirements for emergency response, this section does not apply to the storage, transportation, distribution or sale of BD or liquid

mixtures in intact containers or in transportation pipelines sealed in such a manner as to fully contain BD vapors or liquids.

(c) Where products or processes containing BD 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 (13)(a) of this section.

(2) Definitions: For the purpose of this section, the following definitions shall apply:

"Action level" means a concentration of airborne BD of 0.5 ppm calculated as an 8-hour time-weighted average.

"Director" means the director of the department of labor and industries, or authorized representatives.

"Authorized person" means any person specifically designated by the employer, whose duties require entrance into a regulated area, or a person entering such an area as a designated representative of employees to exercise the right to observe monitoring and measuring procedures under subsection (4)(h) of this section, or a person designated under the WISH Act or regulations issued under the WISH Act to enter a regulated area.

"1,3-Butadiene" means an organic compound with chemical formula $\text{CH}_2=\text{CH}-\text{CH}=\text{CH}_2$ that has a molecular weight of approximately 54.15 gm/mole.

"Business day" means any Monday through Friday, except those days designated as federal, state, local or company specific holidays.

"Complete blood count (CBC)" means laboratory tests performed on whole blood specimens and includes the following: White blood cell count (WBC), hematocrit (Hct), red blood cell count (RBC), hemoglobin (Hgb), differential count of white blood cells, red blood cell morphology, red blood cell indices, and platelet count.

"Day" means any part of a calendar day.

"Emergency situation" means any occurrence such as, but not limited to, equipment failure, rupture of containers, or failure of control equipment that may or does result in an uncontrolled significant release of BD.

"Employee exposure" means exposure of a worker to airborne concentrations of BD which would occur if the employee were not using respiratory protective equipment.

"Objective data" means monitoring data, or mathematical modelling or calculations based on composition, chemical and physical properties of a material, stream or product.

"Permissible exposure limits (PELs)" means either the 8-hour time-weighted average (8-hour TWA) exposure or the short-term exposure limit (STEL).

"Physician or other licensed health care professional" is an individual whose legally permitted scope of practice (i.e., license, registration, or certification) allows him or her to independently provide or be delegated the responsibility to provide one or more of the specific health care services required by (k) of this subsection.

"Regulated area" means any area where airborne concentrations of BD exceed or can reasonably be expected to exceed the 8-hour time-weighted average (8-hour TWA) exposure of 1 ppm or the short-term exposure limit (STEL) of 5 ppm for 15 minutes.

"This section" means this 1,3-butadiene standard.

(3) Permissible exposure limits (PELs).

(a) Time-weighted average (TWA) limit. The employer shall ensure that no employee is exposed to an airborne concentration of BD in excess of one part BD per million parts of air (ppm) measured as an eight (8)-hour time-weighted average.

(b) Short-term exposure limit (STEL). The employer shall ensure that no employee is exposed to an airborne concentration of BD in excess of five parts of BD per million parts of air (5 ppm) as determined over a sampling period of fifteen minutes.

(4) Exposure monitoring.

(a) General.

(i) Determinations of employee exposure shall be made from breathing zone air samples that are representative of the 8-hour TWA and 15-minute short-term exposures of each employee.

(ii) Representative 8-hour TWA employee exposure shall be determined on the basis of one or more samples representing full-shift exposure for each shift and for each job classification in each work area.

(iii) Representative 15-minute short-term employee exposures shall be determined on the basis of one or more samples representing 15-minute exposures associated with operations that are most likely to produce exposures above the STEL for each shift and for each job classification in each work area.

(iv) Except for the initial monitoring required under (b) of this subsection, where the employer can document that exposure levels are equivalent for similar operations on different work shifts, the employer need only determine representative employee exposure for that operation from the shift during which the highest exposure is expected.

(b) Initial monitoring.

(i) Each employer who has a workplace or work operation covered by this section, shall perform initial monitoring to determine accurately the airborne concentrations of BD to which employees may be exposed, or shall rely on objective data pursuant to subsection (1)(b)(i) of this section to fulfill this requirement. The initial monitoring required under this subitem shall be completed within sixty days of the introduction of BD into the workplace.

(ii) Where the employer has monitored within two years prior to the effective date of this section 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, provided that the conditions under which the initial monitoring was conducted have not changed in a manner that may result in new or additional exposures.

(c) Periodic monitoring and its frequency.

(i) If the initial monitoring required by (b) of this subsection reveals employee exposure to be at or above the action level but at or below both the 8-hour TWA limit and the STEL, the employer shall repeat the representative monitoring required by (a) of this subsection every twelve months.

(ii) If the initial monitoring required by (b) of this subsection reveals employee exposure to be above the 8-hour TWA limit, the employer shall repeat the representative monitoring required by (a)(ii) of this subsection at least every

three months until the employer has collected two samples per quarter (each at least 7 days apart) within a two-year period, after which such monitoring must occur at least every six months.

(iii) If the initial monitoring required by (b) of this subsection reveals employee exposure to be above the STEL, the employer shall repeat the representative monitoring required by (a)(iii) of this subsection at least every three months until the employer has collected two samples per quarter (each at least 7 days apart) within a two-year period, after which such monitoring must occur at least every six months.

(iv) The employer may alter the monitoring schedule from every six months to annually for any required representative monitoring for which two consecutive measurements taken at least 7 days apart indicate that employee exposure has decreased to or below the 8-hour TWA, but is at or above the action level.

(d) Termination of monitoring.

(i) If the initial monitoring required by (b) of this subsection reveals employee exposure to be below the action level and at or below the STEL, the employer may discontinue the monitoring for 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 7 days apart, are below the action level and at or below the STEL, the employer may discontinue the monitoring for those employees who are represented by such monitoring.

(e) Additional monitoring.

(i) The employer shall institute the exposure monitoring required under subsection (4) of this section 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 BD or when the employer has any reason to suspect that a change may result in new or additional exposures.

(ii) Whenever spills, leaks, ruptures or other breakdowns occur that may lead to employee exposure above the 8-hour TWA limit or above the STEL, the employer shall monitor (using leak source, such as direct reading instruments, area or personal monitoring), after the cleanup of the spill or repair of the leak, rupture or other breakdown, to ensure that exposures have returned to the level that existed prior to the incident.

(f) Accuracy of monitoring.

Monitoring shall be accurate, at a confidence level of 95 percent, to within plus or minus 25 percent for airborne concentrations of BD at or above the 1 ppm TWA limit and to within plus or minus 35 percent for airborne concentrations of BD at or above the action level of 0.5 ppm and below the 1 ppm TWA limit.

(g) Employee notification of monitoring results.

(i) The employer shall, within 5 business days after the receipt of the results of any monitoring performed under this section, notify the affected employees of these results in writing either individually or by posting of results in an appropriate location that is accessible to affected employees.

(ii) The employer shall, within 15 business days after receipt of any monitoring performed under this section indi-

cating the 8-hour TWA or STEL has been exceeded, provide the affected employees, in writing, with information on the corrective action being taken by the employer to reduce employee exposure to or below the 8-hour TWA or STEL and the schedule for completion of this action.

(h) Observation of monitoring.

(i) Employee observation. The employer shall provide affected employees or their designated representatives an opportunity to observe any monitoring of employee exposure to BD conducted in accordance with this section.

(ii) Observation procedures. When observation of the monitoring of employee exposure to BD requires entry into an area where the use of protective clothing or equipment is required, the employer shall provide the observer at no cost with protective clothing and equipment, and shall ensure that the observer uses this equipment and complies with all other applicable safety and health procedures.

(5) Regulated areas.

(a) The employer shall establish a regulated area whenever occupational exposures to airborne concentrations of BD exceed or can reasonably be expected to exceed the permissible exposure limits, either the 8-hour TWA or the STEL.

(b) Access to regulated areas shall be limited to authorized persons.

(c) Regulated areas shall be demarcated from the rest of the workplace in any manner that minimizes the number of employees exposed to BD within the regulated area.

(d) An employer at a multiemployer worksite who establishes a regulated area shall communicate the access restrictions and locations of these areas to other employers with work operations at that worksite whose employees may have access to these areas.

(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 PELs, except to the extent that the employer can establish that these controls are not feasible or where subsection (8)(a)(i) of this section applies.

(ii) Wherever the feasible engineering controls and work practices which can be instituted are not sufficient to reduce employee exposure to or below the 8-hour TWA or STEL, 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 (8) of this section.

(b) Compliance plan.

(i) Where any exposures are over the PELs, the employer shall establish and implement a written plan to reduce employee exposure to or below the PELs primarily 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. No compliance plan is required if all exposures are under the PELs.

(ii) The written compliance plan shall include a schedule for the development and implementation of the engineering controls and work practice controls including periodic leak detection surveys.

(iii) Copies of the compliance plan required in (b) of this subsection shall be furnished upon request for examination and copying to the director, affected employees and designated employee representatives. Such plans shall be reviewed at least every 12 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 PELs.

(7) Exposure goal program.

(a) For those operations and job classifications where employee exposures are greater than the action level, in addition to compliance with the PELs, the employer shall have an exposure goal program that is intended to limit employee exposures to below the action level during normal operations.

(b) Written plans for the exposure goal program shall be furnished upon request for examination and copying to the director, affected employees and designated employee representatives.

(c) Such plans shall be updated as necessary to reflect significant changes in the status of the exposure goal program.

(d) Respirator use is not required in the exposure goal program.

(e) The exposure goal program shall include the following items unless the employer can demonstrate that the item is not feasible, will have no significant effect in reducing employee exposures, or is not necessary to achieve exposures below the action level:

(i) A leak prevention, detection, and repair program.

(ii) A program for maintaining the effectiveness of local exhaust ventilation systems.

(iii) The use of pump exposure control technology such as, but not limited to, mechanical double-sealed or seal-less pumps.

(iv) Gauging devices designed to limit employee exposure, such as magnetic gauges on rail cars.

(v) Unloading devices designed to limit employee exposure, such as a vapor return system.

(vi) A program to maintain BD concentration below the action level in control rooms by use of engineering controls.

(8) Respiratory protection.

(a) General. For employees who use respirators required by this section, the employer must provide each employee an appropriate respirator that complies with the requirements of this subsection. Respirators must be used during:

(i) Periods necessary to install or implement feasible engineering and work-practice controls;

(ii) Nonroutine work operations that are performed infrequently and for which exposures are limited in duration;

(iii) Work operations for which feasible engineering controls and work-practice controls are not yet sufficient to reduce employee exposures to or below the PELs;

(iv) Emergencies.

(b) Respirator program.

(i) The employer must implement a respiratory protection program as required by chapter 296-842 WAC, except WAC 296-842-13005 and 296-842-14005, which covers each employee required by this section to use a respirator.

(ii) If air-purifying respirators are used, the employer must replace the air-purifying filter elements according to the replacement schedule set for the class of respirators listed in Table 1 of this section, and at the beginning of each work shift.

(iii) Instead of using the replacement schedule listed in Table 1 of this section, the employer may replace cartridges or canisters at 90% of their expiration service life, provided the employer:

(A) Demonstrates that employees will be adequately protected by this procedure;

(B) Uses BD breakthrough data for this purpose that have been derived from tests conducted under worst-case conditions of humidity, temperature, and air-flow rate through the filter element, and the employer also describes the data supporting the cartridge- or canister-change schedule, as well as the basis for using the data in the employer's respirator program.

(iv) A label must be attached to each filter element to indicate the date and time it is first installed on the respirator.

(v) If NIOSH approves an end-of-service-life indicator (ESLI) for an air-purifying filter element, the element may be used until the ESLI shows no further useful service life or until the element is replaced at the beginning of the next work shift, whichever occurs first.

(vi) Regardless of the air-purifying element used, if an employee detects the odor of BD, the employer must replace the air-purifying element immediately.

(c) Respirator selection.

(i) The employer must select appropriate respirators from Table 1 of this section.

Table 1. - Minimum Requirements for Respiratory Protection for Airborne BD

Concentration of Airborne BD (ppm) or condition of use	Minimum required respirator
Less than or equal to 5 ppm (5 times PEL)	(a) Air-purifying half mask or full facepiece respirator equipped with approved BD or organic vapor cartridges or canisters. Cartridges or canisters shall be replaced every 4 hours.
Less than or equal to 10 ppm (10 times PEL)	(a) Air-purifying half mask or full facepiece respirator equipped with approved BD or organic vapor cartridges or canisters. Cartridges or canisters shall be replaced every 3 hours.

Table 1. - Minimum Requirements for Respiratory Protection for Airborne BD

Concentration of Airborne BD (ppm) or condition of use	Minimum required respirator
Less than or equal to 25 ppm (25 times PEL)	(a) Air-purifying full facepiece respirator equipped with approved BD or organic vapor cartridges or canisters. Cartridges or canisters shall be replaced every 2 hours. (b) Any powered air-purifying respirator equipped with approved BD or organic vapor cartridges. PAPR cartridges shall be replaced every 2 hours. (c) Continuous flow supplied air respirator equipped with a hood or helmet.
Less than or equal to 50 ppm (50 times PEL)	(a) Air-purifying full facepiece respirator equipped with approved BD or organic vapor cartridges or canisters. Cartridges or canisters shall be replaced every 1 hour. (b) Powered air purifying respirator equipped with a tight-fitting facepiece and an approved BD or organic vapor cartridges. PAPR cartridges shall be replaced every 1 hour.
Less than or equal to 1,000 ppm (1,000 times PEL)	(a) Supplied air respirator equipped with a half mask or full facepiece and operated in a pressure demand or other positive pressure mode.
Greater than 1,000 ppm	(a) Self-contained breathing unknown concentration, or apparatus equipped with a fire fighting full facepiece and operated in a pressure demand or other positive pressure mode.

Table 1. - Minimum Requirements for Respiratory Protection for Airborne BD

Concentration of Airborne BD (ppm) or condition of use	Minimum required respirator
	(b) Any supplied air respirator equipped with a full facepiece and operated in a pressure demand or other positive pressure mode in combination with an auxiliary self-contained breathing apparatus operated in a pressure demand or other positive pressure mode.
Escape from IDLH Conditions	(a) Any positive pressure self-contained breathing apparatus with an appropriate service life. (b) Any air-purifying full facepiece respirator equipped with a front or back mounted BD or organic vapor canister.

Notes: Respirators approved for use in higher concentrations are permitted to be used in lower concentrations. Full facepiece is required when eye irritation is anticipated.

(ii) Air-purifying respirators must have filter elements certified by NIOSH for organic vapor or BD.

(iii) When an employee whose job requires the use of a respirator cannot use a negative-pressure respirator, the employer must provide the employee with a respirator that has less breathing resistance than the negative-pressure respirator, such as a powered air-purifying respirator or supplied-air respirator, when the employee is able to use it and if it provides the employee adequate protection.

(9) Protective clothing and equipment. Where appropriate to prevent eye contact and limit dermal exposure to BD, the employer shall provide protective clothing and equipment at no cost to the employee and shall ensure its use. Eye and face protection shall meet the requirements of WAC 296-800-160.

(10) Emergency situations. Written plan. A written plan for emergency situations shall be developed, or an existing plan shall be modified, to contain the applicable elements specified in WAC 296-24-567, Employee emergency plans and fire prevention plans, and in WAC 296-62-3112, hazardous waste operations and emergency responses, for each workplace where there is a possibility of an emergency.

(11) Medical screening and surveillance.

(a) Employees covered. The employer shall institute a medical screening and surveillance program as specified in this subsection for:

(i) Each employee with exposure to BD at concentrations at or above the action level on 30 or more days or for employ-

ees who have or may have exposure to BD at or above the PELs on 10 or more days a year;

(ii) Employers (including successor owners) shall continue to provide medical screening and surveillance for employees, even after transfer to a non-BD exposed job and regardless of when the employee is transferred, whose work histories suggest exposure to BD:

(A) At or above the PELs on 30 or more days a year for 10 or more years;

(B) At or above the action level on 60 or more days a year for 10 or more years; or

(C) Above 10 ppm on 30 or more days in any past year; and

(iii) Each employee exposed to BD following an emergency situation.

(b) Program administration.

(i) The employer shall ensure that the health questionnaire, physical examination and medical procedures are provided without cost to the employee, without loss of pay, and at a reasonable time and place.

(ii) Physical examinations, health questionnaires, and medical procedures shall be performed or administered by a physician or other licensed health care professional.

(iii) Laboratory tests shall be conducted by an accredited laboratory.

(c) Frequency of medical screening activities. The employer shall make medical screening available on the following schedule:

(i) For each employee covered under (a)(i) and (ii) of this subsection, a health questionnaire and complete blood count (CBC) with differential and platelet count every year, and a physical examination as specified below:

(A) An initial physical examination that meets the requirements of this rule, if twelve months or more have elapsed since the last physical examination conducted as part of a medical screening program for BD exposure;

(B) Before assumption of duties by the employee in a job with BD exposure;

(C) Every 3 years after the initial physical examination;

(D) At the discretion of the physician or other licensed health care professional reviewing the annual health questionnaire and CBC;

(E) At the time of employee reassignment to an area where exposure to BD is below the action level, if the employee's past exposure history does not meet the criteria of (a)(ii) of this subsection for continued coverage in the screening and surveillance program, and if twelve months or more have elapsed since the last physical examination; and

(F) At termination of employment if twelve months or more have elapsed since the last physical examination.

(ii) Following an emergency situation, medical screening shall be conducted as quickly as possible, but not later than 48 hours after the exposure.

(iii) For each employee who must wear a respirator, physical ability to perform the work and use the respirator must be determined as required by chapter 296-842 WAC.

(d) Content of medical screening.

(i) Medical screening for employees covered by (a)(i) and (ii) of this subsection shall include:

(A) A baseline health questionnaire that includes a comprehensive occupational and health history and is updated annually. Particular emphasis shall be placed on the hematopoietic and reticuloendothelial systems, including exposure to chemicals, in addition to BD, that may have an adverse effect on these systems, the presence of signs and symptoms that might be related to disorders of these systems, and any other information determined by the examining physician or other licensed health care professional to be necessary to evaluate whether the employee is at increased risk of material impairment of health from BD exposure. Health questionnaires shall consist of the sample forms in Appendix C to this section, or be equivalent to those samples;

(B) A complete physical examination, with special emphasis on the liver, spleen, lymph nodes, and skin;

(C) A CBC; and

(D) Any other test which the examining physician or other licensed health care professional deems necessary to evaluate whether the employee may be at increased risk from exposure to BD.

(ii) Medical screening for employees exposed to BD in an emergency situation shall focus on the acute effects of BD exposure and at a minimum include: A CBC within 48 hours of the exposure and then monthly for three months; and a physical examination if the employee reports irritation of the eyes, nose, throat, lungs, or skin, blurred vision, coughing, drowsiness, nausea, or headache. Continued employee participation in the medical screening and surveillance program, beyond these minimum requirements, shall be at the discretion of the physician or other licensed health care professional.

(e) Additional medical evaluations and referrals.

(i) Where the results of medical screening indicate abnormalities of the hematopoietic or reticuloendothelial systems, for which a nonoccupational cause is not readily apparent, the examining physician or other licensed health care professional shall refer the employee to an appropriate specialist for further evaluation and shall make available to the specialist the results of the medical screening.

(ii) The specialist to whom the employee is referred under this subsection shall determine the appropriate content for the medical evaluation, e.g., examinations, diagnostic tests and procedures, etc.

(f) Information provided to the physician or other licensed health care professional. The employer shall provide the following information to the examining physician or other licensed health care professional involved in the evaluation:

(i) A copy of this section including its appendices;

(ii) A description of the affected employee's duties as they relate to the employee's BD exposure;

(iii) The employee's actual or representative BD exposure level during employment tenure, including exposure incurred in an emergency situation;

(iv) A description of pertinent personal protective equipment used or to be used; and

(v) Information, when available, from previous employment-related medical evaluations of the affected employee which is not otherwise available to the physician or other licensed health care professional or the specialist.

(g) The written medical opinion.

(i) For each medical evaluation required by this section, the employer shall ensure that the physician or other licensed health care professional produces a written opinion and provides a copy to the employer and the employee within 15 business days of the evaluation. The written opinion shall be limited to the following information:

(A) The occupationally pertinent results of the medical evaluation;

(B) A medical opinion concerning whether the employee has any detected medical conditions which would place the employee's health at increased risk of material impairment from exposure to BD;

(C) Any recommended limitations upon the employee's exposure to BD; and

(D) A statement that the employee has been informed of the results of the medical evaluation and any medical conditions resulting from BD exposure that require further explanation or treatment.

(ii) The written medical opinion provided to the employer shall not reveal specific records, findings, and diagnoses that have no bearing on the employee's ability to work with BD.

Note: This provision does not negate the ethical obligation of the physician or other licensed health care professional to transmit any other adverse findings directly to the employee.

(h) Medical surveillance.

(i) The employer shall ensure that information obtained from the medical screening program activities is aggregated (with all personal identifiers removed) and periodically reviewed, to ascertain whether the health of the employee population of that employer is adversely affected by exposure to BD.

(ii) Information learned from medical surveillance activities must be disseminated to covered employees, as defined in (a) of this subsection, in a manner that ensures the confidentiality of individual medical information.

(12) Communication of BD hazards to employees.

(a) Hazard communication. The employer shall communicate the hazards associated with BD exposure in accordance with the requirements of the chemical hazard communication standard, WAC 296-800-170.

(b) Employee information and training.

(i) The employer shall train each employee who is potentially exposed to BD at or above the action level or the STEL in accordance with the requirements of the chemical hazard communication standard, WAC 296-800-170.

(ii) The employer shall institute a training program for all employees who are potentially exposed to BD at or above the action level or the STEL, ensure employee participation in the program and maintain a record of the contents of such program.

(iii) Training shall be provided prior to or at the time of initial assignment to a job potentially involving exposure to BD at or above the action level or STEL and at least annually thereafter.

(iv) The training program shall be conducted in a manner that the employee is able to understand. The employer shall

ensure that each employee exposed to BD over the action level or STEL is informed of the following:

(A) The health hazards associated with BD exposure, and the purpose and a description of the medical screening and surveillance program required by this section;

(B) The quantity, location, manner of use, release, and storage of BD and the specific operations that could result in exposure to BD, especially exposures above the PEL or STEL;

(C) The engineering controls and work practices associated with the employee's job assignment, and emergency procedures and personal protective equipment;

(D) The measures employees can take to protect themselves from exposure to BD;

(E) The contents of this standard and its appendices; and

(F) The right of each employee exposed to BD at or above the action level or STEL to obtain:

(I) Medical examinations as required by subsection (10) of this section at no cost to the employee;

(II) The employee's medical records required to be maintained by subsection (13)(c) of this section; and

(III) All air monitoring results representing the employee's exposure to BD and required to be kept by subsection (13)(b) of this section.

(c) Access to information and training materials.

(i) The employer shall make a copy of this standard and its appendices readily available without cost to all affected employees and their designated representatives and shall provide a copy if requested.

(ii) The employer shall provide to the director, or the designated employee representatives, upon request, all materials relating to the employee information and the training program.

(13) Recordkeeping.

(a) Objective data for exemption from initial monitoring.

(i) Where the processing, use, or handling of products or streams made from or containing BD 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 a record of the objective data reasonably relied upon in support of the exemption.

(ii) This record shall include at least the following information:

(A) The product or activity qualifying for exemption;

(B) The source of the objective data;

(C) The testing protocol, results of testing, and analysis of the material for the release of BD;

(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 establish and maintain an accurate record of all measurements taken to monitor employee exposure to BD as prescribed in subsection (4) of this section.

(ii) The record shall include at least the following information:

(A) The date of measurement;

(B) The operation involving exposure to BD 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;

(F) Name, Social Security number and exposure of the employees whose exposures are represented; and

(G) The written corrective action and the schedule for completion of this action required by subsection (4)(g)(ii) of this section.

(iii) The employer shall maintain this record for at least 30 years in accordance with chapter 296-802 WAC.

(c) Medical screening and surveillance.

(i) The employer shall establish and maintain an accurate record for each employee subject to medical screening and surveillance under this section.

(ii) The record shall include at least the following information:

(A) The name and Social Security number of the employee;

(B) Physician's or other licensed health care professional's written opinions as described in subsection (11)(e) of this section;

(C) A copy of the information provided to the physician or other licensed health care professional as required by subsection (11)(e) of this section.

(ii) Medical screening and surveillance records shall be maintained for each employee for the duration of employment plus 30 years, in accordance with chapter 296-802 WAC.

(d) Availability.

(i) The employer, upon written request, shall make all records required to be maintained by this section available for examination and copying to the director.

(ii) Access to records required to be maintained by (a) and (b) of this subsection shall be granted in accordance with chapter 296-802 WAC.

(e) Transfer of records. ~~((i) Whenever the employer ceases to do business, the employer shall transfer records required by this section to the successor employer. The successor employer shall receive and maintain these records. If there is no successor employer, the employer shall notify the director, at least three months prior to disposal, and transmit them to the director if requested by the director within that period.~~

~~((ii))~~ The employer shall transfer medical and exposure records as set forth in ~~((chapter 296-802))~~ WAC 296-802-60005.

(14) Dates.

(a) Effective date. This section shall become effective (day, month), 1997.

(b) Start-up dates.

(i) The initial monitoring required under subsection (4)(b) of this section shall be completed immediately or within sixty days of the introduction of BD into the workplace.

(ii) The requirements of subsections (3) through (13) 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 immediately.

(iii) Engineering controls specified by subsection (6)(a) of this section shall be implemented by February 4, 1999, and the exposure goal program specified in subsection (7) of this section shall be implemented by February 4, 2000.

(15) Appendices.

Appendices A, B, C, D, and F to this section are informational and are not intended to create any additional obligations not otherwise imposed or to detract from any existing obligations.

Appendix A. Substance Safety Data Sheet For 1,3-Butadiene (Non-Mandatory)

(1) Substance Identification.

(a) Substance: 1,3-Butadiene (CH₂=CH-CH=CH₂).

(b) Synonyms: 1,3-Butadiene (BD); butadiene; biethylene; bi-vinyl; divinyl; butadiene-1,3; buta-1,3-diene; erythrene; NCI-C50602; CAS-106-99-0.

(c) BD can be found as a gas or liquid.

(d) BD is used in production of styrene-butadiene rubber and polybutadiene rubber for the tire industry. Other uses include copolymer latexes for carpet backing and paper coating, as well as resins and polymers for pipes and automobile and appliance parts. It is also used as an intermediate in the production of such chemicals as fungicides.

(e) Appearance and odor: BD is a colorless, noncorrosive, flammable gas with a mild aromatic odor at standard ambient temperature and pressure.

(f) Permissible exposure: Exposure may not exceed 1 part BD per million parts of air averaged over the 8-hour workday, nor may short-term exposure exceed 5 parts of BD per million parts of air averaged over any 15-minute period in the 8-hour workday.

(2) Health Hazard Data.

(a) BD can affect the body if the gas is inhaled or if the liquid form, which is very cold (cryogenic), comes in contact with the eyes or skin.

(b) Effects of overexposure: Breathing very high levels of BD for a short time can cause central nervous system effects, blurred vision, nausea, fatigue, headache, decreased blood pressure and pulse rate, and unconsciousness. There are no recorded cases of accidental exposures at high levels that have caused death in humans, but this could occur. Breathing lower levels of BD may cause irritation of the eyes, nose, and throat. Skin contact with liquefied BD can cause irritation and frostbite.

(c) Long-term (chronic) exposure: BD has been found to be a potent carcinogen in rodents, inducing neoplastic lesions at multiple target sites in mice and rats. A recent study of BD-exposed workers showed that exposed workers have an increased risk of developing leukemia. The risk of leukemia increases with increased exposure to BD. OSHA has concluded that there is strong evidence that workplace exposure to BD poses an increased risk of death from cancers of the lymphohematopoietic system.

(d) Reporting signs and symptoms: You should inform your supervisor if you develop any of these signs or symptoms and suspect that they are caused by exposure to BD.

(3) Emergency First-Aid Procedures.

In the event of an emergency, follow the emergency plan and procedures designated for your work area. If you have been trained in first-aid procedures, provide the necessary first aid measures. If necessary, call for additional assistance from co-workers and emergency medical personnel.

(a) Eye and Skin Exposures: If there is a potential that liquefied BD can come in contact with eye or skin, face shields and skin protective equipment must be provided and used. If liquefied BD comes in contact with the eye, immediately flush the eyes with large amounts of water, occasionally lifting the lower and the upper lids. Flush repeatedly. Get medical attention immediately. Contact lenses should not be worn when working with this chemical. In the event of skin contact, which can cause frostbite, remove any contaminated clothing and flush the affected area repeatedly with large amounts of tepid water.

(b) Breathing: If a person breathes in large amounts of BD, move the exposed person to fresh air at once. If breathing has stopped, begin cardiopulmonary resuscitation (CPR) if you have been trained in this procedure. Keep the affected person warm and at rest. Get medical attention immediately.

(c) Rescue: Move the affected person from the hazardous exposure. If the exposed person has been overcome, call for help and begin emergency rescue procedures. Use extreme caution so that you do not become a casualty. Understand the plant's emergency rescue procedures and know the locations of rescue equipment before the need arises.

(4) Respirators and Protective Clothing.

(a) Respirators: Good industrial hygiene practices recommend that engineering and work practice controls be used to reduce environmental concentrations to the permissible exposure level. However, there are some exceptions where respirators may be used to control exposure. Respirators may be used when engineering and work practice controls are not technically feasible, when such controls are in the process of being installed, or when these controls fail and need to be supplemented or during brief, nonroutine, intermittent exposure. Respirators may also be used in situations involving nonroutine work operations which are performed infrequently and in which exposures are limited in duration, and in emergency situations. In some instances cartridge respirator use is allowed, but only with strict time constraints. For example, at exposure below 5 ppm BD, a cartridge (or canister) respirator, either full or half face, may be used, but the cartridge must be replaced at least every 4 hours, and it must be replaced every 3 hours when the exposure is between 5 and 10 ppm.

If the use of respirators is necessary, the only respirators permitted are those that have been approved by the National Institute for Occupational Safety and Health (NIOSH). In addition to respirator selection, a complete respiratory protection program must be instituted which includes regular training, maintenance, fit testing, inspection, cleaning, and evaluation of respirators. If you can smell BD while wearing a respirator, proceed immediately to fresh air, and change cartridge (or canister) before reentering an area where there is BD exposure. If you experience difficulty in breathing while wearing a respirator, tell your supervisor.

(b) **Protective Clothing:** Employees should be provided with and required to use impervious clothing, gloves, face shields (eight-inch minimum), and other appropriate protective clothing necessary to prevent the skin from becoming frozen by contact with liquefied BD (or a vessel containing liquid BD).

Employees should be provided with and required to use splash-proof safety goggles where liquefied BD may contact the eyes.

(5) **Precautions for Safe Use, Handling, and Storage.**

(a) **Fire and Explosion Hazards:** BD is a flammable gas and can easily form explosive mixtures in air. It has a lower explosive limit of 2%, and an upper explosive limit of 11.5%. It has an autoignition temperature of 420 deg. C (788 deg. F). Its vapor is heavier than air (vapor density, 1.9) and may travel a considerable distance to a source of ignition and flash back. Usually it contains inhibitors to prevent self-polymerization (which is accompanied by evolution of heat) and to prevent formation of explosive peroxides. At elevated temperatures, such as in fire conditions, polymerization may take place. If the polymerization takes place in a container, there is a possibility of violent rupture of the container.

(b) **Hazard:** Slightly toxic. Slight respiratory irritant. Direct contact of liquefied BD on skin may cause freeze burns and frostbite.

(c) **Storage:** Protect against physical damage to BD containers. Outside or detached storage of BD containers is preferred. Inside storage should be in a cool, dry, well-ventilated, noncombustible location, away from all possible sources of ignition. Store cylinders vertically and do not stack. Do not store with oxidizing material.

(d) **Usual Shipping Containers:** Liquefied BD is contained in steel pressure apparatus.

(e) **Electrical Equipment:** Electrical installations in Class I hazardous locations, as defined in Article 500 of the National Electrical Code, should be in accordance with Article 501 of the Code. If explosion-proof electrical equipment is necessary, it shall be suitable for use in Group B. Group D equipment may be used if such equipment is isolated in accordance with Section 501-5(a) by sealing all conduit 1/2-inch size or larger. See Venting of Deflagrations (NFPA No. 68, 1994), National Electrical Code (NFPA No. 70, 1996), Static Electricity (NFPA No. 77, 1993), Lightning Protection Systems (NFPA No. 780, 1995), and Fire Hazard Properties of Flammable Liquids, Gases and Volatile Solids (NFPA No. 325, 1994).

(f) **Fire Fighting:** Stop flow of gas. Use water to keep fire-exposed containers cool. Fire extinguishers and quick drenching facilities must be readily available, and you should know where they are and how to operate them.

(g) **Spill and Leak:** Persons not wearing protective equipment and clothing should be restricted from areas of spills or leaks until clean-up has been completed. If BD is spilled or leaked, the following steps should be taken:

(i) Eliminate all ignition sources.

(ii) Ventilate area of spill or leak.

(iii) If in liquid form, for small quantities, allow to evaporate in a safe manner.

(iv) Stop or control the leak if this can be done without risk. If source of leak is a cylinder and the leak cannot be

stopped in place, remove the leaking cylinder to a safe place and repair the leak or allow the cylinder to empty.

(h) **Disposal:** This substance, when discarded or disposed of, is a hazardous waste according to Federal regulations (40 CFR part 261). It is listed as hazardous waste number D001 due to its ignitability. The transportation, storage, treatment, and disposal of this waste material must be conducted in compliance with 40 CFR parts 262, 263, 264, 268 and 270. Disposal can occur only in properly permitted facilities. Check state and local regulation of any additional requirements as these may be more restrictive than federal laws and regulation.

(i) You should not keep food, beverages, or smoking materials in areas where there is BD exposure, nor should you eat or drink in such areas.

(j) Ask your supervisor where BD is used in your work area and ask for any additional plant safety and health rules.

(6) **Medical Requirements.**

Your employer is required to offer you the opportunity to participate in a medical screening and surveillance program if you are exposed to BD at concentrations exceeding the action level (0.5 ppm BD as an 8-hour TWA) on 30 days or more a year, or at or above the 8-hr TWA (1 ppm) or STEL (5 ppm for 15 minutes) on 10 days or more a year. Exposure for any part of a day counts. If you have had exposure to BD in the past, but have been transferred to another job, you may still be eligible to participate in the medical screening and surveillance program.

The WISHA rule specifies the past exposures that would qualify you for participation in the program. These past exposure are work histories that suggest the following:

(a) That you have been exposed at or above the PELs on 30 days a year for 10 or more years;

(b) That you have been exposed at or above the action level on 60 days a year for 10 or more years; or

(c) That you have been exposed above 10 ppm on 30 days in any past year.

Additionally, if you are exposed to BD in an emergency situation, you are eligible for a medical examination within 48 hours. The basic medical screening program includes a health questionnaire, physical examination, and blood test. These medical evaluations must be offered to you at a reasonable time and place, and without cost or loss of pay.

(7) **Observation of Monitoring.**

Your employer is required to perform measurements that are representative of your exposure to BD and you or your designated representative are entitled to observe the monitoring procedure. You are entitled to observe the steps taken in the measurement procedure, and to record the results obtained. When the monitoring procedure is taking place in an area where respirators or personal protective clothing and equipment are required to be worn, you or your representative must also be provided with, and must wear, the protective clothing and equipment.

(8) **Access to Information.**

(a) Each year, your employer is required to inform you of the information contained in this appendix. In addition, your employer must instruct you in the proper work practices for using BD, emergency procedures, and the correct use of protective equipment.

(b) Your employer is required to determine whether you are being exposed to BD. You or your representative has the right to observe employee measurements and to record the results obtained. Your employer is required to inform you of your exposure. If your employer determines that you are being overexposed, he or she is required to inform you of the actions which are being taken to reduce your exposure to within permissible exposure limits and of the schedule to implement these actions.

(c) Your employer is required to keep records of your exposures and medical examinations. These records must be kept by the employer for at least thirty years.

(d) Your employer is required to release your exposure and medical records to you or your representative upon your request.

Appendix B. Substance Technical Guidelines for 1,3-Butadiene (Non-Mandatory)

(1) Physical and Chemical Data.

(a) Substance identification:

(i) Synonyms: 1,3-Butadiene (BD); butadiene; biethylene; bivinyl; divinyl; butadiene-1,3; buta-1,3-diene; erythrene; NCI-C50620; CAS-106-99-0.

(ii) Formula: $(CH_2)=CH-CH=CH(2)$.

(iii) Molecular weight: 54.1.

(b) Physical data:

(i) Boiling point (760 mm Hg): -4.7 deg. C (23.5 deg. F).
 (ii) Specific gravity (water = 1): 0.62 at 20 deg. C (68 deg. F).

(iii) Vapor density (air = 1 at boiling point of BD): 1.87.

(iv) Vapor pressure at 20 deg. C (68 deg. F): 910 mm Hg.

(v) Solubility in water, g/100 g water at 20 deg. C (68 deg. F): 0.05.

(vi) Appearance and odor: Colorless, flammable gas with a mildly aromatic odor. Liquefied BD is a colorless liquid with a mildly aromatic odor.

(2) Fire, Explosion, and Reactivity Hazard Data.

(a) Fire:

(i) Flash point: -76 deg. C (-105 deg. F) for take out; liquefied BD; Not applicable to BD gas.

(ii) Stability: A stabilizer is added to the monomer to inhibit formation of polymer during storage. Forms explosive peroxides in air in absence of inhibitor.

(iii) Flammable limits in air, percent by volume: Lower: 2.0; Upper: 11.5.

(iv) Extinguishing media: Carbon dioxide for small fires, polymer or alcohol foams for large fires.

(v) Special fire fighting procedures: Fight fire from protected location or maximum possible distance. Stop flow of gas before extinguishing fire. Use water spray to keep fire-exposed cylinders cool.

(vi) Unusual fire and explosion hazards: BD vapors are heavier than air and may travel to a source of ignition and flash back. Closed containers may rupture violently when heated.

(vii) For purposes of compliance with the requirements of WAC 296-24-330, BD is classified as a flammable gas. For example, 7,500 ppm, approximately one-fourth of the lower flammable limit, would be considered to pose a potential fire and explosion hazard.

(viii) For purposes of compliance with WAC 296-24-585, BD is classified as a Class B fire hazard.

(ix) For purposes of compliance with WAC 296-24-956 and 296-800-280, locations classified as hazardous due to the presence of BD shall be Class I.

(b) Reactivity:

(i) Conditions contributing to instability: Heat. Peroxides are formed when inhibitor concentration is not maintained at proper level. At elevated temperatures, such as in fire conditions, polymerization may take place.

(ii) Incompatibilities: Contact with strong oxidizing agents may cause fires and explosions. The contacting of crude BD (not BD monomer) with copper and copper alloys may cause formations of explosive copper compounds.

(iii) Hazardous decomposition products: Toxic gases (such as carbon monoxide) may be released in a fire involving BD.

(iv) Special precautions: BD will attack some forms of plastics, rubber, and coatings. BD in storage should be checked for proper inhibitor content, for self-polymerization, and for formation of peroxides when in contact with air and iron. Piping carrying BD may become plugged by formation of rubbery polymer.

(c) Warning Properties:

(i) Odor Threshold: An odor threshold of 0.45 ppm has been reported in The American Industrial Hygiene Association (AIHA) Report, Odor Thresholds for Chemicals with Established Occupational Health Standards. (Ex. 32-28C).

(ii) Eye Irritation Level: Workers exposed to vapors of BD (concentration or purity unspecified) have complained of irritation of eyes, nasal passages, throat, and lungs. Dogs and rabbits exposed experimentally to as much as 6700 ppm for 7 1/2 hours a day for 8 months have developed no histologically demonstrable abnormality of the eyes.

(iii) Evaluation of Warning Properties: Since the mean odor threshold is about half of the 1 ppm PEL, and more than 10-fold below the 5 ppm STEL, most wearers of air purifying respirators should still be able to detect breakthrough before a significant overexposure to BD occurs.

(3) Spill, Leak, and Disposal Procedures.

(a) Persons not wearing protective equipment and clothing should be restricted from areas of spills or leaks until cleanup has been completed. If BD is spilled or leaked, the following steps should be taken:

(i) Eliminate all ignition sources.

(ii) Ventilate areas of spill or leak.

(iii) If in liquid form, for small quantities, allow to evaporate in a safe manner.

(iv) Stop or control the leak if this can be done without risk. If source of leak is a cylinder and the leak cannot be stopped in place, remove the leaking cylinder to a safe place and repair the leak or allow the cylinder to empty.

(b) Disposal: This substance, when discarded or disposed of, is a hazardous waste according to Federal regulations (40 CFR part 261). It is listed by the EPA as hazardous waste number D001 due to its ignitability. The transportation, storage, treatment, and disposal of this waste material must be conducted in compliance with 40 CFR parts 262, 263, 264, 268 and 270. Disposal can occur only in properly permitted facilities. Check state and local regulations for any additional

requirements because these may be more restrictive than federal laws and regulations.

(4) Monitoring and Measurement Procedures.

(a) Exposure above the Permissible Exposure Limit (8-hr TWA) or Short-Term Exposure Limit (STEL):

(i) 8-hr TWA exposure evaluation: Measurements taken for the purpose of determining employee exposure under this standard are best taken with consecutive samples covering the full shift. Air samples must be taken in the employee's breathing zone (air that would most nearly represent that inhaled by the employee).

(ii) STEL exposure evaluation: Measurements must represent 15 minute exposures associated with operations most likely to exceed the STEL in each job and on each shift.

(iii) Monitoring frequencies: Table 1 gives various exposure scenarios and their required monitoring frequencies, as required by the final standard for occupational exposure to butadiene.

Table 1. — Five Exposure Scenarios and Their Associated Monitoring Frequencies

Action Level	8-hr TWA	STEL	Required Monitoring Activity
—*	—	—	No 8-hour TWA or STEL monitoring required.
+*	—	—	No STEL monitoring required. Monitor 8-hr TWA annually.
+	—	—	No STEL monitoring required. Periodic monitoring 8-hour TWA, in accordance with (4)(c)(iii).**
+	+	+	Periodic monitoring 8-hour TWA, in accordance with (4)(c)(iii)**. Periodic monitoring STEL in accordance with (4)(c)(iii).
+	—	+	Periodic monitoring STEL, in accordance with (4)(c)(iii). Monitor 8-hour TWA annually.

Footnote (*) Exposure Scenario, Limit Exceeded: + = Yes, - = No.

Footnote (**) The employer may decrease the frequency of exposure monitoring to annually when at least 2 consecutive measurements taken at least 7 days apart show exposures to be below the 8-hour TWA, but at or above the action level.

(iv) Monitoring techniques: Appendix D describes the validated method of sampling and analysis which has been tested by OSHA for use with BD. The employer has the obligation of selecting a monitoring method which meets the accuracy and precision requirements of the standard under his or her unique field conditions. The standard requires that the method of monitoring must be accurate, to a 95 percent confidence level, to plus or minus 25 percent for concentra-

tions of BD at or above 1 ppm, and to plus or minus 35 percent for concentrations below 1 ppm.

(5) Personal Protective Equipment.

(a) Employees should be provided with and required to use impervious clothing, gloves, face shields (eight-inch minimum), and other appropriate protective clothing necessary to prevent the skin from becoming frozen from contact with liquid BD.

(b) Any clothing which becomes wet with liquid BD should be removed immediately and not reworn until the butadiene has evaporated.

(c) Employees should be provided with and required to use splash proof safety goggles where liquid BD may contact the eyes.

(6) Housekeeping and Hygiene Facilities.

For purposes of complying with WAC 296-800-220 and 296-800-230, the following items should be emphasized:

(a) The workplace should be kept clean, orderly, and in a sanitary condition.

(b) Adequate washing facilities with hot and cold water are to be provided and maintained in a sanitary condition.

(7) Additional Precautions.

(a) Store BD in tightly closed containers in a cool, well-ventilated area and take all necessary precautions to avoid any explosion hazard.

(b) Nonsparking tools must be used to open and close metal containers. These containers must be effectively grounded.

(c) Do not incinerate BD cartridges, tanks or other containers.

(d) Employers must advise employees of all areas and operations where exposure to BD might occur.

Appendix C. Medical Screening and Surveillance for 1,3-Butadiene (Nonmandatory)

(1) Basis for Medical Screening and Surveillance Requirements.

(a) Route of Entry Inhalation.

(b) Toxicology.

Inhalation of BD has been linked to an increased risk of cancer, damage to the reproductive organs, and fetotoxicity. Butadiene can be converted via oxidation to epoxybutene and diepoxybutane, two genotoxic metabolites that may play a role in the expression of BD's toxic effects. BD has been tested for carcinogenicity in mice and rats. Both species responded to BD exposure by developing cancer at multiple primary organ sites. Early deaths in mice were caused by malignant lymphomas, primarily lymphocytic type, originating in the thymus.

Mice exposed to BD have developed ovarian or testicular atrophy. Sperm head morphology tests also revealed abnormal sperm in mice exposed to BD; lethal mutations were found in a dominant lethal test. In light of these results in animals, the possibility that BD may adversely affect the reproductive systems of male and female workers must be considered.

Additionally, anemia has been observed in animals exposed to butadiene. In some cases, this anemia appeared to be a primary response to exposure; in other cases, it may have been secondary to a neoplastic response.

(c) Epidemiology.

Epidemiologic evidence demonstrates that BD exposure poses an increased risk of leukemia. Mild alterations of hematologic parameters have also been observed in synthetic rubber workers exposed to BD.

(2) Potential Adverse Health Effects.

(a) Acute.

Skin contact with liquid BD causes characteristic burns or frostbite. BD in gaseous form can irritate the eyes, nasal passages, throat, and lungs. Blurred vision, coughing, and drowsiness may also occur. Effects are mild at 2,000 ppm and pronounced at 8,000 ppm for exposures occurring over the full workshift.

At very high concentrations in air, BD is an anesthetic, causing narcosis, respiratory paralysis, unconsciousness, and death. Such concentrations are unlikely, however, except in an extreme emergency because BD poses an explosion hazard at these levels.

(b) Chronic.

The principal adverse health effects of concern are BD-induced lymphoma, leukemia and potential reproductive toxicity. Anemia and other changes in the peripheral blood cells may be indicators of excessive exposure to BD.

(c) Reproductive.

Workers may be concerned about the possibility that their BD exposure may be affecting their ability to procreate a healthy child. For workers with high exposures to BD, especially those who have experienced difficulties in conceiving, miscarriages, or stillbirths, appropriate medical and laboratory evaluation of fertility may be necessary to determine if BD is having any adverse effect on the reproductive system or on the health of the fetus.

(3) Medical Screening Components At-A-Glance.

(a) Health Questionnaire.

The most important goal of the health questionnaire is to elicit information from the worker regarding potential signs or symptoms generally related to leukemia or other blood abnormalities. Therefore, physicians or other licensed health care professionals should be aware of the presenting symptoms and signs of lymphohematopoietic disorders and cancers, as well as the procedures necessary to confirm or exclude such diagnoses. Additionally, the health questionnaire will assist with the identification of workers at greatest risk of developing leukemia or adverse reproductive effects from their exposures to BD.

Workers with a history of reproductive difficulties or a personal or family history of immune deficiency syndromes, blood dyscrasias, lymphoma, or leukemia, and those who are or have been exposed to medicinal drugs or chemicals known to affect the hematopoietic or lymphatic systems may be at higher risk from their exposure to BD. After the initial administration, the health questionnaire must be updated annually.

(b) Complete Blood Count (CBC).

The medical screening and surveillance program requires an annual CBC, with differential and platelet count, to be provided for each employee with BD exposure. This test is to be performed on a blood sample obtained by phlebotomy of the venous system or, if technically feasible, from a fingerstick sample of capillary blood. The sample is to be analyzed by an accredited laboratory.

Abnormalities in a CBC may be due to a number of different etiologies. The concern for workers exposed to BD includes, but is not limited to, timely identification of lymphohematopoietic cancers, such as leukemia and non-Hodgkin's lymphoma. Abnormalities of portions of the CBC are identified by comparing an individual's results to those of an established range of normal values for males and females. A substantial change in any individual employee's CBC may also be viewed as "abnormal" for that individual even if all measurements fall within the population-based range of normal values. It is suggested that a flowsheet for laboratory values be included in each employee's medical record so that comparisons and trends in annual CBCs can be easily made.

A determination of the clinical significance of an abnormal CBC shall be the responsibility of the examining physician, other licensed health care professional, or medical specialist to whom the employee is referred. Ideally, an abnormal CBC should be compared to previous CBC measurements for the same employee, when available. Clinical common sense may dictate that a CBC value that is very slightly outside the normal range does not warrant medical concern. A CBC abnormality may also be the result of a temporary physical stressor, such as a transient viral illness, blood donation, or menorrhagia, or laboratory error. In these cases, the CBC should be repeated in a timely fashion, i.e., within 6 weeks, to verify that return to the normal range has occurred. A clinically significant abnormal CBC should result in removal of the employee from further exposure to BD. Transfer of the employee to other work duties in a BD-free environment would be the preferred recommendation.

(c) Physical Examination.

The medical screening and surveillance program requires an initial physical examination for workers exposed to BD; this examination is repeated once every three years. The initial physical examination should assess each worker's baseline general health and rule out clinical signs of medical conditions that may be caused by or aggravated by occupational BD exposure. The physical examination should be directed at identification of signs of lymphohematopoietic disorders, including lymph node enlargement, splenomegaly, and hepatomegaly.

Repeated physical examinations should update objective clinical findings that could be indicative of interim development of a lymphohematopoietic disorder, such as lymphoma, leukemia, or other blood abnormality. Physical examinations may also be provided on an as needed basis in order to follow up on a positive answer on the health questionnaire, or in response to an abnormal CBC. Physical examination of workers who will no longer be working in jobs with BD exposure are intended to rule out lymphohematopoietic disorders.

The need for physical examinations for workers concerned about adverse reproductive effects from their exposure to BD should be identified by the physician or other licensed health care professional and provided accordingly. For these workers, such consultations and examinations may relate to developmental toxicity and reproductive capacity.

Physical examination of workers acutely exposed to significant levels of BD should be especially directed at the respiratory system, eyes, sinuses, skin, nervous system, and

any region associated with particular complaints. If the worker has received a severe acute exposure, hospitalization may be required to assure proper medical management. Since this type of exposure may place workers at greater risk of blood abnormalities, a CBC must be obtained within 48 hours and repeated at one, two, and three months.

Appendix D: Sampling and Analytical Method for 1,3-Butadiene (Nonmandatory)

OSHA Method No.: 56.

Matrix: Air.

Target concentration: 1 ppm (2.21 mg/m(3)).

Procedure: Air samples are collected by drawing known volumes of air through sampling tubes containing charcoal adsorbent which has been coated with 4-tert-butylcatechol. The samples are desorbed with carbon disulfide and then analyzed by gas chromatography using a flame ionization detector.

Recommended sampling rate and air volume: 0.05 L/min and 3 L.

Detection limit of the overall procedure: 90 ppb (200 ug/m(3)) (based on 3 L air volume).

Reliable quantitation limit: 155 ppb (343 ug/m(3)) (based on 3 L air volume).

Standard error of estimate at the target concentration: 6.5%.

Special requirements: The sampling tubes must be coated with 4-tert-butylcatechol. Collected samples should be stored in a freezer.

Status of method: A sampling and analytical method has been subjected to the established evaluation procedures of the Organic Methods Evaluation Branch, OSHA Analytical Laboratory, Salt Lake City, Utah 84165.

(1) Background.

This work was undertaken to develop a sampling and analytical procedure for BD at 1 ppm. The current method recommended by OSHA for collecting BD uses activated coconut shell charcoal as the sampling medium (Ref. 5.2). This method was found to be inadequate for use at low BD levels because of sample instability.

The stability of samples has been significantly improved through the use of a specially cleaned charcoal which is coated with 4-tert-butylcatechol (TBC). TBC is a polymerization inhibitor for BD (Ref. 5.3).

(a) Toxic effects.

Symptoms of human exposure to BD include irritation of the eyes, nose and throat. It can also cause coughing, drowsiness and fatigue. Dermatitis and frostbite can result from skin exposure to liquid BD. (Ref. 5.1)

NIOSH recommends that BD be handled in the workplace as a potential occupational carcinogen. This recommendation is based on two inhalation studies that resulted in cancers at multiple sites in rats and in mice. BD has also demonstrated mutagenic activity in the presence of a liver microsomal activating system. It has also been reported to have adverse reproductive effects. (Ref. 5.1)

(b) Potential workplace exposure.

About 90% of the annual production of BD is used to manufacture styrene-butadiene rubber and Polybutadiene rubber. Other uses include: Polychloroprene rubber, acrylonitrile butadiene-styrene resins, nylon intermediates, styrene-

butadiene latexes, butadiene polymers, thermoplastic elastomers, nitrile resins, methyl methacrylate-butadiene styrene resins and chemical intermediates. (Ref. 5.1)

(c) Physical properties (Ref. 5.1).

CAS No.: 106-99-0

Molecular weight: 54.1

Appearance: Colorless gas

Boiling point: -4.41 deg. C (760 mm Hg)

Freezing point: -108.9 deg. C

Vapor pressure: 2 atm (a) 15.3 deg. C; 5 atm (a) 47 deg. C

Explosive limits: 2 to 11.5% (by volume in air)

Odor threshold: 0.45 ppm

Structural formula: H(2)C:CHCH:CH(2)

Synonyms: BD; biethylene; bivinyl; butadiene; divinyl; buta-1,3-diene; alpha-gamma-butadiene; erythrene; NCI-C50602; pyrrolylene; vinylethylene.

(d) Limit defining parameters.

The analyte air concentrations listed throughout this method are based on an air volume of 3 L and a desorption volume of 1 mL. Air concentrations listed in ppm are referenced to 25 deg. C and 760 mm Hg.

(e) Detection limit of the analytical procedure.

The detection limit of the analytical procedure was 304 pg per injection. This was the amount of BD which gave a response relative to the interferences present in a standard.

(f) Detection limit of the overall procedure.

The detection limit of the overall procedure was 0.60 ug per sample (90 ppb or 200 ug/m(3)). This amount was determined graphically. It was the amount of analyte which, when spiked on the sampling device, would allow recovery approximately equal to the detection limit of the analytical procedure.

(g) Reliable quantitation limit.

The reliable quantitation limit was 1.03 ug per sample (155 ppb or 343 ug/m(3)). This was the smallest amount of analyte which could be quantitated within the limits of a recovery of at least 75% and a precision (+/- 1.96 SD) of +/- 25% or better.

(h) Sensitivity.(1)

Footnote (1) The reliable quantitation limit and detection limits reported in the method are based upon optimization of the instrument for the smallest possible amount of analyte. When the target concentration of an analyte is exceptionally higher than these limits, they may not be attainable at the routine operation parameters.

The sensitivity of the analytical procedure over a concentration range representing 0.6 to 2 times the target concentration, based on the recommended air volume, was 387 area units per ug/mL. This value was determined from the slope of the calibration curve. The sensitivity may vary with the particular instrument used in the analysis.

(i) Recovery.

The recovery of BD from samples used in storage tests remained above 77% when the samples were stored at ambient temperature and above 94% when the samples were stored at refrigerated temperature. These values were determined from regression lines which were calculated from the storage data. The recovery of the analyte from the collection device must be at least 75% following storage.

(j) Precision (analytical method only).

The pooled coefficient of variation obtained from replicate determinations of analytical standards over the range of 0.6 to 2 times the target concentration was 0.011.

(k) Precision (overall procedure).

The precision at the 95% confidence level for the refrigerated temperature storage test was +/- 12.7%. This value includes an additional +/- 5% for sampling error. The overall procedure must provide results at the target concentrations that are +/- 25% at the 95% confidence level.

(l) Reproducibility.

Samples collected from a controlled test atmosphere and a draft copy of this procedure were given to a chemist unassociated with this evaluation. The average recovery was 97.2% and the standard deviation was 6.2%.

(2) Sampling procedure.

(a) Apparatus. Samples are collected by use of a personal sampling pump that can be calibrated to within +/- 5% of the recommended 0.05 L/min sampling rate with the sampling tube in line.

(b) Samples are collected with laboratory prepared sampling tubes. The sampling tube is constructed of silane-treated glass and is about 5-cm long. The ID is 4 mm and the OD is 6 mm. One end of the tube is tapered so that a glass wool end plug will hold the contents of the tube in place during sampling. The opening in the tapered end of the sampling tube is at least one-half the ID of the tube (2 mm). The other end of the sampling tube is open to its full 4-mm ID to facilitate packing of the tube. Both ends of the tube are fire-polished for safety. The tube is packed with 2 sections of pretreated charcoal which has been coated with TBC. The tube is packed with a 50-mg backup section, located nearest the tapered end, and with a 100-mg sampling section of charcoal. The two sections of coated adsorbent are separated and retained with small plugs of silanized glass wool. Following packing, the sampling tubes are sealed with two 7/32 inch OD plastic end caps. Instructions for the pretreatment and coating of the charcoal are presented in Section 4.1 of this method.

(c) Reagents.

None required.

(d) Technique.

(i) Properly label the sampling tube before sampling and then remove the plastic end caps.

(ii) Attach the sampling tube to the pump using a section of flexible plastic tubing such that the larger front section of the sampling tube is exposed directly to the atmosphere. Do not place any tubing ahead of the sampling tube. The sampling tube should be attached in the worker's breathing zone in a vertical manner such that it does not impede work performance.

(iii) After sampling for the appropriate time, remove the sampling tube from the pump and then seal the tube with plastic end caps. Wrap the tube lengthwise.

(iv) Include at least one blank for each sampling set. The blank should be handled in the same manner as the samples with the exception that air is not drawn through it.

(v) List any potential interferences on the sample data sheet.

(vi) The samples require no special shipping precautions under normal conditions. The samples should be refrigerated if they are to be exposed to higher than normal ambient temperatures. If the samples are to be stored before they are shipped to the laboratory, they should be kept in a freezer. The samples should be placed in a freezer upon receipt at the laboratory.

(e) Breakthrough.

(Breakthrough was defined as the relative amount of analyte found on the backup section of the tube in relation to the total amount of analyte collected on the sampling tube. Five-percent breakthrough occurred after sampling a test atmosphere containing 2.0 ppm BD for 90 min. at 0.05 L/min. At the end of this time 4.5 L of air had been sampled and 20.1 ug of the analyte was collected. The relative humidity of the sampled air was 80% at 23 deg. C.)

Breakthrough studies have shown that the recommended sampling procedure can be used at air concentrations higher than the target concentration. The sampling time, however, should be reduced to 45 min. if both the expected BD level and the relative humidity of the sampled air are high.

(f) Desorption efficiency.

The average desorption efficiency for BD from TBC coated charcoal over the range from 0.6 to 2 times the target concentration was 96.4%. The efficiency was essentially constant over the range studied.

(g) Recommended air volume and sampling rate.

(h) The recommended air volume is 3 L.

(i) The recommended sampling rate is 0.05 L/min. for 1 hour.

(j) Interferences.

There are no known interferences to the sampling method.

(k) Safety precautions.

(i) Attach the sampling equipment to the worker in such a manner that it will not interfere with work performance or safety.

(ii) Follow all safety practices that apply to the work area being sampled.

(3) Analytical procedure.

(a) Apparatus.

(i) A gas chromatograph (GC), equipped with a flame ionization detector (FID).(2)

Footnote (2) A Hewlett-Packard Model 5840A GC was used for this evaluation. Injections were performed using a Hewlett-Packard Model 7671A automatic sampler.

(ii) A GC column capable of resolving the analytes from any interference.(3)

Footnote (3) A 20-ft x 1/8-inch OD stainless steel GC column containing 20% FFAP on 80/100 mesh Chromabsorb W-AW-DMCS was used for this evaluation.

(ii) Vials, glass 2-mL with Teflon-lined caps.

(iv) Disposable Pasteur-type pipets, volumetric flasks, pipets and syringes for preparing samples and standards, making dilutions and performing injections.

(b) Reagents.

(i) Carbon disulfide.(4)

Footnote (4) Fisher Scientific Company A.C.S. Reagent Grade solvent was used in this evaluation.

The benzene contaminant that was present in the carbon disulfide was used as an internal standard (ISTD) in this evaluation.

- (ii) Nitrogen, hydrogen and air, GC grade.
- (iii) BD of known high purity.(5)

Footnote (5) Matheson Gas Products, CP Grade 1,3-butadiene was used in this study.

(c) Standard preparation.

(i) Prepare standards by diluting known volumes of BD gas with carbon disulfide. This can be accomplished by injecting the appropriate volume of BD into the headspace above the 1-mL of carbon disulfide contained in sealed 2-mL vial. Shake the vial after the needle is removed from the septum.(6)

Footnote (6) A standard containing 7.71 ug/mL (at ambient temperature and pressure) was prepared by diluting 4 uL of the gas with 1-mL of carbon disulfide.

(ii) The mass of BD gas used to prepare standards can be determined by use of the following equations:

$$MV = (760/BP)(273+t)/(273)(22.41)$$

Where:

MV = ambient molar volume

BP = ambient barometric pressure

T = ambient temperature

ug/uL = 54.09/MV

ug/standard = (ug/uL)(uL) BD used to prepare the standard

(d) Sample preparation.

(i) Transfer the 100-mg section of the sampling tube to a 2-mL vial. Place the 50-mg section in a separate vial. If the glass wool plugs contain a significant amount of charcoal, place them with the appropriate sampling tube section.

(ii) Add 1-mL of carbon disulfide to each vial.

(iii) Seal the vials with Teflon-lined caps and then allow them to desorb for one hour. Shake the vials by hand vigorously several times during the desorption period.

(iv) If it is not possible to analyze the samples within 4 hours, separate the carbon disulfide from the charcoal, using a disposable Pasteur-type pipet, following the one hour. This separation will improve the stability of desorbed samples.

(v) Save the used sampling tubes to be cleaned and repacked with fresh adsorbent.

(e) Analysis.

(i) GC Conditions.

Column temperature: 95 deg. C

Injector temperature: 180 deg. C

Detector temperature: 275 deg. C

Carrier gas flow rate: 30 mL/min.

Injection volume: 0.80 uL

GC column: 20-ft x 1/8-in OD stainless steel GC column containing 20%

FFAP on 80/100 Chromabsorb W-AW-DMCS.

(ii) Chromatogram. See Section 4.2.

(iii) Use a suitable method, such as electronic or peak heights, to measure detector response.

(iv) Prepare a calibration curve using several standard solutions of different concentrations. Prepare the calibration

curve daily. Program the integrator to report the results in ug/mL.

(v) Bracket sample concentrations with standards.

(f) Interferences (analytical).

(i) Any compound with the same general retention time as the analyte and which also gives a detector response is a potential interference. Possible interferences should be reported by the industrial hygienist to the laboratory with submitted samples.

(ii) GC parameters (temperature, column, etc.) may be changed to circumvent interferences.

(iii) A useful means of structure designation is GC/MS.

It is recommended that this procedure be used to confirm samples whenever possible.

(g) Calculations.

(i) Results are obtained by use of calibration curves. Calibration curves are prepared by plotting detector response against concentration for each standard. The best line through the data points is determined by curve fitting.

(ii) The concentration, in ug/mL, for a particular sample is determined by comparing its detector response to the calibration curve. If any analyte is found on the backup section, this amount is added to the amount found on the front section. Blank corrections should be performed before adding the results together.

(iii) The BD air concentration can be expressed using the following equation:

$$\text{mg/m}^3 = (A)(B)/(C)(D)$$

Where:

A = ug/mL from Section 3.7.2

B = volume

C = L of air sampled

D = efficiency

(iv) The following equation can be used to convert results in mg/m³ to ppm:

$$\text{ppm} = (\text{mg/m}^3)(24.46)/54.09$$

Where:

mg/m³ = result from Section 3.7.3.

24.46 = molar volume of an ideal gas at 760 mm Hg and 25 deg. C.

(h) Safety precautions (analytical).

(i) Avoid skin contact and inhalation of all chemicals.

(ii) Restrict the use of all chemicals to a fume hood whenever possible.

(iii) Wear safety glasses and a lab coat in all laboratory areas.

(4) Additional Information.

(a) A procedure to prepare specially cleaned charcoal coated with TBC.

(i) Apparatus.

(A) Magnetic stirrer and stir bar.

(B) Tube furnace capable of maintaining a temperature of 700 deg. C and equipped with a quartz tube that can hold 30 g of charcoal.(8)

Footnote (8) A Lindberg Type 55035 Tube furnace was used in this evaluation.

(C) A means to purge nitrogen gas through the charcoal inside the quartz tube.

(D) Water bath capable of maintaining a temperature of 60 deg. C.

2. Please describe what you do during a typical work day. Be sure to tell about your work with BD.

3. Please check any of these chemicals that you work with now or have worked with in the past:

- benzene _____
- glues _____
- toluene _____
- inks, dyes _____
- other solvents, grease cutters _____
- insecticides (like DDT, lindane, etc.) _____
- paints, varnishes, thinners, strippers _____
- dusts _____
- carbon tetrachloride ("carbon tet") _____
- arsine _____
- carbon disulfide _____
- lead _____
- cement _____
- petroleum products _____
- nitrites _____

4. Please check the protective clothing or equipment you use at the job you have now:

- gloves _____
- coveralls _____
- respirator _____
- dust mask _____
- safety glasses, goggles _____

Please circle your answer.

5. Does your protective clothing or equipment fit you properly? yes no

6. Have you ever made changes in your protective clothing or equipment to make it fit better? yes no

7. Have you been exposed to BD when you were not wearing protective clothing or equipment? yes no

8. Where do you eat, drink and/or smoke when you are at work? (Please check all that apply.)

- Cafeteria/restaurant/snack bar _____
- Break room/employee lounge _____
- Smoking lounge _____
- At my work station _____

Please circle your answer.

9. Have you been exposed to radiation (like x-rays or nuclear material) at the job you have now or at past jobs? yes no

10. Do you have any hobbies that expose you to dusts or chemicals (including paints, glues, etc.)? yes no

11. Do you have any second or side jobs? yes no
If yes, what are your duties there?

12. Were you in the military? yes no

If yes, what did you do in the military? _____

Family Health History

1. In the FAMILY MEMBER column, across from the disease name, write which family member, if any, had the disease.

DISEASE	FAMILY MEMBER
Cancer	
Lymphoma	
Sickle Cell Disease or Trait	
Immune Disease	
Leukemia	
Anemia	

2. Please fill in the following information about family health

- Relative _____
- Alive? _____
- Age at Death? _____
- Cause of Death? _____
- Father _____
- Mother _____
- Brother/Sister _____
- Brother/Sister _____
- Brother/Sister _____

Personal Health History

Birth Date __/__/__ Age __ Sex __ Height __ Weight __

Please circle your answer.

1. Do you smoke any tobacco products? yes no

2. Have you ever had any kind of surgery or operation? yes no

If yes, what type of surgery:

3. Have you ever been in the hospital for any other reasons? yes no

If yes, please describe the reason _____

4. Do you have any on-going or current medical problems or conditions? yes no

If yes, please describe: _____

5. Do you now have or have you ever had any of the following? Please check all that apply to you.

- unexplained fever _____
- anemia ("low blood") _____
- HIV/AIDS _____
- weakness _____
- sickle cell _____
- miscarriage _____
- skin rash _____
- bloody stools _____
- leukemia/lymphoma _____
- neck mass/swelling _____
- wheezing _____
- yellowing of skin _____
- bruising easily _____
- lupus _____
- weight loss _____
- kidney problems _____
- enlarged lymph nodes _____
- liver disease _____
- cancer _____
- infertility _____
- drinking problems _____
- thyroid problems _____
- night sweats _____
- chest pain _____
- still birth _____
- eye redness _____
- lumps you can feel _____
- child with birth defect _____
- autoimmune disease _____
- overly tired _____
- lung problems _____
- rheumatoid arthritis _____
- mononucleosis ("mono") _____
- nagging cough _____

Please circle your answer.

6. Do you have any symptoms or health problems that you think may be related to your work with BD? yes no

If yes, please describe: _____

7. Have any of your co-workers had similar symptoms or problems? yes no don't know

If yes, please describe: _____

8. Do you notice any irritation of your eyes, nose, throat, lungs, or skin when working with BD? yes no

9. Do you notice any blurred vision, coughing, drowsiness, nausea, or headache when working with BD? yes no

10. Do you take any medications (including birth control or over-the-counter)? yes no

If yes, please list: _____

11. Are you allergic to any medication, food, or chemicals? yes no

If yes, please list: _____

12. Do you have any health conditions not covered by this questionnaire that you think are affected by your work with BD? yes no

If yes, please explain: _____

13. Did you understand all the questions? yes no

Signature

1,3-Butadiene (BD) Health Update Questionnaire

DIRECTIONS:

You have been asked to answer the questions on this form because you work with BD (butadiene). These questions are about your work, medical history, and health concerns. Please do your best to answer all of the questions. If you need help, please tell the doctor or health care professional who reviews this form.

This form is a confidential medical record. Only information directly related to your health and safety on the job may be given to your employer. Personal health information will not be given to anyone without your consent.

Date: _____

Name: _____ SSN _/_/___

 Last First MI

Job Title: _____

Company's Name: _____

Supervisor's Name: _____

Supervisor's Phone No.: () ___-____

1. Please describe any NEW duties that you have at your job. _____

2. Please describe any additional job duties you have:

Please circle your answer.

3. Are you exposed to any other chemicals in your work since the last time you were evaluated for exposure to BD? yes no
If yes, please list what they are: _____

4. Does your personal protective equipment and clothing fit you properly? yes no

5. Have you made changes in this equipment or clothing to make it fit better? yes no

6. Have you been exposed to BD when you were not wearing protective clothing or equipment? yes no

7. Are you exposed to any NEW chemicals at home or while working on hobbies? yes no
If yes, please list what they are: _____

8. Since your last BD health evaluation, have you started working any new second or side jobs? yes no
If yes, what are your duties there? _____

Personal Health History

1. What is your current weight? ____ pounds
2. Have you been diagnosed with any new medical conditions or illness since your last evaluation? yesno
If yes, please tell what they are: _____

3. Since your last evaluation, have you been in the hospital for any illnesses, injuries, or surgery? yes no
If yes, please describe: _____

4. Do you have any of the following? Please place a check for all that apply to you.
- unexplained fever _____
 - anemia ("low blood") _____
 - HIV/AIDS _____
 - weakness _____
 - sickle cell _____
 - miscarriage _____
 - skin rash _____
 - bloody stools _____
 - leukemia/lymphoma _____
 - neck mass/swelling _____
 - wheezing _____
 - yellowing of skin _____
 - bruising easily _____
 - lupus _____
 - weight loss _____
 - kidney problems _____
 - enlarged lymph nodes _____
 - liver disease _____
 - cancer _____
 - infertility _____
 - drinking problems _____
 - thyroid problems _____
 - night sweats _____
 - chest pain _____
 - still birth _____
 - eye redness _____
 - lumps you can feel _____
 - child with birth defect _____
 - autoimmune disease _____
 - overly tired _____
 - lung problems _____
 - rheumatoid arthritis _____
 - mononucleosis ("mono") _____
 - nagging cough _____

Please circle your answer.

5. Do you have any symptoms or health problems that you think may be related to your work with BD? yes no
If yes, please describe: _____

6. Have any of your co-workers had similar symptoms or problems? yes no don't know
If yes, please describe: _____

7. Do you notice any irritation of your eyes, nose, throat, lungs, or skin when working with BD? yes no

8. Do you notice any blurred vision, coughing, drowsiness, nausea, or headache when working with BD? yes no

9. Have you been taking any NEW medications (including birth control or over-the-counter)? yes no

If yes, please list:

10. Have you developed any new allergies to medications, foods, or chemicals? yes no

If yes, please list:

11. Do you have any health conditions not covered by this questionnaire that you think are affected by your work with BD? yes no

If yes, please explain: _____

12. Do you understand all the questions? yes no

Signature

AMENDATORY SECTION (Amending WSR 04-10-026, filed 4/27/04, effective 8/1/04)

WAC 296-62-07631 Recordkeeping. (1) Monitoring data for exempted employers.

(a) Where as a result of the initial monitoring the processing, use, or handling of products made from or containing MDA are exempted from other requirements of this section under WAC 296-62-07601(2), the employer shall establish and maintain an accurate record of monitoring relied on in support of the exemption.

(b) This record shall include at least the following information:

- (i) The product qualifying for exemption;
- (ii) The source of the monitoring data (e.g., was monitoring performed by the employer or a private contractor);
- (iii) The testing protocol, results of testing, and/or analysis of the material for the release of MDA;
- (iv) A description of the operation exempted and how the data support the exemption (e.g., are the monitoring data representative of the conditions at the affected facility); and
- (v) Other data relevant to the operations, materials, processing, or employee exposures covered by the exemption.

(c) The employer shall maintain this record for the duration of the employer's reliance upon such objective data.

(2) Objective data for exempted employers.

(a) Where the processing, use, or handling of products made from or containing MDA are exempted from other requirements of WAC 296-62-076 under WAC 296-62-07601, the employer shall establish and maintain an accurate record of objective data relied upon in support of the exemption.

(b) This record shall include at least the following information:

- (i) The product qualifying for exemption;
- (ii) The source of the objective data;
- (iii) The testing protocol, results of testing, and/or analysis of the material for the release of MDA;
- (iv) A description of the operation exempted and how the data support the exemption; and
- (v) Other data relevant to the operations, materials, processing, or employee exposures covered by the exemption.

(c) The employer shall maintain this record for the duration of the employer's reliance upon such objective data.

(3) Exposure measurements.

(a) The employer shall establish and maintain an accurate record of all measurements required by WAC 296-62-07609, in accordance with Part B of this chapter.

(b) This record shall include:

(i) The dates, number, duration, and results of each of the samples taken, including a description of the procedure used to determine representative employee exposures;

(ii) Identification of the sampling and analytical methods used;

(iii) A description of the type of respiratory protective devices worn, if any; and

(iv) The name, Social Security number, job classification, and exposure levels of the employee monitored and all other employees whose exposure the measurement is intended to represent.

(c) The employer shall maintain this record for at least 30 years, in accordance with Part B of this chapter.

(4) Medical surveillance.

(a) The employer shall establish and maintain an accurate record for each employee subject to medical surveillance required by WAC 296-62-07625, 296-62-07627, and 296-62-07629, in accordance with Part B of this chapter.

(b) This record shall include:

(i) The name, Social Security number, and description of the duties of the employee;

(ii) The employer's copy of the physician's written opinion on the initial, periodic, and any special examinations, including results of medical examination and all tests, opinions, and recommendations;

(iii) Results of any airborne exposure monitoring done for that employee and the representative exposure levels supplied to the physician; and

(iv) Any employee medical complaints related to exposure to MDA.

(c) The employer shall keep, or assure that the examining physician keeps, the following medical records:

(i) A copy of this standard and its appendices, except that the employer may keep one copy of the standard and its appendices for all employees provided the employer references the standard and its appendices in the medical surveillance record of each employee;

(ii) A copy of the information provided to the physician as required by any sections in the regulatory text;

(iii) A description of the laboratory procedures and a copy of any standards or guidelines used to interpret the test results or references to the information;

(iv) A copy of the employee's medical and work history related to exposure to MDA.

(d) The employer shall maintain this record for at least the duration of employment plus thirty years, in accordance with Part B of this chapter.

(5) Medical removals.

(a) The employer shall establish and maintain an accurate record for each employee removed from current exposure to MDA pursuant to WAC 296-62-07625, 296-62-07627, and 296-62-07629.

(b) Each record shall include:

(i) The name and Social Security number of the employee;

(ii) The date of each occasion that the employee was removed from current exposure to MDA as well as the corresponding date on which the employee was returned to his or her former job status;

(iii) A brief explanation of how each removal was or is being accomplished; and

(iv) A statement with respect to each removal indicating the reason for the removal.

(c) The employer shall maintain each medical removal record for at least the duration of an employee's employment plus thirty years.

(6) Availability.

(a) The employer shall assure that records required to be maintained by WAC 296-62-076 shall be made available, upon request, to the director for examination and copying.

(b) Employee exposure monitoring records required by WAC 296-62-076 shall be provided upon request for examination and copying to employees, employee representatives, and the director in accordance with the applicable sections of WAC 296-800-170.

(c) Employee medical records required by this section shall be provided upon request for examination and copying, to the subject employee, to anyone having the specific written consent of the subject employee, and to the director in accordance with Part B of this chapter.

(7) Transfer of records. ((a)) The employer shall comply with the requirements involving transfer of records set forth in chapter 296-802 WAC.

~~((b) If 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 the records to the director if so requested by the director within that period.))~~

AMENDATORY SECTION (Amending WSR 09-15-145, filed 7/21/09, effective 9/1/09)

WAC 296-62-14533 Cotton dust. (1) Scope and application.

(a) This section, in its entirety, applies to the control of employee exposure to cotton dust in all workplaces where employees engage in yarn manufacturing, engage in slashing and weaving operations, or work in waste houses for textile operations.

(b) This section does not apply to the handling or processing of woven or knitted materials; to maritime operations

covered by chapters 296-56 and 296-304 WAC; to harvesting or ginning of cotton; or to the construction industry.

(c) Only subsection (8) Medical surveillance, subsection (11)(b) Medical surveillance, subsection (11)(c) Availability, subsection (11)(d) Transfer of records, and Appendices B, C, and D of this section apply in all work places where employees exposed to cotton dust engage in cottonseed processing or waste processing operations.

(d) This section applies to yarn manufacturing and slashing and weaving operations exclusively using washed cotton (as defined by subsection (14) of this section) only to the extent specified by subsection (14) of this section.

(e) This section, in its entirety, applies to the control of all employees exposure to the cotton dust generated in the preparation of washed cotton from opening until the cotton is thoroughly wetted.

(f) This section does not apply to knitting, classing or warehousing operations except that employers with these operations, if requested by WISHA, shall grant WISHA access to their employees and workplaces for exposure monitoring and medical examinations for purposes of a health study to be performed by WISHA on a sampling basis.

(2) Definitions applicable to this section:

(a) "Blow down" - The cleaning of equipment and surfaces with compressed air.

(b) "Blow off" - The use of compressed air for cleaning of short duration and usually for a specific machine or any portion of a machine.

(c) "Cotton dust" - Dust present in the air during the handling or processing of cotton, which may contain a mixture of many substances including ground-up plant matter, fiber, bacteria, fungi, soil, pesticides, noncotton plant matter and other contaminants which may have accumulated with the cotton during the growing, harvesting and subsequent processing or storage periods. Any dust present during the handling and processing of cotton through the weaving or knitting of fabrics, and dust present in other operations or manufacturing processes using raw or waste cotton fibers or cotton fiber by-products from textile mills are considered cotton dust within this definition. Lubricating oil mist associated with weaving operations is not considered cotton dust.

(d) "Director" - The director of labor and industries or his authorized representative.

(e) "Equivalent instrument" - A cotton dust sampling device that meets the vertical elutriator equivalency requirements as described in subsection (4)(a)(iii) of this section.

(f) "Lint-free respirable cotton dust" - Particles of cotton dust of approximately 15 microns or less aerodynamic equivalent diameter.

(g) "Vertical elutriator cotton dust sampler" or "vertical elutriator" - A dust sampler which has a particle size cut-off at approximately 15 microns aerodynamic equivalent diameter when operating at the flow rate of 7.4 ± 0.2 liters per minute.

(h) "Waste processing" - Waste recycling (sorting, blending, cleaning and willowing) and garnetting.

(i) "Yarn manufacturing" - All textile mill operations from opening to, but not including, slashing and weaving.

(3) Permissible exposure limits and action levels.

(a) Permissible exposure limits (PEL).

(i) The employer shall assure that no employee who is exposed to cotton dust in yarn manufacturing and cotton washing operations is exposed to airborne concentrations of lint-free respirable cotton dust greater than 200 $\mu\text{g}/\text{m}^3$ mean concentration, averaged over an eight-hour period, as measured by a vertical elutriator or an equivalent instrument.

(ii) The employer shall assure that no employee who is exposed to cotton dust in textile mill waste house operations or is exposed in yarn manufacturing to dust from "lower grade washed cotton" as defined in subsection (14)(e) of this section is exposed to airborne concentrations of lint-free respirable cotton dust greater than 500 $\mu\text{g}/\text{m}^3$ mean concentration, averaged over an eight-hour period, as measured by a vertical elutriator or an equivalent instrument.

(iii) The employer shall assure that no employee who is exposed to cotton dust in the textile processes known as slashing and weaving is exposed to airborne concentrations of lint-free respirable cotton dust greater than 750 $\mu\text{g}/\text{m}^3$ mean concentration, averaged over an eight-hour period, as measured by a vertical elutriator or an equivalent instrument.

(b) Action levels.

(i) The action level for yarn manufacturing and cotton washing operations is an airborne concentration of lint-free respirable cotton dust of 100 $\mu\text{g}/\text{m}^3$ mean concentration, averaged over an eight-hour period, as measured by a vertical elutriator or an equivalent instrument.

(ii) The action level for waste houses for textile operations is an airborne concentration of lint-free respirable cotton dust of 250 $\mu\text{g}/\text{m}^3$ mean concentration, averaged over an eight-hour period, as measured by a vertical elutriator or an equivalent instrument.

(iii) The action level for the textile processes known as slashing and weaving is an airborne concentration of lint-free respirable cotton dust of 375 $\mu\text{g}/\text{m}^3$ mean concentration, averaged over an eight-hour period, as measured by a vertical elutriator or an equivalent instrument.

(4) Exposure monitoring and measurement.

(a) General.

(i) For the purposes of this section, employee exposure is that exposure which would occur if the employee were not using a respirator.

(ii) The sampling device to be used shall be either the vertical elutriator cotton dust sampler or an equivalent instrument.

(iii) If an alternative to the vertical elutriator cotton dust sampler is used, the employer shall establish equivalency by demonstrating that the alternative sampling devices:

(A) It collects respirable particulates in the same range as the vertical elutriator (approximately 15 microns);

(B) Replicate exposure data used to establish equivalency are collected in side-by-side field and laboratory comparisons; and

(C) A minimum of 100 samples over the range of 0.5 to 2 times the permissible exposure limit are collected, and ninety percent of these samples have an accuracy range of plus or minus twenty-five percent of the vertical elutriator reading with a ninety-five percent confidence level as demonstrated by a statistically valid protocol. (An acceptable protocol for demonstrating equivalency is described in Appendix E of this section.)

(iv) WISHA will issue a written opinion stating that an instrument is equivalent to a vertical elutriator cotton dust sampler if:

(A) A manufacturer or employer requests an opinion in writing and supplies the following information:

(I) Sufficient test data to demonstrate that the instrument meets the requirements specified in this paragraph and the protocol specified in Appendix E of this section;

(II) Any other relevant information about the instrument and its testing requested by WISHA; and

(III) A certification by the manufacturer or employer that the information supplied is accurate(;) and

(B) If WISHA finds, based on information submitted about the instrument, that the instrument meets the requirements for equivalency specified by this subsection.

(b) Initial monitoring. Each employer who has a place of employment within the scope of subsections (1)(a), (d) or (e) of this section shall conduct monitoring by obtaining measurements which are representative of the exposure of all employees to airborne concentrations of lint-free respirable cotton dust over an eight-hour period. The sampling program shall include at least one determination during each shift for each work area.

(c) Periodic monitoring.

(i) If the initial monitoring required by (4)(b) of this section or any subsequent monitoring reveals employee exposure to be at or below the permissible exposure limit, the employer shall repeat the monitoring for those employees at least annually.

(ii) If the initial monitoring required by (4)(b) of this section or any subsequent monitoring reveals employee exposure to be above the PEL, the employer shall repeat the monitoring for those employees at least every six months.

(iii) Whenever there has been a production, process, or control change which may result in new or additional exposure to cotton dust, or whenever the employer has any other reason to suspect an increase in employee exposure, the employer shall repeat the monitoring and measurements for those employees affected by the change or increase.

(d) Employee notification.

(i) Within fifteen working days after the receipt of monitoring results, the employer shall notify each employee in writing of the exposure measurements which represent that employee's exposure.

(ii) Whenever the results indicate that the employee's exposure exceeds the applicable permissible exposure limit specified in subsection (3) of this section, the employer shall include in the written notice a statement that the permissible exposure limit was exceeded and a description of the corrective action taken to reduce exposure below the permissible exposure limit.

(5) Methods of compliance.

(a) Engineering and work practice controls. The employer shall institute engineering and work practice controls to reduce and maintain employee exposure to cotton dust at or below the permissible exposure limit specified in subsection (3) of this section, except to the extent that the employer can establish that such controls are not feasible.

(b) Whenever feasible engineering and work practice controls are not sufficient to reduce employee exposure to or

below the permissible exposure limit, the employer shall nonetheless institute these controls to immediately reduce exposure to the lowest feasible level, and shall supplement these controls with the use of respirators which shall comply with the provisions of subsection (6) of this section.

(c) Compliance program.

(i) Where the most recent exposure monitoring data indicates that any employee is exposed to cotton dust levels greater than the permissible exposure limit, the employer shall establish and implement a written program sufficient to reduce exposures to or below the permissible exposure limit solely by means of engineering controls and work practices as required by (a) of this subsection.

(ii) The written program shall include at least the following:

(A) A description of each operation or process resulting in employee exposure to cotton dust;

(B) Engineering plans and other studies used to determine the controls for each process;

(C) A report of the technology considered in meeting the permissible exposure limit;

(D) Monitoring data obtained in accordance with subsection (4) of this section;

(E) A detailed schedule for development and implementation of engineering and work practice controls, including exposure levels projected to be achieved by such controls;

(F) Work practice program; and

(G) Other relevant information.

(iii) The employer's schedule as set forth in the compliance program, shall project completion of the implementation of the compliance program no later than March 27, 1984 or as soon as possible if monitoring after March 27, 1984 reveals exposures over the PEL, except as provided in (13)(b)(ii)(B) of this section.

(iv) The employer shall complete the steps set forth in his program by the dates in the schedule.

(v) Written programs shall be submitted, upon request, to the director, and shall be available at the worksite for examination and copying by the director, and any affected employee or their designated representatives.

(vi) The written programs required under subsection (5)(c) of this section shall be revised and updated at least every six months to reflect the current status of the program and current exposure levels.

(d) Mechanical ventilation. When mechanical ventilation is used to control exposure, measurements which demonstrate the effectiveness of the system to control exposure, such as capture velocity, duct velocity, or static pressure shall be made at reasonable intervals.

(6) Use of respirators.

(a) General. For employees who are required to use respirators by this section, the employer must provide each employee an appropriate respirator that complies with the requirements of this section. Respirators must be used during:

(i) Periods necessary to install or implement feasible engineering controls and work-practice controls;

(ii) Maintenance and repair activities for which engineering and work-practice controls are not feasible;

(iii) Work operations for which feasible engineering and work-practice controls are not yet sufficient to reduce

employee exposure to or below the permissible exposure limits;

(iv) Work operations specified under subsection (7)(a) of this section;

(v) Periods for which an employee requests a respirator.

(b) Respirator program.

(i) The employer must develop, implement and maintain a respiratory protection program as required by chapter 296-842 WAC, Respirators, which covers each employee required by this chapter to use a respirator.

(ii) Whenever a physician determines that an employee who works in an area in which the cotton-dust concentration exceeds the PEL is unable to use a respirator, including a powered air-purifying respirator, the employee must be given the opportunity to transfer to an available position, or to a position that becomes available later, that has a cotton-dust concentration at or below the PEL. The employer must ensure that such employees retain their current wage rate or other benefits as a result of the transfer.

(c) Respirator selection. The employer must:

(i) Select and provide to employees the appropriate respirators by following requirements in this section and WAC 296-842-13005, found in the respirator rule.

(ii) Provide employees with a powered air-purifying respirator (PAPR) when the employee chooses to use a PAPR instead of a negative-pressure air-purifying respirator, and the PAPR will provide adequate protection.

(iii) Limit the use of filtering facepiece respirators for protection against cotton dust to concentrations less than or equal to five times (5x) the PEL.

(iv) Provide high-efficiency particulate air (HEPA) filters or N-, R-, or P-100 series filters for powered air-purifying respirators (PAPRs) and negative-pressure air-purifying respirators when used in cotton dust concentrations greater than ten times (10x) the PEL.

(7) Work practices. Each employer shall, regardless of the level of employee exposure, immediately establish and implement a written program of work practices which shall minimize cotton dust exposure. The following shall be included where applicable:

(a) Compressed air "blow down" cleaning shall be prohibited, where alternative means are feasible. Where compressed air is used for cleaning, the employees performing the "blow down" or "blow off" shall wear suitable respirators. Employees whose presence is not required to perform "blow down" or "blow off" shall be required to leave the area affected by the "blow down" or "blow off" during this cleaning operation.

(b) Cleaning of clothing or floors with compressed air shall be prohibited.

(c) Floor sweeping shall be performed with a vacuum or with methods designed to minimize dispersal of dust.

(d) In areas where employees are exposed to concentrations of cotton dust greater than the permissible exposure limit, cotton and cotton waste shall be stacked, sorted, baled, dumped, removed or otherwise handled by mechanical means, except where the employer can show that it is infeasible to do so. Where infeasible, the method used for handling cotton and cotton waste shall be the method which reduces exposure to the lowest level feasible.

(8) Medical surveillance.

(a) General.

(i) Each employer covered by the standard shall institute a program of medical surveillance for all employees exposed to cotton dust.

(ii) The employer shall assure 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.

(iii) Persons other than licensed physicians, who administer the pulmonary function testing required by this section shall have completed a NIOSH approved training course in spirometry.

(b) Initial examinations. The employer shall provide medical surveillance to each employee who is or may be exposed to cotton dust. For new employees' this examination shall be provided prior to initial assignment. The medical surveillance shall include at least the following:

(i) A medical history;

(ii) The standardized questionnaire contained in WAC 296-62-14537; and

(iii) A pulmonary function measurement, including a determination of forced vital capacity (FVC) and forced expiratory volume in one second (FEV_1), the FEV_1/FVC ratio, and the percentage that the measured values of FEV_1 and FVC differ from the predicted values, using the standard tables in WAC 296-62-14539. These determinations shall be made for each employee before the employee enters the workplace on the first day of the work week, preceded by at least thirty-five hours of no exposure to cotton dust. The tests shall be repeated during the shift, no less than four hours and no more than ten hours after the beginning of the work shift; and, in any event, no more than one hour after cessation of exposure. Such exposure shall be typical of the employee's usual workplace exposure. The predicted FEV_1 and FVC for blacks shall be multiplied by 0.85 to adjust for ethnic differences.

(iv) Based upon the questionnaire results, each employee shall be graded according to Schilling's byssinosis classification system.

(c) Periodic examinations.

(i) The employer shall provide at least annual medical surveillance for all employees exposed to cotton dust above the action level in yarn manufacturing, slashing and weaving, cotton washing and waste house operations. The employer shall provide medical surveillance at least every two years for all employees exposed to cotton dust at or below the action level, for all employees exposed to cotton dust from washed cotton (except from washed cotton defined in subsection (9)(c) of this section), and for all employees exposed to cotton dust in cottonseed processing and waste processing operations. Periodic medical surveillance shall include at least an update of the medical history, standardized questionnaire (Appendix B-111), Schilling byssinosis grade, and the pulmonary function measurements in (b)(iii) of this subsection.

(ii) Medical surveillance as required in (c)(i) of this subsection shall be provided every six months for all employees in the following categories:

(A) An FEV_1 of greater than eighty percent of the predicted value, but with an FEV_1 decrement of five percent or 200 ml. on a first working day;

(B) An FEV_1 of less than eighty percent of the predicted value; or

(C) Where, in the opinion of the physician, any significant change in questionnaire findings, pulmonary function results, or other diagnostic tests have occurred.

(ii) An employee whose FEV_1 is less than sixty percent of the predicted value shall be referred to a physician for a detailed pulmonary examination.

(iv) A comparison shall be made between the current examination results and those of previous examinations and a determination made by the physician as to whether there has been a significant change.

(d) Information provided to the physician. The employer shall provide the following information to the examining physician:

(i) A copy of this regulation and its appendices;

(ii) A description of the affected employee's duties as they relate to the employee's exposure;

(iii) The employee's exposure level or anticipated exposure level;

(iv) A description of any personal protective equipment used or to be used; and

(v) Information from previous medical examinations of the affected employee which is not readily available to the examining physician.

(e) Physician's written opinion.

(i) The employer shall obtain and furnish the employee with a copy of a written opinion from the examining physician containing the following:

(A) The results of the medical examination and tests including the FEV_1 , FVC, and FEV_1/FVC ratio;

(B) The physician's opinion as to whether the employee has any detected medical conditions which would place the employee at increased risk of material impairment of the employee's health from exposure to cotton dust;

(C) The physician's recommended limitations upon the employee's exposure to cotton dust or upon the employee's use of respirators including a determination of whether an employee can wear a negative pressure respirator, and where the employee cannot, a determination of the employee's ability to wear a powered air purifying respirator; and

(D) A statement that the employee has been informed by the physician of the results of the medical examination and any medical conditions which require further examination or treatment.

(ii) The written opinion obtained by the employer shall not reveal specific findings or diagnoses unrelated to occupational exposure.

(9) Employee education and training.

(a) Training program.

(i) The employer shall train each employee exposed to cotton dust in accordance with the requirements of this section and shall assure that each employee is informed of the following:

(A) The acute and long term health hazards associated with exposure to cotton dust;

(B) The names and descriptions of jobs and processes which could result in exposure to cotton dust at or above the PEL((-));

(C) The measures, including work practices required by subsection (7) of this section, necessary to protect the employee from exposures in excess of the permissible exposure limit;

(D) The purpose, proper use, limitations, and other training requirements for respiratory protection as required by subsection (6) of this section and chapter 296-842 WAC (see WAC 296-842-11005, 296-842-16005 and 296-842-19005);

(E) The purpose for and a description of the medical surveillance program required by subsection (8) of this section and other information which will aid exposed employees in understanding the hazards of cotton dust exposure; and

(F) The contents of this standard and its appendices.

(ii) The training program shall be provided prior to initial assignment and shall be repeated annually for each employee exposed to cotton dust, when job assignments or work processes change and when employee performance indicates a need for retraining.

(b) Access to training materials.

(i) Each employer shall post a copy of this section with its appendices in a public location at the workplace, and shall, upon request, make copies available to employees.

(ii) The employer shall provide all materials relating to the employee training and information program to the director upon request.

(10) Signs. The employer shall post the following warning sign in each work area where the permissible exposure limit for cotton dust is exceeded:

WARNING
COTTON DUST WORK AREA
MAY CAUSE ACUTE OR DELAYED LUNG INJURY
(BYSSINOSIS)
RESPIRATORS REQUIRED IN THIS AREA

(11) Recordkeeping.

(a) Exposure measurements.

(i) The employer shall establish and maintain an accurate record of all measurements required by subsection (4) of this section.

(ii) The record shall include:

(A) A log containing the items listed in WAC 296-62-14535 (4)(a), and the dates, number, duration, and results of each of the samples taken, including a description of the procedure used to determine representative employee exposures;

(B) The type of protective devices worn, if any, and length of time worn; and

(C) The names, Social Security number, job classifications, and exposure levels of employees whose exposure the measurement is intended to represent.

(iii) The employer shall maintain this record for at least twenty years.

(b) Medical surveillance.

(i) The employer shall establish and maintain an accurate medical record for each employee subject to medical surveillance required by subsection (8) of this section.

(ii) The record shall include:

(A) The name and Social Security number and description of the duties of the employee;

(B) A copy of the medical examination results including the medical history, questionnaire response, results of all tests, and the physician's recommendation;

(C) A copy of the physician's written opinion;

(D) Any employee medical complaints related to exposure to cotton dust;

(E) A copy of this standard and its appendices, except that the employer may keep one copy of the standard and the appendices for all employees, provided that he references the standard and appendices in the medical surveillance record of each employee; and

(F) A copy of the information provided to the physician as required by subsection (8)(d) of this section.

(iii) The employer shall maintain this record for at least twenty years.

(c) Availability.

(i) The employer shall make all records required to be maintained by subsection (11) of this section available to the director for examination and copying.

(ii) Employee exposure measurement records and employee medical records required by this subsection shall be provided upon request to employees, designated representatives, and the assistant director in accordance with chapter 296-802 WAC.

(d) Transfer of records.

(i) Whenever the employer ceases to do business, the successor employer shall receive and retain all records required to be maintained by subsection (11) of this section.

(ii) ~~((Whenever the employer ceases to do business, and there is no successor employer to receive and retain the records for the prescribed period, these records shall be transmitted to the director.~~

~~((iii) At the expiration of the retention period for the records required to be maintained by this section, the employer shall notify the director at least three months prior to the disposal of such records and shall transmit those records to the director if he requests them within that period.~~

~~((iv)) The employer shall also comply with any additional requirements involving transfer of records set forth in ((chapter 296-802)) WAC 296-802-60005.~~

(12) Observation of monitoring.

(a) The employer shall provide affected employees or their designated representatives an opportunity to observe any measuring or monitoring of employee exposure to cotton dust conducted pursuant to subsection (4) of this section.

(b) Whenever observation of the measuring or monitoring of employee exposure to cotton dust requires entry into an area where the use of personal protective equipment is required, the employer shall provide the observer with and assure the use of such equipment and shall require the observer to comply with all other applicable safety and health procedures.

(c) Without interfering with the measurement, observers shall be entitled to:

(i) An explanation of the measurement procedures;

(ii) An opportunity to observe all steps related to the measurement of airborne concentrations of cotton dust performed at the place of exposure; and

(iii) An opportunity to record the results obtained.

(13) Washed cotton.

(a) Exemptions. Cotton, after it has been washed by the processes described in this section is exempt from all or parts of this section as specified if the requirements of this section are met.

(b) Initial requirements.

(i) In order for an employer to qualify as exempt or partially exempt from this standard for operations using washed cotton, the employer must demonstrate that the cotton was washed in a facility which is open to inspection by the director and the employer must provide sufficient accurate documentary evidence to demonstrate that the washing methods utilized meet the requirements of this section.

(ii) An employer who handles or processes cotton which has been washed in a facility not under the employer's control and claims an exemption or partial exemption under this paragraph, must obtain from the cotton washer and make available at the worksite, to the director, or his designated representative, to any affected employee, or to their designated representative the following:

(A) A certification by the washer of the cotton of the grade of cotton, the type of washing process, and that the batch meets the requirements of this section:

(B) Sufficient accurate documentation by the washer of the cotton grades and washing process; and

(C) An authorization by the washer that the director may inspect the washer's washing facilities and documentation of the process.

(c) Medical and dyed cotton. Medical grade (USP) cotton, cotton that has been scoured, bleached and dyed, and mercerized yarn shall be exempt from all provisions of this standard.

(d) Higher grade washed cotton. The handling or processing of cotton classed as "low middling light spotted or better" (color grade 52 or better and leaf grade code 5 or better according to the 1993 USDA classification system) shall be exempt from all provisions of the standard except requirements of subsection (8) of this section, medical surveillance; subsection (11)(b) through (d) of this section, recordkeeping-medical records, and Appendices B, C, and D of this section, if they have been washed on one of the following systems:

(i) On a continuous batt system or a rayon rinse system including the following conditions:

(A) With water;

(B) At a temperature of no less than 60°C;

(C) With a water-to-fiber ratio of no less than 40:1; and

(D) With the bacterial levels in the wash water controlled to limit bacterial contamination of the cotton.

(ii) On a batch kier washing system including the following conditions:

(A) With water;

(B) With cotton fiber mechanically opened and thoroughly pretreated before forming the cake;

(C) For low-temperature processing, at a temperature of no less than 60°C with a water-to-fiber ratio of no less than 40:1; or, for high-temperature processing, at a temperature of no less than 93°C with a water-to-fiber ratio of no less than 15:1;

(D) With a minimum of one wash cycle followed by two rinse cycles for each batch, using fresh water in each cycle; and

(E) With bacterial levels in the wash water controlled to limit bacterial contamination of the cotton.

(e) Lower grade washed cotton. The handling and processing of cotton of grades lower than "low middling light spotted," that has been washed as specified in (d) of this subsection and has also been bleached, shall be exempt from all provisions of the standard except the requirements of subsection (3)(a) Permissible exposure limits, subsection (4) Exposure monitoring and measurement, subsection (8) Medical surveillance, subsection (11) Recordkeeping, and Appendices B, C and D of this section.

(f) Mixed grades of washed cotton. If more than one grade of washed cotton is being handled or processed together, the requirements of the grade with the most stringent exposure limit, medical and monitoring requirements shall be followed.

(14) Appendices.

(a) Appendix B (B-I, B-II and B-III), WAC 296-62-14537, Appendix C, WAC 296-62-14539 and Appendix D, WAC 296-62-14541 are incorporated as part of this chapter and the contents of these appendices are mandatory.

(b) Appendix A of this chapter, WAC 296-62-14535 contains information which is not intended to create any additional obligations not otherwise imposed or to detract from any existing obligations.

(c) Appendix E of this chapter is a protocol which may be followed in the validation of alternative measuring devices as equivalent to the vertical elutriator cotton dust sampler. Other protocols may be used if it is demonstrated that they are statistically valid, meet the requirements in subsection (4)(a)(iii) of this section, and are appropriate for demonstrating equivalency.

AMENDATORY SECTION (Amending WSR 04-10-026, filed 4/27/04, effective 8/1/04)

WAC 296-62-20023 Recordkeeping. (1) Exposure measurements. The employer shall establish and maintain an accurate record of all measurements taken to monitor employee exposure to coke oven emissions required in WAC 296-62-20007.

(a) This record shall include:

(i) Name, Social Security number, and job classification of the employees monitored;

(ii) The date(s), number, duration and results of each of the samples taken, including a description of the sampling procedure used to determine representative employee exposure where applicable;

(iii) The type of respiratory protective devices worn, if any;

(iv) A description of the sampling and analytical methods used and evidence of their accuracy; and

(v) The environment variables that could affect the measurement of employee exposure.

(b) The employer shall maintain this record for at least ~~(forth)~~ forty years or for the duration of employment plus twenty years, whichever is longer.

(2) Medical surveillance. The employer shall establish and maintain an accurate record for each employee subject to medical surveillance as required by WAC 296-62-20017.

(a) The record shall include:

(i) The name, Social Security number, and description of duties of the employee;

(ii) A copy of the physician's written opinion;

(iii) The signed statement of any refusal to take a medical examination under WAC 296-62-20017; and

(iv) Any employee medical complaints related to exposure to coke oven emissions.

(b) The employer shall keep, or assure that the examining physician keeps, the following medical records:

(i) A copy of the medical examination results including medical and work history required under WAC 296-62-20017;

(ii) A description of the laboratory procedures used and a copy of any standards or guidelines used to interpret the test results;

(iii) The initial X ray;

(iv) The X rays for the most recent five years;

(v) Any X ray with a demonstrated abnormality and all subsequent X rays;

(vi) The initial cytologic examination slide and written description;

(vii) The cytologic examination slide and written description for the most recent ten years; and

(viii) Any cytologic examination slides with demonstrated atypia, if such atypia persists for three years, and all subsequent slides and written descriptions.

(c) The employer shall maintain medical records required under subsection (2) of this section for at least forty years, or for the duration of employment plus twenty years, whichever is longer.

(3) Availability.

(a) The employer shall make available upon request all records required to be maintained by this section to the director for examination and copying.

(b) Employee exposure measurement records and employee medical records required by this subsection shall be provided upon request to employees, designated representatives, and the assistant director in accordance with chapter 296-802 WAC.

(c) The employer shall make available upon request employee medical records required to be maintained by subsection (2) of this section to a physician designated by the affected employee or former employee.

(4) Transfer of records.

(a) Whenever the employer ceases to do business, the successor employer shall receive and retain all records required to be maintained by this section.

~~(b) ((Whenever the employer ceases to do business and there is no successor employer to receive and retain the records for the prescribed period, these records shall be transmitted by registered mail to the director.~~

~~(c) At the expiration of the retention period for the records required to be maintained under subsections (1) and (2) of this section, the employer shall transmit these records by registered mail to the director or shall continue to retain such records.~~

~~(d))~~ The employer shall also comply with any additional requirements involving transfer of records set forth in ~~((chapter 296-802))~~ WAC 296-802-60005.

AMENDATORY SECTION (Amending WSR 09-15-145, filed 7/21/09, effective 9/1/09)

WAC 296-62-07521 Lead. (1) Scope and application.

(a) This section applies to all occupational exposure to lead, except as provided in subdivision (1)(b).

(b) This section does not apply to the construction industry or to agricultural operations covered by chapter 296-307 WAC.

(2) Definitions as applicable to this part.

(a) "Action level" - Employee exposure, without regard to the use of respirators, to an airborne concentration of lead of thirty micrograms per cubic meter of air (30 $\mu\text{g}/\text{m}^3$) averaged over an eight-hour period.

(b) "Director" - The director of the department of labor and industries.

(c) "Lead" - Metallic lead, all inorganic lead compounds, and organic lead soaps. Excluded from this definition are all other organic lead compounds.

(3) General requirements.

(a) Employers will assess the hazards of lead in the work place and provide information to the employees about the hazards of the lead exposures to which they may be exposed.

(b) Information provided shall include:

(i) Exposure monitoring (including employee notification);

(ii) Written compliance programs;

(iii) Respiratory protection programs;

(iv) Personnel protective equipment and housekeeping;

(v) Medical surveillance and examinations;

(vi) Training requirements;

(vii) Recordkeeping requirements.

(4) Permissible exposure limit (PEL).

(a) The employer shall assure that no employee is exposed to lead at concentrations greater than fifty micrograms per cubic meter of air (50 $\mu\text{g}/\text{m}^3$) averaged over an eight-hour period.

(b) If an employee is exposed to lead for more than eight hours in any work day, the permissible exposure limit, as a time weighted average (TWA) for that day, shall be reduced according to the following formula:

$$\text{Maximum permissible limit (in } \mu\text{g}/\text{m}^3) = 400 \div \text{hours worked in the day.}$$

(c) When respirators are used to supplement engineering and work practice controls to comply with the PEL and all the requirements of subsection (7) have been met, employee exposure, for the purpose of determining whether the employer has complied with the PEL, may be considered to be at the level provided by the protection factor of the respirator for those periods the respirator is worn. Those periods may be averaged with exposure levels during periods when respirators are not worn to determine the employee's daily TWA exposure.

(5) Exposure monitoring.

(a) General.

(i) For the purposes of subsection (5), employee exposure is that exposure which would occur if the employee were not using a respirator.

(ii) With the exception of monitoring under subdivision (5)(c), the employer shall collect full shift (for at least seven continuous hours) personal samples including at least one sample for each shift for each job classification in each work area.

(iii) Full shift personal samples shall be representative of the monitored employee's regular, daily exposure to lead.

(b) Initial determination. Each employer who has a workplace or work operation covered by this standard shall determine if any employee may be exposed to lead at or above the action level.

(c) Basis of initial determination.

(i) The employer shall monitor employee exposures and shall base initial determinations on the employee exposure monitoring results and any of the following, relevant considerations:

(A) Any information, observations, or calculations which would indicate employee exposure to lead;

(B) Any previous measurements of airborne lead; and

(C) Any employee complaints of symptoms which may be attributable to exposure to lead.

(ii) Monitoring for the initial determination may be limited to a representative sample of the exposed employees who the employer reasonably believes are exposed to the greatest airborne concentrations of lead in the workplace.

(iii) Measurements of airborne lead made in the preceding twelve months may be used to satisfy the requirement to monitor under item (5)(c)(i) if the sampling and analytical methods used meet the accuracy and confidence levels of subdivision (5)(i) of this section.

(d) Positive initial determination and initial monitoring.

(i) Where a determination conducted under subdivision (5)(b) and (5)(c) of this section shows the possibility of any employee exposure at or above the action level, the employer shall conduct monitoring which is representative of the exposure for each employee in the workplace who is exposed to lead.

(ii) Measurements of airborne lead made in the preceding twelve months may be used to satisfy this requirement if the sampling and analytical methods used meet the accuracy and confidence levels of subdivision (5)(i) of this section.

(e) Negative initial determination. Where a determination, conducted under subdivisions (5)(b) and (5)(c) of this section is made that no employee is exposed to airborne concentrations of lead at or above the action level, the employer shall make a written record of such determination. The record shall include at least the information specified in subdivision (5)(c) of this section and shall also include the date of determination, location within the worksite, and the name and Social Security number of each employee monitored.

(f) Frequency.

(i) If the initial monitoring reveals employee exposure to be below the action level the measurements need not be repeated except as otherwise provided in subdivision (5)(g) of this section.

(ii) If the initial determination or subsequent monitoring reveals employee exposure to be at or above the action level

but below the permissible exposure limit the employer shall repeat monitoring in accordance with this subsection at least every six months. The employer shall continue monitoring at the required frequency until at least two consecutive measurements, taken at least seven days apart, are below the action level at which time the employer may discontinue monitoring for that employee except as otherwise provided in subdivision (5)(g) of this section.

(iii) If the initial monitoring reveals that employee exposure is above the permissible exposure limit the employer shall repeat monitoring quarterly. The employer shall continue monitoring at the required frequency until at least two consecutive measurements, taken at least seven days apart, are below the PEL but at or above the action level at which time the employer shall repeat monitoring for that employee at the frequency specified in item (5)(f)(ii), except as otherwise provided in subdivision (5)(g) of this section.

(g) Additional monitoring. Whenever there has been a production, process, control or personnel change which may result in new or additional exposure to lead, or whenever the employer has any other reason to suspect a change which may result in new or additional exposures to lead, additional monitoring in accordance with this subsection shall be conducted.

(h) Employee notification.

(i) Within five working days after the receipt of monitoring results, the employer shall notify each employee in writing of the results which represent that employee's exposure.

(ii) Whenever the results indicate that the representative employee exposure, without regard to respirators, exceeds the permissible exposure limit, the employer shall include in the written notice a statement that the permissible exposure limit was exceeded and a description of the corrective action taken or to be taken to reduce exposure to or below the permissible exposure limit.

(i) Accuracy of measurement. The employer shall use a method of monitoring and analysis which has an accuracy (to a confidence level of ninety-five percent) of not less than plus or minus twenty percent for airborne concentrations of lead equal to or greater than 30 $\mu\text{g}/\text{m}^3$.

(6) Methods of compliance.

(a) Engineering and work practice controls.

(i) Where any employee is exposed to lead above the permissible exposure limit for more than thirty days per year, the employer shall implement engineering and work practice controls (including administrative controls) to reduce and maintain employee exposure to lead in accordance with the implementation schedule in Table I below, except to the extent that the employer can demonstrate that such controls are not feasible. Wherever the engineering and work practice controls which can be instituted are not sufficient to reduce employee exposure to or below the permissible exposure limit, the employer shall nonetheless use them to reduce exposures to the lowest feasible level and shall supplement them by the use of respiratory protection which complies with the requirements of subsection (7) of this section.

(ii) Where any employee is exposed to lead above the permissible exposure limit, but for thirty days or less per year, the employer shall implement engineering controls to reduce exposures to 200 $\mu\text{g}/\text{m}^3$, but thereafter may imple-

ment any combination of engineering, work practice (including administrative controls), and respiratory controls to reduce and maintain employee exposure to lead to or below 50 µg/m³.

TABLE 1

Industry	Compliance dates: ¹ (50 µg/m ³)
Lead chemicals, secondary copper smelting.	July 19, 1996
Nonferrous foundries	July 19, 1996. ²
Brass and bronze ingot manufacture.	6 years. ³

¹ Calculated by counting from the date the stay on implementation of subsection (6)(a) was lifted by the U.S. Court of Appeals for the District of Columbia, the number of years specified in the 1978 lead standard and subsequent amendments for compliance with the PEL of 50 µg/m³ for exposure to airborne concentrations of lead levels for the particular industry.

² Large nonferrous foundries (20 or more employees) are required to achieve the PEL of 50 µg/m³ by means of engineering and work practice controls. Small nonferrous foundries (fewer than 20 employees) are required to achieve an 8-hour TWA of 75 µg/m³ by such controls.

³ Expressed as the number of years from the date on which the Court lifts the stay on the implementation of subsection (6)(a) for this industry for employers to achieve a lead in air concentration of 75 µg/m³. Compliance with subsection (6) in this industry is determined by a compliance directive that incorporates elements from the settlement agreement between OSHA and representatives of the industry.

(b) Respiratory protection. Where engineering and work practice controls do not reduce employee exposure to or below the 50 µg/m³ permissible exposure limit, the employer shall supplement these controls with respirators in accordance with subsection (7).

(c) Compliance program.

(i) Each employer shall establish and implement a written compliance program to reduce exposures to or below the permissible exposure limit, and interim levels if applicable, solely by means of engineering and work practice controls in accordance with the implementation schedule in subdivision (6)(a).

(ii) Written plans for these compliance programs shall include at least the following:

(A) A description of each operation in which lead is emitted; e.g., machinery used, material processed, controls in place, crew size, employee job responsibilities, operating procedures and maintenance practices;

(B) A description of the specific means that will be employed to achieve compliance, including engineering plans and studies used to determine methods selected for controlling exposure to lead;

(C) A report of the technology considered in meeting the permissible exposure limit;

(D) Air monitoring data which documents the source of lead emissions;

(E) A detailed schedule for implementation of the program, including documentation such as copies of purchase orders for equipment, construction contracts, etc.;

(F) A work practice program which includes items required under subsections (8), (9) and (10) of this regulation;

(G) An administrative control schedule required by subdivision (6)(f), if applicable; and

(H) Other relevant information.

(ii) Written programs shall be submitted upon request to the director, and shall be available at the worksite for examination and copying by the director, any affected employee or authorized employee representatives.

(iv) Written programs shall be revised and updated at least every six months to reflect the current status of the program.

(d) Mechanical ventilation.

(i) When ventilation is used to control exposure, measurements which demonstrate the effectiveness of the system in controlling exposure, such as capture velocity, duct velocity, or static pressure shall be made at least every three months. Measurements of the system's effectiveness in controlling exposure shall be made within five days of any change in production, process, or control which might result in a change in employee exposure to lead.

(ii) Recirculation of air. If air from exhaust ventilation is recirculated into the workplace, the employer shall assure that (A) the system has a high efficiency filter with reliable back-up filter; and (B) controls to monitor the concentration of lead in the return air and to bypass the recirculation system automatically if it fails are installed, operating, and maintained.

(e) Administrative controls. If administrative controls are used as a means of reducing employees TWA exposure to lead, the employer shall establish and implement a job rotation schedule which includes:

(i) Name or identification number of each affected employee;

(ii) Duration and exposure levels at each job or work station where each affected employee is located; and

(iii) Any other information which may be useful in assessing the reliability of administrative controls to reduce exposure to lead.

(7) Respiratory protection.

(a) General. For employees who use respirators required by this section, the employer must provide each employee an appropriate respirator that complies with the requirements of this subsection. Respirators must be used during:

(i) Period necessary to install or implement engineering or work-practice controls;

(ii) Work operations for which engineering and work-practice controls are not sufficient to reduce exposures to or below the permissible exposure limit;

(iii) Periods when an employee requests a respirator.

(b) Respirator program.

(i) The employer must develop, implement and maintain a respiratory protection program as required by chapter 296-842 WAC, Respirators, which covers each employee required by this chapter to use a respirator.

(ii) If an employee has breathing difficulty during fit testing or respirator use, the employer must provide the

employee with a medical examination as required by subsection (11)(c)(ii)(C) of this section to determine whether or not the employee can use a respirator while performing the required duty.

(c) Respirator selection. The employer must:

(i) Select and provide to employees appropriate respirators according to this section and WAC 296-842-13005, found in the respirator rule.

(ii) Provide employees with a powered air-purifying respirator (PAPR) instead of a negative-pressure respirator selected when an employee chooses to use a PAPR and it provides adequate protection to the employee.

(iii) Provide employees with full-facepiece respirators instead of half-facepiece respirators for protection against lead aerosols that cause eye or skin irritation at the use concentration.

(iv) Provide HEPA filters or N-, R-, or P-100 filters for powered air-purifying respirators (PAPRs) and negative-pressure air-purifying respirators.

(8) Protective work clothing and equipment.

(a) Provision and use. If an employee is exposed to lead above the PEL, without regard to the use of respirators or where the possibility of skin or eye irritation exists, the employer shall provide at no cost to the employee and assure that the employee uses appropriate protective work clothing and equipment such as, but not limited to:

(i) Coveralls or similar full-body work clothing;

(ii) Gloves, hats, and shoes or disposable shoe coverlets; and

(iii) Face shields, vented goggles, or other appropriate protective equipment which complies with WAC 296-800-160.

(b) Cleaning and replacement.

(i) The employer shall provide the protective clothing required in subdivision (8)(a) of this section in a clean and dry condition at least weekly, and daily to employees whose exposure levels without regard to a respirator are over 200 µg/m³ of lead as an eight-hour TWA.

(ii) The employer shall provide for the cleaning, laundering, or disposal of protective clothing and equipment required by subdivision (8)(a) of this section.

(iii) The employer shall repair or replace required protective clothing and equipment as needed to maintain their effectiveness.

(iv) The employer shall assure that all protective clothing is removed at the completion of a work shift only in change rooms provided for that purpose as prescribed in subdivision (10)(b) of this section.

(v) The employer shall assure that contaminated protective clothing which is to be cleaned, laundered, or disposed of, is placed in a closed container in the change-room which prevents dispersion of lead outside the container.

(vi) The employer shall inform in writing any person who cleans or launders protective clothing or equipment of the potentially harmful effects of exposure to lead.

(vii) The employer shall assure that the containers of contaminated protective clothing and equipment required by subdivision (8)(b)(v) are labeled as follows:

CAUTION: CLOTHING CONTAMINATED WITH LEAD.
DO NOT REMOVE DUST BY BLOWING OR SHAKING.
DISPOSE OF LEAD CONTAMINATED WASH WATER IN ACCORDANCE WITH APPLICABLE LOCAL, STATE, OR FEDERAL REGULATIONS.

(viii) The employer shall prohibit the removal of lead from protective clothing or equipment by blowing, shaking, or any other means which disperses lead into the air.

(9) Housekeeping.

(a) Surfaces. All surfaces shall be maintained as free as practicable of accumulations of lead.

(b) Cleaning floors.

(i) Floors and other surfaces where lead accumulates may not be cleaned by the use of compressed air.

(ii) Shoveling, dry or wet sweeping, and brushing may be used only where vacuuming or other equally effective methods have been tried and found not to be effective.

(c) Vacuuming. Where vacuuming methods are selected, the vacuums shall be used and emptied in a manner which minimizes the reentry of lead into the workplace.

(10) Hygiene facilities and practices.

(a) The employer shall assure that in areas where employees are exposed to lead above the PEL, without regard to the use of respirators, food or beverage is not present or consumed, tobacco products are not present or used, and cosmetics are not applied, except in change rooms, lunchrooms, and showers required under subdivision (10)(b) through (10)(d) of this section.

(b) Change rooms.

(i) The employer shall provide clean change rooms for employees who work in areas where their airborne exposure to lead is above the PEL, without regard to the use of respirators.

(ii) The employer shall assure that change rooms are equipped with separate storage facilities for protective work clothing and equipment and for street clothes which prevent cross-contamination.

(c) Showers.

(i) The employer shall assure that employees who work in areas where their airborne exposure to lead is above the PEL, without regard to the use of respirators, shower at the end of the work shift.

(ii) The employer shall provide shower facilities in accordance with WAC 296-800-230.

(iii) The employer shall assure that employees who are required to shower pursuant to item (10)(c)(i) do not leave the workplace wearing any clothing or equipment worn during the work shift.

(d) Lunchrooms.

(i) The employer shall provide lunchroom facilities for employees who work in areas where their airborne exposure to lead is above the PEL, without regard to the use of respirators.

(ii) The employer shall assure that lunchroom facilities have a temperature controlled, positive pressure, filtered air supply, and are readily accessible to employees.

(iii) The employer shall assure that employees who work in areas where their airborne exposure to lead is above the PEL without regard to the use of a respirator wash their hands

and face prior to eating, drinking, smoking or applying cosmetics.

(iv) The employer shall assure that employees do not enter lunchroom facilities with protective work clothing or equipment unless surface lead dust has been removed by vacuuming, downdraft booth, or other cleaning method.

(e) Lavatories. The employer shall provide an adequate number of lavatory facilities which comply with WAC 296-800-230.

(11) Medical surveillance.

(a) General.

(i) The employer shall institute a medical surveillance program for all employees who are or may be exposed at or above the action level for more than thirty days per year.

(ii) The employer shall assure that all medical examinations and procedures are performed by or under the supervision of a licensed physician.

(iii) The employer shall provide the required medical surveillance including multiple physician review under item (11)(c)(iii) without cost to employees and at a reasonable time and place.

(b) Biological monitoring.

(i) Blood lead and ZPP level sampling and analysis. The employer shall make available biological monitoring in the form of blood sampling and analysis for lead and zinc protoporphyrin levels to each employee covered under item (11)(a)(i) of this section on the following schedule:

(A) At least every six months to each employee covered under item (11)(a)(i) of this section;

(B) At least every two months for each employee whose last blood sampling and analysis indicated a blood lead level at or above 40 $\mu\text{g}/100\text{ g}$ of whole blood. This frequency shall continue until two consecutive blood samples and analyses indicate a blood lead level below 40 $\mu\text{g}/100\text{ g}$ of whole blood; and

(C) At least monthly during the removal period of each employee removed from exposure to lead due to an elevated blood lead level.

(ii) Follow-up blood sampling tests. Whenever the results of a blood lead level test indicate that an employee's blood lead level (~~exceeds~~) is at or above the numerical criterion for medical removal under item (12)(a)(i)(A), the employer shall provide a second (follow-up) blood sampling test within two weeks after the employer receives the results of the first blood sampling test.

(iii) Accuracy of blood lead level sampling and analysis. Blood lead level sampling and analysis provided pursuant to this section shall have an accuracy (to a confidence level of ninety-five percent) within plus or minus fifteen percent or 6 $\mu\text{g}/100\text{ ml}$, whichever is greater, and shall be conducted by a laboratory licensed by the Center for Disease Control (CDC), United States Department of Health, Education and Welfare or which has received a satisfactory grade in blood lead proficiency testing from CDC in the prior twelve months.

(iv) Employee notification. Within five working days after the receipt of biological monitoring results, the employer shall notify in writing each employee whose blood lead level (~~exceeds~~) is at or above 40 $\mu\text{g}/100\text{ g}$: (A) of that employee's blood lead level and (B) that the standard requires temporary medical removal with medical removal protection

benefits when an employee's blood lead level exceeds the numerical criterion for medical removal under item (12)(a)(i) of this section.

(c) Medical examinations and consultations.

(i) Frequency. The employer shall make available medical examinations and consultations to each employee covered under item (11)(a)(i) of this section on the following schedule:

(A) At least annually for each employee for whom a blood sampling test conducted at any time during the preceding twelve months indicated a blood lead level at or above 40 $\mu\text{g}/100\text{ g}$;

(B) Prior to assignment for each employee being assigned for the first time to an area in which airborne concentrations of lead are at or above the action level;

(C) As soon as possible, upon notification by an employee either that the employee has developed signs or symptoms commonly associated with lead intoxication, that the employee desires medical advice concerning the effects of current or past exposure to lead on the employee's ability to procreate a healthy child, or that the employee has demonstrated difficulty in breathing during a respirator fitting test or during use; and

(D) As medically appropriate for each employee either removed from exposure to lead due to a risk of sustaining material impairment to health, or otherwise limited pursuant to a final medical determination.

(ii) Content. Medical examinations made available pursuant to subitems (11)(c)(i)(A) through (B) of this section shall include the following elements:

(A) A detailed work history and a medical history, with particular attention to past lead exposure (occupational and nonoccupational), personal habits (smoking, hygiene), and past gastrointestinal, hematologic, renal, cardiovascular, reproductive and neurological problems;

(B) A thorough physical examination, with particular attention to teeth, gums, hematologic, gastrointestinal, renal, cardiovascular, and neurological systems. Pulmonary status should be evaluated if respiratory protection will be used;

(C) A blood pressure measurement;

(D) A blood sample and analysis which determines:

(I) Blood lead level;

(II) Hemoglobin and hematocrit determinations, red cell indices, and examination of peripheral smear morphology;

(III) Zinc protoporphyrin;

(IV) Blood urea nitrogen; and

(V) Serum creatinine;

(E) A routine urinalysis with microscopic examination; and

(F) Any laboratory or other test which the examining physician deems necessary by sound medical practice.

The content of medical examinations made available pursuant to subitems (11)(c)(i)(C) through (D) of this section shall be determined by an examining physician and, if requested by an employee, shall include pregnancy testing or laboratory evaluation of male fertility.

(iii) Multiple physician review mechanism.

(A) If the employer selects the initial physician who conducts any medical examination or consultation provided to an

employee under this section, the employee may designate a second physician:

(I) To review any findings, determinations or recommendations of the initial physician; and

(II) To conduct such examinations, consultations, and laboratory tests as the second physician deems necessary to facilitate this review.

(B) The employer shall promptly notify an employee of the right to seek a second medical opinion after each occasion that an initial physician conducts a medical examination or consultation pursuant to this section. The employer may condition its participation in, and payment for, the multiple physician review mechanism upon the employee doing the following within fifteen days after receipt of the foregoing notification, or receipt of the initial physician's written opinion, whichever is later:

(I) The employee informing the employer that he or she intends to seek a second medical opinion, and

(II) The employee initiating steps to make an appointment with a second physician.

(C) If the findings, determinations or recommendations of the second physician differ from those of the initial physician, then the employer and the employee shall assure that efforts are made for the two physicians to resolve any disagreement.

(D) If the two physicians have been unable to quickly resolve their disagreement, then the employer and the employee through their respective physicians shall designate a third physician:

(I) To review any findings, determinations or recommendations of the prior physicians; and

(II) To conduct such examinations, consultations, laboratory tests and discussions with the prior physicians as the third physician deems necessary to resolve the disagreement of the prior physicians.

(E) The employer shall act consistent with the findings, determinations and recommendations of the third physician, unless the employer and the employee reach an agreement which is otherwise consistent with the recommendations of at least one of the three physicians.

(iv) Information provided to examining and consulting physicians.

(A) The employer shall provide an initial physician conducting a medical examination or consultation under this section with the following information:

(I) A copy of this regulation for lead including all appendices;

(II) A description of the affected employee's duties as they relate to the employee's exposure;

(III) The employee's exposure level or anticipated exposure level to lead and to any other toxic substance (if applicable);

(IV) A description of any personal protective equipment used or to be used;

(V) Prior blood lead determinations; and

(VI) All prior written medical opinions concerning the employee in the employer's possession or control.

(B) The employer shall provide the foregoing information to a second or third physician conducting a medical

examination or consultation under this section upon request either by the second or third physician, or by the employee.

(v) Written medical opinions.

(A) The employer shall obtain and furnish the employee with a copy of a written medical opinion from each examining or consulting physician which contains the following information:

(I) The physician's opinion as to whether the employee has any detected medical condition which would place the employee at increased risk of material impairment of the employee's health from exposure to lead;

(II) Any recommended special protective measures to be provided to the employee, or limitations to be placed upon the employee's exposure to lead;

(III) Any recommended limitation upon the employee's use of respirators, including a determination of whether the employee can wear a powered air purifying respirator if a physician determines that the employee cannot wear a negative pressure respirator; and

(IV) The results of the blood lead determinations.

(B) The employer shall instruct each examining and consulting physician to:

(I) Not reveal either in the written opinion, or in any other means of communication with the employer, findings, including laboratory results, or diagnoses unrelated to an employee's occupational exposure to lead; and

(II) Advise the employee of any medical condition, occupational or nonoccupational, which dictates further medical examination or treatment.

(vi) Alternate physician determination mechanisms. The employer and an employee or authorized employee representative may agree upon the use of any expeditious alternate physician determination mechanism in lieu of the multiple physician review mechanism provided by this subsection so long as the alternate mechanism otherwise satisfies the requirements contained in this subsection.

(d) Chelation.

(i) The employer shall assure that any person whom he retains, employs, supervises or controls does not engage in prophylactic chelation of any employee at any time.

(ii) If therapeutic or diagnostic chelation is to be performed by any person in item (11)(d)(i), the employer shall assure that it be done under the supervision of a licensed physician in a clinical setting with thorough and appropriate medical monitoring and that the employee is notified in writing prior to its occurrence.

(12) Medical removal protection.

(a) Temporary medical removal and return of an employee.

(i) Temporary removal due to elevated blood lead levels.

(A) The employer shall remove an employee from work having an exposure to lead at or above the action level on each occasion that a periodic and a follow-up blood sampling test conducted pursuant to this section indicate that the employee's blood lead level is at or above 60 µg/100g of whole blood; and

(B) The employer shall remove an employee from work having an exposure to lead at or above the action level on each occasion that the average of the last three blood sampling tests conducted pursuant to this section (or the average

of all blood sampling tests conducted over the previous six months, whichever is longer) indicates that the employee's blood lead level is at or above 50 µg/100g of whole blood; provided, however, that an employee need not be removed if the last blood sampling test indicates a blood lead level (~~at or~~) below 40 µg/100g of whole blood.

(ii) Temporary removal due to a final medical determination.

(A) The employer shall remove an employee from work having an exposure to lead at or above the action level on each occasion that a final medical determination results in a medical finding, determination, or opinion that the employee has a detected medical condition which places the employee at increased risk of material impairment to health from exposure to lead.

(B) For the purposes of this section, the phrase "final medical determination" shall mean the outcome of the multiple physician review mechanism or alternate medical determination mechanism used pursuant to the medical surveillance provisions of this section.

(C) Where a final medical determination results in any recommended special protective measures for an employee, or limitations on an employee's exposure to lead, the employer shall implement and act consistent with the recommendation.

(iii) Return of the employee to former job status.

(A) The employer shall return an employee to his or her former job status:

(I) For an employee removed due to a blood lead level at or above 60 µg/100g, or due to an average blood lead level at or above 50 µg/100g, when two consecutive blood sampling tests indicate that the employee's blood lead level is (~~at or~~) below 40 µg/100 g of whole blood;

(II) For an employee removed due to a final medical determination, when a subsequent final medical determination results in a medical finding, determination, or opinion that the employee no longer has a detected medical condition which places the employee at increased risk of material impairment to health from exposure to lead.

(B) For the purposes of this section, the requirement that an employer return an employee to his or her former job status is not intended to expand upon or restrict any rights an employee has or would have had, absent temporary medical removal, to a specific job classification or position under the terms of a collective bargaining agreement.

(iv) Removal of other employee special protective measure or limitations. The employer shall remove any limitations placed on an employee or end any special protective measures provided to an employee pursuant to a final medical determination when a subsequent final medical determination indicates that the limitations or special protective measures are no longer necessary.

(v) Employer options pending a final medical determination. Where the multiple physician review mechanism, or alternate medical determination mechanism used pursuant to the medical surveillance provisions of this section, has not yet resulted in a final medical determination with respect to an employee, the employer shall act as follows:

(A) Removal. The employer may remove the employee from exposure to lead, provide special protective measures to

the employee, or place limitations upon the employee, consistent with the medical findings, determinations, or recommendations of any of the physicians who have reviewed the employee's health status.

(B) Return. The employer may return the employee to his or her former job status, end any special protective measures provided to the employee, and remove any limitations placed upon the employee, consistent with the medical findings, determinations, or recommendations of any of the physicians who have reviewed the employee's health status, with two exceptions. If:

(I) The initial removal, special protection, or limitation of the employee resulted from a final medical determination which differed from the findings, determinations, or recommendations of the initial physician; or

(II) The employee has been on removal status for the preceding eighteen months due to an elevated blood lead level, then the employer shall await a final medical determination.

(b) Medical removal protection benefits.

(i) Provision of medical removal protection benefits. The employer shall provide to an employee up to eighteen months of medical removal protection benefits on each occasion that an employee is removed from exposure to lead or otherwise limited pursuant to this section.

(ii) Definition of medical removal protection benefits. For the purposes of this section, the requirement that an employer provide medical removal protection benefits means that the employer shall maintain the earnings, seniority and other employment rights and benefits of an employee as though the employee had not been removed from normal exposure to lead or otherwise limited.

(iii) Follow-up medical surveillance during the period of employee removal or limitation. During the period of time that an employee is removed from normal exposure to lead or otherwise limited, the employer may condition the provision of medical removal protection benefits upon the employee's participation in follow-up medical surveillance made available pursuant to this section.

(iv) Workers' compensation claims. If a removed employee files a claim for workers' compensation payments for a lead-related disability, then the employer shall continue to provide medical removal protection benefits pending disposition of the claim. To the extent that an award is made to the employee for earnings lost during the period of removal, the employer's medical removal protection obligation shall be reduced by such amount. The employer shall receive no credit for workers' compensation payments received by the employee for treatment related expenses.

(v) Other credits. The employer's obligation to provide medical removal protection benefits to a removed employee shall be reduced to the extent that the employee receives compensation for earnings lost during the period of removal either from a publicly or employer-funded compensation program, or receives income from employment with another employer made possible by virtue of the employee's removal.

(vi) Employees whose blood lead levels do not adequately decline within eighteen months of removal. The employer shall take the following measures with respect to any employee removed from exposure to lead due to an ele-

vated blood lead level whose blood lead level has not declined within the past eighteen months of removal so that the employee has been returned to his or her former job status:

(A) The employer shall make available to the employee a medical examination pursuant to this section to obtain a final medical determination with respect to the employee;

(B) The employer shall assure that the final medical determination obtained indicates whether or not the employee may be returned to his or her former job status, and if not, what steps should be taken to protect the employee's health;

(C) Where the final medical determination has not yet been obtained, or once obtained indicates that the employee may not yet be returned to his or her former job status, the employer shall continue to provide medical removal protection benefits to the employee until either the employee is returned to former job status, or a final medical determination is made that the employee is incapable of ever safely returning to his or her former job status.

(D) Where the employer acts pursuant to a final medical determination which permits the return of the employee to his or her former job status despite what would otherwise be an unacceptable blood lead level, later questions concerning removing the employee again shall be decided by a final medical determination. The employer need not automatically remove such an employee pursuant to the blood lead level removal criteria provided by this section.

(vii) Voluntary removal or restriction of an employee. Where an employer, although not required by this section to do so, removes an employee from exposure to lead or otherwise places limitations on an employee due to the effects of lead exposure on the employee's medical condition, the employer shall provide medical removal protection benefits to the employee equal to that required by item (12)(b)(i) of this section.

(13) Employee information and training.

(a) Training program.

(i) Each employer who has a workplace in which there is a potential exposure to airborne lead at any level shall inform employees of the content of Appendices A and B of this regulation.

(ii) The employer shall train each employee who is subject to exposure to lead at or above the action level or for whom the possibility of skin or eye irritation exists, in accordance with the requirements of this section. The employer shall institute a training program for and assure the participation of all employees.

(iii) The employer shall provide initial training by one hundred eighty days from the effective date for those employees covered by item (13)(a)(ii) on the standard's effective date and prior to the time of initial job assignment for those employees subsequently covered by this subsection.

(iv) The training program shall be repeated at least annually for each employee.

(v) The employer shall assure that each employee is informed of the following:

(A) The content of this standard and its appendices;

(B) The specific nature of the operations which could result in exposure to lead above the action level;

(C) The purpose, proper use, limitations, and other training requirements for respiratory protection as required by chapter 296-62 WAC, Part E;

(D) The purpose and a description of the medical surveillance program, and the medical removal protection program including information concerning the adverse health effects associated with excessive exposure to lead (with particular attention to the adverse reproductive effects on both males and females);

(E) The engineering controls and work practices associated with the employee's job assignment;

(F) The contents of any compliance plan in effect; and

(G) Instructions to employees that chelating agents should not routinely be used to remove lead from their bodies and should not be used at all except under the direction of a licensed physician.

(b) Access to information and training materials.

(i) The employer shall make readily available to all affected employees a copy of this standard and its appendices.

(ii) The employer shall provide, upon request, all materials relating to the employee information and training program to the director.

(iii) In addition to the information required by item (13)(a)(v), the employer shall include as part of the training program, and shall distribute to employees, any materials pertaining to the Occupational Safety and Health Act, the regulations issued pursuant to the act, and this lead standard, which are made available to the employer by the director.

(14) Signs.

(a) General.

(i) The employer may use signs required by other statutes, regulations or ordinances in addition to, or in combination with, signs required by this subsection.

(ii) The employer shall assure that no statement appears on or near any sign required by this subsection which contradicts or detracts from the meaning of the required sign.

(b) Signs.

(i) The employer shall post the following warning signs in each work area where the PEL is exceeded:

WARNING
LEAD WORK AREA
POISON
NO SMOKING OR EATING

(ii) The employer shall assure that signs required by this subsection are illuminated and cleaned as necessary so that the legend is readily visible.

(15) Recordkeeping.

(a) Exposure monitoring.

(i) The employer shall establish and maintain an accurate record of all monitoring required in subsection (5) of this section.

(ii) This record shall include:

(A) The date(s), number, duration, location and results of each of the samples taken, including a description of the sampling procedure used to determine representative employee exposure where applicable;

(B) A description of the sampling and analytical methods used and evidence of their accuracy;

(C) The type of respiratory protective devices worn, if any;

(D) Name, Social Security number, and job classification of the employee monitored and of all other employees whose exposure the measurement is intended to represent; and

(E) The environmental variables that could affect the measurement of employee exposure.

(iii) The employer shall maintain these monitoring records for at least forty years or for the duration of employment plus twenty years, whichever is longer.

(b) Medical surveillance.

(i) The employer shall establish and maintain an accurate record for each employee subject to medical surveillance as required by subsection (11) of this section.

(ii) This record shall include:

(A) The name, Social Security number, and description of the duties of the employee;

(B) A copy of the physician's written opinions;

(C) Results of any airborne exposure monitoring done for that employee and the representative exposure levels supplied to the physician; and

(D) Any employee medical complaints related to exposure to lead.

(iii) The employer shall keep, or assure that the examining physician keeps, the following medical records:

(A) A copy of the medical examination results including medical and work history required under subsection (11) of this section;

(B) A description of the laboratory procedures and a copy of any standards or guidelines used to interpret the test results or references to that information; and

(C) A copy of the results of biological monitoring.

(iv) The employer shall maintain or assure that the physician maintains those medical records for at least forty years, or for the duration of employment plus twenty years, whichever is longer.

(c) Medical removals.

(i) The employer shall establish and maintain an accurate record for each employee removed from current exposure to lead pursuant to subsection (12) of this section.

(ii) Each record shall include:

(A) The name and Social Security number of the employee;

(B) The date on each occasion that the employee was removed from current exposure to lead as well as the corresponding date on which the employee was returned to his or her former job status;

(C) A brief explanation of how each removal was or is being accomplished; and

(D) A statement with respect to each removal indicating whether or not the reason for the removal was an elevated blood lead level.

(iii) The employer shall maintain each medical removal record for at least the duration of an employee's employment.

(d) Availability.

(i) The employer shall make available upon request all records required to be maintained by subsection (15) of this section to the director for examination and copying.

(ii) Environmental monitoring, medical removal, and medical records required by this subsection shall be provided upon request to employees, designated representatives, and the assistant director in accordance with chapter 296-802 WAC. Medical removal records shall be provided in the same manner as environmental monitoring records.

(iii) Upon request, the employer shall make an employee's medical records required to be maintained by this section available to the affected employee or former employee or to a physician or other individual designated by such affected employee or former employees for examination and copying.

(e) Transfer of records.

~~((i) Whenever the employer ceases to do business, the successor employer shall receive and retain all records required to be maintained by subsection (15) of this section.~~

~~(ii) Whenever the employer ceases to do business and there is no successor employer to receive and retain the records required to be maintained by this section for the prescribed period, these records shall be transmitted to the director.~~

~~(iii) At the expiration of the retention period for the records required to be maintained by this section, the employer shall notify the director at least three months prior to the disposal of such records and shall transmit those records to the director if requested within the period.~~

~~(iv)) The employer shall ((also)) comply with any additional requirements involving transfer of records set forth in ((chapter 296-802)) WAC 296-802-60005.~~

(16) 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 lead conducted pursuant to subsection (5) of this section.

(b) Observation procedures.

(i) Whenever observation of the monitoring of employee exposure to lead requires entry into an area where the use of respirators, protective clothing or equipment is required, the employer shall provide the observer with and assure the use of such respirators, clothing and such equipment, and shall require the observer to comply with all other applicable safety and health procedures.

(ii) Without interfering with the monitoring, observers shall be entitled to:

(A) Receive an explanation of the measurement procedures;

(B) Observe all steps related to the monitoring of lead performed at the place of exposure; and

(C) Record the results obtained or receive copies of the results when returned by the laboratory.

(17) Appendices. The information contained in the appendices to this section is not intended by itself, to create any additional obligations not otherwise imposed by this standard nor detract from any existing obligation.

(a) Appendix A. Substance Data Sheet for Occupational Exposure to Lead.

(i) Substance identification.

(A) Substance. Pure lead (Pb) is a heavy metal at room temperature and pressure and is a basic chemical element. It can combine with various other substances to form numerous lead compounds.

(B) Compounds covered by the standard. The word "lead" when used in this standard means elemental lead, all inorganic lead compounds (except those which are not biologically available due to either solubility or specific chemical interaction), and a class of organic lead compounds called lead soaps. This standard does not apply to other organic lead compounds.

(C) Uses. Exposure to lead occurs in at least one hundred twenty different occupations, including primary and secondary lead smelting, lead storage battery manufacturing, lead pigment manufacturing and use, solder manufacturing and use, shipbuilding and ship repairing, auto manufacturing, and printing.

(D) Permissible exposure. The Permissible Exposure Limit (PEL) set by the standard is 50 micrograms of lead per cubic meter of air ($50 \mu\text{g}/\text{m}^3$), averaged over an eight-hour work day.

(E) Action level. The standard establishes an action level of 30 micrograms per cubic meter of air ($30 \mu\text{g}/\text{m}^3$) time weighted average, based on an eight-hour work day. The action level initiates several requirements of the standard, such as exposure monitoring, medical surveillance, and training and education.

(ii) Health hazard data.

(A) Ways in which lead enters your body.

(I) When absorbed into your body in certain doses lead is a toxic substance. The object of the lead standard is to prevent absorption of harmful quantities of lead. The standard is intended to protect you not only from the immediate toxic effects of lead, but also from the serious toxic effects that may not become apparent until years of exposure have passed.

(II) Lead can be absorbed into your body by inhalation (breathing) and ingestion (eating). Lead (except for certain organic lead compounds not covered by the standard, such as tetraethyl lead) is not absorbed through your skin. When lead is scattered in the air as a dust, fume or mist, it can be inhaled and absorbed through your lungs and upper respiratory tract. Inhalation of airborne lead is generally the most important source of occupational lead absorption. You can also absorb lead through your digestive system if lead gets into your mouth and is swallowed. If you handle food, cigarettes, chewing tobacco, or make-up which have lead on them or handle them with hands contaminated with lead, this will contribute to ingestion.

(III) A significant portion of the lead that you inhale or ingest gets into your blood stream. Once in your blood stream lead is circulated throughout your body and stored in various organs and body tissues. Some of this lead is quickly filtered out of your body and excreted, but some remains in your blood and other tissue. As exposure to lead continues, the amount stored in your body will increase if you are absorbing more lead than your body is excreting. Even though you may not be aware of any immediate symptoms of disease, this lead stored in your tissues can be slowly causing irreversible dam-

age, first to individual cells, then to your organs and whole body systems.

(B) Effects of overexposure to lead.

(I) Short-term (acute) overexposure. Lead is a potent, systemic poison that serves no known useful function once absorbed by your body. Taken in large enough doses, lead can kill you in a matter of days. A condition affecting the brain called acute encephalopathy may arise which develops quickly to seizures, coma, and death from cardiorespiratory arrest. A short-term dose of lead can lead to acute encephalopathy. Short-term occupational exposures of this magnitude are highly unusual, but not impossible. Similar forms of encephalopathy may, however arise from extended, chronic exposure to lower doses of lead. There is no sharp dividing line between rapidly developing acute effects of lead, and chronic effects which take longer to acquire. Lead adversely affects numerous body systems, and causes forms of health impairment and disease which arise after periods of exposure as short as days or as long as several years.

(II) Long-term (chronic) overexposure.

a) Chronic overexposure to lead may result in severe damage to your blood-forming, nervous, urinary and reproductive systems. Some common symptoms of chronic exposure include loss of appetite, metallic taste in the mouth, anxiety, constipation, nausea, pallor, excessive tiredness, weakness, insomnia, headache, nervous irritability, muscle and joint pain or soreness, fine tremors, numbness, dizziness, hyperactivity and colic. In lead colic there may be severe abdominal pain.

b) Damage to the central nervous system in general and the brain (encephalopathy) in particular is one of the most severe forms of lead poisoning. The most severe, often fatal, form of encephalopathy may be preceded by vomiting, a feeling of dullness progressing to drowsiness and stupor, poor memory, restlessness, irritability, tremor, and convulsions. It may arise suddenly with the onset of seizures, followed by coma, and death. There is a tendency for muscular weakness to develop at the same time. This weakness may progress to paralysis often observed as a characteristic "wrist drop" or "foot drop" and is a manifestation of a disease to the nervous system called peripheral neuropathy.

c) Chronic overexposure to lead also results in kidney disease with few, if any, symptoms appearing until extensive and most likely permanent kidney damage has occurred. Routine laboratory tests reveal the presence of this kidney disease only after about two-thirds of kidney function is lost. When overt symptoms of urinary dysfunction arise, it is often too late to correct or prevent worsening conditions, and progression of kidney dialysis or death is possible.

d) Chronic overexposure to lead impairs the reproductive systems of both men and women. Overexposure to lead may result in decreased sex drive, impotence and sterility in men. Lead can alter the structure of sperm cells raising the risk of birth defects. There is evidence of miscarriage and stillbirth in women whose husbands were exposed to lead or who were exposed to lead themselves. Lead exposure also may result in decreased fertility, and abnormal menstrual cycles in women. The course of pregnancy may be adversely affected by exposure to lead since lead crosses the placental barrier and poses risks to developing fetuses. Children born

of parents either one of whom were exposed to excess lead levels are more likely to have birth defects, mental retardation, behavioral disorders or die during the first year of childhood.

e) Overexposure to lead also disrupts the blood-forming system resulting in decreased hemoglobin (the substance in the blood that carries oxygen to the cells) and ultimately anemia. Anemia is characterized by weakness, pallor and fatigability as a result of decreased oxygen carrying capacity in the blood.

(III) Health protection goals of the standard.

a) Prevention of adverse health effects for most workers from exposure to lead throughout a working lifetime requires that worker blood lead (PbB) levels be maintained at or below forty micrograms per one hundred grams of whole blood (40 $\mu\text{g}/100\text{g}$). The blood lead levels of workers (both male and female workers) who intend to have children should be maintained below 30 $\mu\text{g}/100\text{g}$ to minimize adverse reproductive health effects to the parents and to the developing fetus.

b) The measurement of your blood lead level is the most useful indicator of the amount of lead absorbed by your body. Blood lead levels (PbB) are most often reported in units of milligrams (mg) or micrograms (μg) of lead (1 mg = 1000 μg) per 100 grams (100g), 100 milliliters (100 ml) or deciliter (dl) of blood. These three units are essentially the same. Sometimes PbB's are expressed in the form of mg% or $\mu\text{g}\%$. This is a shorthand notation for 100g, 100ml, or dl.

c) PbB measurements show the amount of lead circulating in your blood stream, but do not give any information about the amount of lead stored in your various tissues. PbB measurements merely show current absorption of lead, not the effect that lead is having on your body or the effects that past lead exposure may have already caused. Past research into lead-related diseases, however, has focused heavily on associations between PbBs and various diseases. As a result, your PbB is an important indicator of the likelihood that you will gradually acquire a lead-related health impairment or disease.

d) Once your blood lead level climbs above 40 $\mu\text{g}/100\text{g}$, your risk of disease increases. There is a wide variability of individual response to lead, thus it is difficult to say that a particular PbB in a given person will cause a particular effect. Studies have associated fatal encephalopathy with PbBs as low as 150 $\mu\text{g}/100\text{g}$. Other studies have shown other forms of disease in some workers with PbBs well below 80 $\mu\text{g}/100\text{g}$. Your PbB is a crucial indicator of the risks to your health, but one other factor is extremely important. This factor is the length of time you have had elevated PbBs. The longer you have an elevated PbB, the greater the risk that large quantities of lead are being gradually stored in your organs and tissues (body burden). The greater your overall body burden, the greater the chances of substantial permanent damage.

e) The best way to prevent all forms of lead-related impairments and diseases—both short-term and long-term—is to maintain your PbB below 40 $\mu\text{g}/100\text{g}$. The provisions of the standard are designed with this end in mind. Your employer has prime responsibility to assure that the provisions of the standard are complied with both by the company

and by individual workers. You as a worker, however, also have a responsibility to assist your employer in complying with the standard. You can play a key role in protecting your own health by learning about the lead hazards and their control, learning what the standard requires, following the standard where it governs your own action, and seeing that your employer complies with the provisions governing his actions.

(IV) Reporting signs and symptoms of health problems. You should immediately notify your employer if you develop signs or symptoms associated with lead poisoning or if you desire medical advice concerning the effects of current or past exposure to lead on your ability to have a healthy child. You should also notify your employer if you have difficulty breathing during a respirator fit test or while wearing a respirator. In each of these cases your employer must make available to you appropriate medical examinations or consultations. These must be provided at no cost to you and at a reasonable time and place.

(b) Appendix B. Employee Standard Summary. This appendix summarizes key provisions of the standard that you as a worker should become familiar with. The appendix discusses the entire standard.

(i) Permissible exposure limit (PEL). The standard sets a permissible exposure limit (PEL) of fifty micrograms of lead per cubic meter of air (50 $\mu\text{g}/\text{m}^3$), averaged over an eight-hour workday. This is the highest level of lead in air to which you may be permissibly exposed over an eight-hour workday. Since it is an eight-hour average it permits short exposures above the PEL so long as for each eight-hour workday your average exposure does not exceed the PEL.

(ii) Exposure monitoring.

(A) If lead is present in the work place where you work in any quantity, your employer is required to make an initial determination of whether the action level is exceeded for any employee. The initial determination must include instrument monitoring of the air for the presence of lead and must cover the exposure of a representative number of employees who are reasonably believed to have the highest exposure levels. If your employer has conducted appropriate air sampling for lead in the past year he may use these results. If there have been any employee complaints of symptoms which may be attributable to exposure to lead or if there is any other information or observations which would indicate employee exposure to lead, this must also be considered as part of the initial determination. If this initial determination shows that a reasonable possibility exists that any employee may be exposed, without regard to respirators, over the action level (30 $\mu\text{g}/\text{m}^3$) your employer must set up an air monitoring program to determine the exposure level of every employee exposed to lead at your work place.

(B) In carrying out this air monitoring program, your employer is not required to monitor the exposure of every employee, but he or she must monitor a representative number of employees and job types. Enough sampling must be done to enable each employee's exposure level to be reasonably represented by at least one full shift (at least seven hours) air sample. In addition, these air samples must be taken under conditions which represent each employee's regular, daily exposure to lead.

(C) If you are exposed to lead and air sampling is performed, your employer is required to quickly notify you in writing of air monitoring results which represent your exposure. If the results indicate your exposure exceeds the PEL (without regard to your use of respirators), then your employer must also notify you of this in writing, and provide you with a description of the corrective action that will be taken to reduce your exposure.

(D) Your exposure must be rechecked by monitoring every six months if your exposure is over the action level but below the PEL. Air monitoring must be repeated every three months if you are exposed over the PEL. Your employer may discontinue monitoring for you if two consecutive measurements, taken at least two weeks apart, are below the action level. However, whenever there is a production, process, control, or personnel change at your work place which may result in new or additional exposure to lead, or whenever there is any other reason to suspect a change which may result in new or additional exposure to lead, your employer must perform additional monitoring.

(iii) Methods of compliance. Your employer is required to assure that no employee is exposed to lead in excess of the PEL. The standard establishes a priority of methods to be used to meet the PEL.

(iv) Respiratory protection.

(A) Your employer is required to provide and assure your use of respirators when your exposure to lead is not controlled below the PEL by other means. The employer must pay the cost of the respirator. Whenever you request one, your employer is also required to provide you a respirator even if your air exposure level does not exceed the PEL. You might desire a respirator when, for example, you have received medical advice that your lead absorption should be decreased. Or, you may intend to have children in the near future, and want to reduce the level of lead in your body to minimize adverse reproductive effects. While respirators are the least satisfactory means of controlling your exposure, they are capable of providing significant protection if properly chosen, fitted, worn, cleaned, maintained, and replaced when they stop providing adequate protection.

(B) Your employer is required to select respirators from the seven types listed in Table II of the respiratory protection section of this standard (see subsection (7)(c) of this section). Any respirator chosen must be certified by the National Institute for Occupational Safety and Health (NIOSH) under the provisions of 42 CFR part 84. This respirator selection table will enable your employer to choose a type of respirator which will give you a proper amount of protection based on your airborne lead exposure. Your employer may select a type of respirator that provides greater protection than that required by the standard; that is, one recommended for a higher concentration of lead than is present in your work place. For example, a powered air purifying respirator (PAPR) is much more protective than a typical negative-pressure respirator, and may also be more comfortable to wear. A PAPR has a filter, cartridge or canister to clean the air, and a power source which continuously blows filtered air into your breathing zone. Your employer might make a PAPR available to you to ease the burden of having to wear a respirator

for long periods of time. The standard provides that you can obtain a PAPR upon request.

(C) Your employer must also start a respiratory protection program. This program must include written procedures for the proper selection, use, cleaning, storage, and maintenance of respirators.

(D) Your employer must assure that your respirator facepiece fits properly. Proper fit of a respirator facepiece is critical to your protection against air borne lead. Obtaining a proper fit on each employee may require your employer to make available several different types of respirator masks. To ensure that your respirator fits properly and that facepiece leakage is minimal, your employer must give you either a qualitative or quantitative fit test as required in chapter 296-842 WAC.

(E) You must also receive from your employer proper training in the use of respirators. Your employer is required to teach you how to wear a respirator, to know why it is needed, and to understand its limitations.

(F) The standard provides that if your respirator uses filter elements, you must be given an opportunity to change the filter elements whenever an increase in breathing resistance is detected. You also must be permitted to periodically leave your work area to wash your face and respirator facepiece whenever necessary to prevent skin irritation. If you ever have difficulty breathing during a fit test or while using a respirator, your employer must make a medical examination available to you to determine whether you can safely wear a respirator. The result of this examination may be to give you a positive pressure respirator (which reduces breathing resistance) or to provide alternative means of protection.

(v) Protective work clothing and equipment. If you are exposed to lead above the PEL, or if you are exposed to lead compounds such as lead arsenate or lead azide which can cause skin and eye irritation, your employer must provide you with protective work clothing and equipment appropriate for the hazard. If work clothing is provided, it must be provided in a clean and dry condition at least weekly, and daily if your airborne exposure to lead is greater than 200 $\mu\text{g}/\text{m}^3$. Appropriate protective work clothing and equipment can include coveralls or similar full-body work clothing, gloves, hats, shoes or disposable shoe coverlets, and face shields or vented goggles. Your employer is required to provide all such equipment at no cost to you. He or she is responsible for providing repairs and replacement as necessary and also is responsible for the cleaning, laundering or disposal of protective clothing and equipment. Contaminated work clothing or equipment must be removed in change rooms and not worn home or you will extend your exposure and expose your family since lead from your clothing can accumulate in your house, car, etc. Contaminated clothing which is to be cleaned, laundered or disposed of must be placed in closed containers in the change room. At no time may lead be removed from protective clothing or equipment by any means which disperses lead into the work room air.

(vi) Housekeeping. Your employer must establish a housekeeping program sufficient to maintain all surfaces as free as practicable of accumulations of lead dust. Vacuuming is the preferred method of meeting this requirement, and the use of compressed air to clean floors and other surfaces is

absolutely prohibited. Dry or wet sweeping, shoveling, or brushing may not be used except where vacuuming or other equally effective methods have been tried and do not work. Vacuums must be used and emptied in a manner which minimizes the reentry of lead into the work place.

(vii) Hygiene facilities and practices.

(A) The standard requires that change rooms, showers and filtered air lunchrooms be constructed and made available to workers exposed to lead above the PEL. When the PEL is exceeded, the employer must assure that food and beverage is not present or consumed, tobacco products are not present or used, and cosmetics are not applied, except in these facilities. Change rooms, showers and lunchrooms, must be used by workers exposed in excess of the PEL. After showering, no clothing or equipment worn during the shift may be worn home and this includes shoes and underwear. Your own clothing worn during the shift should be carried home and cleaned carefully so that it does not contaminate your home. Lunchrooms may not be entered with protective clothing or equipment unless surface dust has been removed by vacuuming, downdraft booth or other cleaning methods. Finally, workers exposed above the PEL must wash both their hands and faces prior to eating, drinking, smoking or applying cosmetics.

(B) All of the facilities and hygiene practices just discussed are essential to minimize additional sources of lead absorption from inhalation or ingestion of lead that may accumulate on you, your clothes or your possessions. Strict compliance with these provisions can virtually eliminate several sources of lead exposure which significantly contribute to excessive lead absorption.

(viii) Medical surveillance.

(A) The medical surveillance program is part of the standard's comprehensive approach to the prevention of lead-related disease. Its purpose is to supplement the main thrust of the standard which is aimed at minimizing airborne concentrations of lead and sources of ingestion. Only medical surveillance can determine if the other provisions of the standard have effectively protected you as an individual. Compliance with the standard's provision will protect most workers from the adverse effects of lead exposure, but may not be satisfactory to protect individual workers (I) who have high body burdens of lead acquired over past years, (II) who have additional uncontrolled sources of nonoccupational lead exposure, (III) who exhibit unusual variations in lead absorption rates, or (IV) who have specific nonwork related medical conditions which could be aggravated by lead exposure (e.g., renal disease, anemia). In addition, control systems may fail, or hygiene and respirator programs may be inadequate. Periodic medical surveillance of individual workers will help detect those failures. Medical surveillance will also be important to protect your reproductive ability - regardless of whether you are a man or a woman.

(B) All medical surveillance required by the standard must be performed by or under the supervision of a licensed physician. The employer must provide required medical surveillance without cost to employees and at a reasonable time and place. The standard's medical surveillance program has two parts - Periodic biological monitoring, and medical examinations.

(C) Your employer's obligation to offer medical surveillance is triggered by the results of the air monitoring program. Medical surveillance must be made available to all employees who are exposed in excess of the action level for more than thirty days a year. The initial phase of the medical surveillance program, which included blood lead level tests and medical examinations, must be completed for all covered employees no later than one hundred eighty days from the effective date of this standard. Priority within this first round of medical surveillance must be given to employees whom the employer believes to be at greatest risk from continued exposure (for example, those with the longest prior exposure to lead, or those with the highest current exposure). Thereafter, the employer must periodically make medical surveillance - both biological monitoring and medical examinations - available to all covered employees.

(D) Biological monitoring under the standard consists of blood lead level (PbB) and zinc protoporphyrin tests at least every six months after the initial PbB test. A zinc protoporphyrin (ZPP) test is a very useful blood test which measures an effect of lead on your body. If a worker's PbB exceeds 40 $\mu\text{g}/100\text{g}$, the monitoring frequency must be increased from every six months to at least every two months and not reduced until two consecutive PbBs indicate a blood lead level below 40 $\mu\text{g}/100\text{g}$. Each time your PbB is determined to be over 40 $\mu\text{g}/100\text{g}$, your employer must notify you of this in writing within five working days of the receipt of the test results. The employer must also inform you that the standard requires temporary medical removal with economic protection when your PbB exceeds certain criteria (see Discussion of Medical Removal Protection - subsection (12)). During the first year of the standard, this removal criterion is 80 $\mu\text{g}/100\text{g}$. Anytime your PbB exceeds 80 $\mu\text{g}/100\text{g}$ your employer must make available to you a prompt follow-up PbB test to ascertain your PbB. If the two tests both exceed 80 $\mu\text{g}/100\text{g}$ and you are temporarily removed, then your employer must make successive PbB tests available to you on a monthly basis during the period of your removal.

(E) Medical examinations beyond the initial one must be made available on an annual basis if your blood lead levels exceeds 40 $\mu\text{g}/100\text{g}$ at any time during the preceding year. The initial examination will provide information to establish a baseline to which subsequent data can be compared. An initial medical examination must also be made available (prior to assignment) for each employee being assigned for the first time to an area where the airborne concentration of lead equals or exceeds the action level. In addition, a medical examination or consultation must be made available as soon as possible if you notify your employer that you are experiencing signs or symptoms commonly associated with lead poisoning or that you have difficulty breathing while wearing a respirator or during a respirator fit test. You must also be provided a medical examination or consultation if you notify your employer that you desire medical advice concerning the effects of current or past exposure to lead on your ability to procreate a healthy child.

(F) Finally, appropriate follow-up medical examinations or consultations may also be provided for employees who have been temporarily removed from exposure under the

medical removal protection provisions of the standard (see item (ix) below).

(G) The standard specifies the minimum content of pre-assignment and annual medical examinations. The content of other types of medical examinations and consultations is left up to the sound discretion of the examining physician. Pre-assignment and annual medical examinations must include (I) a detailed work history and medical history, (II) a thorough physical examination, and (III) a series of laboratory tests designed to check your blood chemistry and your kidney function. In addition, at any time upon your request, a laboratory evaluation of male fertility will be made (microscopic examination of a sperm sample), or a pregnancy test will be given.

(H) The standard does not require that you participate in any of the medical procedures, tests, etc., which your employer is required to make available to you. Medical surveillance can, however, play a very important role in protecting your health. You are strongly encouraged, therefore, to participate in a meaningful fashion. Generally, your employer will choose the physician who conducts medical surveillance under the lead standard - unless you and your employer can agree on the choice of a physician or physicians. Some companies and unions have agreed in advance, for example, to use certain independent medical laboratories or panels of physicians. Any of these arrangements are acceptable so long as required medical surveillance is made available to workers.

(I) The standard requires your employer to provide certain information to a physician to aid in his or her examination of you. This information includes (I) the standard and its appendices, (II) a description of your duties as they relate to lead exposure, (III) your exposure level, (IV) a description of personal protective equipment you wear, (V) prior blood level results, and (VI) prior written medical opinions concerning you that the employer has. After a medical examination or consultation the physician must prepare a written report which must contain (I) the physician's opinion as to whether you have any medical conditions which places you at increased risk of material impairment to health from exposure to lead, (II) any recommended special protective measures to be provided to you, (III) any blood lead level determinations, and (IV) any recommended limitation on your use of respirators. This last element must include a determination of whether you can wear a powered air purifying respirator (PAPR) if you are found unable to wear a negative pressure respirator.

(J) The medical surveillance program of the lead standard may at some point in time serve to notify certain workers that they have acquired a disease or other adverse medical condition as a result of occupational lead exposure. If this is true these workers might have legal rights to compensation from public agencies, their employers, firms that supply hazardous products to their employers, or other persons. Some states have laws, including worker compensation laws, that disallow a worker to learn of a job-related health impairment to sue, unless the worker sues within a short period of time after learning of the impairment. (This period of time may be a matter of months or years.) An attorney can be consulted about these possibilities. It should be stressed that WISHA is

in no way trying to either encourage or discourage claims or lawsuits. However, since results of the standard's medical surveillance program can significantly affect the legal remedies of a worker who has acquired a job-related disease or impairment, it is proper for WISHA to make you aware of this.

(K) The medical surveillance section of the standard also contains provisions dealing with chelation. Chelation is the use of certain drugs (administered in pill form or injected into the body) to reduce the amount of lead absorbed in body tissues. Experience accumulated by the medical and scientific communities has largely confirmed the effectiveness of this type of therapy for the treatment of very severe lead poisoning. On the other hand it has also been established that there can be a long list of extremely harmful side effects associated with the use of chelating agents. The medical community has balanced the advantages and disadvantages resulting from the use of chelating agents in various circumstances and has established when the use of these agents is acceptable. The standard includes these accepted limitations due to a history of abuse of chelation therapy by some lead companies. The most widely used chelating agents are calcium disodium EDTA, (Ca Na₂EDTA), Calcium Disodium Versenate (Versenate), and d-penicillamine (penicillamine or Cupramine).

(L) The standard prohibits "prophylactic chelation" of any employee by any person the employer retains, supervises or controls. "Prophylactic chelation" is the routine use of chelating or similarly acting drugs to prevent elevated blood levels in workers who are occupationally exposed to lead, or the use of these drugs to routinely lower blood lead levels to pre-designated concentrations believed to be safe. It should be emphasized that where an employer takes a worker who has no symptoms of lead poisoning and has chelation carried out by a physician (either inside or outside of a hospital) solely to reduce the worker's blood lead level, that will generally be considered prophylactic chelation. The use of a hospital and a physician does not mean that prophylactic chelation is not being performed. Routine chelation to prevent increased or reduce current blood lead levels is unacceptable whatever the setting.

(M) The standard allows the use of "therapeutic" or "diagnostic" chelation if administered under the supervision of a licensed physician in a clinical setting with thorough and appropriate medical monitoring. Therapeutic chelation responds to severe lead poisoning where there are marked symptoms. Diagnostic chelation, involves giving a patient a dose of the drug then collecting all urine excreted for some period of time as an aid to the diagnosis of lead poisoning.

(N) In cases where the examining physician determines that chelation is appropriate, you must be notified in writing of this fact before such treatment. This will inform you of a potentially harmful treatment, and allow you to obtain a second opinion.

(ix) Medical removal protection.

(A) Excessive lead absorption subjects you to increased risk of disease. Medical removal protection (MRP) is a means of protecting you when for whatever reasons, other methods, such as engineering controls, work practices, and respirators, have failed to provide the protection you need. MRP involves

the temporary removal of a worker from his or her regular job to a place of significantly lower exposure without any loss of earnings, seniority, or other employment rights or benefits. The purpose of this program is to cease further lead absorption and allow your body to naturally excrete lead which has previously been absorbed. Temporary medical removal can result from an elevated blood lead level, or a medical opinion. Up to eighteen months of protection is provided as a result of either form of removal. The vast majority of removed workers, however, will return to their former jobs long before this eighteen month period expires. The standard contains special provisions to deal with the extraordinary but possible case where a long-term worker's blood lead level does not adequately decline during eighteen months of removal.

(B) During the first year of the standard, if your blood lead level is 80 µg/100g or above you must be removed from any exposure where your air lead level without a respirator would be 100 µg/m³ or above. If you are removed from your normal job you may not be returned until your blood lead level declines to at least 60 µg/100g. These criteria for removal and return will change according to the following schedule:

TABLE 1

Effective Date	Removal Blood Level (µg/100g)	Air Lead (µg/m ³)	Return Blood Lead (µg/100g)
9/6/81	At or above 70	50 or above	At or below 50
9/6/82	At or above 60	30 or above	At or below 40
9/6/84	At or above 50 averaged over six months	30 or above	At or below 40

(C) You may also be removed from exposure even if your blood lead levels are below these criteria if a final medical determination indicates that you temporarily need reduced lead exposure for medical reasons. If the physician who is implementing your employer's medical program makes a final written opinion recommending your removal or other special protective measures, your employer must implement the physician's recommendation. If you are removed in this manner, you may only be returned when the physician indicates it is safe for you to do so.

(D) The standard does not give specific instructions dealing with what an employer must do with a removed worker. Your job assignment upon removal is a matter for you, your employer and your union (if any) to work out consistent with existing procedures for job assignments. Each removal must be accomplished in a manner consistent with existing collective bargaining relationships. Your employer is given broad discretion to implement temporary removals so long as no attempt is made to override existing agreements. Similarly, a removed worker is provided no right to veto an employer's choice which satisfies the standard.

(E) In most cases, employers will likely transfer removed employees to other jobs with sufficiently low lead

exposure. Alternatively, a worker's hours may be reduced so that the time weighted average exposure is reduced, or he or she may be temporarily laid off if no other alternative is feasible.

(F) In all of these situations, MRP benefits must be provided during the period of removal - i.e., you continue to receive the same earnings, seniority, and other rights and benefits you would have had if you had not been removed. Earnings include more than just your base wage; it includes overtime, shift differentials, incentives, and other compensation you would have earned if you had not been removed. During the period of removal you must also be provided with appropriate follow-up medical surveillance. If you were removed because your blood lead level was too high, you must be provided with a monthly blood test. If a medical opinion caused your removal, you must be provided medical tests or examinations that the physician believes to be appropriate. If you do not participate in this follow-up medical surveillance, you may lose your eligibility for MRP benefits.

(G) When you are medically eligible to return to your former job, your employer must return you to your "former job status." This means that you are entitled to the position, wages, benefits, etc., you would have had if you had not been removed. If you would still be in your old job if no removal had occurred, that is where you go back. If not, you are returned consistent with whatever job assignment discretion your employer would have had if no removal had occurred. MRP only seeks to maintain your rights, not expand them or diminish them.

(H) If you are removed under MRP and you are also eligible for worker compensation or other compensation for lost wages, your employer's MRP benefits obligation is reduced by the amount that you actually receive from these other sources. This is also true if you obtain other employment during the time you are laid off with MRP benefits.

(I) The standard also covers situations where an employer voluntarily removes a worker from exposure to lead due to the effects of lead on the employee's medical condition, even though the standard does not require removal. In these situations MRP benefits must still be provided as though the standard required removal. Finally, it is important to note that in all cases where removal is required, respirators cannot be used as a substitute. Respirators may be used before removal becomes necessary, but not as an alternative to a transfer to a low exposure job, or to a lay-off with MRP benefits.

(x) Employee information and training.

(A) Your employer is required to provide an information and training program for all employees exposed to lead above the action level or who may suffer skin or eye irritation from lead. This program must inform these employees of the specific hazards associated with their work environment, protective measures which can be taken, the danger of lead to their bodies (including their reproductive systems), and their rights under the standard. In addition, your employer must make readily available to all employees, including those exposed below the action level, a copy of the standard and its appendices and must distribute to all employees any materials provided to the employer under the Washington Industrial Safety and Health Act (WISHA).

(B) Your employer is required to complete this training for all employees by March 4, 1981. After this date, all new employees must be trained prior to initial assignment to areas where there is possibility of exposure over the action level. This training program must also be provided at least annually thereafter.

(xi) Signs. The standard requires that the following warning sign be posted in work areas where the exposure to lead exceeds the PEL:

WARNING
LEAD WORK AREA
NO SMOKING OR EATING

(xii) Recordkeeping.

(A) Your employer is required to keep all records of exposure monitoring for airborne lead. These records must include the name and job classification of employees measured, details of the sampling and analytic techniques, the results of this sampling and the type of respiratory protection being worn by the person sampled. Your employer is also required to keep all records of biological monitoring and medical examination results. These must include the names of the employees, the physician's written opinion and a copy of the results of the examination. All of the above kinds of records must be kept for forty years, or for at least twenty years after your termination of employment, whichever is longer.

(B) Recordkeeping is also required if you are temporarily removed from your job under the MRP program. This record must include your name and Social Security number, the date of your removal and return, how the removal was or is being accomplished, and whether or not the reason for the removal was an elevated blood lead level. Your employer is required to keep each medical removal record only for as long as the duration of an employee's employment.

(C) The standard requires that if you request to see or copy environmental monitoring, blood lead level monitoring, or medical removal records, they must be made available to you or to a representative that you authorize. Your union also has access to these records. Medical records other than PbBs must also be provided to you upon request, to your physician or to any other person whom you may specifically designate. Your union does not have access to your personal medical records unless you authorize their access.

(xiii) Observations of monitoring. When air monitoring for lead is performed at your work place as required by this standard, your employer must allow you or someone you designate to act as an observer of the monitoring. Observers are entitled to an explanation of the measurement procedure, and to record the results obtained. Since results will not normally be available at the time of the monitoring, observers are entitled to record or receive the results of the monitoring when returned by the laboratory. Your employer is required to provide the observer with any personal protective devices required to be worn by employees working in the areas that is being monitored. The employer must require the observer to wear all such equipment and to comply with all other applicable safety and health procedures.

(xiv) Effective date. The standard's effective date is September 6, 1980, and the employer's obligation under the stan-

dard begin to come into effect as of that date. The standard was originally adopted as WAC 296-62-07349 and later recodified to WAC 296-62-07521.

(c) Appendix C. Medical Surveillance Guidelines.

(i) Introduction.

(A) The primary purpose of the Washington Industrial Safety and Health Act of 1973 is to assure, so far as possible, safe and healthful working conditions for every working man and woman. The occupational health standard for inorganic lead* was promulgated to protect workers exposed to inorganic lead including metallic lead, all inorganic lead compounds and organic lead soaps.

*The term inorganic lead used throughout the medical surveillance appendices is meant to be synonymous with the definition of lead set forth in the standard.

(B) Under this final standard in effect as of September 6, 1980, occupational exposure to inorganic lead is to be limited to 50 µg/m³ (micrograms per cubic meter) based on an eight-hour time-weighted average (TWA). This level of exposure eventually must be achieved through a combination of engineering, work practice and other administrative controls. Periods of time ranging from one to ten years are provided for different industries to implement these controls which are based on individual industry considerations. Until these controls are in place, respirators must be used to meet the 50 µg/m³ exposure limit.

(C) The standard also provides for a program of biological monitoring and medical surveillance for all employees exposed to levels of inorganic lead above the action level of 30 µg/m³ for more than thirty days per year.

(D) The purpose of this document is to outline the medical surveillance provisions of the standard for inorganic lead, and to provide further information to the physician regarding the examination and evaluation of workers exposed to inorganic lead.

(E) Item (ii) provides a detailed description of the monitoring procedure including the required frequency of blood testing for exposed workers, provisions for medical removal protection (MRP), the recommended right of the employee to a second medical opinion, and notification and recordkeeping requirements of the employer. A discussion of the requirements for respirator use and respirator monitoring and WISHA's position on prophylactic chelation therapy are also included in this section.

(F) Item (iii) discusses the toxic effects and clinical manifestations of lead poisoning and effects of lead intoxication on enzymatic pathways in heme synthesis. The adverse effects on both male and female reproductive capacity and on the fetus are also discussed.

(G) Item (iv) outlines the recommended medical evaluation of the worker exposed to inorganic lead including details of the medical history, physical examination, and recommended laboratory tests, which are based on the toxic effects of lead as discussed in item (ii).

(H) Item (v) provides detailed information concerning the laboratory tests available for the monitoring of exposed workers. Included also is a discussion of the relative value of each test and the limitations and precautions which are necessary in the interpretation of the laboratory results.

(I) Airborne levels to be achieved without reliance or respirator protection through a combination of engineering and work practice or other administrative controls are illustrated in the following table:

Industry	Permissible Lead Level/Compliance Date		
	200µg/m ³	100µg/m ³	50µg/m ³
Primary Lead Production	1973	06/29/84	06/29/91
Secondary Lead Production	1973	06/29/84	06/29/91
Lead Acid Battery Manufacturing	1973	06/29/83	06/29/91
Automobile Mfg./Solder, Grinding	1973	N/A	03/08/97
Electronics, Gray Iron Foundries, Ink Mfg., Paints and Coatings Mfg., Can Mfg., Wallpaper Mfg., and Printing.	1973	N/A	06/29/91
Lead Chemical Mfg., Nonferrous Foundries, Leaded Steel Mfg., Battery Breaking in the Collection and Processing of Scrap (when not a part of secondary lead smelter)			
Secondary Copper Smelter, Brass and Bronze Ingot Production.	1973	N/A	N/A ¹ *
All Other Industries	1973	N/A	09/08/92

* Feasibility of achieving the PEL by engineering and work practice controls for these industries has yet to be resolved in court, therefore no date has been scheduled.

(ii) Medical surveillance and monitoring requirements for workers exposed to inorganic lead.

(A) Under the occupational health standard for inorganic lead, a program of biological monitoring and medical surveillance is to be made available to all employees exposed to lead above the action level of 30 µg/m³ TWA for more than thirty days each year. This program consists of periodic blood sampling and medical evaluation to be performed on a schedule which is defined by previous laboratory results, worker complaints or concerns, and the clinical assessment of the examining physician.

(B) Under this program, the blood lead level of all employees who are exposed to lead above the action level of 30 µg/m³ is to be determined at least every six months. The frequency is increased to every two months for employees whose last blood lead level was between 40 µg/100g whole blood and the level requiring employee medical removal to be discussed below. For employees who are removed from exposure to lead due to an elevated blood lead, a new blood lead level must be measured monthly. Zinc protoporphyrin (ZPP) measurement is required on each occasion that a blood lead level measurement is made.

(C) An annual medical examination and consultation performed under the guidelines discussed in item (iv) is to be made available to each employee for whom a blood test conducted at any time during the preceding twelve months indicated a blood lead level at or above 40 µg/100g. Also, an examination is to be given to all employees prior to their assignment to an area in which airborne lead concentrations reach or exceed the action level. In addition, a medical examination must be provided as soon as possible after notification by an employee that the employee has developed signs or symptoms commonly associated with lead intoxication, that the employee desires medical advice regarding lead exposure and the ability to procreate a healthy child, or that the employee has demonstrated difficulty in breathing during a respirator fitting test or during respirator use. An examination is also to be made available to each employee removed from exposure to lead due to a risk of sustaining material impairment to health, or otherwise limited or specially protected pursuant to medical recommendations.

(D) Results of biological monitoring or the recommendations of an examining physician may necessitate removal of an employee from further lead exposure pursuant to the standard's medical removal program (MRP). The object of the MRP program is to provide temporary medical removals to workers either with substantially elevated blood lead levels or otherwise at risk of sustaining material health impairment from continued substantial exposure to lead. The following guidelines which are summarized in Table 10 were created under the standard for the temporary removal of an exposed employee and his or her subsequent return to work in an exposure area.

TABLE 10

		EFFECTIVE DATE				
		Sept. 6, 1980	Sept. 6, 1981	Sept. 6, 1982	Sept. 6, 1983	Sept. 6, 1984
A.	Blood lead level requiring employee medical removal (level must be confirmed with second follow-up blood lead level within two weeks of first report).	>80 µg/100g.	>70 µg/100g.	>60 µg/100g.	>60 µg/100g.	>60 µg/100g or average of last three blood samples or all blood samples over previous 6 months (whichever is over a longer time period) is 50 µg/100g. or greater unless last sample is 40 µg/100g or less.
B.	Frequency which employees exposed is action level of lead (30 µg/m ³ TWA) must have blood lead level checked. (ZPP is also required in each occasion that a blood test is obtained):					
	1. Last blood lead level less than 40 µg/100g	Every 6 months.	Every 6 months.	Every 6 months.	Every 6 months.	Every 6 months.
	2. Last blood lead level between 40 µg/100g and level requiring medical removal (see A above)	Every 2 months.	Every 2 months.	Every 2 months.	Every 2 months.	Every 2 months.
	3. Employees removed from exposure to lead because of an elevated blood lead level	Every 1 month.	Every 1 month.	Every 1 month.	Every 1 month.	Every 1 month.
C.	Permissible airborne exposure limit for workers removed from work due to an elevated blood lead level (without regard to respirator protection).	100 µg/m ³ 8 hr TWA	50 µg/m ³ 8 hr TWA	30 µg/m ³ 8 hr TWA	30 µg/m ³ 8 hr TWA	30 µg/m ³ 8 hr TWA

TABLE 10

	EFFECTIVE DATE				
	Sept. 6, 1980	Sept. 6, 1981	Sept. 6, 1982	Sept. 6, 1983	Sept. 6, 1984
D. Blood lead level confirmed with a second blood analysis, at which employee may return to work. Permissible exposure without regard to respirator protection is listed by industry in Table 1.	60 µg/100g	50 µg/100g	40 µg/100g	40 µg/100g	40 µg/100g

Note: Where medical opinion indicates that an employee is at risk of material impairment from exposure to lead, the physician can remove an employee from exposure exceeding the action level (or less) or recommend special protective measures as deemed appropriate and necessary. Medical monitoring during the medical removal period can be more stringent than noted in the table above if the physician so specifies. Return to work or removal of limitations and special protections is permitted when the physician indicates that the worker is no longer at risk of material impairment.

(E) Under the standard's ultimate worker removal criteria, a worker is to be removed from any work having any eight-hour TWA exposure to lead of 30 µg/m³ or more whenever either of the following circumstances apply. (I) a blood lead level of 60 µg/100g or greater is obtained and confirmed by a second follow-up blood lead level performed within two weeks after the employer receives the results of the first blood sample test, or (II) the average of the previous three blood lead determinations or the average of all blood lead determinations conducted during the previous six months, whichever encompasses the longest time period, equals or exceeds 50 µg/100g, unless the last blood sample indicates a blood lead level at or below 40 µg/100g, in which case the employee need not be removed. Medical removal is to continue until two consecutive blood lead levels are 40 µg/100g or less.

(F) During the first two years that the ultimate removal criteria are being phased in, the return criteria have been set to assure that a worker's blood lead level has substantially declined during the period of removal. From March 1, 1979, to March 1, 1980, the blood lead level requiring employee medical removal is 80 µg/100g. Workers found to have a confirmed blood lead at this level or greater need only be removed from work having a daily eight hour TWA exposure to lead at or above 100 µg/m³. Workers so removed are to be returned to work when their blood lead levels are at or below 60 µg/100g of whole blood. From March 1, 1980, to March 1, 1981, the blood lead level requiring medical removal is 70 µg/100g. During this period workers need only be removed from jobs having a daily eight hour TWA exposure to lead at or above 50 µg/m³ and are to be returned to work when a level of 50 µg/100g is achieved. Beginning March 1, 1981, return depends on the worker's blood lead level declining to 40 µg/100g of whole blood.

(G) As part of the standard, the employer is required to notify in writing each employee whose whole blood lead level exceeds 40 µg/100g. In addition, each such employee is to be informed that the standard requires medical removal with MRP benefits, discussed below, when an employee's blood lead level exceeds the above defined limits.

(H) In addition to the above blood lead level criteria, temporary worker removal may also take place as a result of medical determinations and recommendations. Written medical opinions must be prepared after each examination pursuant to the standard. If the examining physician includes medical finding, determination or opinion that the employee has a medical condition which places the employee at increased risk of material health impairment from exposure to lead, then the employee must be removed from exposure to lead at or above the action level. Alternatively, if the examining physician recommends special protective measures for an employee (e.g., use of a powered air purifying respirator) or recommends limitations on an employee's exposure to lead, then the employer must implement these recommendations. Recommendations may be more stringent than the specific provisions of the standard. The examining physician, therefore, is given broad flexibility to tailor special protective procedures to the needs of individual employees. This flexibility extends to the evaluation and management of pregnant workers and male and female workers who are planning to conceive children. Based on the history, physical examination, and laboratory studies, the physician might recommend special protective measures or medical removal for an employee who is pregnant or who is planning to conceive a child when, in the physician's judgment, continued exposure to lead at the current job would pose a significant risk. The return of the employee to his or her former job status, or the removal of special protections or limitations, depends upon the examining physician determining that the employee is no longer at increased risk of material impairment or that the special measures are no longer needed.

(I) During the period of any form of special protection or removal, the employer must maintain the worker's earnings, seniority, and other employment rights and benefits (as though the worker has not been removed) for a period of up to eighteen months. This economic protection will maximize meaningful worker participation in the medical surveillance program, and is appropriate as part of the employer's overall obligation to provide a safe and healthful work place. The provisions of MRP benefits during the employee's removal

period may, however, be conditioned upon participation in medical surveillance.

(J) On rare occasions, an employee's blood lead level may not acceptably decline within eighteen months of removal. This situation will arise only in unusual circumstances, thus the standard relies on an individual medical examination to determine how to protect such an employee. This medical determination is to be based on both laboratory values, including lead levels, zinc protoporphyrin levels, blood counts, and other tests felt to be warranted, as well as the physician's judgment that any symptoms or findings on physical examination are a result of lead toxicity. The medical determination may be that the employee is incapable of ever safely returning to his or her former job status. The medical determination may provide additional removal time past eighteen months for some employees or specify special protective measures to be implemented.

(K) The lead standard provides for a multiple physician review in cases where the employee wishes a second opinion concerning potential lead poisoning or toxicity. If an employee wishes a second opinion, he or she can make an appointment with a physician of his or her choice. This second physician will review the findings, recommendations or determinations of the first physician and conduct any examinations, consultations or tests deemed necessary in an attempt to make a final medical determination. If the first and second physicians do not agree in their assessment they must try to resolve their differences. If they cannot reach an agreement then they must designate a third physician to resolve the dispute.

(L) The employer must provide examining and consulting physicians with the following specific information: A copy of the lead regulations and all appendices, a description of the employee's duties as related to exposure, the exposure level to lead and any other toxic substances (if applicable), a description of personal protective equipment used, blood lead levels, and all prior written medical opinions regarding the employee in the employer's possession or control. The employer must also obtain from the physician and provide the employee with a written medical opinion containing blood lead levels, the physician's opinion as to whether the employee is at risk of material impairment to health, any recommended protective measures for the employee if further exposure is permitted, as well as any recommended limitations upon an employee's use of respirators.

(M) Employers must instruct each physician not to reveal to the employer in writing or in any other way his or her findings, laboratory results, or diagnoses which are felt to be unrelated to occupational lead exposure. They must also instruct each physician to advise the employee of any occupationally or nonoccupationally related medical condition requiring further treatment or evaluation.

(N) The standard provides for the use of respirators when engineering and other primary controls have not been fully implemented. However, the use of respirator protection shall not be used in lieu of temporary medical removal due to elevated blood lead levels or findings that an employee is at risk of material health impairment. This is based on the numerous inadequacies of respirators including skin rash where the facepiece makes contact with the skin, unacceptable stress to

breathing in some workers with underlying cardiopulmonary impairment, difficulty in providing adequate fit, the tendency for respirators to create additional hazards by interfering with vision, hearing, and mobility, and the difficulties of assuring the maximum effectiveness of a complicated work practice program involving respirators. Respirators do, however, serve a useful function where engineering and work practice are inadequate by providing interim or short-term protection, provided they are properly selected for the environment in which the employee will be working, properly fitted to the employee, maintained and cleaned periodically, and worn by the employee when required.

(O) In its final standard on occupational exposure to inorganic lead, WISHA has prohibited prophylactic chelation. Diagnostic and therapeutic chelation are permitted only under the supervision of a licensed physician with appropriate medical monitoring in an acceptable clinical setting. The decision to initiate chelation therapy must be made on an individual basis and take into account the severity of symptoms felt to be a result of lead toxicity along with blood lead levels, ZPP levels and other laboratory tests as appropriate. EDTA and penicillamine, which are the primary chelating agents used in the therapy of occupational lead poisoning, have significant potential side effects and their use must be justified on the basis of expected benefits to the worker.

(P) Unless frank and severe symptoms are present, therapeutic chelation is not recommended given the opportunity to remove a worker from exposure and allow the body to naturally excrete accumulated lead. As a diagnostic aid, the chelation mobilization test using CA-EDTA has limited applicability. According to some investigators, the tests can differentiate between lead-induced and other nephropathies. The test may also provide an estimation of the mobile fraction of the total body lead burden.

(Q) Employers are required to assure that accurate records are maintained on exposure monitoring, medical surveillance, and medical removal for each employee. Exposure monitoring and medical surveillance records must be kept for forty years or the duration of employment plus twenty years, whichever is longer, while medical removal records must be maintained for the duration of employment. All records required under the standard must be made available upon request to representatives of the director of the department of labor and industries. Employers must also make environmental and biological monitoring and medical removal records available to affected employees and to former employees or their authorized employee representatives. Employees or their specifically designated representatives have access to their entire medical surveillance records.

(R) In addition, the standard requires that the employer inform all workers exposed to lead at or above the action level of the provisions of the standard and all its appendices, the purpose and description of medical surveillance and provisions for medical removal protection if temporary removal is required. An understanding of the potential health effects of lead exposure by all exposed employees along with full understanding of their rights under the lead standard is essential for an effective monitoring program.

(iii) Adverse health effects of inorganic lead.

(A) Although the toxicity of lead has been known for 2,000 years, the knowledge of the complex relationship between lead exposure and human response is still being refined. Significant research into the toxic properties of lead continues throughout the world, and it should be anticipated that our understanding of thresholds of effects and margins of safety will be improved in future years. The provisions of the lead standard are founded on two prime medical judgments; first, the prevention of adverse health effects from exposure to lead throughout a working lifetime requires that worker blood lead levels be maintained at or below 40 $\mu\text{g}/100\text{g}$, and second, the blood lead levels of workers, male or female, who intend to parent in the near future should be maintained below 30 $\mu\text{g}/100\text{g}$ to minimize adverse reproduction health effects to the parent and developing fetus. The adverse effects of lead on reproduction are being actively researched and WISHA encourages the physician to remain abreast of recent developments in the area to best advise pregnant workers or workers planning to conceive children.

(B) The spectrum of health effects caused by lead exposure can be subdivided into five developmental states; normal, physiological changes of uncertain significance, pathophysiological changes, overt symptoms (morbidity), and mortality. Within this process there are no sharp distinctions, but rather a continuum of effects. Boundaries between categories overlap due to the wide variation of individual responses and exposures in the working population. WISHA's development of the lead standard focused on pathophysiological changes as well as later stages of disease.

(I) Heme synthesis inhibition.

a) The earliest demonstrated effect of lead involves its ability to inhibit at least two enzymes of the heme synthesis pathway at very low blood levels. Inhibition of delta aminolevulinic acid dehydrase (ALA-D) which catalyzes the conversion of delta-aminolevulinic acid (ALA) to protoporphyrin is observed at a blood lead level below 20 $\mu\text{g}/100\text{g}$ whole blood. At a blood lead level of 40 $\mu\text{g}/100\text{g}$, more than twenty percent of the population would have seventy percent inhibition of ALA-D. There is an exponential increase in ALA excretion at blood lead levels greater than 40 $\mu\text{g}/100\text{g}$.

b) Another enzyme, ferrochelatase, is also inhibited at low blood lead levels. Inhibition of ferrochelatase leads to increased free erythrocyte protoporphyrin (FEP) in the blood which can then bind to zinc to yield zinc protoporphyrin. At a blood lead level of 50 $\mu\text{g}/100\text{g}$ or greater, nearly one hundred percent of the population will have an increase FEP. There is also an exponential relationship between blood lead levels greater than 40 $\mu\text{g}/100\text{g}$ and the associated ZPP level, which has led to the development of the ZPP screening test for lead exposure.

c) While the significance of these effects is subject to debate, it is WISHA's position that these enzyme disturbances are early stages of a disease process which may eventually result in the clinical symptoms of lead poisoning. Whether or not the effects do progress to the later stages of clinical disease, disruption of these enzyme processes over a working lifetime is considered to be a material impairment of health.

d) One of the eventual results of lead-induced inhibition of enzymes in the heme synthesis pathway is anemia which can be asymptomatic if mild but associated with a wide array of symptoms including dizziness, fatigue, and tachycardia when more severe. Studies have indicated that lead levels as low as 50 $\mu\text{g}/100\text{g}$ can be associated with a definite decreased hemoglobin, although most cases of lead-induced anemia, as well as shortened red-cell survival times, occur at lead levels exceeding 80 $\mu\text{g}/100\text{g}$. Inhibited hemoglobin synthesis is more common in chronic cases whereas shortened erythrocyte life span is more common in acute cases.

e) In lead-induced anemias, there is usually a reticulocytosis along with the presence of basophilic stippling, and ringed sideroblasts, although none of the above are pathognomonic for lead-induced anemia.

(II) Neurological effects.

a) Inorganic lead had been found to have toxic effects on both the central and peripheral nervous systems. The earliest stage of lead-induced central nervous system effects first manifest themselves in the form of behavioral disturbances and central nervous system symptoms including irritability, restlessness, insomnia and other sleep disturbances, fatigue, vertigo, headache, poor memory, tremor, depression, and apathy. With more severe exposure, symptoms can progress to drowsiness, stupor, hallucinations, delirium, convulsions and coma.

b) The most severe and acute form of lead poisoning which usually follows ingestion or inhalation of large amounts of lead is acute encephalopathy which may arise precipitously with the onset of intractable seizures, coma, cardiorespiratory arrest, and death within 48 hours.

c) While there is disagreement about what exposure levels are needed to produce the earliest symptoms, most experts agree that symptoms definitely can occur at blood lead levels of 60 $\mu\text{g}/100\text{g}$ whole blood and therefore recommend a 40 $\mu\text{g}/100\text{g}$ maximum. The central nervous system effects frequently are not reversible following discontinued exposure or chelation therapy and when improvement does occur, it is almost always only partial.

d) The peripheral neuropathy resulting from lead exposure characteristically involves only motor function with minimal sensory damage and has a marked predilection for the extensor muscles of the most active extremity. The peripheral neuropathy can occur with varying degrees of severity. The earliest and mildest form which can be detected in workers with blood lead levels as low as 50 $\mu\text{g}/100\text{g}$ is manifested by slowing or motor nerve conduction velocity often without clinical symptoms. With progression of the neuropathy there is development of painless extensor muscle weakness usually involving the extensor muscles of the fingers and hand in the most active upper extremity, followed in severe cases by wrist drop, much less commonly, foot drop.

e) In addition to slowing of nerve conduction, electromyographical studies in patients with blood lead levels greater than 50 $\mu\text{g}/100\text{g}$ have demonstrated a decrease in the number of acting motor unit potentials, an increase in the duration of motor unit potentials, and spontaneous pathological activity including fibrillations and fasciculation. Whether these effects occur at levels of 40 $\mu\text{g}/100\text{g}$ is undetermined.

f) While the peripheral neuropathies can occasionally be reversed with therapy, again such recovery is not assured particularly in the more severe neuropathies and often improvement is only partial. The lack of reversibility is felt to be due in part to segmental demyelination.

(III) Gastrointestinal. Lead may also effect the gastrointestinal system producing abdominal colic or diffuse abdominal pain, constipation, obstipation, diarrhea, anorexia, nausea and vomiting. Lead colic rarely develops at blood lead levels below 80 $\mu\text{g}/100\text{g}$.

(IV) Renal.

a) Renal toxicity represents one of the most serious health effects of lead poisoning. In the early stages of disease nuclear inclusion bodies can frequently be identified in proximal renal tubular cells. Renal functions remain normal and the changes in this stage are probably reversible. With more advanced disease there is progressive interstitial fibrosis and impaired renal function. Eventually extensive interstitial fibrosis ensues with sclerotic glomeruli and dilated and atrophied proximal tubules; all represent end stage kidney disease. Azotemia can be progressive, eventually resulting in frank uremia necessitating dialysis. There is occasionally associated hypertension and hyperuricemia with or without gout.

b) Early kidney disease is difficult to detect. The urinalysis is normal in early lead nephropathy and the blood urea nitrogen and serum creatinine increase only when two-thirds of kidney function is lost. Measurement of creatinine clearance can often detect earlier disease as can other methods of measurement of glomerular filtration rate. An abnormal Ca-EDTA mobilization test has been used to differentiate between lead-induced and other nephropathies, but this procedure is not widely accepted. A form of Fanconi syndrome with aminoaciduria, glycosuria, and hyperphosphaturia indicating severe injury to the proximal renal tubules is occasionally seen in children.

(V) Reproductive effects.

a) Exposure to lead can have serious effects on reproductive function in both males and females. In male workers exposed to lead there can be a decrease in sexual drive, impotence, decreased ability to produce healthy sperm, and sterility. Malformed sperm (teratospermia), decreased number of sperm (hypospermia), and sperm with decreased motility (asthenospermia) can occur. Teratospermia has been noted at mean blood lead levels of 53 $\mu\text{g}/100\text{g}$ and hypospermia and asthenospermia at 41 $\mu\text{g}/100\text{g}$. Furthermore, there appears to be a dose-response relationship for teratospermia in lead exposed workers.

b) Women exposed to lead may experience menstrual disturbances including dysmenorrhea, menorrhagia and amenorrhea. Following exposure to lead, women have a higher frequency of sterility, premature births, spontaneous miscarriages, and stillbirths.

c) Germ cells can be affected by lead and cause genetic damage in the egg or sperm cells before conception and result in failure to implant, miscarriage, stillbirth, or birth defects.

d) Infants of mothers with lead poisoning have a higher mortality during the first year and suffer from lowered birth weights, slower growth, and nervous system disorders.

e) Lead can pass through the placental barrier and lead levels in the mother's blood are comparable to concentrations of lead in the umbilical cord at birth. Transplacental passage becomes detectable at twelve-fourteen weeks of gestation and increases until birth.

f) There is little direct data on damage to the fetus from exposure to lead but it is generally assumed that the fetus and newborn would be at least as susceptible to neurological damage as young children. Blood lead levels of 50-60 $\mu\text{g}/100\text{g}$ in children can cause significant neurobehavioral impairments, and there is evidence of hyperactivity at blood levels as low as 25 $\mu\text{g}/100\text{g}$. Given the overall body of literature concerning the adverse health effects of lead in children, WISHA feels that the blood lead level in children should be maintained below 30 $\mu\text{g}/100\text{g}$ with a population mean of 15 $\mu\text{g}/100\text{g}$. Blood lead levels in the fetus and newborn likewise should not exceed 30 $\mu\text{g}/100\text{g}$.

g) Because of lead's ability to pass through the placental barrier and also because of the demonstrated adverse effects of lead on reproductive function in both males and females as well as the risk of genetic damage of lead on both the ovum and sperm, WISHA recommends a 30 $\mu\text{g}/100\text{g}$ maximum permissible blood lead level in both males and females who wish to bear children.

(VI) Other toxic effects.

a) Debate and research continue on the effects of lead on the human body. Hypertension has frequently been noted in occupationally exposed individuals although it is difficult to assess whether this is due to lead's adverse effects on the kidneys or if some other mechanism is involved.

b) Vascular and electrocardiographic changes have been detected but have not been well characterized. Lead is thought to impair thyroid function and interfere with the pituitary-adrenal axis, but again these effects have not been well defined.

(iv) Medical evaluation.

(A) The most important principle in evaluating a worker for any occupational disease including lead poisoning is a high index of suspicion on the part of the examining physician. As discussed in Section (ii), lead can affect numerous organ systems and produce a wide array of signs and symptoms, most of which are nonspecific and subtle in nature at least in the early stages of disease. Unless serious concern for lead toxicity is present, many of the early clues to diagnosis may easily be overlooked.

(B) The crucial initial step in the medical evaluation is recognizing that a worker's employment can result in exposure to lead. The worker will frequently be able to define exposures to lead and lead-containing materials but often will not volunteer this information unless specifically asked. In other situations the worker may not know of any exposures to lead but the suspicion might be raised on the part of the physician because of the industry or occupation of the worker. Potential occupational exposure to lead and its compounds occur in at least one twenty occupations, including lead smelting, the manufacture of lead storage batteries, the manufacture of lead pigments and products containing pigments, solder manufacture, shipbuilding and ship repair, auto manufacturing, construction, and painting.

(C) Once the possibility for lead exposure is raised, the focus can then be directed toward eliciting information from the medical history, physical exam, and finally from laboratory data to evaluate the worker for potential lead toxicity.

(D) A complete and detailed work history is important in the initial evaluation. A listing of all previous employment with information on work processes, exposure to fumes or dust, known exposures to lead or other toxic substances, respiratory protection used, and previous medical surveillance should all be included in the worker's record. Where exposure to lead is suspected, information concerning on-the-job personal hygiene, smoking or eating habits in work areas, laundry procedures, and use of any protective clothing or respiratory protection equipment should be noted. A complete work history is essential in the medical evaluation of a worker with suspected lead toxicity, especially when long-term effects such as neurotoxicity and nephrotoxicity are considered.

(E) The medical history is also of fundamental importance and should include a listing of all past and current medical conditions, current medications including proprietary drug intake, previous surgeries and hospitalizations, allergies, smoking history, alcohol consumption, and also nonoccupational lead exposures such as hobbies (hunting, riflery). Also known childhood exposures should be elicited. Any previous history of hematological, neurological, gastrointestinal, renal, psychological, gynecological, genetic, or reproductive problems should be specifically noted.

(F) A careful and complete review of systems must be performed to assess both recognized complaints and subtle or slowly acquired symptoms which the worker might not appreciate as being significant. The review of symptoms should include the following:

- General - Weight loss, fatigue, decreased appetite.
- Head, Eyes, Ears, Nose, Throat (HEENT) - Headaches, visual disturbance or decreased visual acuity, hearing deficits or tinnitus, pigmentation of the oral mucosa, or metallic taste in mouth.
- Cardiopulmonary - Shortness of breath, cough, chest pains, palpitations, or orthopnea.
- Gastrointestinal - Nausea, vomiting, heartburn, abdominal pain, constipation or diarrhea.
- Neurologic - Irritability, insomnia, weakness (fatigue), dizziness, loss of memory, confusion, hallucinations, incoordination, ataxia, decreased strength in hands or feet, disturbance in gait, difficulty in climbing stairs, or seizures.
- Hematologic - Pallor, easy fatigability, abnormal blood loss, melena.

- Reproductive (male or female and spouse where relevant) - History of infertility, impotence, loss of libido, abnormal menstrual periods, history of miscarriages, stillbirths, or children with birth defects.
- Musculoskeletal - Muscle and joint pains.

(G) The physical examination should emphasize the neurological, gastrointestinal, and cardiovascular systems. The worker's weight and blood pressure should be recorded and the oral mucosa checked for pigmentation characteristic of a possible Burtonian or lead line on the gingiva. It should be noted, however, that the lead line may not be present even in severe lead poisoning if good oral hygiene is practiced.

(H) The presence of pallor on skin examination may indicate an anemia, which if severe might also be associated with a tachycardia. If an anemia is suspected, an active search for blood loss should be undertaken including potential blood loss through the gastrointestinal tract.

(I) A complete neurological examination should include an adequate mental status evaluation including a search for behavioral and psychological disturbances, memory testing, evaluation for irritability, insomnia, hallucinations, and mental clouding. Gait and coordination should be examined along with close observation for tremor. A detailed evaluation of peripheral nerve function including careful sensory and motor function testing is warranted. Strength testing particularly of extensor muscle groups of all extremities is of fundamental importance.

(J) Cranial nerve evaluation should also be included in the routine examination.

(K) The abdominal examination should include auscultation for bowel sounds and abnormal bruits and palpation for organomegaly, masses, and diffuse abdominal tenderness.

(L) Cardiovascular examination should evaluate possible early signs of congestive heart failure. Pulmonary status should be addressed particularly if respirator protection is contemplated.

(M) As part of the medical evaluation, the lead standard requires the following laboratory studies.

- (I) Blood lead level.
- (II) Hemoglobin and hematocrit determinations, red cell indices, and examination of the peripheral blood smear to evaluate red blood cell morphology.
- (III) Blood urea nitrogen.
- (IV) Serum creatinine.
- (V) Routine urinalysis with microscopic examination.
- (VI) A zinc protoporphyrin level.

(N) In addition to the above, the physician is authorized to order any further laboratory or other tests which he or she deems necessary in accordance with sound medical practice. The evaluation must also include pregnancy testing or laboratory evaluation of male fertility if requested by the employee.

(O) Additional tests which are probably not warranted on a routine basis but may be appropriate when blood lead and ZPP levels are equivocal include delta aminolevulinic acid and coproporphyrin concentrations in the urine, and dark-field illumination for detection of basophilic stippling in red blood cells.

(P) If an anemia is detected further studies including a careful examination of the peripheral smear, reticulocyte count, stool for occult blood, serum iron, total iron binding capacity, bilirubin, and, if appropriate vitamin B12 and folate may be of value in attempting to identify the cause of the anemia.

(Q) If a peripheral neuropathy is suspected, nerve conduction studies are warranted both for diagnosis and as a basis to monitor any therapy.

(R) If renal disease is questioned, a twenty-four-hour urine collection for creatinine clearance, protein, and electrolytes may be indicated. Elevated uric acid levels may result from lead-induced renal disease and a serum uric acid level might be performed.

(S) An electrocardiogram and chest X ray may be obtained as deemed appropriate.

(T) Sophisticated and highly specialized testing should not be done routinely and where indicated should be under the direction of a specialist.

(v) Laboratory evaluation.

(A) The blood level at present remains the single most important test to monitor lead exposure and is the test used in the medical surveillance program under the lead standard to guide employee medical removal. The ZPP has several advantages over the blood lead level. Because of its relatively recent development and the lack of extensive data concerning its interpretation, the ZPP currently remains an ancillary test.

(B) This section will discuss the blood lead level and ZPP in detail and will outline their relative advantages and disadvantages. Other blood tests currently available to evaluate lead exposure will also be reviewed.

(C) The blood lead level is a good index of current or recent lead absorption when there is no anemia present and when the worker has not taken any chelating agents. However, blood lead levels along with urinary lead levels do not necessarily indicate the total body burden of lead and are not adequate measures of past exposure. One reason for this is that lead has a high affinity for bone and up to ninety percent of the body's total lead is deposited there. A very important component of the total lead body burden is lead in soft tissue (liver, kidneys, and brain). This fraction of the lead body burden, the biologically active lead, is not entirely reflected by blood lead levels since it is a function of the dynamics of lead absorption, distribution, deposition in bone and excretion. Following discontinuation of exposure to lead, the excess body burden is only slowly mobilized from bone and other relatively stable stores and excreted. Consequently, a high blood lead level may only represent recent heavy exposure to lead without a significant total body excess and likewise a low blood lead level does not exclude an elevated total body burden of lead.

(D) Also due to its correlation with recent exposures, the blood lead level may vary considerably over short time intervals.

(E) To minimize laboratory error and erroneous results due to contamination, blood specimens must be carefully collected after thorough cleaning of the skin with appropriate methods using lead-free containers and analyzed by a reliable laboratory. Under the standard, samples must be analyzed in laboratories which are approved by the Center for Disease

Control (CDC) or which have received satisfactory grades in proficiency testing by the CDC in the previous year. Analysis is to be made using atomic absorption spectrophotometry anodic stripping; voltammetry or any method which meets the accuracy requirements set forth by the standard.

(F) The determination of lead in urine is generally considered a less reliable monitoring technique than analysis of whole blood primarily due to individual variability in urinary excretion capacity as well as the technical difficulty of obtaining accurate twenty-four hour urine collections. In addition, workers with renal insufficiency, whether due to lead or some other cause, may have decreased lead clearance and consequently urine lead levels may underestimate the true lead burden. Therefore, urine lead levels should not be used as a routine test.

(G) The zinc protoporphyrin test, unlike the blood lead determination, measures an adverse metabolic effect of lead and as such is a better indicator of lead toxicity than the level of blood lead itself. The level of ZPP reflects lead absorption over the preceding three to four months, and therefore is a better indicator of lead body burden. The ZPP requires more time than the blood lead to read significantly elevated levels; the return to normal after discontinuing lead exposure is also slower. Furthermore, the ZPP test is simpler, faster, and less expensive to perform and no contamination is possible. Many investigators believe it is the most reliable means of monitoring chronic lead absorption.

(H) Zinc protoporphyrin results from the inhibition of the enzyme ferrochelatase which catalyzes the insertion of an iron molecule into the protoporphyrin molecule, which then becomes heme. If iron is not inserted into the molecule then zinc, having a greater affinity for protoporphyrin, takes place in the iron, forming ZPP.

(I) An elevation in the level of circulating ZPP may occur at blood lead levels as low as 20-30 $\mu\text{g}/100\text{g}$ in some workers. Once the blood lead level has reached 40 $\mu\text{g}/100\text{g}$ there is more marked rise in the ZPP value from its normal range of less than 100 $\mu\text{g}/100\text{ml}$. Increases in blood lead levels beyond 40 $\mu\text{g}/100\text{g}$ are associated with exponential increases in ZPP.

(J) Whereas blood lead levels fluctuate over short time spans, ZPP levels remain relatively stable. ZPP is measured directly in red blood cells and is present for the cell's entire one hundred twenty day lifespan. Therefore, the ZPP level in blood reflects the average ZPP production over the previous three to four months and consequently the average lead exposure during that time interval.

(K) It is recommended that a hematocrit be determined whenever a confirmed ZPP of 50 $\mu\text{g}/100\text{ml}$ whole blood is obtained to rule out a significant underlying anemia. If the ZPP is in excess of 100 $\mu\text{g}/100\text{ml}$ and not associated with abnormal elevations in blood lead levels, the laboratory should be checked to be sure the blood leads were determined using atomic absorption spectrophotometry, anodic stripping voltammetry or any method which meets the accuracy requirements set forth by the standard, by a CDC approved laboratory which is experienced in lead level determinations. Repeat periodic blood lead studies should be obtained in all individuals with elevated ZPP levels to be certain that an

associated elevated blood lead level has not been missed due to transient fluctuations in blood leads.

(L) ZPP has characteristic fluorescence spectrum with a peak at 594nm which is detectable with a hematofluorimeter. The hematofluorimeter is accurate and portable and can provide on-site, instantaneous results for workers who can be frequently tested via a finger prick.

(M) However, careful attention must be given to calibration and quality control procedures. Limited data on blood lead -ZPP correlations and the ZPP levels which are associated with the adverse health effects discussed in item (ii) are the major limitations of the test. Also it is difficult to correlate ZPP levels with environmental exposure and there is some variation of response with age and sex. Nevertheless, the ZPP promises to be an important diagnostic test for the early detection of lead toxicity and its value will increase as more data is collected regarding its relationship to other manifestations of lead poisoning.

(N) Levels of delta-aminolevulinic acid (ALA) in the urine are also used as a measure of lead exposure. Increasing concentrations of ALA are believed to result from the inhibition of the enzyme delta-aminolevulinic acid dehydrase (ALA-D). Although the test is relatively easy to perform, inexpensive, and rapid, the disadvantages include variability in results, the necessity to collect a complete twenty-four hour urine sample which has a specific gravity greater than 1.010, and also the fact that ALA decomposes in the presence of light.

(O) The pattern of porphyrin excretion in the urine can also be helpful in identifying lead intoxication. With lead poisoning, the urine concentrations of coproporphyrins I and II, porphobilinogen and uroporphyrin I rise. The most important increase, however, is that of coproporphyrin III; levels may exceed 5,000 µg/l in the urine in lead poisoned individuals, but its correlation with blood lead levels and ZPP are not as good as those of ALA. Increases in urinary porphyrins are not diagnostic of lead toxicity and may be seen in porphyria, some liver diseases, and in patients with high reticulocyte counts.

(vi) Summary.

(A) The WISHA standard for inorganic lead places significant emphasis on the medical surveillance of all workers exposed to levels of inorganic lead above the action level of 30 µg/m³ TWA. The physician has a fundamental role in this surveillance program, and in the operation of the medical removal protection program.

(B) Even with adequate worker education on the adverse health effects of lead and appropriate training in work practices, personal hygiene and other control measures, the physician has a primary responsibility for evaluating potential lead toxicity in the worker. It is only through a careful and detailed medical and work history, a complete physical examination and appropriate laboratory testing that an accurate assessment can be made. Many of the adverse health effects of lead toxicity are either irreversible or only partially reversible and therefore early detection of disease is very important.

(C) This document outlines the medical monitoring program as defined by the occupational safety and health standard for inorganic lead. It reviews the adverse health effects of lead poisoning and describes the important elements of the

history and physical examinations as they relate to these adverse effects.

(D) It is hoped that this review and discussion will give the physician a better understanding of the WISHA standard with the ultimate goal of protecting the health and well-being of the worker exposed to lead under his or her care.

(d) Appendix D. Recommendations to employers concerning high-risk tasks (nonmandatory).

The department advises employers that the following tasks have a high risk for lead overexposure (this list is not complete; other tasks also can result in lead over-exposure):

- Any open flame operation involving lead-containing solder in a manner producing molten solder, including the manufacture or repair of motor vehicle radiators;
- Sanding, cutting or grinding of lead-containing solder;
- Breaking, recycling or manufacture of lead-containing batteries;
- Casting objects using lead, brass, or lead-containing alloys;
- Where lead-containing coatings or paints are present:
 - abrasive blasting
 - welding
 - cutting
 - torch burning
 - manual demolition of structures
 - manual scraping
 - manual sanding
 - heat gun applications
 - power tool cleaning
 - rivet busting
 - clean-up activities where dry expendable abrasives are used
 - abrasive blasting enclosure movement and removal;
- Spray-painting with lead-containing paint;
- Using lead-containing mortar;
- Lead burning;
- Operation or cleaning of shooting facilities where lead bullets are used;
- Formulation or processing of lead-containing pigments or paints;
- Cutting, burning, or melting of lead-containing materials.

The department recommends that annual blood lead testing be offered to all employees potentially overexposed to lead, including those performing the tasks listed above, regardless of air lead levels. Research has shown that air lead levels often do not accurately predict workers' lead overexposure. The blood lead testing will provide the most information if performed during a period of peak lead exposure.

Employers should be aware that the United States Public Health Service has set a goal of eliminating occupational exposures which result in whole blood lead levels of 25 µg/dl or greater. This goal should guide whether employees' blood lead levels indicate lead overexposure.

If blood lead levels are elevated in an employee performing a task associated with lead overexposure, employers should assess the maintenance and effectiveness of exposure controls, hygiene facilities, respiratory protection program,

the employee's work practices and personal hygiene, and the employee's respirator use, if any. If a deficiency exists in any of these areas, the employer should correct the problem.

AMENDATORY SECTION (Amending WSR 01-11-038, filed 5/9/01, effective 9/1/01)

WAC 296-155-140 Sanitation. (1) Potable water.

(a) An adequate supply of potable water shall be provided in all places of employment.

(b) Portable containers used to dispense drinking water shall be capable of being tightly closed and equipped with a tap. Water shall not be dipped from containers.

(c) Any container used to distribute drinking water shall be clearly marked as to the nature of its contents and not used for any other purpose.

(d) The common drinking cup is prohibited.

(e) Where single service cups (to be used but once) are supplied, both a sanitary container for the unused cups and a receptacle for disposing of the used cups shall be provided.

(f) All water containers used to furnish drinking water shall be thoroughly cleaned at least once each week or more often as conditions require.

(g) The requirements of this subsection do not apply to mobile crews or to normally unattended work locations as long as employees working at these locations have transportation immediately available, within the normal course of their duties, to nearby facilities otherwise meeting the requirements of this section.

(h) The following definitions apply:

(i) Mobile crew: A work crew that routinely moves to a different work location periodically. Normally a mobile crew is not at the same location all day.

(ii) Normally unattended work location: An unattended site that is visited occasionally by one or more employees.

(iii) Nearby facility: A sanitary facility that is within three minutes travel by the transportation provided.

(iv) "Potable water" means water (~~which meets the quality standards for drinking purposes of state or local authority having jurisdiction or water that meets the quality standards prescribed by the United States Environmental Protection Agency's National Interim Primary Drinking Water Regulations, published in 40 CFR Part 141, and 40 CFR 147.2400~~) that is suitable for drinking by the public and meets the requirements of chapter 246-290 or 246-291 WAC.

(2) Wash water.

(a) Clean, tepid wash water, between 70 and 100 degrees Fahrenheit, shall be provided at all construction sites.

(b) Individual hand towels shall be provided. Both a sanitary container for the unused towels and a receptacle for disposal of used towels shall be provided.

(c) Hand soap, industrial hand cleaner or similar cleansing agents shall be provided. Cleansing agents shall be adequate to remove any paints, coatings, herbicides, insecticides or other contaminants.

(d) The requirements of this subsection do not apply to mobile crews or to normally unattended work locations as long as employees working at these locations have transportation immediately available, within the normal course of

their duties, to nearby facilities otherwise meeting the requirements of this section.

(e) Gasoline or solvents shall not be used for personal cleaning.

(f) Wash water areas will be maintained in a dry condition. Slipping or other hazards shall be eliminated from the wash water area before it is acceptable for use.

(3) Nonpotable water.

(a) Outlets for nonpotable water, such as water for industrial or firefighting purposes only, shall be identified by signs meeting the requirements of Part E of this chapter, to indicate clearly that the water is unsafe and is not to be used for drinking, washing or cooking purposes.

(b) There shall be no cross-connection, open or potential, between a system furnishing potable water, a system furnishing nonpotable water or a system furnishing wash water.

(4) Toilets.

(a) The provisions of this section apply to both portable chemical toilets and to flush toilets, except where flush toilets are used the requirements of WAC 296-800-230 shall apply instead of (b) of this subsection.

(b) Accessible toilets shall be provided for employees according to the following table:

TABLE B-1

<u>Number of Employees</u>	<u>Toilets Required</u>
1 - 10	1
11 - 25	2
26 - 40	3
41 - 60	4
61 - 80	5
Over 80	one additional toilet for each additional twenty employees or any fraction thereof.

(c) When the employer provides both flush and portable chemical toilets, the number of employees allowed to be served by the flush toilets, per WAC 296-800-230 will be calculated. That number will be subtracted from the total number of employees and the employer will be required to provide an adequate number of portable chemical toilets for the number of remaining employees, as required by (b) of this subsection.

(d) Toilets shall be maintained in clean, sanitary and functional condition. Internal latches shall be provided to secure the units from inadvertent entry. Where there are twenty or more employees consisting of both sexes, facilities shall be provided for each sex.

(i) Each unit shall be properly cleaned on a routine basis.

(ii) Chemicals, toilet tissue and sanitary seat covers shall be maintained in a supply sufficient for use during the entire shift.

(iii) Any defective or inadequate unit shall be immediately removed from service.

(e) Specifications. The following specifications apply:

(i) A noncaustic chemical toilet (portable chemical toilet is) a self-contained unit equipped with a waste receiving chemical holding container.

(ii) Portable chemical toilets consisting of only a holding tank, commonly referred to as "elevator units" or "elevator toilets" are not acceptable. "Elevator units" may be used if they are individually located in a lockable room which affords privacy. When this type unit is used in a private individual lockable room the entire room will be considered a toilet facility, as such the room will meet all requirements of toilet facilities and be inspected in accordance with subsection (5)(b)(iii) of this section.

(iii) Rooms, buildings or shelters housing toilets shall be of sound construction, easy to clean, provide shelter and provide privacy. The toilet rooms shall be ventilated to the outside and adequately lighted. All openings into the toilet room shall be covered with 16-mesh screen.

(iv) Toilets shall be serviced on a regular schedule. Servicing shall include the use of a disinfectant for cleaning urinals and seats, removing waste from containers, recharging containers with an odor controlling chemical and installing an adequate supply of toilet tissue and seat covers.

(v) Service shall be performed in accordance with local codes by approved servicing organizations. Waste shall be disposed of or discharged in accordance with requirements of local health department regulations.

(vi) Waste containers shall be fabricated from impervious materials, e.g. plastic, steel, fiberglass or their equivalent. Containers shall be water tight and capable of containing the chemical waste in a sanitary manner. The container shall be fitted to the building in a manner so as to prevent insects from entering from the exterior of the building. Containers shall be adequate in size to be used by the number of persons, according to the schedule for minimum requirements, without filling the container to more than half of its volume before regularly scheduled servicing.

(vii) Removal of waste shall be handled in a clean and sanitary manner by means of a vacuum hose and received by a leak-proof tank truck. All valves on the tank shall be leak-proof.

(viii) Provisions shall be made so service trucks have a clear approach and convenient access to the toilets to be serviced.

(ix) Disposal of waste from tank trucks shall be in accordance with local health department requirements. In the absence of provisions by local health departments, waste must be disposed of through municipal or district sanitary sewage systems. Municipal or area sanitary sewage districts shall provide sewage disposal locations and facilities which are adequate and convenient for duly authorized toilet service organizations.

(f) The requirements of this subsection do not apply to mobile crews or to normally unattended work locations as long as employees working at these locations have transportation immediately available, within the normal course of their duties, to nearby facilities otherwise meeting the requirements of this section.

(5)(a) On multiemployer worksites, the prime contractor shall ensure that the requirements of this section are met.

Each employer is responsible for seeing that facilities for their own employees are provided.

(b) Each employer shall ensure, at the beginning of each shift, that the sanitation facilities required by this section are inspected. If any facility or unit fails to meet the following requirements, immediate corrective action shall be taken. Such action shall be documented and maintained at the site for at least 72 hours. Inspection shall establish:

(i) Potable water: Sufficient supply of water, sufficient supply of cups, container integrity, cleanliness of unit and area, capacity of trash receptacle (empty).

(ii) Wash water: Sufficient supply of clean water, proper temperature, sufficient supply of towels, sufficient supply of cleansing agents, container integrity, cleanliness of unit and area without the presence of physical hazards, capacity of trash receptacle (empty).

(iii) Toilets: Sufficient supply of toilet tissue and sanitary seat covers, capacity and condition of chemical agent, capacity and condition of holding tank, cleanliness of unit and area without the presence of physical hazards, physical and structural condition of unit, condition of lock, condition of toilet seat and tissue holder, absence of all foreign debris.

(c) The location of the facilities required by subsections (1), (2) and (4) of this section shall be as close as practical to the highest concentration of employees.

(i) On multistory structures they shall be furnished on every third floor.

(ii) At all sites they shall be located within 200 feet horizontally of all employees.

(iii) The requirements of subsection (5)(c)(i) and (ii) do not apply to mobile crews or to normally unattended work locations as long as employees working at these locations have transportation immediately available, within the normal course of their duties, to nearby facilities otherwise meeting the requirements of this section.

(6) Food handling. All employees' food service facilities and operations shall meet the applicable laws, ordinances and regulations of the jurisdictions in which they are located.

(7) Temporary sleeping quarters. When temporary sleeping quarters are provided, they shall be heated, ventilated and lighted.

AMENDATORY SECTION (Amending Order 93-07, filed 10/29/93, effective 12/10/93)

WAC 296-155-17621 Medical surveillance. (1) General.

(a) The employer shall make available initial medical surveillance to employees occupationally exposed on any day to lead at or above the action level. Initial medical surveillance consists of biological monitoring in the form of blood sampling and analysis for lead and zinc protoporphyrin levels.

(b) The employer shall institute a medical surveillance program in accordance with subsections (2) and (3) of this section for all employees who are or may be exposed by the employer at or above the action level for more than thirty days in any consecutive twelve months;

(c) The employer shall assure that all medical examinations and procedures are performed by or under the supervision of a licensed physician.

(d) The employer shall make available the required medical surveillance including multiple physician review under subsection (3)(c) without cost to employees and at a reasonable time and place.

(2) Biological monitoring.

(a) Blood lead and ZPP level sampling and analysis. The employer shall make available biological monitoring in the form of blood sampling and analysis for lead and zinc protoporphyrin levels to each employee covered by subsection (1)(a) and (b) of this section on the following schedule:

(i) For each employee covered by subsection (1)(b) of this section, at least every two months for the first six months and every six months thereafter;

(ii) For each employee covered by subsection (1)(a) or (b) of this section whose last blood sampling and analysis indicated a blood lead level at or above 40 µg/dl, at least every two months. This frequency shall continue until two consecutive blood samples and analyses indicate a blood lead level below 40 µg/dl; and

(iii) For each employee who is removed from exposure to lead due to an elevated blood lead level at least monthly during the removal period.

(b) Follow-up blood sampling tests. Whenever the results of a blood lead level test indicate that an employee's blood lead level (~~exceeds~~) is at or above the numerical criterion for medical removal under WAC 296-155-17623 (1)(a), the employer shall provide a second (follow-up) blood sampling test within two weeks after the employer receives the results of the first blood sampling test.

(c) Accuracy of blood lead level sampling and analysis. Blood lead level sampling and analysis provided pursuant to this WAC 296-155-176 shall have an accuracy (to a confidence level of ninety-five percent) within plus or minus fifteen percent or 6 µg/dl, whichever is greater, and shall be conducted by a laboratory approved by OSHA.

(d) Employee notification.

(i) Within five working days after the receipt of biological monitoring results, the employer shall notify each employee in writing of their blood lead level; and

(ii) The employer shall notify each employee whose blood lead level (~~exceeds~~) is at or above 40 µg/dl that the standard requires temporary medical removal with Medical Removal Protection benefits when an employee's blood lead level exceeds the numerical criterion for medical removal under WAC 296-155-17623 (1)(a).

(3) Medical examinations and consultations.

(a) Frequency. The employer shall make available medical examinations and consultations to each employee covered by subsection (1)(b) of this section on the following schedule:

(i) At least annually for each employee for whom a blood sampling test conducted at any time during the preceding twelve months indicated a blood lead level at or above 40 µg/dl;

(ii) As soon as possible, upon notification by an employee either that the employee has developed signs or symptoms commonly associated with lead intoxication, that

the employee desires medical advice concerning the effects of current or past exposure to lead on the employee's ability to procreate a healthy child, that the employee is pregnant, or that the employee has demonstrated difficulty in breathing during a respirator fitting test or during use; and

(iii) As medically appropriate for each employee either removed from exposure to lead due to a risk of sustaining material impairment to health, or otherwise limited pursuant to a final medical determination.

(b) Content. The content of medical examinations made available pursuant to subdivision (a)(ii) and (iii) of this subsection shall be determined by an examining physician and, if requested by an employee, shall include pregnancy testing or laboratory evaluation of male fertility. Medical examinations made available pursuant to subdivision (a)(i) of this subsection shall include the following elements:

(i) A detailed work history and a medical history, with particular attention to past lead exposure (occupational and nonoccupational), personal habits (smoking, hygiene), and past gastrointestinal, hematologic, renal, cardiovascular, reproductive and neurological problems;

(ii) A thorough physical examination, with particular attention to teeth, gums, hematologic, gastrointestinal, renal, cardiovascular, and neurological systems. Pulmonary status should be evaluated if respiratory protection will be used;

(iii) A blood pressure measurement;

(iv) A blood sample and analysis which determines:

(A) Blood lead level;

(B) Hemoglobin and hematocrit determinations, red cell indices, and examination of peripheral smear morphology;

(C) Zinc protoporphyrin;

(D) Blood urea nitrogen; and,

(E) Serum creatinine;

(v) A routine urinalysis with microscopic examination; and

(vi) Any laboratory or other test relevant to lead exposure which the examining physician deems necessary by sound medical practice.

(c) Multiple physician review mechanism.

(i) If the employer selects the initial physician who conducts any medical examination or consultation provided to an employee by WAC 296-155-176, the employee may designate a second physician:

(A) To review any findings, determinations or recommendations of the initial physician; and

(B) To conduct such examinations, consultations, and laboratory tests as the second physician deems necessary to facilitate this review.

(ii) The employer shall promptly notify an employee of the right to seek a second medical opinion after each occasion that an initial physician conducts a medical examination or consultation pursuant to WAC 296-155-176. The employer may condition its participation in, and payment for, the multiple physician review mechanism upon the employee doing the following within fifteen days after receipt of the foregoing notification, or receipt of the initial physician's written opinion, whichever is later:

(A) The employee informing the employer that they intend to seek a second medical opinion; and

(B) The employee initiating steps to make an appointment with a second physician.

(iii) If the findings, determinations or recommendations of the second physician differ from those of the initial physician, then the employer and the employee shall assure that efforts are made for the two physicians to resolve any disagreement.

(iv) If the two physicians have been unable to quickly resolve their disagreement, then the employer and the employee through their respective physicians shall designate a third physician:

(A) To review any findings, determinations or recommendations of the prior physicians; and

(B) To conduct such examinations, consultations, laboratory tests and discussions with the prior physicians as the third physician deems necessary to resolve the disagreement of the prior physicians.

(v) The employer shall act consistent with the findings, determinations and recommendations of the third physician, unless the employer and the employee reach an agreement which is otherwise consistent with the recommendations of at least one of the three physicians.

(d) Information provided to examining and consulting physicians.

(i) The employer shall provide an initial physician conducting a medical examination or consultation under WAC 296-155-176 with the following information:

(A) A copy of this regulation for lead including all Appendices;

(B) A description of the affected employee's duties as they relate to the employee's exposure;

(C) The employee's exposure level or anticipated exposure level to lead and to any other toxic substance (if applicable);

(D) A description of any personal protective equipment used or to be used;

(E) Prior blood lead determinations; and

(F) All prior written medical opinions concerning the employee in the employer's possession or control.

(ii) The employer shall provide the foregoing information to a second or third physician conducting a medical examination or consultation under WAC 296-155-176 upon request either by the second or third physician, or by the employee.

(e) Written medical opinions.

(i) The employer shall obtain and furnish the employee with a copy of a written medical opinion from each examining or consulting physician which contains only the following information:

(A) The physician's opinion as to whether the employee has any detected medical condition which would place the employee at increased risk of material impairment of the employee's health from exposure to lead;

(B) Any recommended special protective measures to be provided to the employee, or limitations to be placed upon the employee's exposure to lead;

(C) Any recommended limitation upon the employee's use of respirators, including a determination of whether the employee can wear a powered air purifying respirator if a

physician determines that the employee cannot wear a negative pressure respirator; and

(D) The results of the blood lead determinations.

(ii) The employer shall instruct each examining and consulting physician to:

(A) Not reveal either in the written opinion or orally, or in any other means of communication with the employer, findings, including laboratory results, or diagnoses unrelated to an employee's occupational exposure to lead; and

(B) Advise the employee of any medical condition, occupational or nonoccupational, which dictates further medical examination or treatment.

(f) Alternate physician determination mechanisms. The employer and an employee or authorized employee representative may agree upon the use of any alternate physician determination mechanism in lieu of the multiple physician review mechanism provided by subdivision (c) of this subsection so long as the alternate mechanism is as expeditious and protective as the requirements contained in this section.

(4) Chelation.

(a) The employer shall assure that any person whom he retains, employs, supervises or controls does not engage in prophylactic chelation of any employee at any time.

(b) If therapeutic or diagnostic chelation is to be performed by any person in subdivision (a) of this subsection, the employer shall assure that it be done under the supervision of a licensed physician in a clinical setting with thorough and appropriate medical monitoring and that the employee is notified in writing prior to its occurrence.

AMENDATORY SECTION (Amending Order 93-07, filed 10/29/93, effective 12/10/93)

WAC 296-155-17623 Medical removal protection.

(1) Temporary medical removal and return of an employee.

(a) Temporary removal due to elevated blood lead level.

The employer shall remove an employee from work having an exposure to lead at or above the action level on each occasion that a periodic and a follow-up blood sampling test conducted pursuant to WAC 296-155-176 indicate that the employee's blood lead level is at or above 50 µg/dl; and

(b) Temporary removal due to a final medical determination.

(i) The employer shall remove an employee from work having an exposure to lead at or above the action level on each occasion that a final medical determination results in a medical finding, determination, or opinion that the employee has a detected medical condition which places the employee at increased risk of material impairment to health from exposure to lead.

(ii) For the purposes of WAC 296-155-176, the phrase "final medical determination" means the written medical opinion on the employees' health status by the examining physician or, where relevant, the outcome of the multiple physician review mechanism or alternate medical determination mechanism used pursuant to the medical surveillance provisions of WAC 296-155-176.

(iii) Where a final medical determination results in any recommended special protective measures for an employee, or limitations on an employee's exposure to lead, the

employer shall implement and act consistent with the recommendation.

(c) Return of the employee to former job status.

(i) The employer shall return an employee to their former job status:

(A) For an employee removed due to a blood lead level at or above 50 µg/dl when two consecutive blood sampling tests indicate that the employee's blood lead level is (~~at or~~) below 40 µg/dl;

(B) For an employee removed due to a final medical determination, when a subsequent final medical determination results in a medical finding, determination, or opinion that the employee no longer has a detected medical condition which places the employee at increased risk of material impairment to health from exposure to lead.

(ii) For the purposes of WAC 296-155-176, the requirement that an employer return an employee to their former job status is not intended to expand upon or restrict any rights an employee has or would have had, absent temporary medical removal, to a specific job classification or position under the terms of a collective bargaining agreement.

(d) Removal of other employee special protective measure or limitations. The employer shall remove any limitations placed on an employee or end any special protective measures provided to an employee pursuant to a final medical determination when a subsequent final medical determination indicates that the limitations or special protective measures are no longer necessary.

(e) Employer options pending a final medical determination. Where the multiple physician review mechanism, or alternate medical determination mechanism used pursuant to the medical surveillance provisions of WAC 296-155-176, has not yet resulted in a final medical determination with respect to an employee, the employer shall act as follows:

(i) Removal. The employer may remove the employee from exposure to lead, provide special protective measures to the employee, or place limitations upon the employee, consistent with the medical findings, determinations, or recommendations of any of the physicians who have reviewed the employee's health status.

(ii) Return. The employer may return the employee to their former job status, end any special protective measures provided to the employee, and remove any limitations placed upon the employee, consistent with the medical findings, determinations, or recommendations of any of the physicians who have reviewed the employee's health status, with two exceptions.

(A) If the initial removal, special protection, or limitation of the employee resulted from a final medical determination which differed from the findings, determinations, or recommendations of the initial physician or;

(B) If the employee has been on removal status for the preceding eighteen months due to an elevated blood lead level, then the employer shall await a final medical determination.

(2) Medical removal protection benefits.

(a) Provision of medical removal protection benefits. The employer shall provide an employee up to eighteen months of medical removal protection benefits on each occa-

sion that an employee is removed from exposure to lead or otherwise limited pursuant to WAC 296-155-176.

(b) Definition of medical removal protection benefits. For the purposes of WAC 296-155-176, the requirement that an employer provide medical removal protection benefits means that, as long as the job the employee was removed from continues, the employer shall maintain the total normal earnings, seniority and other employment rights and benefits of an employee, including the employee's right to their former job status as though the employee had not been medically removed from the employee's job or otherwise medically limited.

(c) Follow-up medical surveillance during the period of employee removal or limitation. During the period of time that an employee is medically removed from their job or otherwise medically limited, the employer may condition the provision of medical removal protection benefits upon the employee's participation in follow-up medical surveillance made available pursuant to WAC 296-155-176.

(d) Workers' compensation claims. If a removed employee files a claim for workers' compensation payments for a lead-related disability, then the employer shall continue to provide medical removal protection benefits pending disposition of the claim. To the extent that an award is made to the employee for earnings lost during the period of removal, the employer's medical removal protection obligation shall be reduced by such amount. The employer shall receive no credit for workers' compensation payments received by the employee for treatment-related expenses.

(e) Other credits. The employer's obligation to provide medical removal protection benefits to a removed employee shall be reduced to the extent that the employee receives compensation for earnings lost during the period of removal either from a publicly or employer-funded compensation program, or receives income from employment with another employer made possible by virtue of the employee's removal.

(f) Voluntary removal or restriction of an employee. Where an employer, although not required by WAC 296-155-176 to do so, removes an employee from exposure to lead or otherwise places limitations on an employee due to the effects of lead exposure on the employee's medical condition, the employer shall provide medical removal protection benefits to the employee equal to that required by subdivisions (a) and (b) of this subsection.

AMENDATORY SECTION (Amending Order 93-07, filed 10/29/93, effective 12/10/93)

WAC 296-155-17629 Recordkeeping. (1) Exposure assessment.

(a) The employer shall establish and maintain an accurate record of all monitoring and other data used in conducting employee exposure assessments as required in WAC 296-155-17609.

(b) Exposure monitoring records shall include:

(i) The date(s), number, duration, location and results of each of the samples taken if any, including a description of the sampling procedure used to determine representative employee exposure where applicable;

(ii) A description of the sampling and analytical methods used and evidence of their accuracy;

(iii) The type of respiratory protective devices worn, if any;

(iv) Name, Social Security number, and job classification of the employee monitored and of all other employees whose exposure the measurement is intended to represent; and

(v) The environmental variables that could affect the measurement of employee exposure.

(c) The employer shall maintain monitoring and other exposure assessment records in accordance with the provisions of part B, chapter 296-62 WAC.

(2) Medical surveillance.

(a) The employer shall establish and maintain an accurate record for each employee subject to medical surveillance as required by WAC 296-155-17621.

(b) This record shall include:

(i) The name, Social Security number, and description of the duties of the employee;

(ii) A copy of the physician's written opinions;

(iii) Results of any airborne exposure monitoring done on or for that employee and provided to the physician; and

(iv) Any employee medical complaints related to exposure to lead.

(c) The employer shall keep, or assure that the examining physician keeps, the following medical records:

(i) A copy of the medical examination results including medical and work history required by WAC 296-155-17621;

(ii) A description of the laboratory procedures and a copy of any standards or guidelines used to interpret the test results or references to that information;

(iii) A copy of the results of biological monitoring.

(d) The employer shall maintain or assure that the physician maintains medical records in accordance with the provisions of part B, chapter 296-62 WAC.

(3) Medical removals.

(a) The employer shall establish and maintain an accurate record for each employee removed from current exposure to lead pursuant to WAC 296-155-17623.

(b) Each record shall include:

(i) The name and Social Security number of the employee;

(ii) The date of each occasion that the employee was removed from current exposure to lead as well as the corresponding date on which the employee was returned to their former job status;

(iii) A brief explanation of how each removal was or is being accomplished; and

(iv) A statement with respect to each removal indicating whether or not the reason for the removal was an elevated blood lead level.

(c) The employer shall maintain each medical removal record for at least the duration of an employee's employment.

(4) Objective data for exemption from requirement for initial monitoring.

(a) For purposes of WAC 296-155-176, objective data are information demonstrating that a particular product or material containing lead or a specific process, operation, or activity involving lead cannot release dust or fumes in con-

centrations at or above the action level under any expected conditions of use. Objective data can be obtained from an industry-wide study or from laboratory product test results from manufacturers of lead containing products or materials. The data the employer uses from an industry-wide survey must be obtained under workplace conditions closely resembling the processes, types of material, control methods, work practices and environmental conditions in the employer's current operations.

(b) The employer shall maintain the record of the objective data relied upon for at least thirty years.

(5) Availability. The employer shall make available upon request all records required to be maintained by this section to affected employees, former employees, and their designated representatives, and to the director for examination and copying.

(6) Transfer of records. ~~((a) Whenever the employer ceases to do business, the successor employer shall receive and retain all records required to be maintained by this section.~~

~~(b) Whenever the employer ceases to do business and there is no successor employer to receive and retain the records required to be maintained by WAC 296-155-176 for the prescribed period, these records shall be transmitted to the director.~~

~~(c) At the expiration of the retention period for the records required to be maintained by WAC 296-155-176, the employer shall notify the director at least three months prior to the disposal of such records and shall transmit those records to the director if requested within the period.~~

~~(d))~~ The employer shall ~~((also))~~ comply with ~~((any additional))~~ requirements involving the transfer of records set forth in WAC ~~((296-62-05215))~~ 296-800-6005.

AMENDATORY SECTION (Amending WSR 07-17-034, filed 8/7/07, effective 12/1/07)

WAC 296-304-02013 Appendix B—Compliance assistance guidelines for confined and enclosed spaces and other dangerous atmospheres. This appendix is a non-mandatory set of guidelines provided to assist employers in complying with the requirements of WAC 296-304-020 through 296-304-02011. This appendix neither creates additional obligations nor detracts from obligations otherwise contained in this chapter. It is intended to provide explanatory information and educational material to employers and employees to foster understanding of, and compliance with, this chapter.

WAC 296-304-020 through 296-304-02011. These standards are minimum safety standards for entering and working safely in vessel tanks and compartments.

WAC 296-304-020(2) Definition of "Hot work." There are several instances in which circumstances do not necessitate that grinding, drilling, abrasive blasting be regarded as hot work. Some examples are:

(1) Abrasive blasting of the external surface of the vessel (the hull) for paint preparation does not necessitate pumping and cleaning the tanks of a vessel.

(2) Prior to hot work on any hollow structure, the void space should be tested and appropriate precautions taken.

WAC 296-304-020(2) Definition of "Lower explosive limit." The terms lower flammable limit (LFL) and lower explosive limit (LEL) are used interchangeably in fire science literature.

WAC 296-304-020(2) Definition of "Upper explosive limit." The terms upper flammable limit (UFL) and upper explosive limit (UEL) are used interchangeably in fire science literature.

WAC 296-304-02003(1) After a tank has been properly washed and ventilated, the tank should contain 20.8 percent oxygen by volume. This is the same amount found in our normal atmosphere at sea level. However, it is possible that the oxygen content will be lower. When this is the case, the reasons for this deficiency should be determined and corrective action taken.

An oxygen content of 19.5 percent can support life and is adequate for entry. However, any oxygen level less than 20.8 percent and greater than 19.5 percent level should also alert the competent person to look for the causes of the oxygen deficiency and to correct them prior to entry.

WAC 296-304-02003(2) Flammable atmospheres. Atmospheres with a concentration of flammable vapors at or above 10 percent of the lower explosive limit (LEL) are considered hazardous when located in confined spaces. However, atmospheres with flammable vapors below 10 percent of the LEL are not necessarily safe.

Such atmospheres are too lean to burn. Nevertheless, when a space contains or produces measurable flammable vapors below the 10 percent LEL, it might indicate that flammable vapors are being released or introduced into the space and could present a hazard in time. Therefore, the cause of the vapors should be investigated and, if possible, eliminated prior to entry.

Some situations that have produced measurable concentrations of flammable vapors that could exceed 10 percent of the LEL in time are:

(1) Pipelines that should have been blanked or disconnected have opened, allowing product into the space.

(2) The vessel may have shifted, allowing product not previously cleaned and removed during washing to move into other areas of the vessel.

(3) Residues may be producing the atmosphere by releasing flammable vapor.

WAC 296-304-02003(2) Flammable atmospheres that are toxic. An atmosphere with a measurable concentration of a flammable substance below 10 percent of the LEL may be above the WISHA permissible exposure limit for that substance. In that case, refer to WAC 296-304-02003 (3)(b), (c), and (d).

WAC 296-304-02005 (2)(d), 296-304-02009(3), and 296-304-02009(5). The frequency with which a tank is monitored to determine if atmospheric conditions are being maintained is a function of several factors that are discussed below:

(1) Temperature. Higher temperatures will cause a combustible or flammable liquid to vaporize at a faster rate than lower temperatures. This is important since hotter days may cause tank residues to produce more vapors and that may result in the vapors exceeding 10 percent of the LEL or an overexposure to toxic contaminants.

(2) Work in the tank. Any activity in the tank could change the atmospheric conditions in that tank. Oxygen from a leaking oxyfuel hose or torch could result in an oxygen-enriched atmosphere that would more easily propagate a flame. Some welding operations use inert gas, and leaks can result in an oxygen-deficient atmosphere. Manual tank cleaning with high pressure spray devices can stir up residues and result in exposures to toxic contaminants. Simple cleaning or mucking out, where employees walk through and shovel residues and sludge, can create a change in atmospheric conditions.

(3) Period of time elapsed. If a period of time has elapsed since a marine chemist or Coast Guard authorized person has certified a tank as safe, the atmospheric condition should be rechecked by the competent person prior to entry and starting work.

(4) Unattended tanks or spaces. When a tank or space has been tested and declared safe, then subsequently left unattended for a period of time, it should be retested prior to entry and starting work. For example, when barges are left unattended at night, unidentified products from another barge are sometimes dumped into their empty tanks. Since this would result in a changed atmosphere, the tanks should be retested prior to entry and starting work.

(5) Work break. When workers take a break or leave at the end of the shift, equipment sometimes is inadvertently left in the tanks. At lunch or work breaks and at the end of the shift are the times when it is most likely someone will leave a burning or cutting torch in the tank, perhaps turned on and leaking oxygen or an inert gas. Since the former can produce an oxygen-enriched atmosphere, and the latter an oxygen-deficient atmosphere, tanks should be checked for equipment left behind, and atmosphere, monitored if necessary prior to reentering and resuming work. In an oxygen-enriched atmosphere, the flammable range is severely broadened. This means that an oxygen-enriched atmosphere can promote very rapid burning.

(6) Ballasting or trimming. Changing the position of the ballast, or trimming or in any way moving the vessel so as to expose cargo that had been previously trapped, can produce a change in the atmosphere of the tank. The atmosphere should be retested after any such move and prior to entry or work.

WAC 296-304-02007 (1) and (2) hot work. This is a reminder that other sections of the WISHA shipyard safety and health standards in chapter 296-304 WAC should be reviewed prior to starting any hot work. Most notably, WAC 296-304-040 through 296-304-04013, welding, cutting and heating, places additional restrictions on hot work: The requirements of WAC 296-304-04001 and 296-304-04005 must be met before hot work is begun on any metal that is toxic or is covered by a preservative coating respectively; the requirements of WAC 296-304-04007 must be met before welding, cutting, or heating is begun on any structural voids.

WAC 296-304-02003 (1)(b). During hot work, more than 20.8 percent oxygen by volume can be unsafe since it extends the normal flammable range. The standard permits the oxygen level to reach 22.0 percent by volume in order to account for instrument error. However, the cause of excess oxygen should be investigated and the source removed.

WAC 296-304-02011(2). If the entire vessel has been found to be in the same condition, then employers shall be considered to be in compliance with this requirement when signs using appropriate warning language in accordance with WAC 296-304-02011(1) are posted at the gangway and at all other means of access to the vessel.

AMENDATORY SECTION (Amending Order 76-7, filed 3/1/76)

WAC 296-304-07003 Ropes, chains and slings. (1) Manila rope and manila rope slings. ~~((a) Table G-1 in WAC 296-304-07011 shall be used to determine the safe working load of various sizes of manila rope and manila rope slings at various angles, except that higher safe working loads are permissible when recommended by the manufacturer for specific, identifiable products: Provided, That a safety factor of not less than five is maintained.))~~ Employers must ensure that manila rope and manila-rope slings:

(a) Have permanently affixed and legible identification markings as prescribed by the manufacturer that indicate the recommended safe working load for the type(s) of hitch(es) used, the angle upon which it is based, and the number of legs if more than one;

(b) Not be loaded in excess of its recommended safe working load as prescribed on the identification markings by the manufacturer; and

(c) Not be used without affixed and legible identification markings as required by (a) of this subsection.

(2) Wire rope and wire rope slings.

~~((a) (Tables G-2 through G-5 in WAC 296-304-07011 shall be used to determine the safe working loads of various sizes and classifications of improved plow steel wire rope and 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.))~~ Employers must ensure that wire rope and wire rope slings:

(i) Have permanently affixed and legible identification markings as prescribed by the manufacturer that indicate the recommended safe working load for the type(s) of hitch(es) used, the angle upon which it is based, and the number of legs if more than one;

(ii) Not be loaded in excess of its recommended safe working load as prescribed on the identification markings by the manufacturer; and

(iii) Not be used without affixed and legible identification markings as required by (a)(i) of this subsection.

(b) Protruding ends of strands in splices on slings and bridles shall be covered or blunted.

(c) Where U-bolt wire rope clips are used to form eyes, ~~((Table G-6 in WAC 296-304-07011 shall be used to determine the number and spacing of clips. The U-bolt shall be applied))~~ employers must use Table G-1 in WAC 296-304-07011 to determine the number and spacing of clips. Employers must apply the U-bolt so that the "U" section is in contact with the dead end of the rope.

(d) Wire rope shall not be secured by knots.

(3) Chains and chain slings.

~~((a) (Tables G-7 and G-8 in WAC 296-304-07011 shall be used to determine the working load limit of various sizes of wrought iron and alloy steel chains and chain slings, except that higher safe working loads are permissible when recommended by the manufacturer for specific, identifiable products.))~~ Employers must ensure that chain and chain slings:

(i) Have permanently affixed and legible identification markings as prescribed by the manufacturer that indicate the recommended safe working load for the type(s) of hitch(es) used, the angle upon which it is based, and the number of legs if more than one;

(ii) Not be loaded in excess of its recommended safe working load as prescribed on the identification markings by the manufacturer; and

(iii) Not be used without affixed and legible identification markings as required by (a)(i) of this subsection.

(b) All sling chains, including end fastenings, shall be given a visual inspection before being used on the job. A thorough inspection of all chains in use shall be made every 3 months. Each chain shall bear an indication of the month in which it was thoroughly inspected. The thorough inspection shall include inspection for wear, defective welds, deformation and increase in length or stretch.

(c) Employers must note interlink wear, not accompanied by stretch in excess of 5 percent, ~~((shall be noted))~~ and remove the chain ~~((removed))~~ from service when maximum allowable wear at any point of link, as indicated in Table ~~((G-9))~~ G-2 in WAC 296-304-07011, has been reached.

(d) Chain slings shall be removed from service when, due to stretch, the increase in length of a measured section exceeds five percent; when a link is bent, twisted or otherwise damaged; or when raised scarfs or defective welds appear.

(e) All repairs to chains shall be made under qualified supervision. Links or portions of the chain found to be defective as described in (d) of this section shall be replaced by links having proper dimensions and made of material similar to that of the chain. Before repaired chains are returned to service, they shall be proof tested to the proof test load recommended by the manufacturer.

(f) Wrought iron chains in constant use shall be annealed or normalized at intervals not exceeding six months when recommended by the manufacturer. The chain manufacturer shall be consulted for recommended procedures for annealing or normalizing. Alloy chains shall never be annealed.

(g) A load shall not be lifted with a chain having a kink or knot in it. A chain shall not be shortened by bolting, wiring or knotting.

AMENDATORY SECTION (Amending Order 76-7, filed 3/1/76)

WAC 296-304-07005 Shackles and hooks. (1) Shackles. ~~((a) Table G-10 in WAC 296-304-07011 shall be used to determine the safe working loads of various sizes of shackles, except that higher safe working loads are permissible when recommended by the manufacturer for specific, identifiable products: Provided, That a safety factor of not less~~

than five is maintained.) Employers must ensure that shackles:

(a) Have permanently affixed and legible identification markings as prescribed by the manufacturer that indicate the recommended safe working load;

(b) Not be loaded in excess of its recommended safe working load as prescribed on the identification markings by the manufacturer; and

(c) Not be used without affixed and legible identification markings as required by (a) of this subsection.

(2) 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 employer 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 periodically to see that they have not been bent by overloading. Bent or sprung hooks shall not be used.

AMENDATORY SECTION (Amending WSR 03-04-099, filed 2/4/03, effective 8/1/03)

WAC 296-304-0701 Use of gear. (1) Loads shall be safely rigged before being hoisted.

(2) Plates shall be handled on and off hulls by means of shackles whenever possible. Clips or pads of ample size shall be welded to the plate to receive the shackle pins whenever there are no holes in the plate. When it is not possible to make holes in or to weld pads to the plate, alligator tongs, grab hooks, grab clamps or screw clamps may be used. In such cases special precautions shall be taken to keep employees from under such lifts.

(3) Tag lines shall be provided on loads likely to swing or to need guidance.

(4) When slings are secured to eyebolts, the slings shall be so arranged, using spreaders if necessary, that the pull is within 20 degrees of the axis of the bolt.

(5) Slings shall be padded by means of wood blocks or other suitable material where they pass over sharp edges or corners of loads so as to prevent cutting or kinking.

(6) Skips shall be rigged to be handled by not less than 3 legged bridles, and all legs shall always be used. When open end skips are used, means shall be taken to prevent the contents from falling.

(7) Loose ends of idle legs of slings in use shall be hung on the hook.

(8) Employees shall not be permitted to ride the hook or the load.

(9) Loads (tools, equipment or other materials) shall not be swung or suspended over the heads of employees.

(10) Pieces of equipment or structure susceptible to falling or dislodgement shall be secured or removed as early as possible.

(11) An individual who is familiar with the signal code in use shall be assigned to act as a signalman when the hoist

operator cannot see the load being handled. Communications shall be made by means of clear and distinct visual or auditory signals except that verbal signals shall not be permitted.

(12) Pallets, when used, shall be of such material and construction and so maintained as to safely support and carry the loads being handled on them.

(13) A section of hatch through which materials or equipment are being raised, lowered, moved, or otherwise shifted manually or by a crane, winch, hoist, or derrick, shall be completely opened. The beam or pontoon left in place adjacent to an opening shall be sufficiently lashed, locked or otherwise secured to prevent it from moving so that it cannot be displaced by accident.

(14) Hatches shall not be opened or closed while employees are in the square of the hatch below.

(15) Before loads or empty lifting gear are raised, lowered, or swung, clear and sufficient advance warning shall be given to employees in the vicinity of such operations.

(16) At no time shall an employee be permitted to place himself in hazardous position between a swinging load and a fixed object.

TABLE E-1

DIMENSIONS AND SPACING OF WOOD INDEPENDENT-POLE SCAFFOLD MEMBERS

Structural Members	Light duty (Up to 25 pounds per square foot)		Heavy duty (25 to 75 pounds per square foot)			
	Height in feet		Height in feet			
	< 24	>24<40	40<60	<24	>24<40	40<60
Poles or uprights (in inches)	2x4	3x4 or 2x6	4x4	3x4	4x4	4x6
Bearers (in inches)	2x4	2x6	2x6	2x8	2x8	2x10
Ledgers (in inches)	2x6	2x6	2x6	2x8	2x8	2x8
Stringer (not supporting bearers) (in inches)	1x6	1x6	1x6	1x6	1x6	1x6
Braces (in inches)	1x4	1x6	1x6	1x6	1x6	1x6
Pole spacing—longitudinally (in feet)	7 1/2	7 1/2	7 1/2	7	7	7
Pole spacing—transversely (in feet)	6 1/2 min	7 1/2 min	8 1/2 min	6 1/2	10	10
Ledger spacing—vertically (in feet)	7	7	7	4 1/2	4 1/2	4 1/2

TABLE E-2

SPECIFICATIONS FOR SIDE RAILS OF LADDERS

Length (in feet)	Cross section (in inches)	
	At ends	At center
15	1 7/8 x 2 3/4	1 7/8 x 3 3/4
16	1 7/8 x 2 3/4	1 7/8 x 3 3/4

Rope Dia: Inches	SINGLE LEG					
	Vertical			Choker		
	A	B	C	A	B	C
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)**

[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. The following table was too wide to be accommodated in the width of the WAC column. The table as codified has been divided into two tables covering the "TWO LEG BRIDLE OR BASKET HITCH" for 6x19 Classification and for 6x37 Classification. Part One has Rope Diameter in Inches for Vertical and 60° within the two classifications. Part Two has Rope Diameter in Inches for 45° and 30° within the two classifications.]

**TWO LEG BRIDLE OR BASKET HITCH
 (TABLE G-3: Part 1 – Vertical and 60° Positions)**

Rope Dia: Inches	60°					
	Vertical			Choker		
	A	B	C	A	B	C
6X19 CLASSIFICATION						
1/4"	1.2	1.1	1.0	1.0	.97	.92
3/8"	2.6	2.5	2.3	2.3	2.1	2.0
1/2"	4.6	4.4	3.9	4.0	3.8	3.4
5/8"	7.2	6.8	6.0	6.2	5.9	5.2
3/4"	10.	9.7	8.4	8.9	8.4	7.3
7/8"	14.	13.	11.	12.	11.	9.6
1"	18.	17.	14.	15.	15.	12.
1-1/8"	23.	21.	18.	19.	18.	16.
6X37 CLASSIFICATION						
1-1/4"	26.	24.	21.	23.	21.	18.
1-3/8"	32.	29.	25.	28.	25.	22.
1-1/2"	38.	35.	30.	33.	30.	26.
1-3/4"	51.	47.	41.	44.	41.	35.
2"	66.	61.	53.	57.	53.	46.
2-1/4"	83.	76.	66.	72.	66.	57.

**TWO LEG BRIDLE OR BASKET HITCH
 (TABLE G-3: Part 2 – 45° and 30° Positions)**

Rope Dia: Inches	45°						30°					
	Vertical			Choker			Vertical			Choker		
	A	B	C	A	B	C	A	B	C	A	B	C
6X19 CLASSIFICATION												
1/4"	.83	.79	.75	.59	.56	.53						
3/8"	1.8	1.8	1.6	1.3	1.2	1.1						
1/2"	3.2	3.1	2.8	2.3	2.2	2.0						
5/8"	5.1	4.8	4.2	3.6	3.4	3.0						
3/4"	7.2	6.9	5.9	5.1	4.9	4.2						
7/8"	9.8	9.3	7.8	6.9	6.6	5.5						
1"	13.	12.	10.	9.0	8.5	7.2						
1-1/8"	16.	15.	13.	11.	10.	9.0						
6X37 CLASSIFICATION												
1-1/4"	19.	17.	15.	13.	12.	10.						
1-3/8"	22.	21.	18.	16.	15.	13.						
1-1/2"	27.	25.	21.	19.	17.	15.						
1-3/4"	36.	33.	29.	26.	24.	20.						
2"	47.	43.	37.	33.	30.	26.						
2-1/4"	58.	54.	47.	41.	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			Choker		
	A	B	C	A	B	C
6X19 CLASSIFICATION						
1/4	.55	.51	.49	.41	.38	.37
3/8	1.2	1.1	1.1	.91	.85	.80
1/2	2.1	2.0	1.8	1.6	1.5	1.4
5/8	3.3	3.1	2.8	2.5	2.3	2.1
3/4	4.8	4.4	3.9	3.6	3.3	2.9
7/8	6.4	5.9	5.1	4.8	4.5	3.9
1	8.4	7.7	6.7	6.3	5.8	5.0
1-1/8	10.	9.5	8.4	7.9	7.1	6.3
6X37 CLASSIFICATION						
1-1/4	12.	11.	9.8	9.2	8.3	7.4
1-3/8	15.	13.	12.	11.	10.	8.9
1-1/2	17.	16.	14.	13.	12.	10.
1-3/4	24.	21.	19.	18.	16.	14.
2	31.	28.	25.	23.	21.	18.

(A) – Socket or swaged terminal attachment.
 (B) – Mechanical sleeve attachment.

SINGLE LEG						
Rope Dia. Inches	Vertical			Choker		
	A	B	C	A	B	C
(C) – Hand tucked splice attachment.						

TABLE G-5

RATED CAPACITIES FOR IMPROVED PLOW STEEL, FIBER CORE, WIRE ROPE SLINGS (in tons of 2000 pounds)

[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. The following table was too wide to be accommodated in the width of the WAC column. The table as codified has been divided into two tables covering the "TWO-LEG BRIDLE OR BASKET HITCH" for 6x19 Classification and for 6x37 Classification. Part One has Rope Diameter in Inches for Vertical and 60° within the two classifications. Part Two has Rope Diameter in Inches for 45° and 30° within the two classifications.]

TWO-LEG BRIDLE OR BASKET HITCH (TABLE G-5: Part 1 – Vertical and 60° Positions)

Rope Dia. Inches	Vertical			60°		
	A	B	C	A	B	C
6X19 CLASSIFICATION						
1/4	1.1	1.0	.99	.95	.88	.85
3/8	2.4	2.2	1.9	2.1	1.9	1.8
1/2	4.3	3.9	3.7	3.7	3.4	3.2
5/8	6.7	6.2	5.6	5.8	5.3	4.8
3/4	9.5	8.8	7.8	8.2	7.6	6.8
7/8	13.	12.	10.	11.	10.	8.9
1	17.	15.	13.	14.	13.	11.
1-1/8	21.	19.	17.	18.	16.	14.
6X37 CLASSIFICATION						
1-1/4	25.	22.	20.	21.	19.	17.
1-3/8	30.	27.	24.	26.	23.	20.
1-1/2	35.	33.	28.	30.	27.	24.
1-3/4	48.	43.	38.	41.	37.	33.
2	62.	55.	49.	53.	48.	43.

TWO-LEG BRIDLE OR BASKET HITCH (TABLE G-5: Part 2 – 45° and 30° Positions)

Rope Dia. Inches	45°			30°		
	A	B	C	A	B	C
6X19 CLASSIFICATION						
1/4	.77	.72	.70	.55	.51	.49
3/8	1.7	1.6	1.5	1.2	1.1	1.1

Rope Dia. Inches	45°			30°		
	A	B	C	A	B	C
1/2	3.0	2.8	2.6	2.1	2.0	1.8
5/8	4.7	4.4	4.0	3.3	3.1	2.8
3/4	6.7	6.2	5.5	4.8	4.4	3.9
7/8	9.1	8.4	7.3	6.4	5.9	5.1
1	12.	11.	9.4	8.4	7.7	6.7
1-1/8	15.	13.	12.	10.	9.5	8.4

6X37 CLASSIFICATION

1-1/4	17.	16.	14.	12.	11.	9.8
1-3/8	21.	19.	17.	15.	13.	12.
1-1/2	25.	22.	20.	17.	16.	14.
1-3/4	34.	30.	27.	24.	21.	19.
2	43.	39.	35.	31.	28.	25.

- (A) – Socket or swaged terminal attachment.
- (B) – Mechanical sleeve attachment.
- (C) – Hand tucked splice attachment.)

TABLE ((G-6)) G-1

NUMBER AND SPACING OF U-BOLT WIRE ROPE CLIPS

Improved plow steel rope diameter inches	Number of Clips			Minimum spacing (inches)
	Drop forged	Other material		
*		
1/2	3	4		3
5/8	3	4		3 3/4
3/4	4	5		4 1/2
7/8	4	5		5 1/4
1	4	6		6
1 1/8	5	6		6 3/4
1 1/4	5	7		7 1/2
1 3/8	6	7		8 1/4
1 1/2	6	8		9

*Three clips shall be used on wire size less than 1/2-inch diameter.

((TABLE G-7

WROUGHT IRON CHAIN (in pounds or tons of 2000 pounds)

Nominal Size Chain Stock Inch	Single Leg	60°	45°	30°
* 1/4	1060	1835	1500	1060
* 5/16	1655	2865	2340	1655
3/8	2385	2.1	3370	2385
* 7/16	3250	2.8	2.3	3250

Nominal Size Chain Stock Inch	Single Leg	60°	45°	30°
1/2	12.1	13.7	13.0	12.1
* 9/16	12.7	14.6	13.8	12.7
5/8	13.3	15.7	14.7	13.3
3/4	14.8	18.3	16.7	14.8
7/8	16.5	11.2	19.2	16.5
†	18.5	14.7	12.0	18.5
1-1/8	10.0	17.3	14.2	10.0
1-1/4	12.4	21.4	17.5	12.4
1-3/8	15.0	25.9	21.1	15.0
1-1/2	17.8	30.8	25.2	17.8
1-5/8	20.9	36.2	29.5	20.9
1-3/4	24.2	42.0	34.3	24.2
1-7/8	27.6	47.9	39.1	27.6
2	31.6	54.8	44.8	31.6

*These sizes of wrought iron chain are no longer manufactured in the United States.

TABLE G-8

ALLOY STEEL CHAIN
(in tons of 2000 pounds)

Nominal Size Chain Stock Inch	Single Leg	60°	45°	30°
1/4	1.62	2.82	2.27	1.62
3/8	3.30	5.70	4.65	3.30
1/2	5.62	9.75	7.90	5.62
5/8	8.25	14.25	11.65	8.25
3/4	11.5	19.9	16.2	11.5
7/8	14.3	24.9	20.3	14.3
†	19.3	33.4	27.3	19.8
1-1/8	22.2	38.5	31.5	22.2
1-1/4	28.7	49.7	40.5	28.7
1-3/8	33.5	58.0	47.0	33.5
1-1/2	39.7	68.5	56.0	39.7
1-5/8	42.5	73.5	59.5	42.5
1-3/4	47.0	81.5	62.0	47.0))

TABLE ((G-9)) G-2

MAXIMUM ALLOWABLE WEAR AT
ANY POINT OF LINK

Chain size in inches	Maximum allowable wear in fraction of inches
1/4 (9/32)	3/64
3/8	5/64

Chain size in inches	Maximum allowable wear in fraction of inches
1/2	7/64
5/8	9/64
3/4	5/32
7/8	1/64
1	3/16
1 1/8	7/32
1 1/4	1/4
1 3/8	9/32
1 1/2	5/16
1 3/4	1/32

((TABLE G-10))

SAFE WORKING LOADS FOR SHACKLES
(in tons of 2,000 pounds)

Material size (inches)	Pin diameter (inches)	Safe working load
1/2	5/8	1.4
5/8	3/4	2.2
3/4	7/8	3.2
7/8	†	4.3
1	1-1/8	5.6
1-1/8	1-1/4	6.7
1-1/4	1-3/8	8.2
1-3/8	1-1/2	10.0
1-1/2	1-5/8	11.9
1-3/4	2	16.2
2	2-1/4	21.2))

AMENDATORY SECTION (Amending WSR 98-24-096, filed 12/1/98, effective 3/1/99)

WAC 296-307-09506 What definitions apply to this section? "Accessible" means a maximum of one-quarter mile or five minutes travel time from the worksite.

"Hand-labor operations" means agricultural operations performed by hand or with hand tools.

For example: The hand cultivation, weeding, planting or harvesting of vegetables, nuts, fruit, seedlings or other crops, including mushrooms, and hand packing into containers.

EXCEPTION: Hand-labor does not include logging operations, the care or feeding of livestock, or hand-labor operations in permanent structures (e.g., canning facilities or packing houses).

"Handwashing facility" means a facility that meets the requirements of WAC 296-307-09515 and is approved by the local health authority.

"Potable water" means water that is suitable for drinking by the public and meets the requirements of chapter 246-290 or 246-291 WAC.

"Toilet" means a fixed or portable facility designed for the purpose of adequate collection and containment of both

defecation and urination. "Toilet" includes biological, chemical, flush, and combustion toilets, or sanitary outhouses.

AMENDATORY SECTION (Amending WSR 03-18-090, filed 9/2/03, effective 11/1/03)

WAC 296-800-23025 Provide convenient and clean washing facilities.

Exemption: You do **not** have to provide washing facilities for:

- Mobile crews or work locations not normally attended by employees, if there is immediately available transportation to nearby washing facilities that meet the requirements of this rule.

You must:

- Provide convenient and clean washing facilities for employees including:
 - Sinks or basins for personal washing
 - Hot and cold water, or lukewarm (tepid), running water in each sink and basin
 - Hand soap or similar cleaning agents
 - One of the following:
 - Individual paper or cloth hand towels
 - Individual sections of clean continuous cloth toweling
 - ((Warm)) Air blowers for drying hands, located near the sinks and basins.

AMENDATORY SECTION (Amending WSR 08-18-056, filed 9/2/08, effective 11/2/08)

WAC 296-800-310 Summary. Your responsibility: To provide and maintain emergency exit routes and to install and maintain adequate employee alarm systems.

IMPORTANT:

An employer who demonstrates compliance with the exit route provisions of NFPA ((401-2000)) 101-2009, the Life Safety Code, will be in compliance with the corresponding requirements of this section.

Exit routes:

You must:

Provide an adequate number of exit routes.

WAC 296-800-31005.

Make sure that exit routes are large enough.

WAC 296-800-31010.

Make sure that exit routes meet their specific design and construction requirements.

WAC 296-800-31015.

Make sure that each exit route leads outside.

WAC 296-800-31020.

Provide unobstructed access to exit routes.

WAC 296-800-31025.

Exit doors must be readily opened from the inside.

WAC 296-800-31030.

Use side-hinged doors to connect rooms to exit routes.

WAC 296-800-31035.

Provide outdoor exit routes that meet requirements.

WAC 296-800-31040.

Minimize danger to employees while they are using emergency exit routes.

WAC 296-800-31045.

Mark exits adequately.

WAC 296-800-31050.

Provide adequate lighting for exit routes and signs.

WAC 296-800-31053.

Maintain the fire retardant properties of paints or other coatings.

WAC 296-800-31055.

Maintain emergency safeguards.

WAC 296-800-31060.

Maintain exit routes during construction and repair.

WAC 296-800-31065.

Provide doors in freezer or refrigerated rooms that open from the inside.

WAC 296-800-31067.

Employee alarm systems:

You must:

Install and maintain an appropriate employee alarm system.

WAC 296-800-31070.

Establish procedures for sounding emergency alarms.

WAC 296-800-31075.

Test the employee alarm system.

WAC 296-800-31080.

Exemption: This rule does not apply to vehicles, vessels, or other mobile structures.

Note:

The introduction has important information about building, electrical and fire codes that may apply to you in addition to WISHA rules. See "How do the WISHA rules relate to building, fire, and electrical codes" in the introduction section of this book.

AMENDATORY SECTION (Amending WSR 09-01-158, filed 12/23/08, effective 3/1/09)

WAC 296-800-370 Definitions.

Abatement action plans

Refers to your written plans for correcting a WISHA violation.

Abatement date

The date on the citation when you must comply with specific safety and health standards listed on the citation and notice of assessment or the corrective notice of redetermination.

Acceptable

As used in **Electrical, WAC 296-800-280** means an installation or equipment is acceptable to the director of labor and industries, and approved:

- If it is accepted, or certified, or listed, or labeled, or otherwise determined to be safe by a nationally recognized testing laboratory; or

- With respect to an installation or equipment of a kind which no nationally recognized testing laboratory accepts, certifies, lists, labels, or determines to be safe, if it is inspected or tested by another federal agency, or by a state, municipal, or other local authority responsible for enforcing occupational safety provisions of the National Electrical Code, and found in compliance with the provisions of the National Electrical Code as applied in this section;

OR

- With respect to custom-made equipment or related installations which are designed, fabricated for, and intended for use by a particular customer, if it is determined to be safe

for its intended use by its manufacturer on the basis of test data which the employer keeps and makes available for inspection to the director and his/her authorized representatives. Refer to federal regulation 29 CFR 1910.7 for definition of nationally recognized testing laboratory.

Accepted

As used in Electrical, WAC 296-800-280 means an installation is accepted if it has been inspected and found by a nationally recognized testing laboratory to conform to specified plans or to procedures of applicable codes.

Access

As used in material safety data sheets (MSDSs) as Exposure Records, WAC 296-800-180 means the right and opportunity to examine and copy exposure records.

Affected employees

As used in WISHA appeals, penalties and other procedural rules, WAC 296-800-350 means employees exposed to hazards identified as violations in a citation.

Analysis using exposure or medical records

• An analysis using exposure records or medical records can be any collection of data or a statistical study. It can be based on either:

- Partial or complete information from individual employee exposure or medical records or
- Information collected from health insurance claim records

• The analysis is not final until it has been:

- Reported to the employer or
- Completed by the person responsible for the analysis

ANSI

This is an acronym for the American National Standards Institute.

Approved means:

• Approved by the director of the department of labor and industries or their authorized representative, or by an organization that is specifically named in a rule, such as Underwriters' Laboratories (UL), Mine Safety and Health Administration (MSHA), or the National Institute for Occupational Safety and Health (NIOSH).

• As used in Electrical, WAC 296-800-280 means acceptable to the authority enforcing this section. The authority enforcing this section is the director of labor and industries. The definition of acceptable indicates what is acceptable to the director and therefore approved.

Assistant director

The assistant director for the WISHA services division at the department of labor and industries or his/her designated representative.

ASTM

This is an acronym for American Society for Testing and Materials.

Attachment plug or plug

As used in the basic electrical rules, WAC 296-800-280 means the attachment at the end of a flexible cord or cable that is part of a piece of electrical equipment. When it is inserted into an outlet or receptacle, it connects the conductors supplying electrical power from the outlet to the flexible cable.

Bare conductor

A conductor that does not have any covering or insulation.

Bathroom

A room maintained within or on the premises of any place of employment, containing toilets that flush for use by employees.

Biological agents

Organisms or their by-products.

Board

As used in WISHA appeals, penalties and other procedural rules, WAC 296-800-350 means the board of industrial insurance appeals.

Ceiling

An exposure limit that must not be exceeded during any part of the employee's workday. The ceiling must be determined over the shortest time period feasible and should not exceed fifteen minutes.

Certification

As used in WISHA appeals, penalties and other procedural rules, WAC 296-800-350 means refers to an employer's written statement describing when and how a citation violation was corrected.

CFR

This is an acronym for Code of Federal Regulations.

Chemical

Any element, chemical compound, or mixture of elements and/or compounds.

Chemical agents (airborne or contact)

A chemical agent is any of the following:

• Airborne chemical agent which is any of the following:

- Dust - Solid particles suspended in air, that are created by actions such as:

- Handling.
- Drilling.
- Crushing.
- Grinding.
- Rapid impact.
- Detonation.
- Decrepitation of organic or inorganic materials such as rock, ore, metal, coal, wood, and grain.

- Fume - Solid particles suspended in air, that are created by condensation from the gaseous state.

- Gas - A normally formless fluid, such as air, which can be changed to the liquid or solid state by the effect of increased pressure or decreased temperature or both.

- Mist - Liquid droplets suspended in air. Mist is created by:

- Condensation from the gaseous to the liquid state;

OR

- Converting a liquid into a dispersed state with actions such as splashing, foaming, spraying or atomizing.

- Vapor - The gaseous form of a substance that is normally in the solid or liquid state.

- Contact chemical agent which is any of the following:

- Corrosive - A substance that, upon contact, causes destruction of living tissue by chemical action, including acids with a pH of 2.5 or below or caustics with a pH of 11.0 or above.

– Irritant - A substance that will induce a local inflammatory reaction upon immediate, prolonged, or repeated contact with normal living tissue.

– Toxicant - A substance that has the inherent capacity to produce personal injury or illness to individuals by absorption through any body surface.

Chemical manufacturer

An employer with a workplace where one or more chemicals are produced for use or distribution.

Chemical name

The scientific designation of a chemical in accordance with one of the following:

- The nomenclature system developed by the International Union of Pure and Applied Chemistry (IUPAC)
- The Chemical Abstracts Service (CAS) rules of nomenclature
- A name which will clearly identify the chemical for the purpose of conducting a hazard evaluation.

Circuit breaker

• Is a device used to manually open or close a circuit. This device will also open the circuit automatically and without damage to the breaker when a predetermined overcurrent is applied. (600 volts nominal or less)

• Is a switching device capable of making, carrying, and breaking currents under normal circuit conditions, and also making, carrying for a specified time, and breaking currents under specified abnormal circuit conditions, such as those of short circuit. (Over 600 volts nominal)

Citation

Refers to the citation and notice issued to an employer for any violation of WISHA safety and health rules. A citation and notice may be referred to as a citation and notice of assessment but is more commonly referred to as a citation.

Combustible liquid

A combustible liquid has a flashpoint of at least 100°F (37.8°C) and below 200°F (93.3°C). Mixtures with at least 99% of their components having flashpoints of 200°F (93.3°C) or higher are not considered combustible liquids.

Commercial account

As used in Employer Chemical Hazard Communication, WAC 296-800-170 means an arrangement in which a retail distributor sells hazardous chemical(s) to an employer, generally in large quantities over time, and/or at costs that are below the regular retail price.

Common name

As used in Employer Chemical Hazard Communication, WAC 296-800-170 means any designation or identification such as:

- Code name
- Code number
- Trade name
- Brand name
- Generic name used to identify a chemical other than by its chemical name.

Compressed gas

A gas or mixture of gases that, when in a container, has an absolute pressure exceeding:

- 40 psi at 70°F (21.1°C)

OR

- 104 psi at 130°F (54.4°C) regardless of the pressure at 70°F (21.1°C)

Compressed gas can also mean a liquid with a vapor pressure that exceeds 40 psi at 100°F (37.8°C)

Conductor

A wire that transfers electric power.

Container

As used in Employer Chemical Hazard Communication, WAC 296-800-170 means any container, except for pipes or piping systems, that contains a hazardous chemical. It can be any of the following:

- Bag
- Barrel
- Bottle
- Box
- Can
- Cylinder
- Drum
- Reaction vessel
- Storage tank

Correction date

The date by which a violation must be corrected. Final orders or extensions that give additional time to make corrections establish correction dates. A correction date established by an order of the board of industrial insurance appeals remains in effect during any court appeal unless the court suspends the date.

Corrective notice

Refers to a notice changing a citation and is issued by the department after a citation has been appealed.

Corrosive

A substance that, upon contact, causes destruction of living tissue by chemical action, including acids with a pH of 2.5 or below or caustics with a pH of 11.0 or above.

Covered conductor

A conductor that is covered by something else besides electrical insulation.

Damp location

As used in basic electrical rules, WAC 296-800-280 means partially protected areas that are exposed to moderate moisture. Outdoor examples include roofed open porches and marquees. Interior examples include basements and barns.

Department

Those portions of the department of labor and industries responsible for enforcing the Washington Industrial Safety Act (WISHA).

Designated representative

- Any individual or organization to which an employee gives written authorization.
- A recognized or certified collective bargaining agent without regard to written authorization.
- The legal representative of a deceased or legally incapacitated employee.

Director

The director means the director of the department of labor and industries or their designee.

Distributor

A business, other than a chemical manufacturer or importer, that supplies hazardous chemicals to other distributors or to employers.

Documentation

As used in WISHA appeals, penalties and other procedural rules, WAC 296-800-350 means material that you submit to prove that a correction is completed. Documentation includes, but is not limited to, photographs, receipts for materials and/or labor.

Dry location

As used in basic electrical rules, WAC 296-800-280 means areas not normally subjected to damp or wet conditions. Dry locations may become temporarily damp or wet, such as when constructing a building.

Dust

Solid particles suspended in air that are created by actions such as:

- Handling.
- Drilling.
- Crushing.
- Grinding.
- Rapid impact.
- Detonation.
- Decrepitation of organic or inorganic materials such as rock, ore, metal, coal, wood, and grain.

Emergency washing facilities

Emergency washing facilities are emergency showers, eyewashes, eye/face washes, hand-held drench hoses, or other similar units.

Electrical outlets

Places on an electric circuit where power is supplied to equipment through receptacles, sockets, and outlets for attachment plugs.

Employee

Based on chapter 49.17 RCW, the term employee and other terms of like meaning, unless the context of the provision containing such term indicates otherwise, means an employee of an employer who is employed in the business of his or her employer whether by way of manual labor or otherwise and every person in this state who is engaged in the employment of or who is working under an independent contract the essence of which is personal labor for an employer under this standard whether by way of manual labor or otherwise.

Employee exposure record

As used in material safety data sheets (MSDSs) as exposure records, WAC 296-800-180 means a record containing any of the following kinds of information:

- Environmental (workplace) monitoring or measuring of a toxic substance or harmful physical agent, including personal, area, grab, wipe, or other form of sampling, as well as related collection and analytical methodologies, calculations, and other background data relevant to interpretation of the results obtained;
- Biological monitoring results which directly assess the absorption of a toxic substance or harmful physical agent by body systems (e.g., the level of a chemical in the blood, urine, breath, hair, fingernails, etc.) but not including results which assess the biological effect of a substance or agent or which assess an employee's use of alcohol or drugs;

- Material safety data sheets indicating that the material may pose a hazard to human health;

OR

- In the absence of the above, a chemical inventory or any other record which reveals where and when used and the identity (e.g., chemical, common or trade name) of a toxic substance or harmful physical agent.

Employer

Based on chapter 49.17 RCW, an employer is any person, firm, corporation, partnership, business trust, legal representative, or other business entity which engages in any business, industry, profession, or activity in this state and employs one or more employees or who contracts with one or more persons, the essence of which is the personal labor of such person or persons and includes the state, counties, cities, and all municipal corporations, public corporations, political subdivisions of the state, and charitable organizations: Provided, That any persons, partnership, or business entity not having employees, and who is covered by the Industrial Insurance Act must be considered both an employer and an employee.

Exit

Provides a way of travel out of the workplace.

Exit route

A continuous and unobstructed path of exit travel from any point within a workplace to safety outside.

Explosive

A chemical that causes a sudden, almost instant release of pressure, gas, and heat when exposed to a sudden shock, pressure, or high temperature.

Exposed live parts

Electrical parts that are:

- Not suitably guarded, isolated, or insulated

AND

- Capable of being accidentally touched or approached closer than a safe distance.

Exposed wiring methods

Involve working with electrical wires that are attached to surfaces or behind panels designed to allow access to the wires.

Exposure or exposed

As used in employer chemical hazard communication, WAC 296-800-170 and material safety data sheets (MSDSs) as exposure records, WAC 296-800-180. An employee has been, or may have possibly been, subjected to a hazardous chemical, toxic substance or harmful physical agent while working. An employee could have been exposed to hazardous chemicals, toxic substances, or harmful physical agents in any of the following ways:

- Inhalation
- Ingestion
- Skin contact
- Absorption
- Related means.

The terms exposure and exposed only cover workplace exposure involving a toxic substance or harmful physical agent in the workplace different from typical nonoccupational situations in the way it is:

- Used
- Handled

- Stored
- Generated
- Present

Exposure record

See definition for employee exposure record.

Extension ladder

A portable ladder with 2 or more sections and is not self-supporting. The 2 or more sections travel in guides or brackets that let you change the length. The size of a portable ladder is determined by adding together the length of each section.

Failure-to-abate

Any violation(s) resulting from not complying with an abatement date.

Final order

Any of the following (unless an employer or other party files a timely appeal):

- Citation and notice;
- Corrective notice;
- Decision and order from the board of industrial insurance appeals;
- Denial of petition for review from the board of industrial insurance appeals; or
- Decision from a Washington State superior court, court of appeals, or the state supreme court.

Final order date

The date a final order is issued.

First aid

The extent of treatment you would expect from a person trained in basic first aid, using supplies from a first-aid kit.

Tests, such as X rays, must not be confused with treatment.

Flammable

A chemical covered by one of the following categories:

- Aerosol flammable means an aerosol that, when tested by the method described in 16 CFR 1500.45 yields either a flame projection more than 18 inches at full valve opening or a flashback (a flame extending back to the valve) at any degree of valve opening;

- Gas, flammable means:

- A gas that, at temperature and pressure of the surrounding area, forms a flammable mixture with air at a concentration of 13% by volume or less or

- A gas that, at temperature and pressure of the surrounding area, forms a range of flammable mixtures with air wider than 12% by volume, regardless of the lower limit.

- Liquid, flammable means 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% or more of the total volume of the mixture.

- Solid, flammable means a solid, other than a blasting agent or explosive as defined in 29 CFR 1910.109(a), that is likely to cause fire through friction, moisture absorption, spontaneous chemical change, or retained heat from manufacturing or processing, or which can be ignited readily. Solid, inflammable also means that when the substance is ignited, it burns so powerfully and persistently that it creates a serious hazard. A chemical must 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.

Flashpoint

- The minimum temperature at which a liquid gives off a vapor in sufficient concentration to ignite when tested by any of the following measurement methods:

- 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

- 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

- Setaflash closed tester: (See American National Standard Method of Test for Flash Point by Setaflash Closed Tester (ASTM D 3278-78).)

Note: Organic peroxides, which undergo auto accelerating thermal decomposition, are excluded from any of the flashpoint measurement methods specified above.

Flexible cords and cables

Typically used to connect electrical equipment to an outlet or receptacle. These cords can have an attachment plug to connect to a power source or can be permanently wired into the power source. Flexible cords, extension cords, cables and electrical cords are all examples of flexible cord.

Floor hole

An opening in any floor, platform, pavement, or yard that measures at least one inch but less than 12 inches at its smallest dimension and through which materials and tools (but not people) can fall.

Examples of floor holes are:

- Belt holes
- Pipe openings
- Slot openings

Floor opening

An opening in any floor, platform, pavement, or yard that measures at least 12 inches in its smallest dimension and through which a person can fall.

Examples of floor openings are:

- Hatchways
- Stair or ladder openings
- Pits
- Large manholes

The following are NOT considered floor openings:

- Openings occupied by elevators
- Dumbwaiters
- Conveyors
- Machinery
- Containers

Foreseeable emergency

As used in Employer Chemical Hazard Communication, WAC 296-800-170 means any potential event that could result in an uncontrolled release of a hazardous chemical into

the workplace. Examples of foreseeable emergencies include equipment failure, rupture of containers, or failure of control equipment.

Fume

Solid particles suspended in air that are created by condensation from the gaseous state.

Gas

A normally formless fluid, such as air, which can be changed to the liquid or solid state by the effect of increased pressure or decreased temperature or both.

Ground

As used in Electrical, WAC 296-800-280, a connection between an electrical circuit or equipment and the earth or other conducting body besides the earth. This connection can be intentional or accidental.

Grounded

A connection has been made between an electrical circuit or equipment and the earth or another conducting body besides the earth.

Grounded conductor

A system or circuit conductor that is intentionally grounded.

Ground-fault circuit-interrupter

A device whose function is to interrupt the electric circuit to the load when a fault current to ground exceeds some predetermined value that is less than that required to operate the overcurrent protective device of the supply circuit.

Grounding conductor

Is used to connect equipment or the grounded circuit of a wiring system to a grounding electrode or electrodes.

Grounding conductor, equipment

A conductor used to connect noncurrent-carrying metal parts of equipment, raceways, and other enclosures to the system grounded conductor and/or the grounding electrode conductor at the service equipment or at the source of a separately derived system.

Guarded

Covered, shielded, fenced, enclosed, or otherwise protected by means of suitable covers, casings, barriers, rails, screens, mats, or platforms to remove the likelihood of being accidentally touched or approached closer than a safe distance.

Hand-held drench hoses

Hand-held drench hoses are single-headed emergency washing devices connected to a flexible hose that can be used to irrigate and flush the face or other body parts.

Handrail

A single bar or pipe supported on brackets from a wall or partition to provide a continuous handhold for persons using a stair.

Harmful physical agent

Any physical stress such as noise, vibration, repetitive motion, heat, cold, ionizing and nonionizing radiation, and hypo- or hyperbaric pressure which:

- Is listed in the latest edition of the National Institute for Occupational Safety and Health (NIOSH) *Registry of Toxic Effects of Chemical Substances* (RTECS); or
- Has shown positive evidence of an acute or chronic health hazard in testing conducted by, or known to, the employer;

OR

• Is the subject of a material safety data sheet kept by or known to the employer showing that the material may pose a hazard to human health.

Hazard

Any condition, potential or inherent, which can cause injury, death, or occupational disease.

Hazard warning

As used in Employer Chemical Hazard Communication, WAC 296-800-170 can be a combination of words, pictures, symbols, or combination appearing on a label or other appropriate form of warning which shows the specific physical and health hazard(s), including target organ effects, of the chemical(s) in the container(s).

Note: See definition for physical hazard and health hazard to determine which hazards must be covered.

Hazardous chemical

Any chemical that is a physical or health hazard.

Health hazard

A chemical, mixture, biological agent, or physical agent that may cause health effects in short- or long-term exposed employees. Based on statistically significant evidence from at least one study conducted using established scientific principles. Health hazards include:

- Carcinogens
- Toxic or highly toxic agents
- Reproductive toxins
- Irritants
- Corrosives
- Sensitizers
- Hepatotoxins (liver toxins)
- Nephrotoxins (kidney toxins)
- Neurotoxins (nervous system toxins)
- Substances that act on the hematopoietic system (blood or blood-forming system)
 - Substances that can damage the lungs, skin, eyes, or mucous membranes
 - Hot or cold conditions.

Hospitalization

To be admitted to a hospital or an equivalent medical facility on an emergent in-patient basis requiring an overnight stay.

Identity

As used in Employer Chemical Hazard Communication, WAC 296-800-170 means any chemical or common name listed on the material safety data sheet (MSDS) for the specific chemical. Each identity used must allow cross-references among the:

- Required list of hazardous chemicals
- Chemical label
- MSDSs

Imminent danger violation

Any violation(s) resulting from conditions or practices in any place of employment, which are such that a danger exists which could reasonably be expected to cause death or serious physical harm, immediately or before such danger can be eliminated through the enforcement procedures otherwise provided by the Washington Industrial Safety and Health Act.

Importer

The first business within the Customs Territory of the USA that:

- Receives hazardous chemicals produced in other countries

AND

- Supplies them to distributors or employers within the USA

Insulated

A conductor has been completely covered by a material that is recognized as electrical insulation and is thick enough based on:

- The amount of voltage involved

AND

- The type of covering material

Interim waiver

An order granted by the department allowing an employer to vary from WISHA requirements until the department decides to grant a permanent or temporary waiver.

Irritant

A substance that will induce a local inflammatory reaction upon immediate, prolonged, or repeated contact with normal living tissue.

Ladder

Consists of 2 side rails joined at regular intervals by crosspieces called steps, rungs, or cleats. These steps are used to climb up or down.

Listed

Equipment is listed if it:

- Is listed in a publication by a nationally recognized laboratory (such as UL, underwriters laboratory) that inspects the production of that type of equipment,

AND

- States the equipment meets nationally recognized standards or has been tested and found safe to use in a specific manner.

Material safety data sheet (MSDS)

Written, printed, or electronic information (on paper, microfiche, or on-screen) that informs manufacturers, distributors, employers or employees about a hazardous chemical, its hazards, and protective measures as required by material safety data sheet and label preparation, chapter 296-839 WAC.

Medical treatment

Treatment provided by a physician or by registered professional personnel under the standing orders of a physician. Medical treatment does not include first-aid treatment even if provided by a physician or registered professional personnel.

Mist

Liquid droplets suspended in air. Mist is created by:

- Condensation from the gaseous to the liquid state;

OR

- Converting a liquid into a dispersed state with actions such as splashing, foaming, spraying or atomizing.

Mixture

As used in Employer Chemical Hazard Communication, WAC 296-800-170, any combination of 2 or more chemicals (if that combination did not result from a chemical reaction).

Movable equipment

As used in WAC 296-800-35052, a hand-held or non-hand-held machine or device;

- That is powered or nonpowered;

AND

- Can be moved within or between worksites

Must

Must means mandatory.

NEMA

These initials stand for National Electrical Manufacturing Association.

NFPA

This is an acronym for National Fire Protection Association.

Nose

The portion of the stair tread that projects over the face of the riser below it.

Occupational Safety and Health Administration (OSHA)

Created in 1970 when the U.S. Congress passed the Occupational Safety and Health Act, the Occupational Safety and Health Administration (OSHA) provides safety on the job for workers. OSHA oversees state plans (such as WISHA in Washington) that have elected to administer the safety and health program for their state. OSHA requires WISHA rules to be at least as effective as OSHA rules.

Office work environment

An indoor or enclosed occupied space where clerical work, administration, or business is carried out.

In addition, it includes:

- Other workplace spaces controlled by the employer and used by office workers, such as cafeterias, meeting rooms, and washrooms.

- Office areas of manufacturing and production facilities, not including process areas.

- Office areas of businesses such as food and beverage establishments, agricultural operations, construction, commercial trade, services, etc.

Open riser

A stair step with an air space between treads has an open riser.

Organic peroxide

This is an organic compound containing the bivalent-O-O-structure. It may be considered a structural derivative of hydrogen peroxide if one or both of the hydrogen atoms has been replaced by an organic radical.

Outlet

See definition for electrical outlets.

Oxidizer

A chemical other than a blasting agent or explosive as defined in WAC 296-52-60130 or CFR 1910.109(a), that starts or promotes combustion in other materials, causing fire either of itself or through the release of oxygen or other gases.

Permissible exposure limits (PELs)

Permissible exposure limits (PELs) are employee exposures to toxic substances or harmful physical agents that must not be exceeded. PELs are specified in applicable WISHA rules.

Person

Based on chapter 49.17 RCW, one or more individuals, partnerships, associations, corporations, business trusts, legal representatives, or any organized group of persons.

Personal eyewash units

Personal eyewash units are portable, supplementary units that support plumbed units or self-contained units, or both, by delivering immediate flushing for less than fifteen minutes.

Personal service room

Used for activities not directly connected with a business' production or service function such as:

- First aid
- Medical services
- Dressing
- Showering
- Bathrooms
- Washing
- Eating

Personnel

See the definition for employees.

Physical hazard

As used in Employer Chemical Hazard Communication, WAC 296-800-170 means a chemical that has scientifically valid evidence to show it is one of the following:

- Combustible liquid
- Compressed gas
- Explosive
- Flammable
- Organic peroxide
- Oxidizer
- Pyrophoric
- Unstable (reactive)
- Water reactive

Platform

Platform means an extended step or landing that breaks a continuous run of stairs.

Plug

See definition for attachment plug.

Potable water

~~Water that ((you can safely drink. It meets specific safety standards prescribed by the United States Environmental Protection Agency's National Interim Primary Drinking Water Regulations, published in 40 CFR Part 141, and 40 CFR 147.2400)) is suitable for drinking by the public and meets the requirements of chapter 246-290 or 246-291 WAC.~~

Predictable and regular basis

Employee functions such as, but not limited to, inspection, service, repair and maintenance which are performed

- At least once every 2 weeks

OR

• 4 man-hours or more during any sequential 4-week period (to calculate man-hours multiply the number of employees by the number of hours during a 4-week period).

Produce

As used in Employer Chemical Hazard Communication, WAC 296-800-170, any one of the following:

- Manufacture
- Process
- Formulate

- Blend
- Extract
- Generate
- Emit
- Repackage

Purchaser

As used in Employer Chemical Hazard Communication, WAC 296-800-170, an employer who buys one or more hazardous chemicals to use in their workplace.

Pyrophoric

A chemical is pyrophoric if it will ignite spontaneously in the air when the temperature is 130°F (54.4°C) or below.

Qualified person

A person who has successfully demonstrated the ability to solve problems relating to the subject matter, work, or project, either by:

- Possession of a recognized degree, certificate, or professional standing;

OR

- Extensive knowledge, training and experience.

Railing or standard railing

A vertical barrier erected along exposed edges of a floor opening, wall opening, ramp, platform, or runway to prevent falls of persons.

Reassume jurisdiction

The department has decided to take back its control over a citation and notice being appealed.

Receptacle or receptacle outlet

As used in basic electrical rules, WAC 296-800-280 means outlets that accept a plug to supply electric power to equipment through a cord or cable.

Record

A record is any item, collection, or grouping of information. Examples include:

- Paper document
- Microfiche
- Microfilm
- X-ray film
- Computer record

Repeat violation

A violation is a repeat violation if the employer has been cited one or more times previously for a substantially similar hazard.

~~Refuge area~~

~~• A protected space along an exit route that is separated from other spaces inside the building by a barrier with at least a one-hour fire resistance rating;~~

~~OR~~

~~• A floor in a building with an automatic sprinkler system that has at least two spaces that are separated by smoke-resistant partitions. See WAC 296-24-607 for requirements for automatic sprinkler systems.))~~ **Refuge area**

• A protected space along an exit route that is separated from other spaces inside the building by a barrier with at least a one-hour fire resistance rating;

OR

• A floor in a building with an automatic sprinkler system that has at least two spaces that are separated by smoke-resistant partitions. See WAC 296-24-607 for requirements for automatic sprinkler systems.

Responsible party

As used in employer chemical hazard communication, WAC 296-800-170. Someone who can provide appropriate information about the hazardous chemical and emergency procedures.

Rise

The vertical distance from the top of a tread to the top of the next higher tread.

Riser

The vertical part of the step at the back of a tread that rises to the front of the tread above.

Rungs

Rungs are the cross pieces on ladders that are used to climb up and down the ladder.

Runway

An elevated walkway above the surrounding floor or ground level. Examples of runways are footwalks along shafting or walkways between buildings.

Safety factor

The term safety factor means the ratio of when something will break versus the actual working stress or safe load when it is used.

Self-lighting or self-luminous

A light source that:

• Is illuminated by a self-contained power source other than batteries;

AND

• Operates independently from external power sources.

Serious violation

Serious violation must be deemed to exist in a workplace if there is a substantial probability that death or serious physical harm could result from a condition which exists, or from one or more practices, means, methods, operations, or processes which have been adopted or are in use in such workplace, unless the employer did not, and could not with the exercise of reasonable diligence, know of the presence of the violation.

~~((Self-lighting or self-luminous~~

~~A light source that:~~

~~• Is illuminated by a self-contained power source other than batteries;~~

~~AND~~

~~• Operates independently from external power sources.))~~

Short-term exposure limit (STEL)

An exposure limit, averaged over a short time period (usually measured for 15 minutes) that must not be exceeded during any part of an employee's workday.

Should

Should means recommended.

Single ladder

A type of portable ladder with one section.

It is distinguished by all of the following:

- It has one section
- It cannot support itself
- Its length cannot be adjusted

Smoking

A person is smoking if they are:

- Lighting up
- Inhaling

- Exhaling

- Carrying a pipe, cigar or cigarette of any kind that is burning

Specific chemical identity

This term applies to chemical substances. It can mean the:

- Chemical name
- Chemical Abstracts Service (CAS) registry number
- Any other information that reveals the precise chemical designation of the substance.

Stair railing

A vertical barrier attached to a stairway with an open side to prevent falls. The top surface of the stair railing is used as a handrail

Stairs or stairway

A series of steps and landings:

- Leading from one level or floor to another,
- Leading to platforms, pits, boiler rooms, crossovers, or around machinery, tanks, and other equipment
 - Used more or less continuously or routinely by employees, or only occasionally by specific individuals.
 - With three or more risers

Standard safeguard

Safety devices that prevent hazards by their attachment to:

- Machinery
- Appliances
- Tools
- Buildings
- Equipment

These safeguards must be constructed of:

- Metal
- Wood
- Other suitable materials

The department makes the final determination about whether a safeguard is sufficient for its use.

Step ladder

A portable ladder with:

- Flat steps
- A hinge at the top allowing the ladder to fold out and support itself
- Its length that cannot be adjusted.

Time weighted average (TWA₈)

An exposure limit, averaged over 8 hours, that must not be exceeded during an employee's work shift.

Toeboard

A barrier at floor level along exposed edges of a floor opening, wall opening, platform, runway, or ramp, to prevent falls of materials.

Toxic chemical

As used in first aid, WAC 296-800-150, is a chemical that produces serious injury or illness when absorbed through any body surface.

Toxic substance

Any chemical substance or biological agent, such as bacteria, virus, and fungus, which is any of the following:

- Listed in the latest edition of the National Institute for Occupational Safety and Health (NIOSH) *Registry of Toxic Effects of Chemical Substances* (RTECS)

- Shows positive evidence of an acute or chronic health hazard in testing conducted by, or known to, the employer
- The subject of a material safety data sheet kept by or known to the employer showing the material may pose a hazard to human health.

Toxicant

A substance that has the inherent capacity to produce personal injury or illness to individuals by absorption through any body surface.

Trade secret

Any confidential:

- Formula
- Pattern
- Process
- Device
- Information
- Collection of information

The trade secret is used in an employer's business and gives an opportunity to gain an advantage over competitors who do not know or use it.

See WAC 296-62-053 for requirements dealing with trade secrets.

Tread

As used in stairs and stair railings, WAC 296-800-250 means the horizontal part of the stair step.

Tread run

As used in stairs and stair railings, WAC 296-800-250 means the distance from the front of one stair tread to the front of an adjacent tread.

Tread width

The distance from front to rear of the same tread including the nose, if used.

UL (Underwriters' Laboratories, Inc.)

You will find these initials on electrical cords and equipment. The initials mean the cord or equipment meets the standards set by the Underwriters' Laboratories, Inc.

Unstable (reactive)

As used in employer chemical hazard communication, WAC 296-800-170. An unstable or reactive chemical is one that in its pure state, or as produced or transported, will vigorously polymerize, decompose, condense, or will become self-reactive under conditions of shocks, pressure or temperature.

Use

As used in employer chemical hazard communication, WAC 296-800-170, means to:

- Package
- Handle
- React
- Emit
- Extract
- Generate as a by-product
- Transfer.

Vapor

The gaseous form of a substance that is normally in the solid or liquid state.

Voltage of a circuit

The greatest effective potential difference between any two conductors or between a conductor and ground.

Voltage to ground

The voltage between a conductor and the point or conductor of the grounded circuit. For undergrounded circuits, it is the greatest voltage between the conductor and any other conductor of the circuit.

Voltage, nominal

Nominal voltage is a value assigned to a circuit or system to designate its voltage class (120/240, 480Y/277, 600, etc.). The actual circuit voltage can vary from the value if it is within a range that permits the equipment to continue operating in a satisfactory manner.

WAC

This is an acronym for **Washington Administrative Code**, which are rules developed to address state law.

Water-reactive

As used in Employer Chemical Hazard Communication, WAC 296-800-170, a water-reactive chemical reacts with water to release a gas that is either flammable or presents a health hazard.

Watertight

Constructed so that moisture will not enter the enclosure or container.

Weatherproof

Constructed or protected so that exposure to the weather will not interfere with successful operation. Rainproof, rain-tight, or watertight equipment can fulfill the requirements for weatherproof where varying weather conditions other than wetness, such as snow, ice, dust, or temperature extremes, are not a factor.

Wet location

As used in basic electrical rules, WAC 296-800-280 means:

- Underground installations or in concrete slabs or masonry that are in direct contact with the earth
- Locations that can be saturated by water or other liquids
- Unprotected locations exposed to the weather (like vehicle washing areas)

WISHA

This is an acronym for the Washington Industrial Safety and Health Act.

Work area

As used in employer chemical hazard communication, WAC 296-800-170, a room or defined space in a workplace where hazardous chemicals are produced or used, and where employees are present.

Working days

Means a calendar day, except Saturdays, Sundays, and legal holidays. Legal holidays include:

- New Year's Day - January 1
- Martin Luther King, Jr. Day
- Presidents' Day
- Memorial Day
- Independence Day - July 4
- Labor Day
- Veterans' Day - November 11
- Thanksgiving Day
- The day after Thanksgiving Day; and
- Christmas Day - December 25

The number of working days must be calculated by not counting the first working day and counting the last working day.

Worker

See the definition for employee.

Workplace

• The term workplace means:

– Any plant, yard, premises, room, or other place where an employee or employees are employed for the performance of labor or service over which the employer has the right of access or control, and includes, but is not limited to, all workplaces covered by industrial insurance under Title 51 RCW, as now or hereafter amended.

– As used in Employer Chemical Hazard Communication, WAC 296-800-170 means an establishment, job site, or project, at one geographical location containing one or more work areas.

You

See definition of employer.

Your representative

Your representative is the person selected to act in your behalf.

AMENDATORY SECTION (Amending WSR 04-10-026, filed 4/27/04, effective 8/1/04)

WAC 296-802-60005 Transfer or dispose of employee medical and exposure records when you go out of business.

You must:

• Follow the requirements in Table 1 when transferring or disposing of records.

**Table 1
Transfer or Disposal of Records**

If	Then
Another employer continues the business when you go out of business	Transfer all employee records to that employer
No other employer continues the business when you go out of business	<p>((Do the following:</p> <p>–)) Notify affected current employees of their rights of access to records at least three months prior to the termination of your business</p> <p>((AND EITHER:</p> <p>–Notify WISHA in writing of your impending decision to dispose of records at least three months prior to your planned disposal;</p> <p>OR</p>

**Table 1
Transfer or Disposal of Records**

If	Then
	–Transfer the records to WISHA, if required by a specific WISHA safety and health rule
You intend to dispose of records after the retention period has expired Note: If you dispose of records on a regular basis, you may notify WISHA once annually, at least three months before your first disposal, with the schedule of your planned disposals for the year	<p>•Do the following:</p> <p>–Notify WISHA in writing of your impending decision to dispose of records at least three months prior to your planned disposal;</p> <p>OR</p> <p>–Transfer the records to WISHA, if required by a specific WISHA safety and health rule</p>

Note: The address to notify WISHA in writing is:
Department of Labor & Industries/WISHA Services
Attention: Medical Records
P.O. Box 44610
Olympia, WA 98504 4610))

AMENDATORY SECTION (Amending WSR 04-12-070, filed 6/1/04, effective 9/1/04)

WAC 296-823-200 Definitions.

Blood

Human blood, human blood components and products made from human blood. Also included are medications derived from blood, such as immune globulins, albumin, and factors 8 and 9.

Bloodborne pathogens

Pathogenic microorganisms that are present in human blood and can cause disease in humans. Examples of these pathogens include:

- Human immunodeficiency virus (HIV)
- Hepatitis B virus (HBV)
- Hepatitis C virus, malaria
- Syphilis
- Babesiosis
- Brucellosis
- Leptospirosis
- Arboviral infections
- Relapsing fever
- Creutzfeld-Jakob Disease
- Human T-lymphotrophic virus Type I
- Viral Hemorrhagic Fever.

Clinical laboratory

A workplace where diagnostic or other screening procedures are performed on blood or other potentially infectious materials (OPIM).

Contaminated

The presence or the reasonably anticipated presence of blood or other potentially infectious materials (OPIM) on an item or surface.

Contaminated laundry

Laundry that has been soiled with blood or other potentially infectious materials (OPIM) or may contain contaminated sharps.

Contaminated sharps

Any contaminated object that can penetrate the skin including, but not limited to, needles, scalpels, broken glass, broken capillary tubes, and exposed ends of dental wires.

Decontamination

The use of physical or chemical means to remove, inactivate, or destroy bloodborne pathogens on a surface or item to the point where they are no longer capable of transmitting infectious particles and the surface or item is rendered safe for handling, use, or disposal.

Exposure incident

A specific eye, mouth, other mucous membrane, nonintact skin or parenteral contact with blood or other potentially infectious materials (OPIM) that results from the performance of an employee's duties. Examples of nonintact skin include skin with dermatitis, hangnails, cuts, abrasions, chafing, or acne.

Handwashing facilities

A facility providing an adequate supply of running potable water, soap and single use towels or ((hot)) air drying machines.

Licensed healthcare professional

A person whose legally permitted scope of practice allows him or her to independently perform the activities required by this rule.

Needleless systems

A device that does not use needles for any of the following:

- The collection of bodily fluids or withdrawal of body fluids after initial venous or arterial access is established
- The administration of medication or fluids
- Any other procedure involving the potential for occupational exposure to bloodborne pathogens due to percutaneous injuries from contaminated sharps.

Occupational exposure

Reasonably anticipated skin, eye, mucous membrane, or parenteral contact with blood or OPIM that may result from the performance of an employee's duties.

Other potentially infectious materials (OPIM)

Includes all of the following:

- Human body fluids: Semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, pericardial fluid, peritoneal fluid, amniotic fluid, saliva in dental procedures, any body fluid that is visibly contaminated with blood, and all body fluids in situations where it is difficult or impossible to differentiate between body fluids((:))
- Any unfixed tissue or organ (other than intact skin) from a human (living or dead)((:))
- HIV-containing cell or tissue cultures, organ cultures, and HIV- or HBV-containing culture medium or other solutions; and blood, organs, or other tissues from experimental animals infected with HIV or HBV

- Blood and tissues of experimental animals infected with bloodborne pathogens.

Parenteral contact

When mucous membranes or skin is pierced by needlesticks, human bites, cuts, or abrasions.

Personal protective equipment (PPE)

Specialized clothing or equipment worn by an employee for protection against a hazard. General work clothes (for example, uniforms, pants, shirts, or blouses) not intended to function as protection against a hazard are not considered to be PPE.

Production facility

A facility engaged in industrial-scale, large-volume or high concentration production of HIV or HBV.

Regulated waste

Regulated waste is any of the following:

- Liquid or semiliquid blood or other potentially infectious materials (OPIM)
- Contaminated items that would release blood or OPIM in a liquid or semiliquid state, if compressed
- Items that are caked with dried blood or OPIM and are capable of releasing these materials during handling
- Contaminated sharps
- Pathological and microbiological wastes containing blood or OPIM.

Research laboratory

A laboratory producing or using research-laboratory-scale amounts of HIV or HBV. Research laboratories may produce high concentrations of HIV or HBV but not in the volume found in production facilities.

Safer medical devices

Medical devices that have been engineered to reduce the risk of needlesticks and other contaminated sharps injuries. These include not only sharps with engineered sharps injury protections and needleless systems but also other medical devices designed to reduce the risk of sharps injury exposures to bloodborne pathogens. Examples include blunt suture needles and plastic or mylar-wrapped glass capillary tubes.

Secondary duty

Any job expectation outside the primary job duties assigned to that position.

Sharps with engineered sharps injury protections (SESIP)

A nonneedle sharp or a needle device used for withdrawing body fluids, accessing a vein or artery, or administering medications or other fluids, with a built-in safety feature or mechanism that effectively reduces the risk of an exposure incident.

Source person

A person, living or dead, whose blood or other potentially infectious materials may be a source (OPIM) of occupational exposure to the employee. Examples include:

- Hospital and clinic patients
- Clients in institutions for the developmentally disabled
- Trauma victims
- Clients of drug and alcohol treatment facilities
- Residents of hospices and nursing homes
- Human remains
- Individuals who donate or sell blood or blood components.

Standard microbiological practices

Standard microbiological practices refer to procedures comparable to those outlined in the current edition of the Center for Disease Control "Biosafety in Microbiological and Biomedical Laboratories."

Sterilize

The use of a physical or chemical procedure to destroy all microbial life including highly resistant bacterial endospores.

Universal precautions

An approach to infection control. According to the concept of universal precautions, all human blood and certain human body fluids are treated as if known to be infectious for HIV, HBV, and other bloodborne pathogens.

Note: Universal Blood-Body Fluid Precautions, Body Substance Isolation, and Standard Precautions expand on the concept of universal precautions to include all body fluids and substances as infectious. These concepts are acceptable alternatives to universal precautions.

AMENDATORY SECTION (Amending WSR 09-19-119, filed 9/22/09, effective 12/1/09)

WAC 296-842-13005 Select and provide appropriate respirators.

Exemption: This section does NOT apply to respirator use that is voluntary. See WAC 296-842-11005 for voluntary use program requirements.

IMPORTANT:

See chapter 296-841 WAC, Airborne contaminants, for:

- Hazard evaluation requirements. Evaluation results are necessary for respirator selection.
- References to substance-specific rules that may also apply to you and have additional respirator selection requirements. These references are found in the permissible exposure limit (PEL) table.

A respirator shall be provided to each employee when such equipment is necessary to protect the health of the employee. Select and provide, at no cost to employees, appropriate respirators for routine use, infrequent use, and reasonably foreseeable emergencies (such as escape, emergency, and spill response situations) by completing the following process:

Respirator Selection Process

Step 1: If your only respirator use is for escape, skip to **Step 8** to select appropriate respirators.

Step 2: If the respiratory hazard is a biological aerosol, such as TB (tuberculosis), anthrax, psittacosis (parrot fever), or hanta virus, select a respirator appropriate for **nonemergency** activities recognized to present a health risk to workers AND skip to **Step 8**.

- If respirator use will occur during **emergencies**, skip to **Step 8** and document the analysis used to select the appropriate respirator.

- Use Centers for Disease Control (CDC) selection guidance for exposures to specific biological agents when this guidance exists. Visit <http://www.cdc.gov>.

Step 3: If the respiratory hazard is a pesticide, follow the respirator specification on the pesticide label AND skip to **Step 9**.

Step 4: Determine the expected exposure concentration for each respiratory hazard of concern. Use the results from the evaluation required by chapter 296-841 WAC, Airborne contaminants.

Step 5: Determine if the respiratory hazard is classified as IDLH; if it is NOT IDLH skip to **Step 7**.

- The respiratory hazard IS classified as IDLH if:

- The atmosphere is oxygen deficient or oxygen enriched;

OR

- You CANNOT measure or estimate your expected exposure concentration;

OR

- Your measured or estimated expected exposure concentration is greater or equal to the IDLH value in the NIOSH *Pocket Guide to Chemical Hazards*.

Note: DOSH uses the IDLH values in the 1990 edition of the NIOSH *Pocket Guide to Hazardous Chemicals* to determine the existence of IDLH conditions. You may use more recent editions of this guide. Visit www.cdc.gov/niosh for more information.

Step 6: Select an appropriate respirator from one of the following respirators for IDLH conditions and skip to **Step 8**:

- Full-facepiece, pressure demand, self-contained breathing apparatus (SCBA) certified by NIOSH for a minimum service life of thirty minutes;

OR

- Full-facepiece, pressure demand air-line respirator equipped with an auxiliary self-contained air supply.

Exception: If the respiratory hazard is oxygen deficiency AND you can show oxygen concentrations can be controlled within the ranges listed in Table 4 under ALL foreseeable conditions, you are allowed to select ANY type of SCBA or air-line respirator.

**Table 4
Concentration Ranges for Oxygen Deficiency**

Altitude (as ft. above sea level)	Oxygen Concentration Range (as percent oxygen)
Below 3,001	16.0 - 19.5
3,001 - 4,000	16.4 - 19.5
4,001 - 5,000	17.1 - 19.5
5,001 - 6,000	17.8 - 19.5
6,001 - 7,000	18.5 - 19.5
7,001 - 8,000	19.3 - 19.5
Above 8,000 feet the exception does not apply. Oxygen-enriched breathing air must be supplied above 14,000 feet.	

Step 7: Select respirator types with assigned protection factors (APFs) from Table 5 that are appropriate to protect employees from the expected exposure concentration.

Note: Appendix B, using assigned protection factors (APFs) for respirator selection, found in this chapter, uses the hazard-ratio approach established by ANSI

Z88.2-1992 to determine which respirator types can provide a sufficient level of protection.

- If no permissible exposure limit (PEL) is established for an airborne contaminant, use relevant available information and informed professional judgment to determine an acceptable exposure limit value to use for calculating hazard ratios. For example, you may use exposure limit values established by the American Conference of Governmental Industrial Hygienists (ACGIH).

Step 8: Consider hazards that could require selection of specific respirator types. For example, select full-facepiece respirators to prevent eye irritation or abrasive blasting helmets to provide particle rebound protection.

Note: Rules for specific substances have additional selection specifications that apply to escape and other types of respirators. Make sure you follow those additional requirements before finalizing your selection.

Step 9: Evaluate user and workplace factors that might compromise respirator performance, reliability or safety.

Examples:

- High humidity or temperature extremes in the workplace.
- Necessary voice communication.
- High traffic areas and moving machinery.
- If respirator use is for escape only, follow this step and then skip to **Step 11**.

- If the respiratory hazard is a pesticide, follow the requirements on the pesticide label and skip to **Step 11**.

- Time or distance for escape.

Step 10: Follow Table 6 requirements to select an air-purifying respirator.

- If Table 6 requirements cannot be met, you must select an appropriate air-line respirator or an SCBA.

Step 11: Make sure respirators you select are certified by the National Institute for Occupational Safety and Health (NIOSH).

- Respirators provided exclusively for escape from IDLH atmospheres must be NIOSH-certified for escape from the atmosphere in which they will be used.

- To maintain certification, make sure the respirator is used according to cautions and limitations specified on the NIOSH approval label. This includes manufacturer restrictions on cartridges and canisters.

For SCBAs, use only the respirator manufacturer's NIOSH-approved breathing gas containers, marked and maintained in accordance with the Quality Assurance 68 provisions of the NIOSH approval for the SCBA as issued in accordance with the NIOSH respirator certification standard at 42 CFR Part 84.

Note: While selecting respirators, you will need to select a sufficient number of types, models or sizes to provide for fit testing. You can also consider other respirator use issues, such as accommodating facial hair with a loose fitting respirator.

Use Table 5 to identify the assigned protection factor for different types of respirators.

- These assigned protection factors are only effective when the employer implements a continuing, effective respirator program as required by this chapter, including training, fit testing, maintenance, and use requirements.

- You may select respirators assigned for use in higher workplace concentrations of a hazardous substance for use at lower concentrations of that substance, or when required use is independent of concentration.

Table 5

Assigned Protection Factors (APF) for Respirator Types

If the respirator is a(n) . . .	Then the APF is . . .
Air-purifying respirator with a:	
• Quarter-mask	5
• Half-facepiece. This category includes filtering facepiece and elastomeric facepiece models	10
• Full-facepiece	50
Powered air-purifying respirator (PAPR) with a:	
• Loose-fitting facepiece	25
• Half-facepiece	50
• Full-facepiece	1000
• Hood or helmet	25/1000 (see note)
Note: PAPRs with helmets/hoods may receive an APF of 1000 only when you have evidence that testing of these respirators demonstrates performance at a level of protection of 1,000 or greater. Such evidence must be provided by the respirator manufacturer. This level of performance can best be demonstrated by performing a workplace protection factor (WPF) or simulated workplace protection factor (SWPF) study or equivalent testing.	
Air-line respirator with a:	
• Half-facepiece and designed to operate in demand mode	10
• Loose-fitting facepiece and designed to operate in continuous flow mode	25
• Half-facepiece and designed to operate in continuous-flow mode	50
• Half-facepiece and designed to operate in pressure-demand or other positive-pressure mode	50
• Full-facepiece and designed to operate in demand mode	50
• Full-facepiece and designed to operate in continuous-flow mode	1000

If the respirator is a(n) . . .	Then the APF is . . .
<ul style="list-style-type: none"> • Full-facepiece and designed to operate in pressure-demand or other positive-pressure mode • Helmet or hood and designed to operate in continuous-flow mode 	<p>1000</p> <p>25/1000 (see note)</p>
<p>Note: Air-line respirators with helmets/hoods designed to operate in continuous-flow mode may receive an APF of 1000 when you have evidence that testing of these respirators demonstrates performance at a level of protection of 1,000 or greater. Such evidence must be provided by the respirator manufacturer. This level of performance can best be demonstrated by performing a workplace protection factor (WPF) or simulated workplace protection factor (SWPF) study or equivalent testing.</p>	
<p>Self-contained breathing apparatus (SCBA) with a tight fitting:</p> <ul style="list-style-type: none"> • Half-facepiece and designed to operate in demand mode • Full-facepiece and designed to operate in demand mode • Full-facepiece and designed to operate in pressure-demand or other positive pressure mode (e.g., open/closed circuit) • Helmet or hood and designed to operate in demand mode • Helmet or hood and designed to operate in pressure-demand or other positive-pressure mode (e.g., open/closed circuit) 	<p>10</p> <p>50</p> <p>10,000</p> <p>50</p> <p>10,000</p>
<p>Combination respirators:</p> <ul style="list-style-type: none"> • When using a combination respirator, such as an air-line respirator with an air-purifying filter, you must make sure the APF is appropriate to the mode of operation in which the respirator is used 	
<p>Escape respirators:</p> <ul style="list-style-type: none"> • APFs in this table do not apply to respirators used solely for escape. To select escape respirators, go to Step 8 of this section 	

Use Table 6 to select air-purifying respirators for particle, vapor, or gas contaminants.

Table 6
Requirements for Selecting Any Air-purifying Respirator

If the contaminant is a . .	Then . . .
<ul style="list-style-type: none"> • Gas OR vapor 	<ul style="list-style-type: none"> • Provide a respirator with canisters or cartridges equipped with a NIOSH-certified, end-of-service-life indicator (ESLI) OR • If a canister or cartridge with an ESLI is NOT available, develop a cartridge change schedule to make sure the canisters or cartridges are replaced before they are no longer effective OR • Select an atmosphere-supplying respirator
<ul style="list-style-type: none"> • Particle, such as a dust, spray, mist, fog, fume, or aerosol 	<ul style="list-style-type: none"> • Select respirators with filters certified to be at least 95% efficient by NIOSH <ul style="list-style-type: none"> – For example, N95s, R99s, P100s, or High Efficiency Particulate Air (HEPA) filters

AMENDATORY SECTION (Amending WSR 07-05-072, filed 2/20/07, effective 4/1/07)

WAC 296-842-20010 Prevent conditions that could create a hazardous breathing air supply. (1) Use SCBA and air-line respirators safely:

– **DO NOT** supply compressed oxygen to SCBAs or air-line respirators that previously used compressed air.

Note: Compressed air leaves residues containing hydrocarbons such as oil or grease. Fire or explosion can occur if compressed oxygen makes contact with these residues.

(2) Use breathing air couplings on air-line respirators that are **NOT** compatible with couplings for nonrespirable air or other gas systems, for example, utility air used for manufacturing purposes.

(3) **DO NOT** allow asphyxiating substances to enter breathing air lines; for example, do not flush nitrogen through worksite air lines also used for breathing air.

(4) Use equipment specifically designed for oxygen service or distribution **IF** oxygen concentrations greater than 23.5% are used.

Note: Respiratory equipment **NOT** designed for oxygen service or distribution can create fire or explosion hazards in oxygen concentrations higher than 23.5%.

(5) Make sure cylinders used to supply breathing air for SCBAs or air-line respirators are tested and maintained as described in the federal Department of Transportation's

(DOT) Shipping Container Specification Regulations, Title 49 CFR Part 180.

- Note:**
- Use only cylinders marked (with serial number, cylinder pressure, DOT exemption number, and test dates) according to these DOT regulations
 - To find any Code of Federal Regulations (CFR) visit: www.access.gpo.gov.

WSR 12-24-091
PERMANENT RULES
LIQUOR CONTROL BOARD

[Filed December 5, 2012, 10:46 a.m., effective January 5, 2013]

Effective Date of Rule: Thirty-one days after filing.

Purpose: SB 5259 was passed in the 2012 legislative session. The bill allows small wineries to report annually instead of monthly. Five rules need to be revised in chapter 314-19 WAC and one rule in chapter 314-19 WAC needs to be repealed to allow monthly reporting for small wineries. In addition, two rules in chapter 314-24 WAC need to be revised.

Citation of Existing Rules Affected by this Order: Repealing WAC 314-19-040; and amending WAC 314-19-005, 314-19-010, 314-19-015, 314-19-020, 314-19-030, 314-24-070, and 314-24-120.

Statutory Authority for Adoption: RCW 66.08.030.

Adopted under notice filed as WSR 12-21-040 on October 10, 2012.

Number of Sections Adopted in Order to Comply with Federal Statute: New 0, Amended 0, Repealed 0; Federal Rules or Standards: New 0, Amended 0, Repealed 0; or Recently Enacted State Statutes: New 0, Amended 7, Repealed 1.

Number of Sections Adopted at Request of a Nongovernmental Entity: New 0, Amended 0, Repealed 0.

Number of Sections Adopted on the Agency's Own Initiative: New 0, Amended 0, Repealed 0.

Number of Sections Adopted in Order to Clarify, Streamline, or Reform Agency Procedures: New 0, Amended 7, Repealed 1.

Number of Sections Adopted Using Negotiated Rule Making: New 0, Amended 0, Repealed 0; Pilot Rule Making: New 0, Amended 0, Repealed 0; or Other Alternative Rule Making: New 0, Amended 0, Repealed 0.

Date Adopted: December 5, 2012.

Sharon Foster
 Chairman

AMENDATORY SECTION (Amending WSR 07-02-076, filed 12/29/06, effective 1/29/07)

WAC 314-19-005 What is the purpose of chapter 314-19 WAC? The purpose of this chapter is to outline the beer and wine tax reporting and payment requirements for the following liquor licensees and ~~((permitees))~~ permit holders:

Type of liquor license	Laws that outline tax rates and requirements
(a) Washington beer and/or wine distributor	RCW 66.24.210, 66.24.230, 66.24.290, 66.24.305
(b) Washington beer and/or wine importer	RCW 66.24.230
(c) Domestic brewery	RCW 66.24.270, 66.24.290, 66.24.305
(d) Domestic brewery/brand owner	RCW 66.24.270, 66.24.290, 66.24.305
(e) Microbrewery	RCW 66.24.270, 66.24.290, 66.24.305
(f) Domestic winery	RCW 66.24.210, 66.24.215, 66.24.230, 66.24.305
(g) Public house	RCW 66.24.290, 66.24.580
(h) Beer certificate of approval holder	RCW 66.24.270
(i) Wine certificate of approval holder	RCW 66.24.210, 66.24.206
(j) Authorized representative certificate of approval holder—U.S. produced beer	RCW 66.04.010, 66.24.261, 66.24.270
(k) Authorized representative certificate of approval holder—foreign produced beer	RCW 66.04.010, 66.24.261, 66.24.270
(l) Authorized representative certificate of approval holder—U.S. produced wine	RCW 66.04.010, 66.24.203, 66.24.206
(m) Authorized representative certificate of approval holder—foreign produced wine	RCW 66.04.010, 66.24.203, 66.24.206
(n) Retailer with an endorsement to receive direct shipments of beer and wine from breweries, microbreweries, or wineries	RCW 66.24.210, 66.24.290, 66.24.270
(o) Wine shipper permit holder	RCW 66.24.210

AMENDATORY SECTION (Amending WSR 07-02-076, filed 12/29/06, effective 1/29/07)

WAC 314-19-010 Definitions. The following definitions are to clarify the purpose and intent of the rules and laws governing beer and wine tax reporting and payment requirements. Additional definitions can be found in RCW 66.04-010.

(1) "Late." A ~~((monthly))~~ tax payment is considered late if it is unpaid on the due date and remains unpaid until the twentieth day of the following month.

(2) "Missing." A (~~monthly~~) tax report and tax payment, if taxes are owed, is considered missing if it is more than thirty days past the required filing date.

(3) "Samples" are beer and/or wine furnished to retail licensees for the purpose of negotiating a sale, per RCW 66.28.040. See WAC 314-64-080 for sampling procedures.

(4) "Tastings" are beer and/or wine products provided to customers at no charge for the purpose of promoting a sale, that are consumed on the premises of a domestic brewery, microbrewery, winery, or additional winery locations as authorized by RCW 66.24.170(4). Tastings are not taxable under this title.

AMENDATORY SECTION (Amending WSR 10-01-090, filed 12/16/09, effective 1/16/10)

WAC 314-19-015 What are the (~~monthly~~) reporting and tax payment requirements? (1) The required (~~monthly~~) beer and/or wine tax reports must be:

(a) On a form furnished by the board or in a format approved by the board;

(b) Filed every month, including months with no activity or taxes due. A winery or wine certificate of approval holder with total taxable sales of wine in Washington state of six thousand gallons or less during the calendar year may elect to file annually;

(c) Submitted, with the tax due, to the board on or before the twentieth day of (~~each~~) the month following the end of the reporting period, for the previous (~~month~~) reporting period (for example, a monthly report listing transactions for the month of January is due by February 20; an annual report listing transactions for 2012 is due by January 20, 2013). When the twentieth day of the month falls on a Saturday, Sunday, or a legal holiday, the filing must be postmarked by the U.S. Postal Service no later than the next postal business day; and

(d) Filed separately for each type of liquor license or permit held.

(2) Wineries, wine certificate of approval holders and wine shippers who elect to file annually:

(a) Must have taxable sales of wine in Washington state of six thousand gallons or less during the calendar year;

(b) New licensees who anticipate taxable sales of wine in Washington state of less than six thousand gallons must request by notifying the liquor control board within thirty days of license issuance that they would like to file annually;

(c) May only change reporting frequency (to annual filing or off annual filing) at the beginning of a calendar year, effective month must be January;

(d) Are required to file multiple reports in the event of a midyear tax rate change (for example, the tax rate changes June 1st; annual filer will submit two reports. One for January 1st through May 31st and one for June 1st through December 31st. Both are due January 20th following the end of the reporting period);

(e) Must submit a report the month following the month the license has been discontinued or business closed (for example, annual filer closes business/discontinued license May 25th, report is due June 20th).

Type of Licensee	Tax Payment Requirements
<p>((2)) (3) Washington beer and/or wine distributor</p>	<p>(a) Distributors must pay taxes on all beer and/or wine received during the preceding calendar month, including samples received at no charge (see WAC 314-64-080 and 314-64-090 for more information). The total tax due (per barrel for beer and per liter for wine) is to be paid by the first distributor to receive the product and must be included with the monthly report.</p> <p>(b) Distributors do not pay taxes on beer and/or wine received from another in-state licensed distributor who has already paid the Washington state tax on the product.</p> <p>(c) Distributors may claim a tax refund or credit, provided that they have paid the taxes prior to claiming the credit, for the following (see WAC 314-19-030 for information on claiming a tax refund or credit):</p> <p>(i) Shipments exported directly to a point outside the state of Washington, including sales to interstate common carriers;</p> <p>(ii) Sales to any military reservation in Washington state;</p> <p>(iii) Product that is deemed unsalable due to freight damage, product quality, or other causes that occurred prior to receipt by the distributor, subject to the following conditions:</p> <p>(A) The unsalable product must be destroyed within the state of Washington (per RCW 66.24.305);</p> <p>(B) The licensee must notify their local liquor enforcement officer in advance for destruction of more than fifty cases of wine or two hundred cases of beer;</p> <p>(C) The licensee must report the destroyed product on the next required monthly report;</p> <p>(D) The licensee must keep records showing the reason for the destruction and an inventory of products destroyed. These records must be kept on the licensed premises and available for inspection by board employees for a period of two years; and</p> <p>(E) The licensee must provide documentation from the freight company with the report if they are claiming a credit due to freight damage.</p>
<p>((3)) (4) Washington beer and/or wine importers</p>	<p>Importers must pay taxes on samples received during the preceding calendar month, as follows:</p> <p>(a) If the samples are used by the importer within the state of Washington, the importer must pay the tax.</p> <p>(b) If samples are provided to a distributor, the distributor must pay the tax.</p>
<p>((4)) (5) Domestic breweries, microbreweries, and domestic wineries</p>	<p>(a) Domestic breweries, microbreweries, and domestic wineries must list production for the current (month) <u>reporting period</u> only. The brewery that the domestic brewery/brand owner contracts with is required to include any products they produce for the brand owner in their production count.</p>

Type of Licensee	Tax Payment Requirements
	<p>(b) Domestic breweries, microbreweries, and domestic wineries must pay taxes on beer and/or wine that is:</p> <p>(i) Sold at retail on the licensed premises (or shipped to additional winery locations as authorized by RCW 66.24.170(4)), including retail sales to out-of-state residents;</p> <p>(ii) Sold to retail licensees;</p> <p>(iii) Furnished as samples to retail licensees as authorized by RCW 66.28.040, WAC 314-64-080, and 314-64-090 (does not include samples provided to distributors);</p> <p>(iv) Provided as donations to qualifying 501 (c)(3) or (6) nonprofit organizations per RCW 66.28.040 or to the Washington wine commission per RCW 66.12.180 and 66.24.210;</p> <p>(v) Received via an interplant transfer if used as outlined in above subsections (i), (ii), (iii), or (iv);</p> <p>(vi) Sold at farmers markets as authorized by RCW 66.24.170(5), 66.24.240(4) and/or 66.24.244(5); or</p> <p>(vii) Wine that has been shipped out-of-state as nontax paid export and returned to Washington state if used as outlined in (b)(i), (ii), (iii), (iv), or (vi) of this subsection.</p> <p>(c) Domestic breweries, microbreweries, and domestic wineries do not pay tax on beer and/or wine that is:</p> <p>(i) Sold to <u>or furnished as samples to</u> distributors;</p> <p>(ii) Shipped out of a particular location for an interplant transfer;</p> <p>(iii) Exported directly to a point outside the state of Washington, including sales to interstate common carriers;</p> <p>(iv) ((Sold to the Washington state liquor control board;</p> <p>(v)) Sold to any military reservation in Washington state; or</p> <p>((vi)) <u>(v)</u> Provided as a tasting on the brewery or winery premises or at additional winery locations at no charge, as authorized by RCW 66.24.170(4). See WAC 314-19-010(3) for the definition of "tastings."</p>
<p>((5)) <u>(6)</u> Domestic brewery—Brand owners</p>	<p>(a) Domestic brewery-brand owners must file a report showing the quantity of all beer sold or delivered to each licensed beer distributor, or beer exported directly to a point outside the state of Washington, during the preceding ((month)) <u>reporting period</u>.</p> <p>(b) Domestic brewery-brand owners are not responsible for the tax on beer that is contract produced.</p>
<p>((6)) <u>(7)</u> Out-of-state beer and/or wine certificate of approval holders</p>	<p>(a) Certificate of approval holders must file a report showing the quantity of all beer and/or wine sold or delivered to each licensed beer or wine distributor or importer, including samples, during the preceding ((month)) <u>reporting period</u>.</p> <p>(b) Tax is due from the certificate of approval holder.</p>

Type of Licensee	Tax Payment Requirements
	<p>(i) On samples shipped to licensed agents, and</p> <p>(ii) On donations to the Washington wine commission per RCW 66.12.180 and 66.24.210 or to 501 (c)(3) nonprofit charitable associations within Washington state per RCW 66.28.040.</p>
<p>((7)) <u>(8)</u> Out-of-state United States beer and/or wine certificate of approval holders with a direct shipping to Washington retailer endorsement</p>	<p>(a) Certificate of approval holders with this endorsement must file an addendum report showing the quantity of beer and/or wine sold or delivered to each licensed retailer, including samples, during the preceding ((month)) <u>reporting period</u>.</p> <p>(b) Tax is due from the certificate of approval holder on beer and/or wine sold or delivered to retail licensees and on sales to nonprofit charitable associations.</p>
<p>((8)) <u>(9)</u> Out-of-state United States wine certificate of approval holders with a direct shipping to consumers endorsement</p>	<p>(a) A certificate of approval holder with this endorsement must report the total quantity of wine sold to consumers in Washington state during the preceding ((month)) <u>reporting period</u>.</p> <p>(b) Tax is due from the certificate of approval holder on wine sold or delivered to Washington state residents.</p>
<p>((9)) <u>(10)</u> Authorized representative certificate of approval holders-U.S. and/or foreign produced beer or wine</p>	<p>(a) Authorized representative certificate of approval holders must file a report showing the quantity of all beer and/or wine sold or delivered to each licensed beer or wine distributor or importer, including samples. They must list the brewery and/or winery that they represent and that had shipments into Washington state during the preceding month.</p> <p>(b) Tax is due from the authorized representative beer and/or wine certificate of approval holders only on samples shipped to licensed agents, directly to retailers per WAC 314-64-080 and 314-64-090, donations to the Washington wine commission per RCW 66.12.180 and 66.24.210, or to 501 (c)(3) nonprofit charitable associations within Washington state per RCW 66.28.040.</p>
<p>((10)) <u>(11)</u> Public house licensees</p>	<p>Public house licensees must pay taxes on all sales of their own product during the preceding calendar month.</p>
<p>((11)) <u>(12)</u> Retailer with an endorsement allowing receipt of direct shipment of beer or wine from a United States brewery, microbrewery, or winery</p>	<p>A Washington retailer who receives shipments directly from a United States brewery, microbrewery, or winery, outside Washington, must file a report showing the quantity of beer and wine received by direct shipment from each licensed beer or wine producer, including samples, during the preceding month.</p>
<p>((12)) <u>(13)</u> Wine shipper permit holder</p>	<p>(a) An out-of-state winery must file a report showing the total quantity of wine sold or delivered to consumers during the preceding ((month)) <u>reporting period</u>.</p> <p>(b) Pay the tax due for sales of wine to Washington state residents.</p>

AMENDATORY SECTION (Amending WSR 07-02-076, filed 12/29/06, effective 1/29/07)

WAC 314-19-020 What if a licensee doesn't report or pay the taxes due, or reports or pays late? The board may

take the following actions against a licensee or ~~((permittee))~~ permit holder in order to collect any of the reports or taxes due that are outlined in this title.

<p>(1) Suspension or revocation of license</p>	<p>(a) Failure to make a report and/or pay the taxes in the manner and dates outlined in this chapter will be sufficient ground for the board to suspend or revoke a liquor license, wine shipper permit, or certificate of approval (per RCW 66.08.150, 66.24.010, 66.24.120, 66.24.206, 66.20.370, 66.20.380, and 66.24.270).</p> <p>(b) The suspension will remain in effect until all missing reports and/or taxes have been filed with the board (see WAC 314-19-010(1) for the definition of "missing").</p>
<p>(2) Penalties</p>	<p>A penalty of two percent per month will be assessed on any tax payments postmarked after the twentieth day of the month following the ((month)) reporting period of ((sale)) the transactions (per the reporting requirements outlined in WAC 314-19-015, RCW 66.24.290, and 66.24.210). When the twentieth day of the month falls on a Saturday, Sunday, or a legal holiday, the filing must be postmarked by the U.S. Postal Service no later than the next postal business day.</p>
<p>(3) Surety bond requirements</p>	<p>(a) What is a surety bond? A "surety bond" is a type of insurance policy that guarantees beer and/or wine tax payment to the state. The surety bond must be:</p> <ul style="list-style-type: none"> (i) Executed by a surety company authorized to do business in the state of Washington; (ii) On a form and in an amount acceptable to the board; (iii) Payable to the Washington state liquor control board; and (iv) Conditioned that the licensee will pay the taxes and penalties levied by RCW 66.24.210 and/or 66.24.290. (v) As an option to obtaining a surety bond, a licensee may create an assignment of savings account for the board in the same amount as required for a surety bond. Requests for this option must be submitted in writing to the board's financial division. <p>(b) When will the board require a surety bond? The board may require a surety bond from a Washington beer and/or wine distributor, domestic microbrewery, domestic brewery, public house, domestic winery, wine shipper, or a beer or wine certificate of approval holder that has a direct shipment privilege. If any of the following occur, the board may require the licensee or ((permittee)) <u>permit holder</u> to obtain a surety bond or assignment of savings account, within twenty-one days after an administrative violation notice is issued:</p> <ul style="list-style-type: none"> (i) A report or tax payment is missing, as defined in WAC 314-19-010, for two or more consecutive months; or (ii) A report or tax payment is missing, as defined in WAC 314-19-010, two or more times within a two year period.

	<p>(c) What will happen if the licensee does not acquire the surety bond or savings account? Failure to meet the bonding or savings account requirements outlined in subsections (a) and (b) of this rule may result in immediate suspension of license privileges until all missing reports are filed and late taxes have been paid and the surety bond is acquired or the savings account is established.</p> <p>(d) In what amount and for how long will the board require a surety bond? The amount of a surety bond or savings account required by this chapter must be either \$3,000, or the total of the highest four months' worth of tax liability for the previous twelve month period, whichever is greater.</p> <ul style="list-style-type: none"> (i) The licensee or ((permittee)) <u>permit holder</u> must maintain the bond for at least two years. After the two year period the licensee or ((permittee)) <u>permit holder</u> may request an exemption as outlined in subsection (f) of this rule. (ii) Surety bond and savings account amounts may be reviewed annually and compared to the last twelve months' tax liability of the licensee. If the current bond or savings account amount does not meet the requirements outlined in this section, the licensee or ((permittee)) <u>permit holder</u> will be required to increase the bond amount or amount on deposit within twenty-one days. <p>(e) What action will the board take when a licensee or ((permittee)) <u>permit holder</u> holds a surety bond and does not pay taxes due or pays late? If a licensee or ((permittee)) <u>permit holder</u> holds a surety bond or savings account, the board will immediately start the process to collect overdue taxes from the surety company or assigned account. If the exact amount of taxes due is not known due to missing reports, the board will estimate the taxes due based on previous production, receipts, and/or sales.</p> <p>(f) Can a licensee or ((permittee)) <u>permit holder</u> request an exemption to the surety bond or savings account requirement? A licensee or ((permittee)) <u>permit holder</u> may make a written request to the board's financial division for an exemption from the surety bond or assignment of savings account requirements. The board will grant an exemption once the following criteria are met:</p> <ul style="list-style-type: none"> (i) The licensee or ((permittee)) <u>permit holder</u> has filed reports and paid applicable taxes to the board for at least two years immediately prior to the exemption request; and (ii) There have been no late or missing reports or tax payments during the previous two years. (iii) In order to remain exempt from the surety bond or assignment of savings account requirements, the licensee must continue to meet the tax reporting and payment requirements outlined in this title (outlined in WAC 314-19-015, RCW 66.24.206, 66.24.210, 66.24.270, 66.24.290, and 66.24.580).
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AMENDATORY SECTION (Amending WSR 04-24-007, filed 11/19/04, effective 12/20/04)

WAC 314-19-030 How can a licensee claim a credit or refund for tax-paid product?

(1) How to claim a tax credit	(2) How to claim a tax refund
<p>(a) On the next ((monthly)) report <u>filed</u>, show the amount of product for which a tax credit is due in the appropriate section(s) of the form.</p> <p>(b) Deduct the total credit from the total amount due on this report.</p>	<p>(a) A licensee may request a refund, rather than claim a credit, if the amount of the credit is too large to be used in a reasonable amount of time or the licensee has discontinued business.</p> <p>(b) On the next ((monthly)) report <u>filed</u>, the licensee must show the amount of product for which a tax refund is due in the appropriate section(s) of the form.</p> <p>(c) The board will not issue a refund check until the total amount to be refunded accumulates to at least ten dollars.</p>

REPEALER

The following section of the Washington Administrative Code is repealed:

WAC 314-19-040 Is there any exception to the additional tax imposed on fortified wine?

AMENDATORY SECTION (Amending WSR 12-17-006, filed 8/1/12, effective 9/1/12)

WAC 314-24-070 Domestic wineries—Purchase and use of bulk wines, brandy or wine spirits—Import permit required—Records—Wine returned to Washington. (1) Domestic wineries may purchase and receive under federal bond from any holder of a domestic winery license, holder of the fruit and/or wine distillery license provided in RCW 66.24.140, or out-of-state holder of a federal winery or fruit distillery basic permit, bulk wine, brandy or bulk wine spirits manufactured or produced by such holder, and use the same in the manufacture or production of wines: Provided, That every domestic winery which imports wine, brandy or wine spirits manufactured outside the state of Washington for use as authorized in this section must first be in possession of a permit issued by the board, in accordance with RCW 66.20.-010(5) of the Washington State Liquor Act. Applications for such permits must be submitted to the board in writing. Such permits expire at the end of the board's fiscal year, and are subject to renewal at that time upon written request and remittance of said annual fee. Wine manufactured or produced from one kind of fruit or berry may not receive wine, brandy or wine spirits manufactured or produced from another kind of fruit or berry. Such brandy or wine spirits so purchased shall be used exclusively and only for the purpose of adding wine spirits to wines. In those cases where the holder of a domestic winery license shall also hold such fruit and/or wine distillery license, then, and in such cases, such domestic winery may use brandy or wine spirits manufactured or produced under such distillery license as a wine spir-

its addition in the manufacture or production of wine by such holder of the domestic winery license.

(2) Any domestic winery using wine, brandy or wine spirits as provided in subsection (1) of this section, shall make and file with the board, not later than the tenth day of each month upon forms prescribed and furnished by the board, a report showing all transactions of such domestic winery in the purchase and/or use of wine, brandy or wine spirits as provided in said subsection (1), and shall retain one copy of such report in its own files, and shall keep and preserve for a period of not less than two years any bills of lading or other documents supporting such report. One copy of the bill of lading covering such sale and shipment to a domestic winery is to be forwarded to the board by the shipping winery or fruit distillery, at the time of such shipment.

(3) A domestic winery may ship Washington wine out of and may return such wine to Washington state for ultimate sale. The following conditions apply:

(a) The wine is produced in Washington by a licensed winery.

(b) The export shall be from the licensed winery and returned to the same entity.

(c) The returned wine must not have been altered in any way, with the exception of sparkling wine.

(d) A domestic winery returning previously exported Washington wine must comply with tax collection and tracking requirements initiated by the liquor control board.

(e) A domestic winery must keep on file for audit purposes clear source records (shipping documents, etc.) with ~~((monthly))~~ reporting documents. Records need to indicate what wine was returned to the state that was previously reported as an export (including number of cases and gallons).

AMENDATORY SECTION (Amending WSR 00-17-065, filed 8/9/00, effective 9/9/00)

WAC 314-24-120 Importation of foreign wine—United States wineries—~~((Monthly))~~ Reports—Records.

(1) Foreign wine. Wine manufactured outside of the United States may be imported by a wine importer or distributor under the following conditions:

(a) The wine importer or distributor importing such wine must obtain label approval in accordance with WAC 314-24-040. Such wine shall be imported and delivered directly to either the warehouse of the importer or distributor or to some other warehouse previously designated by the importer or distributor and approved by the board.

(b) All matters pertaining to the importation, transportation, storage, keeping of records, and all other matters pertaining to the importation of wine manufactured outside the United States shall be subject at all times to such orders, rules and regulations as the board may from time to time prescribe, and the board reserves the right to make orders applicable to individual and particular cases in addition to general orders, rules and regulations applicable generally.

(2) Holders of certificate of approval—United States wineries, located outside of Washington state. Each winery holding a certificate of approval may ship wine to licensed wine importers and/or distributors only. As required by sec-

tion 10, chapter 21, Laws of 1969 ex. sess., and by the written agreement embodied in the application for certificate of approval, each winery holding a certificate of approval shall file the report(s) required by WAC 314-19-015.