

**WSR 05-23-098**  
**EXPEDITED RULES**  
**DEPARTMENT OF HEALTH**  
 (Examining Board of Psychology)  
 [Filed November 17, 2005, 10:37 a.m.]

Title of Rule and Other Identifying Information: Repeal WAC 246-924-020 Applications for licensure, 246-924-050 Psychologists—Education prerequisites to licensing for applicants enrolled in a doctoral program between December 28, 1978, to October 19, 1987, 246-924-055 Psychologists—Educational prerequisites to licensing for applicants enrolled in a doctoral program prior to December 28, 1978, 246-924-065 Psychologists—Experience requirement prerequisite to licensing for experience prior to March 5, 1985, and 246-924-080 Psychology examination—Application submittal date.

**NOTICE**

THIS RULE IS BEING PROPOSED UNDER AN EXPEDITED RULE-MAKING PROCESS THAT WILL ELIMINATE THE NEED FOR THE AGENCY TO HOLD PUBLIC HEARINGS, PREPARE A SMALL BUSINESS ECONOMIC IMPACT STATEMENT, OR PROVIDE RESPONSES TO THE CRITERIA FOR A SIGNIFICANT LEGISLATIVE RULE. IF YOU OBJECT TO THIS USE OF THE EXPEDITED RULE-MAKING PROCESS, YOU MUST EXPRESS YOUR OBJECTIONS IN WRITING AND THEY MUST BE SENT TO Janice K. Boden, Program Manager, Department of Health, 310 Israel Road S.E., Tumwater, WA 98502, AND RECEIVED BY January 24, 2006.

Purpose of the Proposal and Its Anticipated Effects, Including Any Changes in Existing Rules: WAC 246-924-020 and 246-924-080, applications for licensure are no longer needed due to computerized administration of the national written examination. The Department of Health/Examining Board of Psychology no longer administers the written examination. Once an application is approved, it is the applicant's responsibility to contact the test site and schedule their own testing day and time. Therefore, the sixty-day application cut-off date required in this rule section is no longer needed.

WAC 246-924-050 Psychologists—Education prerequisites to licensing for applicants enrolled in a doctoral program between December 28, 1978, to October 19, 1987, 246-924-055 Psychologists—Educational prerequisites to licensing for applicants enrolled in a doctoral program prior to December 28, 1978, and 246-924-065 Psychologists—Experience requirement prerequisite to licensing for experience prior to March 5, 1985; these rule sections contain the education and experience requirements for applicants that have obtained their doctoral education and experience prior to October 19, 1987. There is currently no need to maintain these previous requirements in rule, as these applicants are eligible for licensure through the endorsement process. Applicants that come to us after being out of school for several years typically are credentialed in another jurisdiction(s) and therefore, are eligible for a Washington state licensure by endorsement. Applicants do not need to have their schooling or experience reviewed, and eligibility determined, based upon Washington state's requirements in place at the time they were in their doctoral program. Licensure by endorse-

ment may also occur by holding a psychology license in another jurisdiction for at least two years, by holding a "Certificate of Professional Qualification," or by being listed in the National Register of Health Service Providers in Psychology.

Statutory Authority for Adoption: RCW 18.83.050.

Statute Being Implemented: Chapter 18.83 RCW.

Rule is not necessitated by federal law, federal or state court decision.

Name of Proponent: Examining Board of Psychology, governmental.

Name of Agency Personnel Responsible for Drafting, Implementation and Enforcement: Janice K. Boden, Program Manager, 310 Israel Road S.E., Tumwater, WA 98502, (360) 236-4912.

October 7, 2005

Doug Uhl, Ph.D.

Board Chair

**REPEALER**

The following sections of the Washington Administrative Code are repealed:

WAC 246-924-020	Applications for licensure.
WAC 246-924-050	Psychologists—Education prerequisites to licensing for applicants enrolled in a doctoral program between December 28, 1978 to October 19, 1987.
WAC 246-924-055	Psychologists—Educational prerequisites to licensing for applicants enrolled in a doctoral program prior to December 28, 1978.
WAC 246-924-065	Psychologists—Experience requirement prerequisite to licensing for experience prior to March 5, 1985.
WAC 246-924-080	Psychology examination—Application submittal date.

**WSR 05-23-105**  
**EXPEDITED RULES**  
**DEPARTMENT OF REVENUE**  
 [Filed November 17, 2005, 2:21 p.m.]

Title of Rule and Other Identifying Information: WAC 458-20-144 Printing industry.

**NOTICE**

THIS RULE IS BEING PROPOSED UNDER AN EXPEDITED RULE-MAKING PROCESS THAT WILL ELIMINATE THE NEED FOR THE AGENCY TO HOLD PUBLIC HEARINGS, PREPARE A SMALL BUSINESS

ECONOMIC IMPACT STATEMENT, OR PROVIDE RESPONSES TO THE CRITERIA FOR A SIGNIFICANT LEGISLATIVE RULE. IF YOU OBJECT TO THIS USE OF THE EXPEDITED RULE-MAKING PROCESS, YOU MUST EXPRESS YOUR OBJECTIONS IN WRITING AND THEY MUST BE SENT TO JoAnne Gordon, Department of Revenue, P.O. Box 47453, Olympia, WA 98504-7453, fax (360) 586-5543, e-mail joanneg@dor.wa.gov, AND RECEIVED BY January 23, 2006.

Purpose of the Proposal and Its Anticipated Effects, Including Any Changes in Existing Rules: The proposed amendment to WAC 458-20-144 (Rule 144) incorporates provisions of chapter 514, Laws of 2005.

Reasons Supporting Proposal: **Background:** WAC 458-20-144 (Rule 144) explains the B&O and retail sales tax reporting responsibilities of persons engaged in printing activities. This rule was revised in January 2005, with an effective date of July 1, 2005.

The major revision to Rule 144 was the removal of language stating that a deduction from the measure of tax for both B&O and retail sales tax purposes was available where a mailing bureau purchased postage for a customer and charged that customer for the postage. The January 2005 revision explained that amounts received from a customer for postage costs incurred by the seller are, under the law, included in the measure of both taxes.

Effective July 1, 2005, the department adopted revisions to Rule 144 on an emergency basis to reflect chapter 514, Laws of 2005, which provide a B&O tax deduction and retail sales and use tax exemptions for delivery charges made for the delivery of direct mail if the charges are separately stated. These provisions of chapter 514 took effect May 16, 2005, and supercede the instructions included in the January 2005 rule actions regarding charges for postage costs.

**Current Rule-Making Action:** The department is undertaking the current rule action to incorporate the provisions of chapter 514 in permanent Rule 144.

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

Statute Being Implemented: RCW 82.08.010 and chapter 514, Laws of 2005.

Rule is not necessitated by federal law, federal or state court decision.

Name of Proponent: Department of Revenue, governmental.

Name of Agency Personnel Responsible for Drafting: JoAnne Gordon, 1025 Union Avenue S.E., Suite #544, Olympia, WA, (360) 570-6121; Implementation: Alan R. Lynn, 1025 Union Avenue S.E., Suite #544, Olympia, WA, (360) 570-6125; and Enforcement: Janis P. Bianchi, 1025 Union Avenue S.E., Suite #544, Olympia, WA, (360) 570-6147.

November 14, 2005

Alan R. Lynn

Rules Coordinator

AMENDATORY SECTION (Amending WSR 05-03-052, filed 1/11/05, effective 7/1/05)

**WAC 458-20-144 Printing industry.** (1) **Introduction.** This ~~((rule))~~ section discusses the taxability of the printing industry. For information on the taxability of mailing bureau services, refer to WAC 458-20-141, Duplicating industry and mailing bureaus.

Chapter 514, Laws of 2005, changed the taxability of delivery charges associated with direct mail. Refer to subsection (4) of this section for further information.

(2) **Definition.** The phrase "printing industry" includes letterpress, offset-lithography, and gravure processes as well as multigraph, mimeograph, autotyping, addressographing and similar activities.

(3) **Business and occupation tax.** Printers are subject to the business and occupation tax under the printing and publishing classification upon the gross income of the business.

(4) **Retail sales tax.** The printing or imprinting of advertising circulars, books, briefs, envelopes, folders, posters, racing forms, tickets, and other printed matter, whether upon special order or upon materials furnished either directly or indirectly by the customer is a retail sale and subject to the retail sales tax, providing the customer either consumes, or distributes such articles free of charge, and does not resell such articles in the regular course of business. The retail sales tax is computed upon the total charge for printing, and the printer may not deduct the cost of labor, author's alterations, or other service charges in performing the printing, even though such charges may be stated or shown separately on invoices.

RCW 82.04.070 and 82.08.010, respectively, define "gross proceeds of sales" and "selling price." These definitions provide that there is no deduction for "delivery costs." RCW 82.08.010 further provides that there is no deduction for "delivery charges," a term also defined by the statute to include postage. ~~((If a printer purchases stamps, applies metered postage using its meter account, or applies its permit imprint, and also charges the customer for the postage, the charge is included in the measure of B&O and/or retail sales tax, unless excluded by another provision of chapters 82.04 and 82.08 RCW. See also WAC 458-20-111 for information about nontaxable advances and reimbursements.))~~ Effective May 17, 2005, chapter 514, Laws of 2005, provides a B&O tax deduction and retail sales and use tax exemption from the measure of tax for amounts derived from delivery charges for direct mail when the delivery charges are separately stated on an invoice or similar billing invoice provided to the buyer.

"Direct mail" means printed material delivered or distributed by United States mail or other delivery service to a mass audience or to addressees on a mailing list provided by the purchaser or at the direction of the purchaser when the cost of the items are not billed directly to the recipients. "Direct mail" includes tangible personal property supplied directly or indirectly by the purchaser to the direct mail seller for inclusion in the package containing the printed material. "Direct mail" does not include multiple items of printed material delivered to a single address. RCW 82.08.010 and chapter 514, Laws of 2005.

"Delivery charges" means charges by the seller of personal property or services for preparation and delivery to a

location designated by the purchaser of personal property or services including, but not limited to, transportation, shipping, postage, handling, crating, and packing. RCW 82.08.010.

Sales of printed matter to advertising agencies who purchase for their own use or for the use of their clients, and not for resale in the regular course of business, are sales for consumption and subject to the retail sales tax.

Sales of tickets to theater owners, amusement operators, transportation companies and others are sales for consumption and subject to the retail sales tax. Such tickets are not resold by the theater owners or amusement proprietors as tangible personal property but are used merely as a receipt to the patrons for payment and as evidence of the right to admission or transportation.

Sales of school annuals and similar publications by printers to school districts, private schools or student organizations therein are subject to the retail sales tax.

Sales by printers of books, envelopes, folders, posters, racing forms, stationery, tickets and other printed matter to dealers for resale in the regular course of business are wholesale sales and are not subject to the retail sales tax.

Charges made by bookbinders or printers for imprinting, binding or rebinding of materials for consumers are subject to the retail sales tax.

Sales to printers of equipment, supplies and materials which do not become a component part or ingredient of the finished printed matter sold or which are put to "intervening use" before being resold are subject to the retail sales tax. This includes, among others, sales of fuel, furniture, lubricants, machinery, type, lead, slugs and mats.

Sales to printers of paper stock and ink which become a part of the printed matter sold are sales for resale and are not subject to retail sales tax.

(5) **Commissions and discounts.** There is a general trade practice in the printing industry of making allowances to advertising agencies of a certain percentage of the gross charge made for printed matter ordered by the agency either in its own name or in the name of the advertiser. This allowance may be a "commission" or may be a "discount."

A "commission" paid by a seller constitutes an expense of doing business and is not deductible from the measure of tax under either business and occupation tax or retail sales tax. On the other hand, a "discount" is a deduction from an established selling price allowed to buyers, and a bona fide discount is deductible under both these classifications.

In order that there may be a definite understanding, printers, advertising agencies and advertisers are advised that tax liability in such cases is as follows:

(a) The allowance taken by an advertising agency will be deductible as a discount in the computation of the printer's liability only in the event that the printer bills the charge on a net basis; i.e., less the discount.

(b) Where the printer bills the gross charge to the agency, and the advertiser pays the sales tax measured by the gross charge, no deduction will be allowed, irrespective of the fact that in payment of the account the printer actually receives from the agency the net amount only; i.e., the gross billing, less the commission retained by the agency. In all cases the commission received is taxable to the agency.

**WSR 05-23-142**  
**EXPEDITED RULES**  
**DEPARTMENT OF**  
**LABOR AND INDUSTRIES**  
[Filed November 22, 2005, 9:24 a.m.]

Title of Rule and Other Identifying Information: Chapter 296-08 WAC, Practice and procedure and chapter 296-14 WAC, Industrial insurance.

NOTICE

THIS RULE IS BEING PROPOSED UNDER AN EXPEDITED RULE-MAKING PROCESS THAT WILL ELIMINATE THE NEED FOR THE AGENCY TO HOLD PUBLIC HEARINGS, PREPARE A SMALL BUSINESS ECONOMIC IMPACT STATEMENT, OR PROVIDE RESPONSES TO THE CRITERIA FOR A SIGNIFICANT LEGISLATIVE RULE. IF YOU OBJECT TO THIS USE OF THE EXPEDITED RULE-MAKING PROCESS, YOU MUST EXPRESS YOUR OBJECTIONS IN WRITING AND THEY MUST BE SENT TO Carmen Moore, Department of Labor and Industries, P.O. Box 44001, Olympia, WA 98504-4001, AND RECEIVED BY January 23, 2006.

Purpose of the Proposal and Its Anticipated Effects, Including Any Changes in Existing Rules: This rule making will repeal chapter 296-08 WAC, Practice and procedure. However, WAC 296-08-025 Attorney's fees, will be incorporated into existing chapter 296-14 WAC, Industrial insurance. There are no anticipated effects as, with the exception of WAC 296-08-025, the rules have not been used for years.

Reasons Supporting Proposal: To promote more efficient government, the department is engaged in an ongoing review of its rules and policies. This repeal will eliminate a group of rules that is unused and nonessential to department and public business. It will move the one remaining essential rule to an appropriate existing WAC chapter.

Statutory Authority for Adoption: Chapters 51.04, 51.08, 51.12, 51.24, and 51.32 RCW.

Statute Being Implemented: RCW 51.52.120, 51.04.-020, and 7.68.110.

Rule is not necessitated by federal law, federal or state court decision.

Name of Proponent: Department of Labor and Industries, governmental.

Name of Agency Personnel Responsible for Drafting: Joseph Molenda, Tumwater, (360) 902-4714; Implementation: Russell D. Johnson, Tumwater, (360) 902-6695; and Enforcement: Cynthia Harris, Tumwater, (360) 902-6961.

November 22, 2005

Gary Weeks

Director

NEW SECTION

**WAC 296-14-955 Attorney's fees.** (1) The department of labor and industries (hereinafter department) shall fix a reasonable attorney fee to be paid by the worker, crime victim, or beneficiary for services rendered with the department if written application therefor is made by the attorney, worker, crime victim, or beneficiary, as provided in RCW 51.52.120.

(a) Fees will be set only for services rendered prior to the notice of appeal;

(b) On closed claims, fees will only be set if written application is received by the department within one year from the claim closure date as indicated on the department order.

(c) If such application for fixing of a fee is made by the attorney, it shall set forth therein the monetary amount which the attorney considers reasonable for all services rendered with the department, the reason such fee is considered to be reasonable, and a detailed breakdown of the time spent by the attorney in representing the injured worker.

(d) In all instances, the department shall afford to all parties affected a minimum of ten days in which to submit comment and material information which may be helpful to the department in setting a fair and reasonable fee.

(e) The department will provide copies of information sent to the department to the attorney, worker, crime victim, or beneficiary upon request.

(f) Informal contact may be made with the parties to determine the feasibility of reaching an agreement on the amount of the fees.

(g) Additional information necessary to reach a decision may be requested by the department.

(2) *Fee fixing criteria.* All attorney fees fixed by the department where application therefor has been made shall be established in accordance with the following general principles:

(a) Only one fee shall be fixed for legal services in any one claim regardless of the number of attorneys representing the worker, crime victim, or beneficiary, except that in cases of multiple beneficiaries represented by one or multiple attorneys the department has the discretion to set more than one attorney fee if so requested.

(b) The department shall defer fixing a fee until such time as information, which it deems sufficient upon which to base a fee, is available.

(c) A fee shall be fixed only in those cases where the attorney's services are instrumental in securing additional benefits to the worker, crime victim, or beneficiary.

(d) Where increased compensation is obtained, the fee may be fixed without regard to any medical benefits secured.

(e) In setting all fees, the following factors shall be carefully considered and weighed:

(i) Nature of the claim.

(ii) Novelty and complexity of the issues presented or other unusual circumstances.

(iii) Time and labor expended.

(iv) Skill and diligence in resolving the claim.

(v) Extent and nature of the relief.

(vi) The prevalent practice of charging contingency fees in the department.

(vii) The worker's or crime victim's circumstance and the remedial social purposes of the Industrial Insurance Act and of the Crime Victims Compensation Act, which are intended to provide sure and adequate relief to injured workers and crime victims and their families.

(3) The manager of the claims consultant division of the department is the director's designee to process all petitions to set attorney's fees and to issue orders setting those fees for

services rendered by attorneys in securing industrial insurance benefits. The supervisor of the crime victims section of the department is the director's designee to process all petitions to set attorney's fees and to issue orders setting those fees for services rendered by attorneys in securing crime victims benefits.

REPEALER

The following chapter of the Washington Administrative Code is repealed:

WAC 296-08-001	Effective date and validity.
WAC 296-08-010	Appearance and practice before agency—Who may appear.
WAC 296-08-020	Appearance and practice before agency—Appearance in certain proceedings may be limited to attorneys.
WAC 296-08-025	Attorney's fees.
WAC 296-08-030	Appearance and practice before agency—Solicitation of business unethical.
WAC 296-08-040	Appearance and practice before agency—Standards of ethical conduct.
WAC 296-08-050	Appearance and practice before agency—Appearance by former employee of agency or former member of attorney general's staff.
WAC 296-08-060	Appearance and practice before agency—Former employee as expert witness.
WAC 296-08-070	Computation of time.
WAC 296-08-080	Notice and opportunity for hearing in contested cases.
WAC 296-08-090	Service of process—By whom served.
WAC 296-08-100	Service of process—Upon whom served.
WAC 296-08-110	Service of process—Service upon parties.
WAC 296-08-120	Service of process—Methods of service.
WAC 296-08-130	Service of process—When service complete.
WAC 296-08-140	Service of process—Filing with agency.
WAC 296-08-150	Subpoenas—Where provided by law—Form.

WAC 296-08-160	Subpoenas—Issuance to parties.	WAC 296-08-520	Rules of evidence—Admissibility criteria.
WAC 296-08-170	Subpoenas—Service.	WAC 296-08-530	Rules of evidence—Tentative admission—Exclusion—Discontinuance—Objections.
WAC 296-08-180	Subpoenas—Fees.		
WAC 296-08-190	Subpoenas—Proof of service.	WAC 296-08-540	Petitions for rule making, amendment or repeal.
WAC 296-08-200	Subpoenas—Quashing.		
WAC 296-08-210	Subpoenas—Enforcement.	WAC 296-08-550	Petitions for rule making, amendment or repeal—Requisites.
WAC 296-08-220	Subpoenas—Geographical scope.		
WAC 296-08-370	Official notice—Matters of law.	WAC 296-08-560	Petitions for rule making, amendment or repeal—Agency must consider.
WAC 296-08-380	Official notice—Material facts.	WAC 296-08-570	Petitions for rule making, amendment or repeal—Notice of disposition.
WAC 296-08-390	Presumptions.		
WAC 296-08-400	Stipulations and admissions of record.	WAC 296-08-580	Declaratory rulings.
WAC 296-08-410	Form and content of decisions in contested cases.	WAC 296-08-590	Forms.
WAC 296-08-420	Definition of issues before hearing.		
WAC 296-08-430	Prehearing conference rule—Authorized.		
WAC 296-08-440	Prehearing conference rule—Record of conference action.		
WAC 296-08-450	Submission of documentary evidence in advance.		
WAC 296-08-460	Excerpts from documentary evidence.		
WAC 296-08-470	Expert or opinion testimony and testimony based on economic and statistical data—Number and qualifications of witnesses.		
WAC 296-08-480	Expert or opinion testimony and testimony based on economic and statistical data—Written sworn statements.		
WAC 296-08-490	Expert or opinion testimony and testimony based on economic and statistical data—Supporting data.		
WAC 296-08-500	Expert or opinion testimony and testimony based on economic and statistical data—Effect of noncompliance with WAC 296-08-470 or 296-08-480.		
WAC 296-08-510	Continuances.		

**WSR 05-23-144**  
**EXPEDITED RULES**  
**DEPARTMENT OF**  
**LABOR AND INDUSTRIES**  
 [Filed November 22, 2005, 9:26 a.m.]

Title of Rule and Other Identifying Information: Chapter 296-24 WAC, General safety and health standards; chapter 296-62 WAC, General occupational health standards; chapter 296-78 WAC, Sawmills; chapter 296-155 WAC, Safety standards for construction work; chapter 296-807 WAC, Portable power tools; and chapter 296-833 WAC, Temporary housing for workers.

**NOTICE**

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Purpose of the Proposal and Its Anticipated Effects, Including Any Changes in Existing Rules: The Occupational Safety and Health Administration (OSHA) recently made some changes to notification requirements in their construction rules and removed outdated references in their general industry rules. We are making the same changes to remain

as-effective-as OSHA, and are also making general house-keeping changes to correct typing errors.

WAC 296-24-21515 Conveyors, repealed this section; requirements were moved into chapter 296-806 WAC, Machine safety.

WAC 296-24-33005 Tank storage, repealing reference to outdated ANSI per OSHA changes.

WAC 296-62-07709 Exposure assessment and monitoring, changed notification requirements in the construction and shipyard industries from fifteen days to five days, to remain as-effective-as OSHA.

WAC 296-62-07712 Requirements for asbestos activities in construction and shipyard work, removed the word "signed" from the requirement for a written report, to remain consistent with OSHA.

WAC 296-62-07725 Medical surveillance, removed the requirement for separate submission of evaluation and certification documents, to remain consistent with OSHA.

WAC 296-78-835 Vehicles, repealing reference to outdated ANSI per OSHA changes.

WAC 296-155-100 Management's responsibility, corrected form number in subsection (7).

WAC 296-155-125 First-aid supplies, corrected reference in subsection (4).

WAC 296-155-17311 Exposure monitoring, changed notification requirement from fifteen days to five days, to remain as-effective-as OSHA.

WAC 296-155-305 Signaling and flaggers, removed wording from subsection (1)(a) to make sentence correct.

WAC 296-155-452 Specific purpose equipment and installations, corrected reference in subsection (1)(d).

WAC 296-155-476 General requirements, corrected typing error in subsection (1)(b).

WAC 296-155-545 Conveyors, corrected reference in subsection (3)(c).

WAC 296-155-704 Hoisting and rigging, corrected wording in subsection (3)(a)(i).

WAC 296-807-16005, repealing reference to outdated ANSI per OSHA changes.

WAC 296-833-30010 Provide adequate water, repealing reference to outdated ANSI per OSHA changes.

Reasons Supporting Proposal: We are required by law to make sure our rules are as-effective-as the federal standards.

Statutory Authority for Adoption: RCW 49.17.010, 49.17.040, 49.17.050, 49.17.060.

Statute Being Implemented: Chapter 49.17 RCW.

Rule is necessary because of federal law, 29 C.F.R. Parts 1910 and 1926.

Name of Proponent: Department of Labor and Industries, governmental.

Name of Agency Personnel Responsible for Drafting: Tracy Spencer, Tumwater, (360) 902-5530; Implementation and Enforcement: Steve Cant, Tumwater, (360) 902-5495.

November 22, 2005

Gary Weeks

Director

AMENDATORY SECTION (Amending WSR 00-06-075, filed 3/1/00, effective 4/10/00)

**WAC 296-62-07709 Exposure assessment and monitoring.** (1) General monitoring criteria.

(a) Each employer who has a workplace or work operation where exposure monitoring is required under this part must perform monitoring to determine accurately the airborne concentrations of asbestos to which employees may be exposed.

(b) Determinations of employee exposure must be made from breathing zone air samples that are representative of the eight-hour TWA and thirty minute short-term exposures of each employee.

(c) Representative eight-hour TWA employee exposures must be determined on the basis of one or more samples representing full-shift exposure for each shift for each employee in each job classification in each work area.

(d) Representative thirty minute short-term employee exposures must be determined on the basis of one or more samples representing thirty minute exposures associated with operations that are most likely to produce exposures above the excursion limit for each shift for each job classification in each work area.

(2) Exposure monitoring requirements for all occupational exposures to asbestos in all industries covered by the Washington Industrial Safety and Health Act except construction work, as defined in WAC 296-155-012, and except ship repairing, shipbuilding and shipbreaking employments and related employments as defined in WAC 296-304-01001.

(a) Initial monitoring.

(i) Each employer who has a workplace or work operation covered by this standard, except as provided for in (a)(ii) and (iii) of this subsection, must perform initial monitoring of employees who are, or may reasonably be expected to be exposed to airborne concentrations at or above the TWA permissible exposure limit and/or excursion limit. The initial monitoring must be at the initiation of each asbestos job to accurately determine the airborne concentration of asbestos to which employees may be exposed.

(ii) Where the employer or his/her representative has monitored after March 31, 1992, for the TWA permissible exposure limit and/or excursion limit, and the monitoring satisfies all other requirements of this section, and the monitoring data was obtained during work operations conducted under workplace conditions closely resembling the processes, type of material including percentage of asbestos, control methods, work practices, and environmental conditions used and prevailing in the employer's current operations, the employer may rely on such earlier monitoring results to satisfy the requirements of (a)(i) of this subsection.

(iii) Where the employer has relied upon objective data that demonstrates that asbestos is not capable of being released in airborne concentrations at or above the TWA permissible exposure limit and/or excursion limit under those work conditions of processing, use, or handling expected to have the greatest potential for releasing asbestos, then no initial monitoring is required.

(b) Monitoring frequency (periodic monitoring) and patterns. After the initial determinations required by subsection (2)(a)(i) of this section, samples must be of such frequency

and pattern as to represent with reasonable accuracy the levels of exposure of the employees. Sampling must not be at intervals greater than six months for employees whose exposures may reasonably be foreseen to exceed the TWA permissible exposure limit and/or excursion limit.

(c) Daily monitoring within regulated areas: The employer must conduct daily monitoring that is representative of the exposure of each employee who is assigned to work within a regulated area. Exception: When all employees within a regulated area are equipped with full facepiece supplied-air respirators operated in the pressure-demand mode equipped with either an auxiliary positive pressure self-contained breathing apparatus or a HEPA filter, the employer may dispense with the daily monitoring required by this subsection.

(d) Changes in monitoring frequency. If either the initial or the periodic monitoring required by subsection (2)(a) and (b) of this section statistically indicates that employee exposures are below the TWA permissible exposure limit and/or excursion limit, the employer may discontinue the monitoring for those employees whose exposures are represented by such monitoring.

(e) Additional monitoring. Notwithstanding the provisions of subsection (2)(a)(ii) and (c) of this section, the employer must institute the exposure monitoring required under subsection (2)(a)(i) and (ii) 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 above the TWA permissible exposure limit and/or excursion limit, or when the employer has any reason to suspect that a change may result in new or additional exposures above the TWA permissible exposure limit and/or excursion limit.

(3) Exposure assessment monitoring requirements for all construction work as defined in WAC 296-155-012 and for all ship repairing, shipbuilding and shipbreaking employments and related employments as defined in WAC 296-304-01001.

(a) Initial exposure assessment.

(i) Each employer who has a workplace or work operation covered by this standard must ensure that a "competent person" conducts an exposure assessment immediately before or at the initiation of the operation to ascertain expected exposures during that operation or workplace. The assessment must be completed in time to comply with the requirements which are triggered by exposure data or lack of a "negative exposure assessment," and to provide information necessary to assure that all control systems planned are appropriate for that operation and will work properly.

(ii) Basis of initial exposure assessment: Unless a negative exposure assessment has been made according to (b) of this subsection, the initial exposure assessment must, if feasible, be based on monitoring conducted according to (b) of this subsection. The assessment must take into consideration both the monitoring results and all observations, information or calculations which indicate employee exposure to asbestos, including any previous monitoring conducted in the workplace, or of the operations of the employer which indicate the levels of airborne asbestos likely to be encountered on the job. For Class I asbestos work, until the employer con-

ducts exposure monitoring and documents that employees on that job will not be exposed in excess of the PELs, or otherwise makes a negative exposure assessment according to (b) of this subsection, the employer must presume that employees are exposed in excess of the TWA and excursion limit.

(b) Negative exposure assessment: For any one specific asbestos job which will be performed by employees who have been trained in compliance with the standard, the employer may demonstrate that employee exposures will be below the PELs by data which conform to the following criteria:

(i) Objective data demonstrating that the products or material containing asbestos minerals or the activity involving such product or material cannot release airborne fibers in concentrations exceeding the TWA and excursion limit under those work conditions having the greatest potential for releasing asbestos; or

(ii) Where the employer has monitored prior asbestos jobs for the PEL and the excursion limit within 12 months of the current or projected job, the monitoring and analysis were performed in compliance with the asbestos standard in effect; and the data was obtained during work operations conducted under workplace conditions "closely resembling" the processes, type of material including percentage of asbestos, control methods, work practices, and environmental conditions used and prevailing in the employer's current operations, the operations were conducted by employees whose training and experience are no more extensive than that of employees performing the current job, and these data show that under the conditions prevailing and which will prevail in the current workplace there is a high degree of certainty that employee exposures will not exceed the TWA or excursion limit; or

(iii) The results of initial exposure monitoring of the current job made from breathing zone samples that are representative of the 8-hour TWA and 30-minute short-term exposures of each employee covering operations which are most likely during the performance of the entire asbestos job to result in exposures over the PELs.

(c) Periodic monitoring.

(i) Class I and Class II operations. The employer must conduct daily monitoring that is representative of the exposure of each employee who is assigned to work within a regulated area who is performing Class I or II work, unless the employer according to (b) of this subsection, has made a negative exposure assessment for the entire operation.

(ii) All operations under the standard other than Class I and II operations. The employer must conduct periodic monitoring of all work where exposures are expected to exceed a PEL, at intervals sufficient to document the validity of the exposure prediction.

(iii) Exception. When all employees required to be monitored daily are equipped with supplied-air respirators operated in the pressure demand mode, the employer may dispense with the daily monitoring required by subsection (2)(c) of this section. However, employees performing Class I work using a control method which is not listed in WAC 296-62-07712 or using a modification of a listed control method, must continue to be monitored daily even if they are equipped with supplied-air respirators.

(d) Termination of monitoring. If the periodic monitoring required by (c) of this subsection reveals that employee exposures, as indicated by statistically reliable measurements, are below the permissible exposure limit and excursion limit the employer may discontinue monitoring for those employees whose exposures are represented by such monitoring.

(e) Monitoring outside negative-pressure enclosures: The employer must conduct representative area monitoring of the airborne fiber levels at least every other day at the HEPA machine exhaust and entrance to the decontamination area.

(f) Additional monitoring. Notwithstanding the provisions of (b), (c), and (d) of this subsection, the employer must institute the exposure monitoring required under (c) of this subsection whenever there has been a change in process, control equipment, personnel or work practices that may result in new or additional exposures above the permissible exposure limit and/or excursion limit or when the employer has any reason to suspect that a change may result in new or additional exposures above the permissible exposure limit and/or excursion limit. Such additional monitoring is required regardless of whether a "negative exposure assessment" was previously produced for a specific job.

(g) Preabatement monitoring. Prior to the start of asbestos work, representative area air monitoring must be conducted for comparison to clearance monitoring as required by subsection (3)(h) of this section. Preabatement air monitoring is not required for outdoor work.

(h) Clearance monitoring. Representative area air monitoring must be taken at the completion of the asbestos work. Air sample results must be obtained before removal or reoccupancy of the regulated area. Clearance air monitoring is not required for outdoor asbestos work. The employer must demonstrate by monitoring that the airborne concentration is below:

- The permissible exposure limit; or
- At or below the airborne fiber level existing prior to the start of the asbestos work, whichever level is lower.

(4) Method of monitoring.

(a) All samples taken to satisfy the employee exposure monitoring requirements of this section must be personal samples collected following the procedures specified in WAC 296-62-07735, Appendix A.

(b) Monitoring must be performed by persons having a thorough understanding of monitoring principles and procedures and who can demonstrate proficiency in sampling techniques.

(c) All samples taken to satisfy the monitoring requirements of this section must be evaluated using the WISHA reference method specified in WAC 296-62-07735, Appendix A, or an equivalent counting method recognized by the department.

(d) If an equivalent method to the WISHA reference method is used, the employer must ensure that the method meets the following criteria:

(i) Replicate exposure data used to establish equivalency are collected in side-by-side field and laboratory comparisons; and

(ii) The comparison indicates that ninety percent of the samples collected in the range 0.5 to 2.0 times the permissible limit have an accuracy range of plus or minus twenty-five percent of the WISHA reference method results at a ninety-five percent confidence level as demonstrated by a statistically valid protocol; and

(iii) The equivalent method is documented and the results of the comparison testing are maintained.

(e) To satisfy the monitoring requirements of this section, employers must use the results of monitoring analysis performed by laboratories which have instituted quality assurance programs that include the elements as prescribed in WAC 296-62-07735, Appendix A.

(5) Employee notification of monitoring results.

(a) The employer must, as soon as possible but no later than within five days for construction and shipyard industries and fifteen working days for other industries, after the receipt of the results of any monitoring performed under the standard, 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.

(b) The written notification required by (a) of this subsection must contain the corrective action being taken by the employer to reduce employee exposure to or below the TWA and/or excursion exposure limits, wherever monitoring results indicated that the TWA and/or excursion exposure limits had been exceeded.

(6) Observation of monitoring.

(a) The employer must provide affected employees or their designated representatives an opportunity to observe any monitoring of employee exposure to asbestos conducted in accordance with this section.

(b) When observation of the monitoring of employee exposure to asbestos requires entry into an area where the use of protective clothing or equipment is required, the observer must be provided with and be required to use such clothing and equipment and shall comply with all other applicable safety and health procedures.

AMENDATORY SECTION (Amending WSR 99-17-026, filed 8/10/99, effective 11/10/99)

**WAC 296-62-07712 Requirements for asbestos activities in construction and shipyard work.** (1) Methods of compliance, the following engineering controls and work practices of this section must be used for construction work defined in WAC 296-155-012 and for all ship repair defined in WAC 296-304-010.

(2) Engineering controls and work practices for all operations covered by this section. The employer must use the following engineering controls and work practices in all operations covered by this section, regardless of the levels of exposure:

(a) Vacuum cleaners equipped with HEPA filters to collect all debris and dust containing ACM and PACM, except as provided in subsection (10)(b) of this section in the case of roofing material.

(b) Wet methods, or wetting agents, to control employee exposures during asbestos handling, mixing, removal, cutting, application, and cleanup, except where employers dem-



onstrate that the use of wet methods is infeasible due to, for example, the creation of electrical hazards, equipment malfunction, and, in roofing, except as provided in subsection (10)(b) of this section.

(c) Asbestos must be handled, mixed, applied, removed, cut, scored, or otherwise worked in a wet saturated state to prevent the emission of airborne fibers unless the usefulness of the product would be diminished thereby.

(d) Prompt cleanup and disposal of wastes and debris contaminated with asbestos in leak-tight containers except in roofing operations, where the procedures specified in this section apply.

(3) In addition to the requirements of subsection (2) of this section, the employer must use the following control methods to achieve compliance with the TWA permissible exposure limit and excursion limit prescribed by WAC 296-62-07705:

(a) Local exhaust ventilation equipped with HEPA filter dust collection systems;

(b) Enclosure or isolation of processes producing asbestos dust;

(c) Ventilation of the regulated area to move contaminated air away from the breathing zone of employees and toward a filtration or collection device equipped with a HEPA filter;

(d) Use of other work practices and engineering controls that the department can show to be feasible;

(e) Wherever the feasible engineering and work practice controls described above are not sufficient to reduce employee exposure to or below the permissible exposure limit and/or excursion limit prescribed in WAC 296-62-07705, the employer must use them to reduce employee exposure to the lowest levels attainable by these controls and must supplement them by the use of respiratory protection that complies with the requirements of WAC 296-62-07715.

(4) Prohibitions. The following work practices and engineering controls must not be used for work related to asbestos or for work which disturbs ACM or PACM, regardless of measured levels of asbestos exposure or the results of initial exposure assessments:

(a) High-speed abrasive disc saws that are not equipped with point or cut ventilator or enclosures with HEPA filtered exhaust air;

(b) Compressed air used to remove asbestos, or materials containing asbestos, unless the compressed air is used in conjunction with an enclosed ventilation system designed to capture the dust cloud created by the compressed air;

(c) Dry sweeping, shoveling or other dry cleanup of dust and debris containing ACM and PACM;

(d) Employee rotation as a means of reducing employee exposure to asbestos.

(5) Cleanup.

(a) After completion of asbestos work (removal, demolition, and renovation operations), all surfaces in and around the work area must be cleared of any asbestos debris.

(b) Encapsulant must be applied to all areas where asbestos has been removed to ensure binding of any remaining fibers.

(6) Class I requirements. The following engineering controls and work practices and procedures must be used:

(a) All Class I work, including the installation and operation of the control system must be supervised by a competent person as defined in WAC 296-62-07703;

(b) For all Class I jobs involving the removal of more than 25 linear or 10 square feet of thermal system insulation or surfacing material; for all other Class I jobs, where the employer cannot produce a negative exposure assessment according to WAC 296-62-07709(3), or where employees are working in areas adjacent to the regulated area, while the Class I work is being performed, the employer must use one of the following methods to ensure that airborne asbestos does not migrate from the regulated area:

(i) Critical barriers must be placed over all the openings to the regulated area, except where activities are performed outdoors; or

(ii) The employer must use another barrier or isolation method which prevents the migration of airborne asbestos from the regulated area, as verified by perimeter area surveillance during each work shift at each boundary of the regulated area, showing no visible asbestos dust; and perimeter area monitoring showing that clearance levels contained in 40 CFR Part 763, Subpart E, of the EPA Asbestos in Schools Rule are met, or that perimeter area levels, measured by Phase Contrast Microscopy (PCM) are no more than background levels representing the same area before the asbestos work began. The results of such monitoring must be made known to the employer no later than 24 hours from the end of the work shift represented by such monitoring. Exception: For work completed outdoors where employees are not working in areas adjacent to the regulated areas, (a) of this subsection is satisfied when the specific control methods in subsection (7) of this section are used;

(c) For all Class I jobs, HVAC systems must be isolated in the regulated area by sealing with a double layer of 6 mil plastic or the equivalent;

(d) For all Class I jobs, impermeable dropcloths shall be placed on surfaces beneath all removal activity;

(e) For all Class I jobs, all objects within the regulated area must be covered with impermeable dropcloths or plastic sheeting which is secured by duct tape or an equivalent;

(f) For all Class I jobs where the employer cannot produce a negative exposure assessment, or where exposure monitoring shows that a PEL is exceeded, the employer must ventilate the regulated area to move contaminated air away from the breathing zone of employees toward a HEPA filtration or collection device.

(7) Specific control methods for Class I work. In addition, Class I asbestos work must be performed using one or more of the following control methods according to the limitations stated below:

(a) Negative pressure enclosure (NPE) systems: NPE systems may be used where the configuration of the work area does not make the erection of the enclosure infeasible, with the following specifications and work practices:

(i) Specifications:

(A) The negative pressure enclosure (NPE) may be of any configuration;

(B) At least 4 air changes per hour must be maintained in the NPE;

(C) A minimum of -0.02 column inches of water pressure differential, relative to outside pressure, must be maintained within the NPE as evidenced by manometric measurements;

(D) The NPE must be kept under negative pressure throughout the period of its use; and

(E) Air movement must be directed away from employees performing asbestos work within the enclosure, and toward a HEPA filtration or collection device.

(ii) Work practices:

(A) Before beginning work within the enclosure and at the beginning of each shift, the NPE must be inspected for breaches and smoke-tested for leaks, and any leaks sealed.

(B) Electrical circuits in the enclosure must be deactivated, unless equipped with ground-fault circuit interrupters.

(b) Glove bag systems may be used to remove PACM and/or ACM from straight runs of piping and elbows and other connections with the following specifications and work practices:

(i) Specifications:

(A) Glove bags must be made of 6 mil thick plastic and must be seamless at the bottom.

(B) Glove bags used on elbows and other connections must be designed for that purpose and used without modifications.

(ii) Work practices:

(A) Each glove bag must be installed so that it completely covers the circumference of pipe or other structure where the work is to be done.

(B) Glove bags must be smoke-tested for leaks and any leaks sealed prior to use.

(C) Glove bags may be used only once and may not be moved.

(D) Glove bags must not be used on surfaces whose temperature exceeds 150°F.

(E) Prior to disposal, glove bags must be collapsed by removing air within them using a HEPA vacuum.

(F) Before beginning the operation, loose and friable material adjacent to the glove bag/box operation must be wrapped and sealed in two layers of six mil plastic or otherwise rendered intact.

(G) Where system uses attached waste bag, such bag must be connected to collection bag using hose or other material which must withstand pressure of ACM waste and water without losing its integrity.

(H) Sliding valve or other device must separate waste bag from hose to ensure no exposure when waste bag is disconnected.

(I) At least two persons must perform Class I glove bag removal operations.

(c) Negative pressure glove bag systems. Negative pressure glove bag systems may be used to remove ACM or PACM from piping.

(i) Specifications: In addition to specifications for glove bag systems above, negative pressure glove bag systems must attach HEPA vacuum systems or other devices to bag during removal.

(ii) Work practices:

(A) The employer must comply with the work practices for glove bag systems in this section.

(B) The HEPA vacuum cleaner or other device used during removal must run continually during the operation until it is completed at which time the bag must be collapsed prior to removal of the bag from the pipe.

(C) Where a separate waste bag is used along with a collection bag and discarded after one use, the collection bag may be reused if rinsed clean with amended water before reuse.

(d) Negative pressure glove box systems: Negative pressure glove boxes may be used to remove ACM or PACM from pipe runs with the following specifications and work practices:

(i) Specifications:

(A) Glove boxes must be constructed with rigid sides and made from metal or other material which can withstand the weight of the ACM and PACM and water used during removal.

(B) A negative pressure generator must be used to create negative pressure in the system.

(C) An air filtration unit must be attached to the box.

(D) The box must be fitted with gloved apertures.

(E) An aperture at the base of the box must serve as a bagging outlet for waste ACM and water.

(F) A back-up generator must be present on site.

(G) Waste bags must consist of 6 mil thick plastic double-bagged before they are filled or plastic thicker than 6 mil.

(ii) Work practices:

(A) At least two persons must perform the removal.

(B) The box must be smoke-tested for leaks and any leaks sealed prior to each use.

(C) Loose or damaged ACM adjacent to the box must be wrapped and sealed in two layers of 6 mil plastic prior to the job, or otherwise made intact prior to the job.

(D) A HEPA filtration system must be used to maintain pressure barrier in box.

(e) Water spray process system. A water spray process system may be used for removal of ACM and PACM from cold line piping if, employees carrying out such process have completed a 40-hour separate training course in its use, in addition to training required for employees performing Class I work. The system must meet the following specifications and shall be performed by employees using the following work practices:

(i) Specifications:

(A) Piping must be surrounded on 3 sides by rigid framing.

(B) A 360 degree water spray, delivered through nozzles supplied by a high pressure separate water line, must be formed around the piping.

(C) The spray must collide to form a fine aerosol which provides a liquid barrier between workers and the ACM and PACM.

(ii) Work practices:

(A) The system must be run for at least 10 minutes before removal begins.

(B) All removal must take place within the water barrier.

(C) The system must be operated by at least three persons, one of whom must not perform removal, but must check equipment, and ensure proper operation of the system.

(D) After removal, the ACM and PACM must be bagged while still inside the water barrier.

(f) A small walk-in enclosure which accommodates no more than two persons (mini-enclosure) may be used if the disturbance or removal can be completely contained by the enclosure with the following specifications and work practices:

(i) Specifications:

(A) The fabricated or job-made enclosure must be constructed of 6 mil plastic or equivalent.

(B) The enclosure must be placed under negative pressure by means of a HEPA filtered vacuum or similar ventilation unit.

(C) Change room. A small change room made of 6-mil-thick polyethylene plastic should be contiguous to the mini-enclosure, and is necessary to allow the worker to vacuum off his/her protective coveralls and remove them before leaving the work area. While inside the enclosure, the worker should wear Tyvek disposable coveralls or equivalent and must use the appropriate HEPA-filtered dual cartridge respiratory protection. The advantages of mini-enclosures are that they limit the spread of asbestos contamination, reduce the potential exposure of bystanders and other workers who may be working in adjacent areas, and are quick and easy to install. The disadvantage of mini-enclosures is that they may be too small to contain the equipment necessary to create a negative-pressure within the enclosure; however, the double layer of plastic sheeting will serve to restrict the release of asbestos fibers to the area outside the enclosure.

(ii) Work practices:

(A) Before use, the mini-enclosure must be inspected for leaks and smoke-tested to detect breaches, and any breaches sealed.

(B) Before reuse, the interior must be completely washed with amended water and HEPA-vacuumed.

(C) During use, air movement must be directed away from the employee's breathing zone within the mini-enclosure.

(8) Alternative control methods for Class I work. Class I work may be performed using a control method which is not referenced in subsection (2)(a) through (3)(e) of this section, or which modifies a control method referenced in subsection (2)(a) through (3)(e) of this section, if the following provisions are complied with:

(a) The control method shall enclose, contain or isolate the processes or source of airborne asbestos dust, before it enters the breathing zone of employees.

(b) A certified industrial hygienist or licensed professional engineer who is also qualified as a project designer as defined in WAC 296-62-07703, shall evaluate the work area, the projected work practices and the engineering controls and shall certify in writing that the planned control method is adequate to reduce direct and indirect employee exposure to below the PELs under worst-case conditions of use, and that the planned control method will prevent asbestos contamination outside the regulated area, as measured by clearance sampling which meets the requirements of EPA's Asbestos in Schools rule issued under AHERA, or perimeter monitoring which meets the criteria in subsection (6)(b)(ii) of this section. Where the TSI or surfacing material to be removed is 25

linear or 10 square feet or less, the evaluation required in subsection (8)(b) of this section may be performed by a competent person.

(c) Before work which involves the removal of more than 25 linear or 10 square feet of thermal system insulation or surfacing material is begun using an alternative method which has been the subject of subsection (2)(a) through (3)(e) of this section required evaluation and certification, the employer shall ~~((send))~~ include a copy of such evaluation and certification ~~((to the Department of Labor and Industries, Asbestos Certification Program, P.O. Box 44614, Olympia, Washington 98504-4614))~~ with notifications required by WAC 296-65-020, Notification requirements. The submission shall not constitute approval by WISHA.

(d) The evaluation of employee exposure required in WAC 296-62-07712(8) must include and be based on sampling and analytical data representing employee exposure during the use of such method under the worst-case conditions and by employees whose training and experiences are equivalent to employees who are to perform the current job.

(9) Work practices and engineering controls for Class II work.

(a) All Class II work must be supervised by a competent person as defined in WAC 296-62-07703.

(b) For all indoor Class II jobs, where the employer has not produced a negative exposure assessment according to WAC 296-62-07709(3), or where during the job, changed conditions indicate there may be exposure above the PEL or where the employer does not remove the ACM in a substantially intact state, the employer must use one of the following methods to ensure that airborne asbestos does not migrate from the regulated area:

(i) Critical barriers must be placed over all openings to the regulated area; or

(ii) The employer must use another barrier or isolation method which prevents the migration of airborne asbestos from the regulated area, as verified by perimeter area monitoring or clearance monitoring which meets the criteria set out in subsection (6)(b)(ii) of this section.

(c) Impermeable dropcloths must be placed on surfaces beneath all removal activity.

(d) All Class II asbestos work must be performed using the work practices and requirements set out above in subsection (2) of this section.

(10) Additional controls for Class II work. Class II asbestos work must also be performed by complying with the work practices and controls designated for each type of asbestos work to be performed, set out in this paragraph. Where more than one control method may be used for a type of asbestos work, the employer may choose one or a combination of designated control methods. Class II work also may be performed using a method allowed for Class I work, except that glove bags and glove boxes are allowed if they fully enclose the Class II material to be removed.

(a) For removing vinyl and asphalt flooring materials which contain ACM or for which in buildings constructed no later than 1980, the employer has not verified the absence of ACM according to WAC 296-62-07712 (10)(a)(ix). The employer must ensure that employees comply with the fol-

lowing work practices and that employees are trained in these practices according to WAC 296-62-07722.

- (i) Flooring or its backing must not be sanded.
- (ii) Vacuums equipped with HEPA filter, disposable dust bag, and metal floor tool (no brush) must be used to clean floors.
- (iii) Resilient sheeting must be removed by cutting with wetting of the snip point and wetting during delamination. Rip-up of resilient sheet floor material is prohibited.
- (iv) All scraping of residual adhesive and/or backing must be performed using wet methods.
- (v) Dry sweeping is prohibited.
- (vi) Mechanical chipping is prohibited unless performed in a negative pressure enclosure which meets the requirements of subsection (7)(a) of this section.
- (vii) Tiles must be removed intact, unless the employer demonstrates that intact removal is not possible.
- (viii) When tiles are heated and can be removed intact, wetting may be omitted.
- (ix) Resilient flooring material including associated mastic and backing must be assumed to be asbestos-containing unless an industrial hygienist determines that it is asbestos-free using recognized analytical techniques.

(b) For removing roofing material which contains ACM the employer must ensure that the following work practices are followed:

- (i) Roofing material must be removed in an intact state to the extent feasible.
- (ii) Wet methods must be used to remove roofing materials that are not intact, or that will be rendered not intact during removal, unless such wet methods are not feasible or will create safety hazards.
- (iii) Cutting machines must be continuously misted during use, unless a competent person determines that misting substantially decreases worker safety.
- (iv) When removing built-up roofs with asbestos-containing roofing felts and an aggregate surface using a power roof cutter, all dust resulting from the cutting operation must be collected by a HEPA dust collector, or must be HEPA vacuumed by vacuuming along the cut line. When removing built-up roofs with asbestos-containing roofing felts and a smooth surface using a power roof cutter, the dust resulting from the cutting operation must be collected either by a HEPA dust collector or HEPA vacuuming along the cut line, or by gently sweeping and then carefully and completely wiping up the still wet dust and debris left along the cut line. The dust and debris must be immediately bagged or placed in covered containers.
- (v) Asbestos-containing material that has been removed from a roof must not be dropped or thrown to the ground. Unless the material is carried or passed to the ground by hand, it must be lowered to the ground via covered, dust-tight chute, crane or hoist:

(A) Any ACM that is not intact must be lowered to the ground as soon as is practicable, but in any event no later than the end of the work shift. While the material remains on the roof it must either be kept wet, placed in an impermeable waste bag, or wrapped in plastic sheeting.

(B) Intact ACM must be lowered to the ground as soon as is practicable, but in any event no later than the end of the work shift.

(vi) Upon being lowered, unwrapped material must be transferred to a closed receptacle in such manner so as to preclude the dispersion of dust.

(vii) Roof level heating and ventilation air intake sources must be isolated or the ventilation system must be shut down.

(viii) Notwithstanding any other provision of this section, removal or repair of sections of intact roofing less than 25 square feet in area does not require use of wet methods or HEPA vacuuming as long as manual methods which do not render the material nonintact are used to remove the material and no visible dust is created by the removal method used. In determining whether a job involves less than 25 square feet, the employer must include all removal and repair work performed on the same roof on the same day.

(c) When removing cementitious asbestos-containing siding and shingles or transite panels containing ACM on building exteriors (other than roofs, where subsection (10)(b) of this section applies) the employer must ensure that the following work practices are followed:

(i) Cutting, abrading or breaking siding, shingles, or transite panels, must be prohibited unless the employer can demonstrate that methods less likely to result in asbestos fiber release cannot be used.

(ii) Each panel or shingle must be sprayed with amended water prior to removal.

(iii) Unwrapped or unbagged panels or shingles must be immediately lowered to the ground via covered dust-tight chute, crane or hoist, or placed in an impervious waste bag or wrapped in plastic sheeting and lowered to the ground no later than the end of the work shift.

(iv) Nails must be cut with flat, sharp instruments.

(d) When removing gaskets containing ACM, the employer must ensure that the following work practices are followed:

(i) If a gasket is visibly deteriorated and unlikely to be removed intact, removal must be undertaken within a glove bag as described in subsection (7)(b) of this section.

(ii) (Reserved.)

(iii) The gasket must be immediately placed in a disposal container.

(iv) Any scraping to remove residue must be performed wet.

(e) When performing any other Class II removal of asbestos-containing material for which specific controls have not been listed in subsection (10) of this section, the employer must ensure that the following work practices are complied with.

(i) The material must be thoroughly wetted with amended water prior to and during its removal.

(ii) The material must be removed in an intact state unless the employer demonstrates that intact removal is not possible.

(iii) Cutting, abrading or breaking the material must be prohibited unless the employer can demonstrate that methods less likely to result in asbestos fiber release are not feasible.

(iv) Asbestos-containing material removed, must be immediately bagged or wrapped, or kept wet until transferred to a closed receptacle, no later than the end of the work shift.

(f) Alternative work practices and controls. Instead of the work practices and controls listed in subsection (10) of this section, the employer may use different or modified engineering and work practice controls if the following provisions are complied with.

(i) The employer must demonstrate by data representing employee exposure during the use of such method under conditions which closely resemble the conditions under which the method is to be used, that employee exposure will not exceed the PELs under any anticipated circumstances.

(ii) A competent person must evaluate the work area, the projected work practices and the engineering controls, and must certify in writing, that the different or modified controls are adequate to reduce direct and indirect employee exposure to below the PELs under all expected conditions of use and that the method meets the requirements of this standard. The evaluation must include and be based on data representing employee exposure during the use of such method under conditions which closely resemble the conditions under which the method is to be used for the current job, and by employees whose training and experience are equivalent to employees who are to perform the current job.

(11) Work practices and engineering controls for Class III asbestos work. Class III asbestos work must be conducted using engineering and work practice controls which minimize the exposure to employees performing the asbestos work and to bystander employees.

(a) The work must be performed using wet methods.

(b) To the extent feasible, the work must be performed using local exhaust ventilation.

(c) Where the disturbance involves drilling, cutting, abrading, sanding, chipping, braking, or sawing of thermal system insulation or surfacing material, the employer must use impermeable dropcloths, and must isolate the operation using mini-enclosures or glove bag systems according to subsection (7) of this section or another isolation method.

(d) Where the employer does not produce a "negative exposure assessment" for a job, or where monitoring results show the PEL has been exceeded, the employer must contain the area using impermeable dropcloths and plastic barriers or their equivalent, or must isolate the operation using a control system listed in and in compliance with subsection (7) of this section.

(e) Employees performing Class III jobs, which involve the disturbance of thermal system insulation or surfacing material, or where the employer does not produce a "negative exposure assessment" or where monitoring results show a PEL has been exceeded, must wear respirators which are selected, used and fitted according to provisions of WAC 296-62-07715.

(12) Class IV asbestos work. Class IV asbestos jobs must be conducted by employees trained according to the asbestos awareness training program set out in WAC 296-62-07722. In addition, all Class IV jobs must be conducted in conformity with the requirements set out in this section, mandating wet methods, HEPA vacuums, and prompt clean up of debris containing ACM and PACM.

(a) Employees cleaning up debris and waste in a regulated area where respirators are required must wear respirators which are selected, used and fitted according to provisions of WAC 296-62-07715.

(b) Employers of employees who clean up waste and debris in, and employers in control of, areas where friable thermal system insulation or surfacing material is accessible, must assume that such waste and debris contain asbestos.

(13) Alternative methods of compliance for installation, removal, repair, and maintenance of certain roofing and pipeline coating materials. Notwithstanding any other provision of this section, an employer who complies with all provisions of subsection (10)(a) and (b) of this section when installing, removing, repairing, or maintaining intact pipeline asphaltic wrap, or roof flashings which contain asbestos fibers encapsulated or coated by bituminous or resinous compounds will be deemed to be in compliance with this section. If an employer does not comply with all provisions of this subsection (13), or if during the course of the job the material does not remain intact, the provisions of subsection (10) of this section apply instead of this subsection (13).

(a) Before work begins and as needed during the job, a competent person who is capable of identifying asbestos hazards in the workplace and selecting the appropriate control strategy for asbestos exposure, and who has the authority to take prompt corrective measures to eliminate such hazards, must conduct an inspection of the worksite and determine that the roofing material is intact and will likely remain intact.

(b) All employees performing work covered by this subsection (13) must be trained in a training program that meets the requirements of WAC 296-62-07722.

(c) The material must not be sanded, abraded, or ground. When manual methods are used, materials must stay intact.

(d) Material that has been removed from a roof must not be dropped or thrown to the ground. Unless the material is carried or passed to the ground by hand, it must be lowered to the ground via covered, dust-tight chute, crane or hoist. All such material must be removed from the roof as soon as is practicable, but in any event no later than the end of the work shift.

(e) Where roofing products which have been labeled as containing asbestos pursuant to WAC 296-62-07721, installed on nonresidential roofs during operations covered by this subsection (13), the employer must notify the building owner of the presence and location of such materials no later than the end of the job.

(f) All removal or disturbance of pipeline asphaltic wrap must be performed using wet methods.

**AMENDATORY SECTION** (Amending WSR 97-19-014, filed 9/5/97, effective 11/5/97)

**WAC 296-62-07725 Medical surveillance.** (1) General.

(a) Employees covered. The employer shall institute a medical surveillance program for all employees who are or will be exposed to airborne concentrations of fibers of asbestos at or above the permissible exposure limits. Exception.

Employers in the construction or shipyard industries shall institute a medical surveillance program for all employees who for a combined total of 30 or more days per year are engaged in Class I, II, and III work, or are exposed at or above the permissible exposure limit for combined 30 days or more per year; or who are required by the standard to wear negative pressure respirators. For the purpose of this subsection, any day in which an employee engaged in Class II or III work or a combination thereof for one hour or less (taking into account the entire time spent on the removal operation, including cleanup), and, while doing so adheres to the work practices specified in this standard, shall not be counted.

(b) Examination by a physician.

(i) The employer shall ensure that all medical examinations and procedures are performed by or under the supervision of a licensed physician, and shall be provided without cost to the employee and at a reasonable time and place.

(ii) Persons other than licensed physicians, who administer the pulmonary function testing required by this section, shall complete a training course in spirometry sponsored by an appropriate academic or professional institution.

(2) Preplacement examinations.

(a) Except as provided by WAC 296-62-07725 (1)(a), before an employee is assigned to an occupation exposed to airborne concentrations of asbestos, a preplacement medical examination shall be provided or made available by the employer. Examinations administered using the thirty or more days per year criteria of WAC 296-62-07725 (1)(a) shall be given within ten working days following the thirtieth day of exposure. Examinations must be given prior to assignment of employees to areas where negative-pressure respirators are worn.

(b) All examinations shall include, as a minimum, a medical and work history: A complete physical examination of all systems with special emphasis on the pulmonary, cardiovascular, and gastrointestinal systems; completion of the respiratory disease standardized questionnaire in WAC 296-62-07741, Appendix D, Part 1; a chest roentgenogram (posterior-anterior 14x17 inches); pulmonary function tests to include forced vital capacity (FVC) and forced expiratory volume at 1 second (FEV<sub>1.0</sub>); and any additional tests deemed appropriate by the examining physician. Interpretation and classification of chest roentgenograms shall be conducted in accordance with WAC 296-62-07743, Appendix E.

(3) Periodic examinations.

(a) Periodic medical examinations shall be made available annually.

(b) The scope of the medical examination shall be in conformance with the protocol established in subsection (2)(b) of this section, except that the frequency of chest roentgenograms shall be conducted in accordance with Table 2 of this section, and the abbreviated standardized questionnaire contained in WAC 296-62-07741, Appendix D, Part 2, shall be administered to the employee.

TABLE 2—FREQUENCY OF CHEST ROENTGENOGRAMS

Years since first exposure	Age of employee		
	15 to 35	35+ to 45	45+
0 to 10 . . . . .	Every 5 years	Every 5 years	Every 5 years.
10+ . . . . .	Every 5 years	Every 2 years	Every 1 year.

(c) If the examining physician determines that any of the examinations should be provided more frequently than specified, the employer shall provide such examinations to affected employees at the frequencies specified by the physician.

(4) Termination of employment examinations.

(a) The employer shall provide, or make available, a termination of employment medical examination for any employee who has been exposed to airborne concentrations of fibers of asbestos at or above the permissible exposure limits.

(b) The medical examination shall be in accordance with the requirements of the periodic examinations stipulated in subsection (3) of this section, and shall be given within thirty calendar days before or after the date of termination of employment.

(5) Recent examinations. No medical examination is required of any employee, if adequate records show that the employee has been examined in accordance with subsection (2), (3), or (4) of this section within the past one-year period.

(6) Information provided to the physician. The employer shall provide the following information to the examining physician:

(a) A copy of this standard and Appendices D, E, and H of WAC 296-62-07741, 296-62-07743, and 296-62-07749 respectively.

(b) A description of the affected employee's duties as they relate to the employee's exposure.

(c) The employee's representative exposure level or anticipated exposure level.

(d) A description of any personal protective and respiratory equipment used or to be used.

(e) Information from previous medical examinations of the affected employee that is not otherwise available to the examining physician.

(7) Physician's written opinion.

(a) The employer shall obtain a written ((signed)) opinion from the examining physician. This written opinion shall contain the results of the medical examination and shall include:

(i) The physician's opinion as to whether the employee has any detected medical conditions that would place the employee at an increased risk of material health impairment from exposure to asbestos;

(ii) Any recommended limitations on the employee or upon the use of personal protective equipment such as clothing or respirators;

(iii) A statement that the employee has been informed by the physician of the results of the medical examination and of any medical conditions resulting from asbestos exposure that require further explanation or treatment; and

(iv) A statement that the employee has been informed by the physician of the increased risk of lung cancer attributable to the combined effect of smoking and asbestos exposure.

(b) The employer shall instruct the physician not to reveal in the written opinion given to the employer specific findings or diagnoses unrelated to occupational exposure to asbestos.

(c) The employer shall provide a copy of the physician's written opinion to the affected employee within thirty days from its receipt.

**AMENDATORY SECTION** (Amending Order 94-07, filed 7/20/94, effective 9/20/94)

**WAC 296-24-33005 Tank storage.** (1) Design and construction of tanks.

(a) Materials.

(i) Tanks shall be built of steel except as provided in (1)(a)(ii) through (v) of this section.

(ii) Tanks may be built of materials other than steel for installation underground or if required by the properties of the liquid stored. Tanks located above ground or inside buildings shall be of noncombustible construction.

(iii) Tanks built of materials other than steel shall be designed to specifications embodying principles recognized as good engineering design for the material used.

(iv) Unlined concrete tanks may be used for storing flammable or combustible liquids having a gravity of 40°API or heavier. Concrete tanks with special lining may be used for other services provided the design is in accordance with sound engineering practice.

(v) Tanks may have combustible or noncombustible linings.

(vi) Special engineering consideration shall be required if the specific gravity of the liquid to be stored exceeds that of water or if the tanks are designed to contain flammable or combustible liquids at a liquid temperature below 0°F.

(b) Fabrication.

(i) Tanks may be of any shape or type consistent with sound engineering design.

(ii) Metal tanks shall be welded, riveted, and caulked, brazed, or bolted, or constructed by use of a combination of these methods. Filler metal used in brazing shall be nonferrous metal or an alloy having a melting point above 1000°F and below that of the metal joined.

(c) Atmospheric tanks.

(i) Atmospheric tanks shall be built in accordance with acceptable good standards of design. Atmospheric tanks may be built in accordance with:

(A) Underwriters' Laboratories, Inc., Subjects No. 142, Standard for Steel Aboveground Tanks for Flammable and Combustible Liquids, 1968; No. 58, Standards for Steel Underground Tanks for Flammable and COMBUSTIBLE Liquids, Fifth Edition, December 1961; or No. 80, Standard for Steel Inside Tanks for Oil-Burner Fuel, September 1963.

(B) American Petroleum Institute Standards (~~No. 12A, Specification for Oil Storage Tanks with Riveted Shells, Seventh Edition, September 1951, or~~) No. 650, Welded Steel Tanks for Oil Storage, Third Edition, 1966.

(C) American Petroleum Institute Standards No. 12B, Specification for Bolted Production Tanks, Eleventh Edition, May 1958, and Supplement 1, March 1962; No. 12D, Specification for Large Welded Production Tanks, Seventh Edition, August 1957; or No. 12F, Specification for Small Welded Production Tanks, Fifth Edition, March 1961. Tanks built in accordance with these standards shall be used only as

production tanks for storage of crude petroleum in oil-producing areas.

(ii) Tanks designed for underground service not exceeding 2,500 gallons capacity may be used aboveground.

(iii) Low-pressure tanks and pressure vessels may be used as atmospheric tanks.

(iv) Atmospheric tanks shall not be used for the storage of a flammable or combustible liquid at a temperature at or above its boiling point.

(d) Low pressure tanks.

(i) The normal operating pressure of the tank shall not exceed the design pressure of the tank.

(ii) Low-pressure tanks shall be built in accordance with acceptable standards of design. Low-pressure tanks may be built in accordance with:

(A) American Petroleum Institute Standard No. 620, Recommended Rules for the Design and Construction of Large, Welded, Low-Pressure Storage Tanks, Third Edition, 1966.

(B) The principles of the Code for Unfired Pressure Vessels, Section VIII of the ASME Boiler and Pressure Vessels Code, 1968.

(ii) Atmospheric tanks built according to the Underwriters' Laboratories, Inc., requirements in (1)(c)(i) of this section may be used for operating pressures not exceeding 1 p.s.i.g. and shall be limited to 2.5 p.s.i.g. under emergency venting conditions. Pressure vessels may be used as low-pressure tanks.

(e) Pressure vessels.

(i) The normal operating pressure of the vessel shall not exceed the design pressure of the vessel.

(ii) Pressure vessels shall be built in accordance with the Code for Unfired Pressure Vessels, Section VIII of the ASME Boiler and Pressure Vessel Code, 1968.

(f) Provisions for internal corrosion. When tanks are not designed in accordance with the American Petroleum Institute, American Society of Mechanical Engineers, or the Underwriters' Laboratories, Inc.'s standards, or if corrosion is anticipated beyond that provided for in the design formulas used, additional metal thickness or suitable protective coatings or linings shall be provided to compensate for the corrosion loss expected during the design life of the tank.

(2) Installation of outside aboveground tanks.

(a) Location with respect to property lines and public ways.

(i) Every aboveground tank for the storage of flammable or combustible liquids, except those liquids with boil-over characteristics and unstable liquids, operating at pressures not in excess of 2.5 p.s.i.g. and equipped with emergency venting which will not permit pressures to exceed 2.5 p.s.i.g. shall be located in accordance with Table H-5.

(ii) Every aboveground tank for the storage of flammable or combustible liquids, except those liquids with boil-over characteristics and unstable flammable or combustible liquids, operating at pressures exceeding 2.5 p.s.i.g. or equipped with emergency venting which will permit pressures to exceed 2.5 p.s.i.g. shall be located in accordance with Table H-6.

(iii) Every aboveground tank for the storage of flammable or combustible liquids with boil-over characteristics shall be located in accordance with Table H-7.

(iv) Every aboveground tank for the storage of unstable liquids shall be located in accordance with Table H-8.

(v) Reference minimum distances for use in Tables H-5 to H-8 inclusive.

(vi) Where end failure or horizontal pressure tanks and vessels may expose property, the tank shall be placed with the longitudinal axis parallel to the nearest important exposure.

**TABLE H-5**

Type of tank	Protection	Minimum distance in feet from property line which may be built upon, including the opposite side of a public way.	Minimum distance in feet from nearest side of any public way or from nearest important building and shall be not less than 5 feet.
Floating roof	Protection for exposures.	1/2 times diameter of tank but need not exceed 90 ft.	1/6 times diameter of tank but need not exceed 30 ft.
	None	Diameter of tank but need not exceed 175 ft.	1/6 times diameter of tank but need not exceed 30 ft.
Vertical with weak roof to shell seam	Approved foam or inerting system on the tank.	1/2 times diameter of tank but need not exceed 90 ft. and shall not be less than 5 ft.	1/6 times diameter of tank but need not exceed 30 ft.
	Protection for exposures.	Diameter of tank but need not exceed 175 ft.	1/3 times diameter of tank but need not exceed 60 ft.
	None	2 times diameter of tank but need not exceed 350 ft.	1/3 times diameter of tank but need not exceed 60 ft.
Horizontal and vertical, with emergency relief venting to limit pressures to 2.5 p.s.i.g.	Approved inerting system on the tank or approved foam system on vertical tanks.	1/2 times Table H-9 but shall not be less than 5 ft.	1/2 times Table H-9.
	Protection for exposures.	Table H-9	Table H-9
	None	2 times table	Table H-9

**TABLE H-6**

Type of tank	Protection	Minimum distance in feet from property line which may be built upon, including the opposite side of a public way.	Minimum distance in feet from nearest side of any public way or from nearest important building.
Any type	Protection for exposures.	1 1/2 times Table H-9 but shall not be less than 25 ft.	1 1/2 times Table H-9 but shall not be less than 25 ft.
	None	3 times Table H-9 but shall not be less than 50 ft.	1 1/2 times Table H-9 but shall not be less than 25 ft.

**TABLE H-7**

Type of tank	Protection	Minimum distance in feet from property line which may be built upon, including the opposite side of a public way.	Minimum distance in feet from nearest side of any public way or from nearest important building.
Floating roof	Protection for exposures.	Diameter of tank but need not exceed 175 ft.	1/3 times diameter of tank but need not exceed 60 ft.
	None	2 times diameter of tank but need not exceed 350 ft.	1/3 times diameter of tank but need not exceed 60 ft.
Fixed roof	Approved foam or inerting system.	Diameter of tank but need not exceed 175 ft.	1/3 times diameter of tank but need not exceed 60 ft.
	Protection for exposures.	2 times diameter of tank but need not exceed 350 ft.	2/3 times diameter of tank but need not exceed 120 ft.
	None	4 times diameter of tank but need not exceed 350 ft.	2/3 times diameter of tank but need not exceed 120 ft.

**TABLE H-8**

Type of tank	Protection	Minimum distance in feet from property line which may be built upon, including the opposite side of a public way.	Minimum distance in feet from nearest side of any public way or from nearest important building.
Horizontal and vertical tanks with emergency relief venting to permit pressure not in excess of 2.5 p.s.i.g.	Tank protected with any of the following: Approved water spray, approved inerting, approved insulation and refrigeration, approved barricade.	See Table H-9, but the distance may be not less than 25 ft.	Not less than 25 ft.
	Protection for exposures.	2 1/2 times Table H-9 but not less than 50 ft.	Not less than 50 ft.
	None	5 times Table H-9 but not less than 100 ft.	Not less than 100 ft.



**TABLE H-8**

Type of tank	Protection	Minimum distance in feet from property line which may be built upon, including the opposite side of a public way.	Minimum distance in feet from nearest side of any public way or from nearest important building.
Horizontal and vertical tanks with emergency relief venting to permit pressure over 2.5 p.s.i.g.	Tank protected with any one of the following: Approved water spray, approved inerting, approved insulation and refrigeration, approved barricade.	2 times Table H-9 but not less than 50 ft.	Not less than 50 ft.
	Protection for exposures.	4 times Table H-9 but not less than 100 ft.	Not less than 100 ft.
	None	8 times Table H-9 but not less than 150 ft.	Not less than 150 ft.

**TABLE H-9**

Capacity tank gallons	Minimum distance in feet from property line which may be built upon, including the opposite side of a public way.	Minimum distance in feet from nearest side of any public way or from nearest important building.
275 or less	5	5
276 to 750	10	5
751 to 12,000	15	5
12,001 to 30,000	20	5
30,001 to 50,000	30	10
50,001 to 100,000	50	15
100,001 to 500,000	80	25
500,001 to 1,000,000	100	35
1,000,001 to 2,000,000	135	45
2,000,001 to 3,000,000	165	55
3,000,001 or more	175	60

(b) Spacing (shell-to-shell) between aboveground tanks.

(i) The distance between any two flammable or combustible liquid storage tanks shall not be less than 3 feet.

(ii) Except as provided in (2)(b)(iii) of this section, the distance between any two adjacent tanks shall not be less than one-sixth the sum of their diameters. When the diameter of one tank is less than one-half the diameter of the adjacent tank, the distance between the two tanks shall not be less than one-half the diameter of the smaller tank.

(iii) Where crude petroleum in conjunction with production facilities are located in noncongested areas and have capacities not exceeding 126,000 gallons (3,000 barrels), the distance between such tanks shall not be less than 3 feet.

(iv) Where unstable flammable or combustible liquids are stored, the distance between such tanks shall not be less than one-half the sum of their diameters.

(v) When tanks are compacted in three or more rows or in an irregular pattern, greater spacing or other means shall be provided so that inside tanks are accessible for fire fighting purposes.

(vi) The minimum separation between a liquefied petroleum gas container and a flammable or combustible liquid storage tank shall be 20 feet, except in the case of flammable or combustible liquid tanks operating at pressures exceeding 2.5 p.s.i.g. or equipped with emergency venting which will permit pressures to exceed 2.5 p.s.i.g. in which case the provisions of (2)(b)(i) and (ii) of this section shall apply. Suitable means shall be taken to prevent the accumulation of flammable or combustible liquids under adjacent liquefied petroleum gas containers such as by diversion curbs or grading. When flammable or combustible liquid storage tanks are within a diked area, the liquefied petroleum gas containers shall be outside the diked area and at least 10 feet away from the centerline of the wall of the diked area. The foregoing provisions shall not apply when liquefied petroleum gas containers of 125 gallons or less capacity are installed adjacent to fuel oil supply tanks of 550 gallons or less capacity.

(c) Location of outside aboveground tanks with respect to important buildings on same property. Every outside aboveground tank shall be separated from important buildings on the same property by distances not less than those specified in (2)(a)(i), (ii), (iii) and (iv) of this section, whichever is applicable. The appropriate distance column in Tables H-5, H-6, H-7, H-8, or H-9, that shall be used shall be the one reading: "Minimum distance in feet from nearest side of any public way or from nearest important building."

(d) Normal venting for aboveground tanks.

(i) Atmospheric storage tanks shall be adequately vented to prevent the development of vacuum or pressure sufficient to distort the roof of a cone roof tank or exceed the design pressure in the case of other atmospheric tanks, as a result of filling or emptying, and atmospheric temperature changes.

(ii) Normal vents shall be sized either in accordance with: (A) The American Petroleum Institute Standard 2000 (1968), Venting Atmospheric and Low-Pressure Storage Tanks; or (B), other accepted standard; or (C) shall be at least as large as the filling or withdrawal connection, whichever is larger but in no case less than 1 1/4 inch nominal inside diameter.

(iii) Low-pressure tanks and pressure vessels shall be adequately vented to prevent development of pressure or vacuum, as a result of filling or emptying and atmospheric temperature changes, from exceeding the design pressure of the tank or vessel. Protection shall also be provided to prevent over-pressure from any pump discharging into the tank or vessel when the pump discharge pressure can exceed the design pressure of the tank or vessel.

(iv) If any tank or pressure vessel has more than one fill or withdrawal connection and simultaneous filling or withdrawal can be made, the vent size shall be based on the maximum anticipated simultaneous flow.

(v) Unless the vent is designed to limit the internal pressure 2.5 p.s.i. or less, the outlet of vents and vent drains shall be arranged to discharge in such a manner as to prevent localized overheating of any part of the tank in the event vapors from such vents are ignited.

(vi) Tanks and pressure vessels storing Class IA liquids shall be equipped with venting devices which shall be normally closed except when venting to pressures or vacuum conditions. Tanks and pressure vessels storing Class IB and IC liquids shall be equipped with venting devices which shall be normally closed except when venting under pressure or vacuum conditions, or with approved flame arresters.

Exemption: Tanks of 3,000 bbls. capacity or less containing crude petroleum in crude-producing areas; and, outside aboveground atmospheric tanks under 1,000 gallons capacity containing other than Class IA flammable liquids may have open vents. (See (2)(f)(ii) of this section.)

(vii) Flame arresters or venting devices required in (2)(e)(vi) of this section may be omitted for Class IB and IC liquids where conditions are such that their use may, in case of obstruction, result in tank damage.

(e) Emergency relief venting for fire exposure for above-ground tanks.

(i) Every aboveground storage tank shall have some form of construction or device that will relieve excessive internal pressure caused by exposure fires.

(ii) In a vertical tank the construction referred to in (2)(e)(i) of this section may take the form of a floating roof, lifter roof, a weak roof-to-shell seam, or other approved pressure relieving construction. The weak roof-to-shell seam shall be constructed to fail preferential to any other seam.

(iii) Where entire dependence for emergency relief is placed upon pressure relieving devices, the total venting capacity of both normal and emergency vents shall be enough to prevent rupture of the shell or bottom of the tank if vertical, or of the shell or heads if horizontal. If unstable liquids are stored, the effects of heat or gas resulting from polymerization, decomposition, condensation, or self-reactivity shall be taken into account. The total capacity of both normal and emergency venting devices shall be not less than that derived from Table H-10 except as provided in (2)(e)(v) and (vi) of this section. Such device may be a self-closing manhole cover, or one using long bolts that permit the cover to lift under internal pressure, or an additional or larger relief valve or valves. The wetted area of the tank shall be calculated on the basis of 55 percent of the total exposed area of a sphere or spheroid, 75 percent of the total exposed area of a horizontal tank and the first 30 feet above grade of the exposed shell area of a vertical tank.

**TABLE 10**  
WETTED AREA VERSUS CUBIC FEET  
FREE AIR PER HOUR  
(14.7 psia and 60°F)

Square feet	CFH	Square feet	CFH	Square feet	CFH
20	21,100	200	211,000	1,000	524,000
30	31,600	250	239,000	1,200	557,000
40	42,100	300	265,000	1,400	587,000
50	52,700	350	288,000	1,600	614,000
60	63,200	400	312,000	1,800	639,000
70	73,700	500	354,000	2,000	662,000
80	84,200	600	392,000	2,400	704,000
90	94,800	700	428,000	2,800	742,000

Square feet	CFH	Square feet	CFH	Square feet	CFH
100	105,000	800	462,000	and	
120	126,000	900	493,000	over	
140	147,000	1,000	524,000		
160	168,000				
180	190,000				
200	211,000				

(iv) For tanks and storage vessels designed for pressure over 1 p.s.i.g., the total rate of venting shall be determined in accordance with Table H-10, except that when the exposed wetted area of the surface is greater than 2,800 square feet, the total rate of venting shall be calculated by the following formula:

$$CFH = 1,107A^{0.82}$$

Where:

CFH = Venting requirement, in cubic feet of free air per hour.

A = Exposed wetted surface, in square feet.

Note: The foregoing formula is based on  $Q = 21,000A^{0.82}$ .

(v) The total emergency relief venting capacity for any specific stable liquid may be determined by the following formula:

Cubic feet of free air per hour = V

$$V = \frac{1337}{LM}$$

V = Cubic feet of free air per hour from Table H-10.

L = Latent heat of vaporization of specific liquid in B.t.u. per pound.

M = Molecular weight of specific liquids.

(vi) The required airflow rate of (2)(e)(iii) or (v) of this section may be multiplied by the appropriate factor listed in the following schedule when protection is provided as indicated. Only one factor may be used for any one tank.

0.5 for drainage in accordance with (2)(g)(ii) of this section for tanks over 200 square feet of wetted area.

0.3 for approved water spray.

0.3 for approved insulation.

0.15 for approved water spray with approved insulation.

(vii) The outlet of all vents and vent drains on tanks equipped with emergency venting to permit pressures exceeding 2.5 p.s.i.g. shall be arranged to discharge in such a way as to prevent localized overheating of any part of the tank, in the event vapors from such vents are ignited.

(viii) Each commercial tank venting device shall have stamped on it the opening pressure, the pressure at which the valve reaches the full open position, and the flow capacity at the latter pressure, expressed in cubic feet per hour of air at 60°F and at a pressure of 14.7 p.s.i.a.

(ix) The flow capacity of tank venting devices 12 inches and smaller in nominal pipe size shall be determined by actual test of each type and size of vent. These flow tests may

be conducted by the manufacturer if certified by a qualified impartial observer, or may be conducted by an outside agency. The flow capacity of tank venting devices larger than 12 inches nominal pipe size, including manhole covers with long bolts or equivalent, may be calculated provided that the opening pressure is actually measured, the rating pressure and corresponding free orifice area are stated, the word "calculated" appears on the nameplate, and the computation is based on a flow coefficient of 0.5 applied to the rated orifice area.

(f) Vent piping for aboveground tanks.

(i) Vent piping shall be constructed in accordance with WAC 296-24-33007 of this section.

(ii) Where vent pipe outlets for tanks storing Class I liquids are adjacent to buildings or public ways, they shall be located so that the vapors are released at a safe point outside of buildings and not less than 12 feet above the adjacent ground level. In order to aid their dispersion, vapors shall be discharged upward or horizontally away from closely adjacent walls. Vent outlets shall be located so that flammable vapors will not be trapped by eaves or other obstructions and shall be at least five feet from building openings.

(iii) When tank vent piping is manifolded, pipe sizes shall be such as to discharge within the pressure limitations of the system, the vapors they may be required to handle when manifolded tanks are subject to the same fire exposure.

(g) Drainage, dikes, and walls for aboveground tanks.

(i) Drainage and diked areas. The area surrounding a tank or a group of tanks shall be provided with drainage as in (2)(g)(ii) of this section, or shall be diked as provided in (2)(g)(iii), to prevent accidental discharge of liquid from endangering adjoining property or reaching waterways.

(ii) Drainage. Where protection of adjoining property or waterways is by means of a natural or manmade drainage system, such systems shall comply with the following:

(A) A slope of not less than 1 percent away from the tank toward the drainage system shall be provided.

(B) The drainage system shall terminate in vacant land or other area or in an impounding basin having a capacity not smaller than that of the largest tank served. This termination area and the route of the drainage system shall be so located that, if the flammable or combustible liquids in the drainage system are ignited, the fire will not seriously expose tanks or adjoining property.

(C) The drainage system, including automatic drainage pumps, shall not discharge to adjoining property, natural water courses, public sewers, or public drains unless the discharge of flammable or combustible liquids would not constitute a hazard, or the system is so designed that it will not permit flammable or combustible liquids to be released.

(iii) Diked areas. Where protection of adjoining property or waterways is accomplished by retaining the liquid around the tank by means of a dike, the volume of the diked area shall comply with the following requirements:

(A) Except as provided in (2)(g)(iii)(B) of this section, the volumetric capacity of the diked area shall not be less than the greatest amount of liquid that can be released from the largest tank within the diked area, assuming a full tank. The capacity of the diked area enclosing more than one tank

shall be calculated by deducting the volume of the tanks other than the largest tank below the height of the dike.

(B) For a tank or group of tanks with fixed roofs containing crude petroleum with boilover characteristics, the volumetric capacity of the diked area shall be not less than the capacity of the largest tank served by the enclosure, assuming a full tank. The capacity of the diked enclosure shall be calculated by deducting the volume below the height of the dike of all tanks within the enclosure.

(C) Walls of the diked area shall be of earth, steel, concrete or solid masonry designed to be liquidtight and to withstand a full hydrostatic head. Earthen walls 3 feet or more in height shall have a flat section at the top not less than 2 feet wide. The slope of an earthen wall shall be consistent with the angle of repose of the material of which the wall is constructed.

(D) The walls of the diked area shall be restricted to an average height of 6 feet above interior grade.

(E) Where provision is made for draining water from diked areas, drainage shall be provided at a uniform slope of not less than 1 percent away from tanks toward a sump, drain-box, or other safe means of disposal located at the greatest practical distance from the tank. Such drains shall normally be controlled in a manner so as to prevent flammable or combustible liquids from entering natural water courses, public sewers, or public drains, if their presence would constitute a hazard. Control of drainage shall be accessible under fire conditions.

(F) No loose combustible material, empty or full drum or barrel, shall be permitted within the diked area.

(G) Each diked area containing two or more tanks shall be subdivided preferably by drainage channels or at least by intermediate curbs in order to prevent spills from endangering adjacent tanks within the diked area as follows:

(I) When storing normally stable liquids in vertical cone roof tanks constructed with weak roof-to-shell seam or approved floating roof tanks or when storing crude petroleum in producing areas in any type of tank, one subdivision for each tank in excess of 10,000 bbls. and one subdivision for each group of tanks (no tank exceeding 10,000 bbls. capacity) having an aggregate capacity not exceeding 15,000 bbls.

(II) When storing normally stable flammable or combustible liquids in tanks not covered in (g)(iii)(G)(I) of this subsection, one subdivision for each tank in excess of 100,000 gallons (2,500 bbls.) and one subdivision for each group of tanks (no tank exceeding 100,000 gallons capacity) having an aggregate capacity not exceeding 150,000 gallons (3,570 bbls.).

(III) When storing unstable liquids in any type of tank, one subdivision for each tank except that tanks installed in accordance with the drainage requirements of NFPA 15-1969, Standard for Water Spray Fixed Systems for Fire Protection shall require no additional subdivision.

(IV) The drainage channels or intermediate curbs shall be located between tanks so as to take full advantage of the available space with due regard for the individual tank capacities. Intermediate curbs, where used, shall be not less than 18 inches in height.

(h) Tank openings other than vents for aboveground tanks.

(i) Connections for all tank openings shall be vaportight and liquidtight. Vents are covered in (2)(d) through (f) of this section.

(ii) Each connection to an aboveground tank through which liquid can normally flow shall be provided with an internal or an external valve located as close as practical to the shell of the tank. Such valves, when external, and their connections to the tank shall be of steel except when the chemical characteristics of the liquid stored are incompatible with steel. When materials other than steel are necessary, they shall be suitable for the pressures, structural stresses, and temperatures involved, including fire exposures.

(iii) Each connection below the liquid level through which liquid does not normally flow shall be provided with a liquidtight closure. This may be a valve, plug, or blind, or a combination of these.

(iv) Openings for gaging shall be provided with a vapor tight cap or cover.

(v) For Class IB and Class IC liquids other than crude oils, gasolines, and asphalts, the fill pipe shall be so designed and installed as to minimize the possibility of generating static electricity. A fill pipe entering the top of a tank shall terminate within 6 inches of the bottom of the tank and shall be installed to avoid excessive vibration.

(vi) Filling and emptying connections which are made and broken shall be located outside of buildings at a location free from any source of ignition and not less than 5 feet away from any building opening. Such connection shall be closed and liquidtight when not in use. The connection shall be properly identified.

(3) Installation of underground tanks.

(a) Location. Excavation for underground storage tanks shall be made with due care to avoid undermining of foundations of existing structures. Underground tanks or tanks under buildings shall be so located with respect to existing building foundations and supports that the loads carried by the latter cannot be transmitted to the tank. The distance from any part of a tank storing Class I liquids to the nearest wall of any basement or pit shall be not less than 1 foot, and to any property line that may be built upon, not less than 3 feet. The distance from any part of a tank storing Class II or Class III liquids to the nearest wall of any basement, pit or property line shall not be less than 1 foot.

(b) Depth and cover. Underground tanks shall be set on firm foundations and surrounded with at least 6 inches of noncorrosive, inert materials such as clean sand, earth, or gravel well tamped in place. The tank shall be placed in the hole with care since dropping or rolling the tank into the hole can break a weld, puncture or damage the tank, or scrape off the protective coating of coated tanks. Tanks shall be covered with a minimum of 2 feet of earth or shall be covered with not less than 1 foot of earth, on top of which shall be placed a slab of reinforced concrete not less than 4 inches thick. When underground tanks are, or are likely to be, subject to traffic, they shall be protected against damage from vehicles passing over them by at least 3 feet of earth cover, or 18 inches of well-tamped earth, plus 6 inches of reinforced concrete or 8 inches of asphaltic concrete. When asphaltic or reinforced concrete paving is used as part of the protection, it shall

extend at least 1 foot horizontally beyond the outline of the tank in all directions.

(c) Corrosion protection. Corrosion protection for the tank and its piping shall be provided by one or more of the following methods:

- (i) Use of protective coatings or wrappings;
  - (ii) Cathodic protection; or,
  - (iii) Corrosion resistant materials of construction.
- (d) Vents.

(i) Location and arrangement of vents for Class I liquids. Vent pipes from tanks storing Class I liquids shall be so located that the discharge point is outside of buildings, higher than the fill pipe opening, and not less than 12 feet above the adjacent ground level. Vent pipes shall discharge only upward in order to disperse vapors. Vent pipes 2 inches or less in nominal inside diameter shall not be obstructed by devices that will cause excessive back pressure. Vent pipe outlets shall be so located that flammable vapors will not enter building openings, or be trapped under eaves or other obstructions. If the vent pipe is less than 10 feet in length, or greater than 2 inches in nominal inside diameter, the outlet shall be provided with a vacuum and pressure relief device or there shall be an approved flame arrester located in the vent line at the outlet or within the approved distance from the outlet.

(ii) Size of vents. Each tank shall be vented through piping adequate in size to prevent blow-back of vapor or liquid at the fill opening while the tank is being filled. Vent pipes shall be not less than 1 1/4 inch nominal inside diameter.

TABLE H-11  
VENT LINE DIAMETERS

Maximum flow GPM	Pipe length*		
	50 feet	100 feet	200 feet
	Inches	Inches	Inches
100	1 1/4	1 1/4	1 1/4
200	1 1/4	1 1/4	1 1/4
300	1 1/4	1 1/4	1 1/2
400	1 1/4	1 1/2	2
500	1 1/2	1 1/2	2
600	1 1/2	2	2
700	2	2	2
800	2	2	3
900	2	2	3
1,000	2	2	3

\* Vent lines of 50 ft., 100 ft., and 200 ft. of pipe plus 7 ells.

(iii) Location and arrangement of vents for Class II or Class III liquids. Vent pipes from tanks storing Class II or Class III flammable liquids shall terminate outside of the building and higher than the fill pipe opening. Vent outlets shall be above normal snow level. They may be fitted with return bends, coarse screens or other devices to minimize ingress of foreign material.

(iv) Vent piping shall be constructed in accordance with WAC 296-24-33007. Vent pipes shall be so laid as to drain toward the tank without sags or traps in which liquid can collect. They shall be located so that they will not be subjected to physical damage. The tank end of the vent pipe shall enter the tank through the top.

(v) When tank vent piping is manifolded, pipe sizes shall be such as to discharge, within the pressure limitations of the system, the vapors they may be required to handle when manifolded tanks are filled simultaneously.

(e) Tank openings other than vents.

(i) Connections for all tank openings shall be vapor or liquid tight.

(ii) Openings for manual gaging, if independent of the fill pipe, shall be provided with a liquid-tight cap or cover. If inside a building, each such opening shall be protected against liquid overflow and possible vapor release by means of a spring-loaded check valve or other approved device.

(iii) Fill and discharge lines shall enter tanks only through the top. Fill lines shall be sloped toward the tank.

(iv) For Class IB and Class IC liquids other than crude oils, gasolines, and asphalts, the fill pipe shall be so designed and installed as to minimize the possibility of generating static electricity by terminating within 6 inches of the bottom of the tank.

(v) Filling and emptying connections which are made and broken shall be located outside of buildings at a location free from any source of ignition and not less than 5 feet away from any building opening. Such connection shall be closed and liquidtight when not in use. The connection shall be properly identified.

(4) Installation of tanks inside of buildings.

(a) Location. Tanks shall not be permitted inside of buildings except as provided in WAC 296-24-33011 and 296-24-33015 through 296-24-33019.

(b) Vents. Vents for tanks inside of buildings shall be as provided in (2)(d),(e),(f)(ii) and (3)(d) of this section, except that emergency venting by the use of weak roof seams on tanks shall not be permitted. Vents shall discharge vapors outside the buildings.

(c) Vent piping. Vent piping shall be constructed in accordance with WAC 296-24-33007.

(d) Tank openings other than vents.

(i) Connections for all tank openings shall be vapor or liquidtight. Vents are covered in (4)(b) of this section.

(ii) Each connection to a tank inside of buildings through which liquid can normally flow shall be provided with an internal or an external valve located as close as practical to the shell of the tank. Such valves, when external, and their connections to the tank shall be of steel except when the chemical characteristics of the liquid stored are incompatible with steel. When materials other than steel are necessary, they shall be suitable for the pressures, structural stresses, and temperatures involved, including fire exposures.

(iii) Flammable or combustible liquid tanks located inside of buildings, except in one-story buildings designed and protected for flammable or combustible liquid storage, shall be provided with an automatic-closing heat-actuated valve on each withdrawal connection below the liquid level, except for connections used for emergency disposal, to prevent continued flow in the event of fire in the vicinity of the tank. This function may be incorporated in the valve required in (4)(d)(ii) of this section, and if a separate valve, shall be located adjacent to the valve required in (4)(d)(ii) of this section.

(iv) Openings for manual gaging, if independent of the fill pipe (see (4)(d)(vi) of this section), shall be provided with a vaportight cap or cover. Each such opening shall be protected against liquid overflow and possible vapor release by means of a spring loaded check valve or other approved device.

(v) For Class IB and Class IC liquids other than crude oils, gasolines, and asphalts, the fill pipe shall be so designed and installed as to minimize the possibility of generating static electricity by terminating within 6 inches of the bottom of the tank.

(vi) The fill pipe inside of the tank shall be installed to avoid excessive vibration of the pipe.

(vii) The inlet of the fill pipe shall be located outside of buildings at a location free from any source of ignition and not less than 5 feet away from any building opening. The inlet of the fill pipe shall be closed and liquidtight when not in use. The fill connection shall be properly identified.

(viii) Tanks inside buildings shall be equipped with a device, or other means shall be provided, to prevent overflow into the building.

(5) Supports, foundations, and anchorage for all tank locations.

(a) General. Tank supports shall be installed on firm foundations. Tank supports shall be of concrete, masonry, or protected steel. Single wood timber supports (not cribbing) laid horizontally may be used for outside aboveground tanks if not more than 12 inches high at their lowest point.

(b) Fire resistance. Steel supports or exposed piling shall be protected by materials having a fire resistance rating of not less than 2 hours, except that steel saddles need not be protected if less than 12 inches high at their lowest point. Water spray protection or its equivalent may be used in lieu of fire-resistant materials to protect supports.

(c) Spheres. The design of the supporting structure for tanks such as spheres shall receive special engineering consideration.

(d) Load distribution. Every tank shall be so supported as to prevent the excessive concentration of loads on the supporting portion of the shell.

(e) Foundations. Tanks shall rest on the ground or on foundations made of concrete, masonry, piling, or steel. Tank foundations shall be designed to minimize the possibility of uneven settling of the tank and to minimize corrosion in any part of the tank resting on the foundation.

(f) Flood areas. Where a tank is located in an area that may be subjected to flooding, the applicable precautions outlined in (5)(f) of this section shall be observed.

(i) No aboveground vertical storage tank containing a flammable or combustible liquid shall be located so that the allowable liquid level within the tank is below the established maximum flood stage, unless the tank is provided with a guiding structure such as described in (5)(f)(xiii), (xiv) and (xv) of this section.

(ii) Independent water supply facilities shall be provided at locations where there is no ample and dependable public water supply available for loading partially empty tanks with water.

(iii) In addition to the preceding requirements, each tank so located that more than 70 percent, but less than 100 per-

cent, of its allowable liquid storage capacity will be submerged at the established maximum flood stage, shall be safeguarded by one of the following methods: Tank shall be raised, or its height shall be increased, until its top extends above the maximum flood stage a distance equivalent to 30 percent or more of its allowable liquid storage capacity: Provided, however, That the submerged part of the tank shall not exceed two and one-half times the diameter. Or, as an alternative to the foregoing, adequate noncombustible structural guides, designed to permit the tank to float vertically without loss of product, shall be provided.

(iv) Each horizontal tank so located that more than 70 percent of its storage capacity will be submerged at the established flood stage, shall be anchored, attached to a foundation of concrete or of steel and concrete, of sufficient weight to provide adequate load for the tank when filled with flammable or combustible liquid and submerged by flood waters to the established flood stage, or adequately secured by other means.

(v) Spherical and spheroidal tanks shall be protected by applicable methods as specified for either vertical or horizontal tanks.

(vi) At locations where there is no ample and dependable water supply, or where filling of underground tanks with liquid is impracticable because of the character of their contents, their use, or for other reasons, each tank shall be safeguarded against movement when empty and submerged by high ground water or flood waters by anchoring, weighting with concrete or other approved solid loading material, or securing by other means. Each such tank shall be so constructed and installed that it will safely resist external pressures due to high ground water or flood waters.

(vii) At locations where there is an ample and dependable water supply available, underground tanks containing flammable or combustible liquids, so installed that more than 70 percent of their storage capacity will be submerged at the maximum flood stage, shall be so anchored, weighted, or secured by other means, as to prevent movement of such tanks when filled with flammable or combustible liquids, and submerged by flood waters to the established flood stage.

(viii) Pipe connections below the allowable liquid level in a tank shall be provided with valves or cocks located as closely as practicable to the tank shell. Such valves and their connections to tanks shall be of steel or other material suitable for use with the liquid being stored. Cast iron shall not be used.

(ix) At locations where an independent water supply is required, it shall be entirely independent of public power and water supply. Independent source of water shall be available when flood waters reach a level not less than 10 feet below the bottom of the lowest tank on a property.

(x) The self-contained power and pumping unit shall be so located or so designed that pumping into tanks may be carried on continuously throughout the rise in flood waters from a level 10 feet below the lowest tank to the level of the potential flood stage.

(xi) Capacity of the pumping unit shall be such that the rate of rise of water in all tanks shall be equivalent to the established potential average rate of rise of flood waters at any stage.

(xii) Each independent pumping unit shall be tested periodically to insure that it is in satisfactory operating condition.

(xiii) Structural guides for holding floating tanks above their foundations shall be so designed that there will be no resistance to the free rise of a tank, and shall be constructed of noncombustible material.

(xiv) The strength of the structure shall be adequate to resist lateral movement of a tank subject to a horizontal force in any direction equivalent to not less than 25 pounds per square foot acting on the projected vertical cross-sectional area of the tank.

(xv) Where tanks are situated on exposed points or bends in a shoreline where swift currents in flood waters will be present, the structures shall be designed to withstand a unit force of not less than 50 pounds per square foot.

(xvi) The filling of a tank to be protected by water loading shall be started as soon as flood waters reach a dangerous flood stage. The rate of filling shall be at least equal to the rate of rise of the floodwaters (or the established average potential rate of rise).

(xvii) Sufficient fuel to operate the water pumps shall be available at all times to insure adequate power to fill all tankage with water.

(xviii) All valves on connecting pipelines shall be closed and locked in closed position when water loading has been completed.

(xix) Where structural guides are provided for the protection of floating tanks, all rigid connections between tanks and pipelines shall be disconnected and blanked off or banded before the floodwaters reach the bottom of the tank, unless control valves and their connections to the tank are of a type designed to prevent breakage between the valve and the tank shell.

(xx) All valves attached to tanks other than those used in connection with water loading operations shall be closed and locked.

(xxi) If a tank is equipped with a swing line, the swing pipe shall be raised to and secured at its highest position.

(xxii) Inspections. The director or his/her designated representative shall make periodic inspections of all plants where the storage of flammable or combustible liquids is such as to require compliance with the foregoing requirements, in order to assure the following:

(A) That all flammable or combustible liquid storage tanks are in compliance with these requirements and so maintained.

(B) That detailed printed instructions of what to do in flood emergencies are properly posted.

(C) That station operators and other employees depended upon to carry out such instructions are thoroughly informed as to the location and operation of such valves and other equipment necessary to effect these requirements.

(g) Earthquake areas. In areas subject to earthquakes, the tank supports and connections shall be designed to resist damage as a result of such shocks.

(6) Sources of ignition. In locations where flammable vapors may be present, precautions shall be taken to prevent ignition by eliminating or controlling sources of ignition. Sources of ignition may include open flames, lightning, smoking, cutting and welding, hot surfaces, frictional heat,

sparks (static, electrical, and mechanical), spontaneous ignition, chemical and physical-chemical reactions, and radiant heat.

(7) Testing.

(a) General. All tanks, whether shop built or field erected, shall be strength tested before they are placed in service in accordance with the applicable sections of the code under which they were built. The American Society of Mechanical Engineers (ASME) code stamp, American Petroleum Institute (API) monogram, or the label of the Underwriters' Laboratories, Inc., on a tank shall be evidence of compliance with this strength test. Tanks not marked in accordance with the above codes shall be strength tested before they are placed in service in accordance with good engineering principles and reference shall be made to the sections on testing in the codes listed in (l)(c)(i), (d)(ii) or (e)(ii) of this section.

(b) Strength. When the vertical length of the fill and vent pipes is such that when filled with liquid the static head imposed upon the bottom of the tank exceeds 10 pounds per square inch, the tank and related piping shall be tested hydrostatically to a pressure equal to the static head thus imposed.

(c) Tightness. In addition to the strength test called for in (7)(a) and (b), all tanks and connections shall be tested for tightness. Except for underground tanks, this tightness test shall be made at operating pressure with air, inert gas, or water prior to placing the tank in service. In the case of field-erected tanks the strength test may be considered to be the test for tank tightness. Underground tanks and piping, before being covered, enclosed, or placed in use, shall be tested for tightness hydrostatically, or with air pressure at not less than 3 pounds per square inch and not more than 5 pounds per square inch.

(d) Repairs. All leaks or deformations shall be corrected in an acceptable manner before the tank is placed in service. Mechanical caulking is not permitted for correcting leaks in welded tanks except pinhole leaks in the roof.

(e) Derated operations. Tanks to be operated at pressures below their design pressure may be tested by the applicable provisions of (7)(a) or (b) based upon the pressure developed under full emergency venting of the tank.

**AMENDATORY SECTION** (Amending WSR 03-06-076, filed 3/4/03, effective 8/1/03)

**WAC 296-78-835 Vehicles.** (1) Vehicles.

(a) Scope. Vehicles shall include all mobile equipment normally used in sawmill, planing mill, storage, shipping, and yard operations, including log sorting yards.

(b) Lift trucks. Lift truck shall be designed, constructed, maintained and operated in accordance with the requirements of WAC 296-24-230 through 296-24-23035 of the general safety and health standards.

(c) Carriers. Drive chains on lumber carriers shall be adequately guarded to prevent contact at the pinch points.

(d)(i) Lumber carriers shall be so designed and constructed that the operator's field of vision shall not be unnecessarily restricted.

(ii) Carriers shall be provided with ladders or equivalent means of access to the operator's platform or cab.

(e) Lumber hauling trucks.

(i) On trucks where the normal operating position is ahead of the load in the direction of travel, the cab shall be protected by a barrier at least as high as the cab. The barrier shall be capable of stopping the weight of the load capacity of the vehicle if the vehicle were to be stopped suddenly while traveling at its normal operating speed. The barrier shall be constructed in such a manner that individual pieces of a normal load will not go through openings in the barrier.

(ii) Stakes, stake pockets, racks, tighteners, and binders shall provide a positive means to secure the load against any movement during transit.

(iii) Where rollers are used, at least two shall be equipped with locks which shall be locked when supporting loads during transit.

(2) Warning signals and spark arrestors. All vehicles shall be equipped with audible warning signals and where practicable shall have spark arrestors.

(3) Flywheels, gears, sprockets and chains and other exposed parts that constitute a hazard to workers shall be enclosed in standard guards.

(4) All vehicles operated after dark or in any area of reduced visibility shall be equipped with head lights and backup lights which adequately illuminate the direction of travel for the normal operating speed of the vehicle. The vehicle shall also be equipped with tail lights which are visible enough to give sufficient warning to surrounding traffic at the normal traffic operating speed.

(5) All vehicles operated in areas where overhead hazards exist shall be equipped with an overhead guard for the protection of the operator.

(6) Where vehicles are so constructed and operated that there is a possibility of the operator being injured by backing into objects, a platform guard shall be provided and so arranged as not to hinder the exit of the driver.

(7) Trucks, lift trucks and carriers shall not be operated at excessive rates of speed. When operating on tramways or docks more than six feet above the ground or lower level they shall be limited to a speed of not more than twelve miles per hour. When approaching blind corners they shall be limited to four miles per hour.

(8) Vehicles shall not be routed across principal thoroughfares while employees are going to or from work unless pedestrian lanes are provided.

(a) Railroad tracks and other hazardous crossings shall be plainly posted (~~and traffic control devices (American National Standard D8.1 - 1967 for Railroad-Highway Grade Crossing Protection) should be utilized~~).

(b) Restricted overhead clearance. All areas of restricted side or overhead clearance shall be plainly marked.

(c) Pickup and unloading points. Pickup and unloading points and paths for lumber packages on conveyors and transfers and other areas where accurate spotting is required, shall be plainly marked and wheel stops provided where necessary.

(d) Aisles, passageways, and roadways. Aisles, passageways, and roadways shall be sufficiently wide to provide safe side clearance. One-way aisles may be used for two-way traffic if suitable turnouts are provided.

(9) Where an operator's vision is impaired by the vehicle or load it is carrying, he shall move only on signal from

someone so stationed as to have a clear view in the direction the vehicle is to travel.

(10) Lift trucks shall be equipped, maintained and operated in compliance with the requirements of the general safety and health standard, WAC 296-24-230 through 296-24-23035.

(11) Load limits. No vehicle shall be operated with loads exceeding its safe load capacity.

(12) Vehicles with internal combustion engines shall not be operated in enclosed buildings or buildings with ceilings less than sixteen feet high unless the buildings have ventilation adequate to maintain air quality as required by the general occupational health standard, chapter 296-62 WAC.

(13) Vehicles shall not be refueled while motor is running. Smoking or open flames shall not be allowed in the refueling area.

(14) No employee other than trained operators or mechanics shall start the motor of, or operate any log or lumber handling vehicle.

(15) All vehicles shall be equipped with brakes capable of holding and controlling the vehicle and capacity load upon any grade or incline over which they may operate.

(16) Unloading equipment and facilities.

(a) Machines used for hoisting, unloading, or lowering logs shall be equipped with brakes capable of controlling or holding the maximum load in midair.

(b) The lifting cylinders of all hydraulically operated log handling machines, or where the load is lifted by wire rope, shall be equipped with a positive device for preventing the uncontrolled lowering of the load or forks in case of a failure in the hydraulic system.

(c) A limit switch shall be installed on powered log handling machines to prevent the lift arms from traveling too far in the event the control switch is not released in time.

(d) When forklift-type machines are used to load trailers, a means of securing the loading attachment to the fork shall be installed and used.

(e) A-frames and similar log unloading devices shall have adequate height to provide safe clearance for swinging loads and to provide for adequate crotch lines and spreader bar devices.

(f) Log handling machines used to stack logs or lift loads above operator's head shall be equipped with overhead protection.

(g) Unloading devices shall be equipped with a horn or other plainly audible signaling device.

(h) Movement of unloading equipment shall be coordinated by audible or hand signals when operator's vision is impaired or operating in the vicinity of other employees.

Lift trucks regularly used for transporting peeler blocks or cores shall have tusks or a similar type hold down device to prevent the blocks or cores from rolling off the forks.

(17) Where spinners are used on steering wheels, they shall be of the automatic retracting type or shall be built into the wheel in such a manner as not to extend above the plane surface of the wheel. Vehicles equipped with positive anti-kickback steering are exempted from this requirement.

(18) Mechanical stackers and unstackers shall have all gears, sprockets and chains exposed to the contact of work-

ers, fully enclosed by guards as required by WAC 296-78-710 of this chapter.

(19) Manually operated control switches shall be properly identified and so located as to be readily accessible to the operator. Main control switches shall be so designed that they can be locked in the open position.

(20) Employees shall not stand or walk under loads being lifted or moved. Means shall be provided to positively block the hoisting platform when employees must go beneath the stacker or unstacker hoist.

(21) No person shall ride any lift truck or lumber carrier unless a suitable seat is provided, except for training purposes.

(22) Unstacking machines shall be provided with a stopping device which shall at all times be accessible to at least one employee working on the machine.

(23) Floor of unstacker shall be kept free of broken stickers and other debris. A bin or frame shall be provided to allow for an orderly storage of stickers.

(24) Drags or other approved devices shall be provided to prevent lumber from running down on graders.

(25) Liquefied petroleum gas storage and handling. Storage and handling of liquefied petroleum gas shall be in accordance with the requirements of WAC 296-24-475 through 296-24-47517 of the general safety and health standards.

(26) Flammable liquids. Flammable liquids shall be stored and handled in accordance with WAC 296-24-330 through 296-24-33019 of the general safety and health standards.

(27) Guarding side openings. The hoistway side openings at the top level of the stacker and unstacker shall be protected by enclosures of standard railings.

(28) Guarding hoistway openings. When the hoist platform or top of the load is below the working platform, the hoistway openings shall be guarded.

(29) Guarding lower landing area. The lower landing area of stackers and unstackers shall be guarded by enclosures that prevent entrance to the area or pit below the hoist platform. Entrances should be protected by electrically interlocked gates which, when open, will disconnect the power and set the hoist brakes. When the interlock is not installed, other positive means of protecting the entrance shall be provided.

(30) Lumber lifting devices. Lumber lifting devices on all stackers shall be designed and arranged so as to minimize the possibility of lumber falling from such devices.

(31) Inspection. At the start of each work shift, equipment operators shall inspect the equipment they will use for evidence of failure or incipient failure. Equipment found to have defects which might affect the operating safety shall not be used until the defects are corrected.

(32) Cleaning pits. Safe means of entrance and exit shall be provided to permit cleaning of pits.

(33) Preventing entry to hazardous area. Where the return of trucks from unstacker to stacker is by mechanical power or gravity, adequate signs, warning devices, or barriers shall be erected to prevent entry into the hazardous area.



AMENDATORY SECTION (Amending WSR 95-04-007, filed 1/18/95, effective 3/1/95)

**WAC 296-155-100 Management's responsibility.** (1)

It shall be the responsibility of management to establish, supervise, and enforce, in a manner which is effective in practice:

- (a) A safe and healthful working environment.
- (b) An accident prevention program as required by these standards.

(c) Training programs to improve the skill and competency of all employees in the field of occupational safety and health.

(2) Employees required to handle or use poisons, caustics, and other harmful substances shall be instructed regarding the safe handling and use, and be made aware of the potential hazards, personal hygiene, and personal protective measures required.

(3) In job site areas where harmful plants or animals are present, employees who may be exposed shall be instructed regarding the potential hazards, and how to avoid injury, and the first-aid procedures to be used in the event of injury.

(4) Employees required to handle or use flammable liquids, gases, or toxic materials shall be instructed in the safe handling and use of these materials and made aware of the specific requirements contained in Parts B, D, and other applicable parts of this standard.

(5) Permit-required confined spaces. The requirements of chapters 296-24, 296-62 and 296-155 WAC apply.

(6) The employer shall ensure that work assignments place no employee in a position or location not within ordinary calling distance of another employee able to render assistance in case of emergency.

**Note:** This subsection does not apply to operators of motor vehicles, watchpersons or other jobs which, by their nature, are single employee assignments. However, a definite procedure for checking the welfare of all employees during working hours should be instituted and all employees so advised.

(7) Each employer shall post and keep posted a notice or notices (Job Safety and Health Protection - Form ((~~F416-081-000~~) F416-081-909)) to be furnished by the department of labor and industries, informing employees of the protections and obligations provided for in the act and that for assistance and information, including copies of the act, and of specific safety and health standards employees should contact the employer or the nearest office of the department of labor and industries. Such notice or notices shall be posted by the employer at each establishment in a conspicuous place or places where notices to employees are customarily posted. Each employer shall take steps to assure that such notices are not altered, defaced, or covered by other material.

AMENDATORY SECTION (Amending WSR 01-11-038, filed 5/9/01, effective 9/1/01)

**WAC 296-155-125 First-aid supplies.** (1) The first-aid kits and supplies requirements of the safety and health core rules, chapter 296-800 WAC, apply within the scope of chapter 296-155 WAC.

(2) All vehicles used to transport work crews must be equipped with first-aid supplies.

(3) When practical, a poster must be fastened and maintained either on or in the cover of each first-aid kit and at or near all phones plainly stating the worksite address or location, and the phone numbers of emergency medical responders for the worksite.

(4) Requirements of WAC ((~~296-62-130, Emergency washing facilities~~) 296-800-15030, Make sure emergency washing facilities are functional and readily accessible), apply within the scope of chapter 296-155 WAC.

AMENDATORY SECTION (Amending Order 92-15, filed 2/3/93, effective 3/15/93)

**WAC 296-155-17311 Exposure monitoring.** (1) General.

(a) Determinations of employee exposure shall be made from breathing zone air samples that are representative of each employee's exposure to airborne MDA over an 8-hour period. Determination of employee exposure to the STEL shall be made from breathing zone air samples collected over a 15 minute sampling period.

(b) Representative employee exposure shall be determined on the basis of one or more samples representing full shift exposure for each shift for each job classification in each work area where exposure to MDA may occur.

(c) Where the employer can document that exposure levels are equivalent for similar operations in different work shifts, the employer shall only be required to determine representative employee exposure for that operation during one shift.

(2) Initial monitoring. Each employer who has a workplace or work operation covered by this standard shall perform initial monitoring to determine accurately the airborne concentrations of MDA to which employees may be exposed unless:

(a) The employer can demonstrate, on the basis of objective data, that the MDA-containing product or material being handled cannot cause exposures above the standard's action level, even under worst-case release conditions; or

(b) The employer has historical monitoring or other data demonstrating that exposures on a particular job will be below the action level.

(3) Periodic monitoring and monitoring frequency.

(a) If the monitoring required by subsection (2)(b) of this section reveals employee exposure at or above the action level, but at or below the PELs, the employer shall repeat such monitoring for each such employee at least every 6 months.

(b) If the monitoring required by subsection (2)(b) of this section reveals employee exposure above the PELs, the employer shall repeat such monitoring for each such employee at least every 3 months.

(c) Employers who are conducting MDA operations within a regulated area can forego periodic monitoring if the employees are all wearing supplied-air respirators while working in the regulated area.

(d) The employer may alter the monitoring schedule from every three months to every six months for any employee for whom two consecutive measurements taken at

least 7 days apart indicate that the employee exposure has decreased to below the PELs but above the action level.

(4) Termination of monitoring.

(a) If the initial monitoring required by subsection (2)(b) of this section reveals employee exposure to be below the action level, the employer may discontinue the monitoring for that employee, except as otherwise required by subsection (5) of this section.

(b) If the periodic monitoring required by subsection (3) of this section reveals that employee exposures, as indicated by at least two consecutive measurements taken at least 7 days apart, are below the action level the employer may discontinue the monitoring for that employee, except as otherwise required by subsection (5) of this section.

(5) Additional monitoring. The employer shall institute the exposure monitoring required under subsections (2)(b) and (c) of this section when there has been a change in production process, chemicals present, control equipment, personnel, or work practices which may result in new or additional exposures to MDA, or when the employer has any reason to suspect a change which may result in new or additional exposures.

(6) Accuracy of monitoring. Monitoring shall be accurate, to a confidence level of 95 percent, to within plus or minus 25 percent for airborne concentrations of MDA.

(7) Employee notification of monitoring results.

(a) The employer shall, ~~((within 15))~~ as soon as possible but no later than 5 working days after the receipt of the results of any monitoring performed under this standard, notify each employee of these results, in writing, either individually or by posting of results in an appropriate location that is accessible to affected employees.

(b) The written notification required by subdivision (a) of this subsection shall contain the corrective action being taken by the employer or any other protective measures which have been implemented to reduce the employee exposure to or below the PELs, wherever the PELs are exceeded.

(8) Visual monitoring. The employer shall make routine inspections of employee hands, face, and forearms potentially exposed to MDA. Other potential dermal exposures reported by the employee must be referred to the appropriate medical personnel for observation. If the employer determines that the employee has been exposed to MDA the employer shall:

(a) Determine the source of exposure;

(b) Implement protective measures to correct the hazard; and

(c) Maintain records of the corrective actions in accordance with WAC 296-155-17327.

**AMENDATORY SECTION** (Amending WSR 04-24-089, filed 12/1/04, effective 1/1/05)

**WAC 296-155-305 Signaling and flaggers.**

**Definition:**

*Flagger* means a person who provides temporary traffic control.

For the purposes of this chapter, *MUTCD* means the Federal Highway Administration's Manual on Uniform Traffic

Control as currently modified and adopted by the Washington state department of transportation.

**Link:** For the current version of the MUTCD, see the department of transportation's web site at <http://www.wsdot.wa.gov/biz/trafficoperations/mutcd.htm>.

(1) General requirements for signaling and flaggers.

(a) ~~((When flaggers are used,))~~ Employers must first apply the requirements in this section. Then you must set up and use temporary traffic controls according to the guidelines and recommendations in Part VI of the MUTCD.

(b) Job site workers with specific traffic control responsibilities must be trained in traffic control techniques, device usage, and placement.

Note:

- You may purchase copies of the MUTCD by writing:

U.S. Government Printing Office  
Superintendent of Documents  
Mail Stop: SSOP,  
Washington D.C. 20402-9328

- You may view and print a copy of the MUTCD at the following web site <http://www.wsdot.wa.gov/biz/trafficoperations/mutcd.htm>.

(2) When to use flaggers.

(a) Flaggers are to be used only when other reasonable traffic control methods will not adequately control traffic in the work zone.

(b) If signs, signals, and barricades do not provide necessary protection from traffic at work zones and construction sites on or adjacent to a highway or street, then you must use flaggers or other appropriate traffic controls.

(3) Flagger signaling.

(a) Flagger signaling must be with sign paddles approved by WSDOT and conform to guidelines and recommendations of MUTCD.

(b) Sign paddles must comply with the requirements of the MUTCD.

(c) When flagging is done during periods of darkness, sign paddles must be retroreflective or illuminated in the same manner as signs.

(d) During emergency situations, red flags, meeting the specifications of the MUTCD, may be used to draw a driver's attention to particularly hazardous conditions. In nonemergency situations, a red flag may be held in a flagger's free hand to supplement the use of a sign paddle.

(4) Adequate warning of approaching vehicles. Employers must:

- Position work zone flaggers so they are not exposed to traffic or equipment approaching them from behind.

– If this is not possible, then the employer, responsible contractor, and/or project owner must develop and use a method to ensure that flaggers have adequate visual warning of traffic and equipment approaching from behind.

**Note:**

- The following are some optional examples of methods that may be used to adequately warn or protect flaggers:
  - Mount a mirror on the flagger's hard hat.
  - Use an observer.
  - Use "jersey" barriers.

- The department recognizes the importance of adequately trained flaggers and supports industry efforts to improve the quality of flagger training. However, training

alone is not sufficient to comply with the statutory requirement of revising flagger safety standards to improve options available that ensure flagger safety and that flaggers have adequate visual warning of objects approaching from behind them.

(5) High-visibility garments for flaggers.

(a) While flagging during daylight hours, a flagger must at least wear, as an outer garment:

- A high-visibility safety garment designed according to Class 2 specifications in ANSI/ISEA 107-1999, American National Standard for High-Visibility Safety Apparel.

- Consisting of at least 775 square inches of background material that are fluorescent yellow-green, fluorescent orange-red or fluorescent red in color;

**AND**

- 201 square inches of retroreflective material that encircles the torso and is placed to provide 360 degrees visibility around the flagger.

- A high visibility hard hat that is white, yellow, yellow-green, orange or red in color.

**Note:** A high-visibility garment meets Class 2 specifications if the garment:

- Meets the requirements above;

**OR**

- Has an ANSI "Class 2" label.

**Definition:**

For the purpose of this rule, **hours of darkness** means one-half hour before sunset to one-half hour after sunrise.

(b) While flagging during hours of darkness, a flagger must at least wear, as an outer garment:

- A high-visibility safety garment designed according to Class 2 specifications in ANSI/ISEA 107-1999.

- Consisting of at least 775 square inches of background material that are fluorescent yellow-green, fluorescent orange-red or fluorescent red in color;

**AND**

- 201 square inches of retroreflective material that encircles the torso and is placed to provide 360 degrees visibility around the flagger.

- White coveralls, or other coveralls or trousers that have retroreflective banding on the legs designed according to ANSI/ISEA 107-1999 standards.

- When snow or fog limit visibility, pants, coveralls, or rain gear, meeting these additional requirements must be worn:

- In a highly visible color;

- With retroreflective banding on the legs;

- Designed according to ANSI/ISEA 107-1999.

- A high-visibility hard hat:

- Marked with at least 12 square inches of retroreflective material applied to provide 360 degrees of visibility.

**Note:** ANSI/ISEA 107-1999 is available by:

- Purchasing copies of ANSI/ISEA 107-1999 by writing:

- American National Standards Institute

- 11 West 42nd Street

- New York, NY 10036

**OR**

- Contacting the ANSI web site at <http://web.ansi.org/>.

**OR**

- Reading a copy of ANSI/ISEA 107-1999 at any Washington state library.

(6) Flagger training. Employers must make sure that:

(a) Each flagger has in their possession:

- A valid Washington traffic control flagger card; or

- A valid flagger card from a state such as:

- Oregon;

- Idaho;

- Montana;

**OR**

- Other states having a flagger training reciprocity agreement with Washington.

(b) The flagger card shows the following:

- Verification that the flagger training required is completed;

- Date the flagger received their flagger training;

- Name of the instructor providing the flagger training;

- Name of the state that issued the flagger card;

- The card's expiration date, not to exceed three years from the date of issuance;

**AND**

- The flagger's picture or a statement that says "valid with photo ID."

(c) Flagger training is based upon the MUTCD.

**Exemption:** Personnel that have not completed a flagger-training course may be assigned duties as flaggers only during emergencies. Emergency assignments are temporary and last only until a certified flagger can be put into the position.

**Definition:**

For the purpose of this rule, **emergency** means an unforeseen occurrence endangering life, limb, or property.

(7) Flagger orientation and traffic control plan.

(a) The employer, responsible contractor or project owner must conduct an orientation that familiarizes the flagger with the job site. This requirement applies each time the flagger is assigned to a new project or when job site conditions change significantly.

The orientation must include, but is not limited to:

- The flagger's role and location on the job site;

- Motor vehicle and equipment in operation at the site;

- Job site traffic patterns;

- Communications and signals to be used between flaggers and equipment operators;

- On-foot escape route;

**AND**

- Other hazards specific to the job site.

(b) If flaggers are used on a job that will last more than one day, then the employer, responsible contractor and/or project owner must keep on-site, a current site specific traffic control plan. The purpose of this plan is to help move traffic through or around the construction zone in a way that protects the safety of the traveling public, pedestrians and workers.

The plan must include, but is not limited to, the following items when they are appropriate:

- Sign use and placement;

- Application and removal of pavement markings;

- Construction;

- Scheduling;

- Methods and devices for delineation and channelization;

- Placement and maintenance of devices;

- Placement of flaggers;

- Roadway lighting;

- Traffic regulations;
  - AND
  - Surveillance and inspection.
- (8) Advance warning signs.
- (a) Employers must provide the following on all flagging operations:
- A three sign advance warning sequence on all roadways with a speed limit below 45 mph.

- A four sign advance warning sequence on all roadways with a 45 mph or higher speed limit.
- (b) Warning signs must reflect the actual condition of the work zone. When not in use, warning signs must either be taken down or covered.
- (c) Employers must make sure to follow Table 1 for spacing of advance warning sign placement.

**Table 1. Advanced Warning Sign Spacing**

Road Type	Speed	Distances Between Advance Warning Signs*			
		A**	B**	C**	D**
Freeways & Expressways	70 55	1,500 ft.+/- or per the MUTCD.	1,500 ft.+/- or per the MUTCD.	1,500 ft.+/- or per the MUTCD.	1,500 ft.+/- or per the MUTCD.
Rural Highways	65 60	1,000 ft.+/-	1,000 ft.+/-	1,000 ft.+/-	1,000 ft.+/-
Rural Roads	55 45	500 ft.+/-	500 ft.+/-	500 ft.+/-	500 ft.+/-
Rural Roads and Urban Arterials	40 35	350 ft.+/-	350 ft.+/-	350 ft.+/-	N/A
Rural Roads, Urban Streets, Residential Business Districts	30 25	200 ft.***	200 ft.***	200 ft.***	N/A
Urban Streets	25 or less	100 ft.***	100 ft.***	100 ft.***	N/A

\*All spacing may be adjusted to accommodate interchange ramps, at-grade intersections, and driveways.

\*\*This refers to the distance between advance warning signs. See Figure 1, Typical Lane Closure on Two-Lane Road. This situation is typical for roadways with speed limits less than 45 mph.

\*\*\*This spacing may be reduced in urban areas to fit roadway conditions.

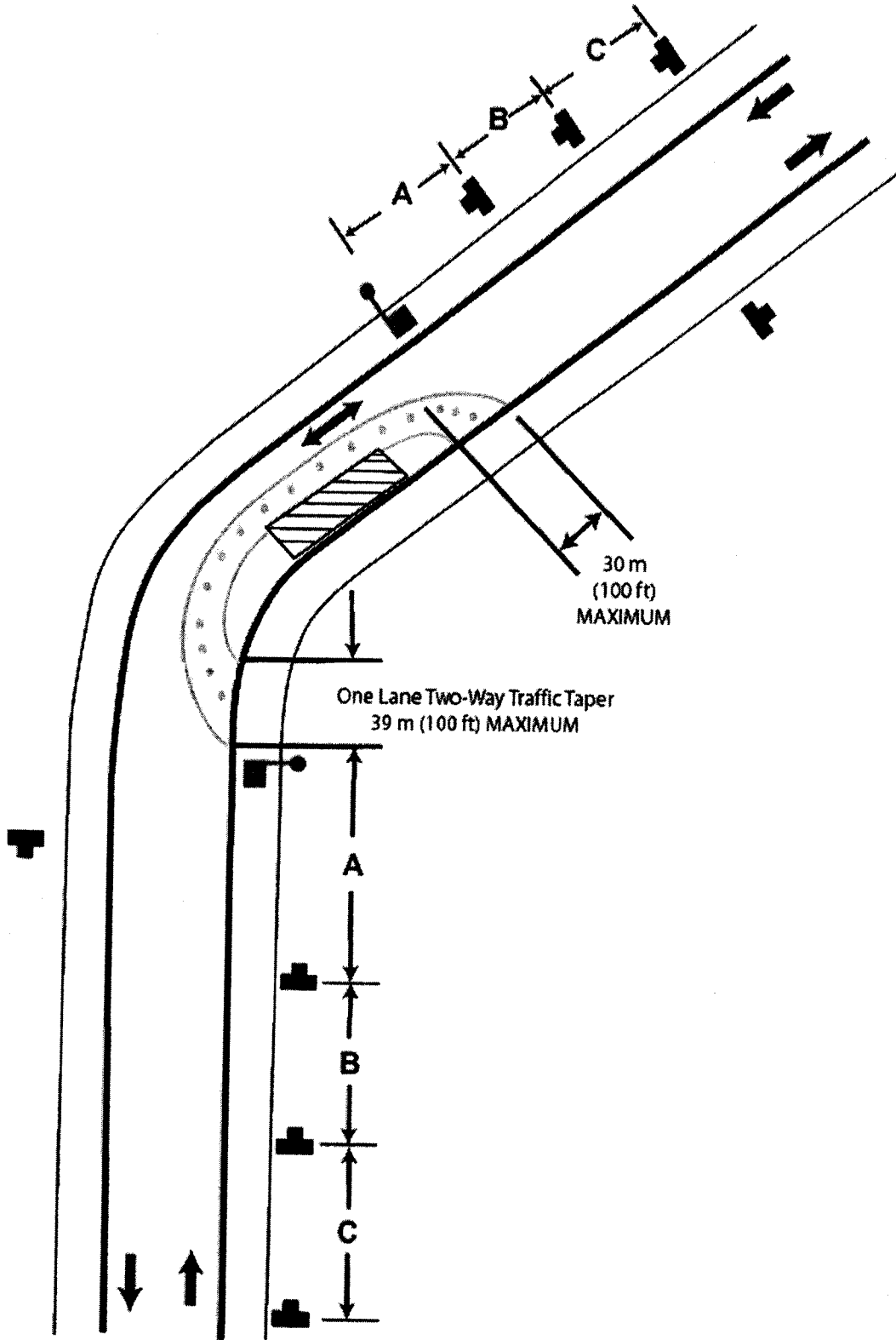
**Exemption:** In a mobile flagging operation, as defined by the MUTCD when the flagger is moving with the operation, the "flagger ahead (symbol or text)" sign must be:

- Within 1,500 feet of the flagger;

AND

- The flagger station must be seen from the sign.

If terrain does not allow a motorist to see the flagger from the "flagger ahead" sign, the distance between the flagger and the sign must be shortened to allow visual contact, but in no case can the distance be less than the distance specified in Table 1, Advanced Warning Sign Spacing.



(9) Providing a safe job site for flaggers. Employers, responsible contractors and/or project owners must make sure that:

(a) Flagger stations are located far enough in advance of the work space so that the approaching road users will have sufficient distance to stop before entering the work space. Follow Table 2 for the distance of the flagger workstation in advance of the work space.

**Table 2. Distance of Flagger Station in Advance of the Work Space**

Speed* (mph)	Distance (ft)**
20	35
25	55
30	85
35	120
40	170
45	220
50	280
55	335
60	415
65	485

\* Posted speed, off-peak 85th-percentile speed prior to work starting or the anticipated operating speed.  
 \*\* This spacing may be reduced to fit roadway and worksite conditions. Distances greater than those listed in the table are acceptable.

(b) Flaggers stand either on the shoulder adjacent to the road user being controlled or in the closed lane prior to stopping road users. A flagger must only stand in the lane being used by moving road users after road users have stopped.

**Definition:**

Road user means a vehicle operator, bicyclist, or pedestrian within a public roadway, including workers in temporary traffic control zones.

(c) Flagger workstations are illuminated during hours of darkness by floodlights that do not create glare that poses a hazard for drivers.

**Note:** To identify potential glare, observe the lighted area from various directions and angles on the main roadway after initial floodlight setup.

**Exemption:** Emergency situations are exempt from these illumination requirements. For the purpose of this rule, **emergency** means an unforeseen occurrence endangering life, limb, or property.

(d) Flaggers are not assigned other duties while engaged in flagging activities.

(e) Flaggers do not use devices that may distract the flagger's vision, hearing, or attention.

- Examples of these devices include cell phones, pagers, radios, and headphones.
- Devices such as two-way radios used for communications between flaggers to direct traffic or ensure flagger safety are acceptable.

(f) Flaggers receive a rest period of at least ten minutes, on the employer's time, for each four hours of working time.

- Rest periods must be scheduled as near as possible to the midpoint of the work period.

- A flagger must not be allowed to work more than three hours without a rest period.

**Exemption:** Scheduled rest periods are not required where the nature of the work allows a flagger to take intermittent rest periods equivalent to ten minutes for each four hours worked.

AMENDATORY SECTION (Amending Order 88-04, filed 5/11/88)

**WAC 296-155-452 Specific purpose equipment and installations.** (1) Cranes and hoists. This subsection applies to the installation of electric equipment and wiring used in connection with cranes, monorail hoists, hoists, and all runways.

- (a) Disconnecting means.
  - (i) Runway conductor disconnecting means. A readily accessible disconnecting means shall be provided between the runway contact conductors and the power supply.
  - (ii) Disconnecting means for cranes and monorail hoists. A disconnecting means, capable of being locked in the open position, shall be provided in the leads from the runway contact conductors or other power supply on any crane or monorail hoist.

(A) If this additional disconnecting means is not readily accessible from the crane or monorail hoist operating station, means shall be provided at the operating station to open the power circuit to all motors of the crane or monorail hoist.

(B) The additional disconnect may be omitted if a monorail hoist or hand-propelled crane bridge installation meets all of the following:

- (I) The unit is floor controlled;
- (II) The unit is within view of the power supply disconnecting means; and
- (III) No fixed work platform has been provided for servicing the unit.

(b) Control. A limit switch or other device shall be provided to prevent the load block from passing the safe upper limit of travel of any hoisting mechanism.

(c) Clearance. The dimension of the working space in the direction of access to live parts which may require examination, adjustment, servicing, or maintenance while alive shall be a minimum of 2 feet 6 inches (762 mm). Where controls are enclosed in cabinets, the door(s) shall open at least 90 degrees or be removable, or the installation shall provide equivalent access.

(d) Grounding. All exposed metal parts of cranes, monorail hoists, hoists and accessories including pendant controls shall be metallically joined together into a continuous electrical conductor so that the entire crane or hoist will be grounded in accordance with WAC ((296-155-434)) 296-155-447(6). Moving parts, other than removable accessories or attachments, having metal-to-metal bearing surfaces shall be considered to be electrically connected to each other through the bearing surfaces for grounding purposes. The trolley frame and bridge frame shall be considered as electrically grounded through the bridge and trolley wheels and its respective tracks unless conditions such as paint or other insulating materials prevent reliable metal-to-metal contact. In this case a separate bonding conductor shall be provided.

- (2) Elevators, escalators, and moving walks.

(a) Disconnecting means. Elevators, escalators, and moving walks shall have a single means for disconnecting all ungrounded main power supply conductors for each unit.

(b) Control panels. If control panels are not located in the same space as the drive machine, they shall be located in cabinets with doors or panels capable of being locked closed.

(3) Electric welders—disconnecting means.

(a) Motor-generator, AC transformer, and DC rectifier arc welders. A disconnecting means shall be provided in the supply circuit for each motor-generator arc welder, and for each AC transformer and DC rectifier arc welder which is not equipped with a disconnect mounted as an integral part of the welder.

(b) Resistance welders. A switch or circuit breaker shall be provided by which each resistance welder and its control equipment can be isolated from the supply circuit. The ampere rating of this disconnecting means shall not be less than the supply conductor ampacity.

(4) X-ray equipment.

(a) Disconnecting means.

(i) General. A disconnecting means shall be provided in the supply circuit. The disconnecting means shall be operable from a location readily accessible from the X-ray control. For equipment connected to a 120-volt branch circuit of 30 amperes or less, a grounding-type attachment plug cap and receptacle of proper rating may serve as a disconnecting means.

(ii) More than one piece of equipment. If more than one piece of equipment is operated from the same high-voltage circuit, each piece or each group of equipment as a unit shall be provided with a high-voltage switch or equivalent disconnecting means. This disconnecting means shall be constructed, enclosed, or located so as to avoid contact by employees with its live parts.

(b) Control-radiographic and fluoroscopic types. Radiographic and fluoroscopic-type equipment shall be effectively enclosed or shall have interlocks that deenergize the equipment automatically to prevent ready access to live current-carrying parts.

AMENDATORY SECTION (Amending Order 91-07, filed 11/22/91, effective 12/24/91)

**WAC 296-155-476 General requirements.** (1) A stairway or ladder shall be provided at all personnel points of access where there is a break in elevation of 19 inches (48 cm) or more, and no ramp, runway, sloped embankment, or personnel hoist is provided.

(a) Employees shall not use any spiral stairways that will not be a permanent part of the structure on which construction work is being performed.

(b) A double-cleated ladder or two or more separate ladders shall be provided when ladders are the only means of access or exit from a working area for 25 or more employees, or when a ladder is to serve simultaneous two-way traffic.

(c) When a building or structure has only one point of access between levels, that point of access shall be kept clear to permit free passage of employees. When work must be performed or equipment must be used such that free passage

at that point of access is restricted, a second point of access shall be provided and used.

(d) When a building or structure has two or more points of access between levels, at least one point of access shall be kept clear to permit free passage of employees.

(2) Employers shall provide and install all stairway and ladder fall protection systems required by this part and shall comply with all other pertinent requirements of this part before employees begin the work that necessitates the installation and use of stairways, ladders, and their respective fall protection systems.

AMENDATORY SECTION (Amending Order 94-07, filed 7/20/94, effective 9/20/94)

**WAC 296-155-545 Conveyors.** (1) All conveyors in use shall meet the applicable requirements for design, construction, inspection, testing, maintenance, and operation, as prescribed in ANSI B20.1-1976, Safety Code for Conveyors, Cableways, and Related Equipment.

(2) Starting precautions.

(a) When the entire length of a conveyor is visible from the starting switch, the operator shall visually check to make certain that all persons are in the clear before starting the conveyor.

(b) When the entire length of the conveyor is not visible from the starting switch, a positive audible or visible warning system shall be installed and operated to warn persons that the conveyor will be started.

(c) All reasonable precautions shall be taken by the operator prior to starting a conveyor, to assure that no person is in a hazardous location where they may be injured when the conveyor is started.

(3) Riding and walking on conveyors.

(a) Riding on conveyor chains, belt, or bucket elevators shall be prohibited.

(b) Persons shall not be allowed to walk on conveyors except for emergency purposes and then only after the conveyor has been deenergized and the person can do so safely.

(c) Riding of conveyors shall only be permitted on the manlift steps and platforms with handholds attached and other safety factors as specified in chapter ~~((296-82 WAC, Safety standards for existing belt manlifts))~~ 296-96 WAC, Safety regulations and fees for all elevators, dumbwaiters, escalators, and other conveyances.

(4) Stop controls.

(a) Means for stopping the motor or engine of a conveyor shall be provided at the operator's station.

(b) If the operator's station is at a remote point, similar provisions for stopping the motor or engine shall be provided at the motor or engine location.

(5) Emergency controls. Emergency stop switches shall be arranged so that the conveyor cannot be started again until the actuating stop switch has been reset to running or "on" position.

(6) Screw type conveyors. Screw or auger type conveyors shall be guarded to prevent employee contact with turning flights.

(7) Overhead conveyors.

(a) Where a conveyor passes over work areas, aisles, or thoroughfares, guards shall be provided to protect persons required to work below the conveyors.

(b) Where a conveyor crosses over an aisle or passageway, it shall be conspicuously marked by suitable signs, as required by Part E of this chapter.

(c) When the return strand of a conveyor operates within seven feet of the floor there shall be a trough provided of sufficient strength to carry the weight resulting from a broken chain. If the strands are over a passageway, a means shall be provided to catch and support the ends of the chain in the event of a break.

(8) Emergency stop.

(a) Conveyors shall be provided with an emergency stopping device (panic-type) which can be reached from the conveyor.

(b) The emergency stopping device shall be located near the material entrance and shall stop the conveyor a sufficient distance away from the hazard to prevent injury.

(c) Where the conveyor leading into such equipment is under constant control of an operator who has full view of the material entrance who is located or restrained where they cannot possibly fall onto the conveyor an emergency stopping device is not mandatory.

(9) Conveyor lockout.

(a) Conveyors shall be locked out with a padlock at any time repair, maintenance, or clean-up work is being performed on the conveyor.

(b) Tags or push-button stops are not acceptable.

(10) Where conveyors are in excess of seven feet in height, means shall be provided to safely permit essential inspection and maintenance operations.

(11) Conveyor repair.

(a) Any part showing signs of significant wear shall be inspected carefully and replaced prior to reaching a condition where it may create a hazard.

(b) Replacement parts shall be equal to or exceed the manufacturer's specifications.

**AMENDATORY SECTION** (Amending WSR 02-13-115, filed 6/19/02, effective 9/1/02)

**WAC 296-155-704 Hoisting and rigging.** (1) All the provisions of WAC 296-155-525 and 296-155-526 apply to hoisting and rigging.

(2) In addition, subsections (3) through (5) of this section apply regarding the hazards associated with hoisting and rigging.

(3) **General.**

(a) Crane preshift visual inspection.

(i) Cranes being used in steel erection activities must be visually inspected prior to each shift by a competent person. The inspection must include observation for deficiencies during operation and, as a minimum, must include:

- All control mechanisms for maladjustments;
- Control and drive mechanism for excessive wear of components and contamination by lubricants, water or other foreign matter;

- Safety devices, including boom angle indicators, boom stops, boom kick out devices, anti-two block devices, and load ((movement)) moment indicators where required;

- Air, hydraulic, and other pressurized lines for deterioration or leakage, particularly those which flex in normal operation;

- Hooks and latches for deformation, chemical damage, cracks, or wear;

- Wire rope reeving for compliance with hoisting equipment manufacturer's specifications;

- Electrical apparatus for malfunctioning, signs of excessive deterioration, dirt, or moisture accumulation;

- Hydraulic system for proper fluid level;

- Tires for proper inflation and condition;

- Ground conditions around the hoisting equipment for proper support, including ground settling under and around outriggers, ground water accumulation, or similar conditions;

- The hoisting equipment for level position; and

- The hoisting equipment for level position after each move and setup.

(ii) If any deficiency is identified, an immediate determination must be made by the competent person if the deficiency constitutes a hazard.

(iii) If the deficiency constitutes a hazard, the hoisting equipment must be removed from service until the deficiency has been corrected.

(iv) The operator is responsible for those operations under their direct control. Whenever there is any doubt as to safety, the operator must have the authority to stop and refuse to handle loads until safety has been assured.

(b) A qualified rigger (a rigger who is also a qualified person) must inspect the rigging prior to each shift in accordance with WAC 296-155-330.

(c) The headache ball, hook or load must not be used to transport personnel, except as provided in (d) of this subsection.

(d) Cranes or derricks may be used to hoist employees on a personnel platform when work under this part is being conducted if all the provisions of WAC 296-155-525 through 296-155-528 are met.

(e) Safety latches on hooks must not be deactivated or made inoperable except:

(i) When a qualified rigger has determined that the hoisting and placing of purlins and single joists can be performed more safely by doing so; or

(ii) When equivalent protection is provided in a site-specific erection plan.

(4) **Working under loads.**

(a) Routes for suspended loads must be preplanned to ensure that no employee works directly below a suspended load except when:

(i) Engaged in the initial connection of the steel; or

(ii) Necessary for the hooking or unhooking of the load.

(b) When working under suspended loads, the following criteria must be met:

(i) Materials being hoisted must be rigged to prevent unintentional displacement;

(ii) Hooks with self-closing safety latches or their equivalent must be used to prevent components from slipping out of the hook; and



(iii) All loads must be rigged by a qualified rigger.

**(5) Multiple lift rigging procedure.**

(a) A multiple lift must only be performed if the following criteria are met:

- A multiple lift rigging assembly is used;
- A multiple lift is only permitted when specifically within the manufacturer's specifications and limitations;
- A maximum of five members are hoisted per lift;

**Exception:** Bundles of decking must not be lifted using the multiple lift rigging procedure, even though they meet the definition of structural members in WAC 296-155-702.

• Only beams and similar structural members are lifted; and

• All employees engaged in the multiple lift have been trained in these procedures in accordance with WAC 296-155-717 (3)(a).

(b) Components of the multiple lift rigging assembly must be specifically designed and assembled with a maximum capacity for total assembly and for each individual attachment point. This capacity, certified by the manufacturer or a qualified rigger, must be based on the manufacturer's specifications with a five to one safety factor for all components.

(c) The total load must not exceed:

- The rated capacity of the hoisting equipment specified in the hoisting equipment load charts; and
- The rigging capacity specified in the rigging-rating chart.

(d) The multiple lift rigging assembly must be rigged with members:

- Attached at their center of gravity and maintained reasonably level;
- Rigged from top down; and
- Rigged at least seven feet (2.1 m) apart.

(e) The members on the multiple lift rigging assembly must be set from the bottom up.

(f) Controlled load lowering must be used whenever the load is over the connectors.

**AMENDATORY SECTION** (Amending WSR 03-09-009, filed 4/4/03, effective 8/1/03)

**WAC 296-807-16005 Make sure equipment meets minimum design and construction requirements.**

**You must:**

(1) Make sure equipment meets ANSI design and construction requirements.

• Make sure power lawnmowers manufactured on or after August 1, 2003, meet the requirements of the appropriate ANSI standard:

– ANSI B71.1-1998, American National Standard for Consumer Turf Care Equipment - Walk-Behind Mowers and Ride-On Machines with Mowers - Safety Specifications

**OR**

– ANSI B71.4-1999, American National Standard for Commercial Turf Care Equipment - Safety Specifications.

• Make sure noncommercial power lawnmowers manufactured before the effective date of this chapter meet the requirements ((of ANSI B71.1-1968, American National

~~Standard Safety Specifications for Power Lawnmowers)) in chapter 296-806 WAC, Machine safety.~~

**Note:** There may be a statement on the tool or in the instruction manual indicating the tool meets the requirements of the appropriate ANSI standard. If in doubt, check with the manufacturer.

**You must:**

(2) Position, guard or shield all power-driven shafts, chains, belts, gears, friction drive components, nip and pinch points, and any exposed components hot enough to cause burns while:

- Starting
- Mounting
- Operating the machine.

(3) Have a shutoff device that:

- Will stop the motor or engine

**AND**

• Has to be intentionally and manually activated before the motor or engine can be restarted.

**AMENDATORY SECTION** (Amending WSR 02-23-073, filed 11/19/02, effective 1/1/03)

**WAC 296-833-30010 Provide adequate water.**

**You must:**

• Provide a water supply that is adequate and convenient for:

- Drinking
- Cooking
- Bathing
- Laundry purposes.

• Make sure the water supply system is:

- Capable of delivering
  - Thirty-five gallons per person per day to the campsite
  - At a peak rate of two and one-half times the average hourly demand

– Able to supply water to all fixtures at the same time with normal operating pressures

– Approved by the appropriate health authority

• Supply water to each housing area by either:

- Piping water directly to the shelters
- Providing yard hydrants within one hundred feet of the shelters

• Prohibit common drinking cups

• Provide one or more drinking fountain(s) for each one hundred occupants (or fraction of that number) where water under pressure is available.

((Reference:

~~The construction of drinking fountains must comply with ANSI standard Specifications for Drinking Fountains, Z4.2.1942.))~~

**REPEALER**

The following section of the Washington Administrative Code is repealed:

WAC 296-24-21515      Conveyors.

**WSR 05-23-177**  
**EXPEDITED RULES**  
**DEPARTMENT OF**  
**NATURAL RESOURCES**

[Filed November 23, 2005, 11:28 a.m.]

Title of Rule and Other Identifying Information: Chapter 332-30 WAC, Aquatic land management, WAC/RCW reference update.

NOTICE

THIS RULE IS BEING PROPOSED UNDER AN EXPEDITED RULE-MAKING PROCESS THAT WILL ELIMINATE THE NEED FOR THE AGENCY TO HOLD PUBLIC HEARINGS, PREPARE A SMALL BUSINESS ECONOMIC IMPACT STATEMENT, OR PROVIDE RESPONSES TO THE CRITERIA FOR A SIGNIFICANT LEGISLATIVE RULE. IF YOU OBJECT TO THIS USE OF THE EXPEDITED RULE-MAKING PROCESS, YOU MUST EXPRESS YOUR OBJECTIONS IN WRITING AND THEY MUST BE SENT TO Jenifer Gitchell, Department of Natural Resources, P.O. Box 47015, Olympia, WA 98504-7015, AND RECEIVED BY January 23, 2006.

Purpose of the Proposal and Its Anticipated Effects, Including Any Changes in Existing Rules: SHB 1491 reorganized and renumbered all aquatic lands statutes, throughout Title 79 RCW. This rule change will update all RCW references within the aquatic lands administrative codes (chapter 332-30 WAC) to reflect the reorganization and renumbering. It will also correct a few internal numbering references. It will make no substantive changes.

Reasons Supporting Proposal: Updating all RCW references will allow for easier application of rules.

Statutory Authority for Adoption: RCW 79.105.360.

Statute Being Implemented: Title 79 RCW.

Rule is not necessitated by federal law, federal or state court decision.

Name of Agency Personnel Responsible for Drafting: Elizabeth Ellis, Olympia, (360) 902-1074; Implementation and Enforcement: Fran McNair, Olympia, (360) 902-1003.

November 15, 2005

Doug Sutherland  
 Commissioner of Public Lands

AMENDATORY SECTION (Amending Resolution No. 500, filed 11/5/85)

**WAC 332-30-100 Introduction.** Subsection (2)(e) of this section shall not apply to port districts managing aquatic lands under a management agreement (WAC 332-30-114). State-owned aquatic lands include approximately 1,300 miles of tidelands, 6,700 acres of constitutionally established harbor areas and all of the submerged land below extreme low tide which amounts to some 2,000 square miles of marine beds of navigable waters and an undetermined amount of fresh water shoreland and bed. These lands are managed as a public trust and provide a rich land base for a variety of recreational, economic and natural process activities. Management concepts, philosophies, and programs for state-owned aquatic lands should be consistent with this responsibility to the public.

These lands are "a finite natural resource of great value and an irreplaceable public heritage" and will be managed to "provide a balance of public benefits for all citizens of the state." (RCW (~~79.90.450 and 79.90.455~~) 79.105.010, 79.105.020, and 79.105.030)

(1) **Management goals.** Management of state-owned aquatic lands will strive to:

- (a) Foster water-dependent uses;
- (b) Ensure environmental protection;
- (c) Encourage direct public use and access;
- (d) Promote production on a continuing basis of renewable resources;
- (e) Allow suitable state aquatic lands to be used for mineral and material production; and
- (f) Generate income from use of aquatic lands in a manner consistent with the above goals.

(2) **Management methods.** To achieve the above, state-owned aquatic lands will be managed particularly to promote uses and protect resources of statewide value.

(a) Planning will be used to prevent conflicts and mitigate adverse effects of proposed activities involving resources and aquatic land uses of statewide value. Mitigation shall be provided for as set forth in WAC 332-30-107(6).

(b) Areas having unique suitability for uses of statewide value or containing resources of statewide value may be managed for these special purposes. Harbor areas and scientific reserves are examples. Unique use requirements or priorities for these areas may supersede the need for mitigation.

(c) Special management programs may be developed for those resources and activities having statewide value. Based on the needs of each case, programs may prescribe special management procedures or standards such as lease auctions, resource inventory, shorter lease terms, use preferences, operating requirements, bonding, or environmental protection standards.

(d) Water-dependent uses shall be given a preferential lease rate in accordance with RCW (~~79.90.480~~) 79.105.240. Fees for nonwater-dependent aquatic land uses will be based on fair market value.

(e) Research and development may be conducted to enhance production of renewable resources.

AMENDATORY SECTION (Amending Order 710, filed 10/17/02, effective 11/17/02)

**WAC 332-30-106 Definitions.** All definitions in this section shall apply to the department and to port districts managing aquatic lands under a management agreement (WAC 332-30-114). For the purpose of this chapter:

(1) "Accretion" means the natural buildup of shoreline through the gradual deposit of alluvium. The general principle of common law applicable is that a riparian or littoral owner gains by accretion and reliction, and loses by erosion. Boundary lines generally will change with accretion.

(2) "Alluvium" means material deposited by water on the bed or shores.

(3) "Anniversary date" means the month and day of the start date of an authorization instrument unless otherwise specified in the instrument.

(4) "Aquaculture" means the culture and/or farming of food fish, shellfish, and other aquatic plants and animals in fresh water, brackish water or salt water areas. Aquaculture practices may include but are not limited to hatching, seeding or planting, cultivating, feeding, raising, harvesting of planted crops or of natural crops so as to maintain an optimum yield, and processing of aquatic plants or animals.

(5) "Aquatic lands" means all state-owned tidelands, shorelands, harbor areas, and the beds of navigable waters (RCW ((~~79.90.010~~) 79.105.060(1)). Aquatic lands are part of the public lands of the state of Washington (see subsection ((~~49~~)) (51) of this section). Included in aquatic lands are public places subsection ((~~51~~)) (53) of this section, waterways subsection ((~~74~~)) (78) of this section, bar islands, avulsively abandoned beds and channels of navigable bodies of water, managed by the department of natural resources directly, or indirectly through management agreements with other governmental entities.

(6) "Aquatic land use classes" means classes of uses of tideland, shorelands and beds of navigable waters that display varying degrees of water dependency. See WAC 332-30-121.

(7) "Authorization instrument" means a lease, material purchase, easement, permit, or other document authorizing use of state-owned aquatic lands and/or materials.

(8) "Avulsion" means a sudden and perceptible change in the shoreline of a body of water. Generally no change in boundary lines occurs.

(9) "Beds of navigable waters" means those submerged lands lying waterward of the line of extreme low tide in navigable tidal waters and waterward of the line of navigability in navigable lakes, rivers and streams. The term, "bedlands" means beds of navigable waters.

(10) "Commerce" means the exchange or buying and selling of goods and services. As it applies to aquatic land, commerce usually involves transport and a land/water interface.

(11) "Covered moorage" means slips and mooring floats that are covered by a single roof with no dividing walls.

(12) "Department" means the department of natural resources.

(13) "Dredging" means enlarging or cleaning out a river channel, harbor, etc.

(14) "Educational reserves" means accessible areas of aquatic lands typical of selected habitat types which are suitable for educational projects.

(15) "Enclosed moorage" means moorage that has completely enclosed roof, side and end walls similar to a car garage i.e. boathouse.

(16) "Environmental reserves" means areas of environmental importance, sites established for the continuance of environmental baseline monitoring, and/or areas of historical, geological or biological interest requiring special protective management.

(17) "Erosion" means the gradual cutting away of a shore by natural processes. Title is generally lost by erosion, just as it is gained by accretion.

(18) "Extreme low tide" means the line as estimated by the federal government below which it might reasonably be expected that the tide would not ebb. In Puget Sound area generally, this point is estimated by the federal government to

be a point in elevation 4.50 feet below the datum plane of mean lower low water, (0.0). Along the Pacific Ocean and in the bays fronting thereon and the Strait of Juan due Fuca, the elevation ranges down to a minus 3.5 feet in several locations.

(19) "Fair market value" means the amount of money which a purchaser willing, but not obligated, to buy the property would pay an owner willing, but not obligated, to sell it, taking into consideration all uses to which the property is adapted and might in reason be applied (Donaldson v. Greenwood, 40 Wn.2d 238, 1952). Such uses must be consistent with applicable federal, state and local laws and regulations affecting the property as of the date of valuation.

(20) "First class shorelands" means the shores of a navigable lake or river belonging to the state not subject to tidal flow, lying between the line of ordinary high water and the line of navigability, or the inner harbor line where established and within or in front of the corporate limits of any city, or within two miles thereof upon either side (RCW ((~~79.90-040~~) 79.105.060(3)). These boundary descriptions represent the general rule; however exceptions do exist. To determine if the shorelands are within two miles of the corporate limits of a city, the distance is measured along the shoreline from the intersection of the corporate limit with the shoreline.

(21) "First class tidelands" means the shores of navigable tidal waters belonging to the state lying within or in front of the corporate limits of any city, or within one mile thereof upon either side and between the line of ordinary high tide and the inner harbor line; and within two miles of the corporate limits on either side and between the line of ordinary high tide and the line of extreme low tide (RCW ((~~79.90-030~~) 79.105.060(4)). In general, the line of ordinary high tide is the landward boundary. The line of extreme low tide, or the inner harbor line where established, is the waterward boundary. To determine if the tidelands are within two miles of the corporate limits of a city, the distance is measured along the shoreline from the intersection of the corporate limit with the shoreline.

(22) "Fiscal year" means a period of time commencing on the first day of July and ending on the thirtieth day of June of the succeeding year. A fiscal year is identified by the year in which it ends, e.g., fiscal year 1985 is the period July 1, 1984 through June 30, 1985.

(23) "Floating house" means any floating structure that is designed, or has been substantially and structurally remodeled or redesigned, to serve primarily as a residence. "Floating houses" include house boats, house barges, or any floating structures that serve primarily as a residence and do not qualify as a vessel as provided in subsection (74) of this section. A floating structure that is used as a residence and is capable of navigation, but is not designed primarily for navigation, nor normally is capable of self propulsion and use as a means of transportation is a floating house, not a vessel.

(24) "Governmental entity" means the federal government, the state, county, city, port district, or other municipal corporation or political subdivision thereof.

(25) "Harbor area" means the area of navigable waters determined as provided in section 1 of Article XV of the state Constitution which shall be forever reserved for landings, wharves, streets, and other conveniences of navigation and

commerce (RCW ((~~79.90.020~~) 79.105.060(5)). Harbor areas exist between the inner and outer harbor lines as established by the state harbor line commission.

(26) "Harbor area use classes" means classes of uses of harbor areas that display varying degrees of conformance to the purpose for which harbor areas were established under the Constitution.

(27) "Harbor line" means either or both:

(a) A line (outer harbor line) located and established in navigable waters as provided for in section 1 of Article XV of the state Constitution beyond which the state shall never sell or lease any rights whatever to private persons (RCW 79.105.060(12)).

(b) A line (inner harbor line) located and established in navigable waters between the line of ordinary high tide and the outer harbor line, constituting the inner boundary of the harbor area (RCW ((~~79.90.025~~) 79.105.060(8)).

(28) "Inflation rate" means, for a given year, the percentage rate of change in the previous calendar year's all commodity producer price index of the Bureau of Labor Statistics of the United States department of commerce (RCW ((~~79.90.465~~) 79.105.060(7)). The rate published by the bureau during May of each year for the previous calendar year shall be the rate for the previous calendar year.

(29) "Interest rate" shall be twelve percent per annum (RCW ((~~79.90.520~~) 43.17.240).

(30) "Interim uses" means certain uses which may, under special circumstances, be allowed to locate in harbor areas (see WAC 332-30-115(5)).

(31) "Inventory" means both a compilation of existing data on man's uses, and the biology and geology of aquatic lands as well as the gathering of new information on aquatic lands through field and laboratory analysis. Such data is usually presented in map form such as the *Washington Marine Atlas*.

(32) "Island" means a body of land entirely and customarily surrounded by water. Land in navigable waters which is only surrounded by water in times of high water, is not an island within the rule that the state takes title to newly formed islands in navigable waters.

(33) "Line of navigability" means a measured line at that depth sufficient for ordinary navigation as determined by the board of natural resources for the body of water in question.

(34) "Log booming" means placing logs into and taking them out of the water, assembling and disassembling log rafts before or after their movement in water-borne commerce, related handling and sorting activities taking place in the water, and the temporary holding of logs to be taken directly into a processing facility (RCW ((~~79.90.465~~) 79.105.060(9)).

(35) "Log storage" means the water storage of logs in rafts or otherwise prepared for shipment in water-borne commerce, but does not include the temporary holding of logs to be taken directly into a vessel or processing facility (RCW ((~~79.90.465~~) 79.105.060(10)).

(36) "Marine land" means those lands from the mean high tide mark waterward in marine and estuarine waters, including intertidal and submerged lands. Marine lands represents a portion of aquatic lands.

(37) "Meander line" means fixed determinable lines run by the federal government along the banks of all navigable bodies of water and other important rivers and lakes for the purpose of defining the sinuosities of the shore or bank and as a means of ascertaining the areas of fractional subdivisions of the public lands bordering thereon.

(38) "Moorage facility" means a marina, open water moorage and anchorage area, pier, dock, mooring buoy, or any other similar fixed moorage site.

(39) "Motorized vehicular travel" means movement by any type of motorized equipment over land surfaces.

(40) "Multiple use management" means a management philosophy which seeks to insure that several uses or activities can occur at the same place at the same time. The mechanism involves identification of the primary use of the land with provisions such as performance standards to permit compatible secondary uses to occur.

(41) "Navigability or navigable" means that a body of water is capable or susceptible of having been or being used for the transport of useful commerce. The state of Washington considers all bodies of water meandered by government surveyors as navigable unless otherwise declared by a court.

(42) "Navigation" means the movement of vessels to and from piers and wharves.

(43) "Nonwater-dependent use" means a use that can operate in a location other than on the waterfront. Examples include, but are not limited to, hotels, condominiums, apartments, restaurants, retail stores, and warehouses not part of a marine terminal or transfer facility (RCW ((~~79.90.465~~) 79.105.060(11)).

(44) "Open moorage" means moorage slips and mooring floats that have completely open sides and tops.

(45) "Open water moorage and anchorage areas" are areas of state-owned aquatic lands leased for moorage and anchorage that do not abut uplands and do not include a built connection to the uplands. They are generally in the center of a waterbody, to provide moorage in addition to any marinas and docks along the edge of the waterbody. They may contain mooring buoys, floating moorage docks, other moorage facilities not connected to the shoreline, and/or anchorage areas, as determined by the lessee and approved by the department. These areas are leased in accordance with WAC 332-30-139(5) and subject to the restrictions therein.

(46) "Optimum yield" means the yield which provides the greatest benefit to the state with particular reference to food production and is prescribed on the basis of the maximum sustainable yield over the statewide resource base as modified by any relevant economic, social or ecological factor.

(47) "Ordinary high tide" means the same as mean high tide or the average height of high tide. In Puget Sound, the mean high tide line varies from 10 to 13 feet above the datum plane of mean lower low water (0.0).

(48) "Ordinary high water" means, for the purpose of asserting state ownership, the line of permanent upland vegetation along the shores of nontidal navigable waters. In the absence of vegetation, it is the line of mean high water.

(49) "Port district" means a port district created under Title 53 RCW (RCW ((~~79.90.465~~) 79.105.060(14)).

(50) "Public benefit" means that all of the citizens of the state may derive a direct benefit from departmental actions in the form of environmental protection; energy and mineral production; utilization of renewable resources; promotion of navigation and commerce by fostering water-dependent uses; and encouraging direct public use and access; and generating revenue in a manner consistent with RCW ((79.90.455)) 79.105.030.

(51) "Public lands" means lands belonging to or held in trust by the state, which are not devoted to or reserved for a particular use by law, and include state lands, tidelands, shorelands and harbor areas as herein defined, and the beds of navigable waters belonging to the state (RCW ((79.01.004)) 79.02.010).

(52) "Public interest" means. . . (reserved).

(53) "Public place" means a part of aquatic lands set aside for public access through platted tidelands, shorelands, and/or harbor areas to the beds of navigable waters.

(54) "Public tidelands" means tidelands belonging to and held in public trust by the state for the citizens of the state, which are not devoted to or reserved for a particular use by law.

(55) "Public trust" means that certain state-owned tidelands, shorelands and all beds of navigable waters are held in trust by the state for all citizens with each citizen having an equal and undivided interest in the land. The department has the responsibility to manage these lands in the best interest of the general public.

(56) "Public use" means to be made available daily to the general public on a first-come, first-served basis, and may not be leased to private parties on any more than a day use basis.

(57) "Public use beach" means a state-owned beach available for free public use but which may be leased for other compatible uses.

(58) "Public utility line" means pipes, conduits, and similar facilities for distribution of water, electricity, natural gas, telephone, other electronic communication, and sewers, including sewer outfall lines (RCW ((79.90.465)) 79.105.-060(15)).

(59) "Real rate of return" means the average for the most recent ten calendar years of the average rate of return on conventional real property mortgages as reported by the Federal Home Loan Bank Board or any successor agency, minus the average inflation rate for the most recent ten calendar years (RCW ((79.90.465)) 79.105.060(16)).

(60) "Reliction" means the gradual withdrawal of water from a shoreline leaving the land uncovered. Boundaries usually change with reliction.

(61) "Renewable resource" means a natural resource which through natural ecological processes is capable of renewing itself.

(62) "Residential use" means any noncommercial habitation of:

(a) A floating house, as defined in WAC 332-30-106(23); or

(b) A vessel, as defined in WAC 332-30-106(74), when any one of the following applies:

(i) Any person or succession of different persons resides on the vessel in a specific location, and/or in the same area on more than a total of thirty days in any forty-day period or on

more than a total of ninety days in any three hundred sixty-five-day period. "In the same area" means within a radius of one mile of any location where the same vessel previously moored or anchored on state-owned aquatic lands. A vessel that is occupied and is moored or anchored in the same area, but not for the number of days described in this subsection, is considered used as a recreational or transient vessel;

(ii) The city or county jurisdiction, through local ordinance or policy, defines the use as a residential use or identifies the occupant of the vessel as a resident of the vessel or of the facility where it is moored;

(iii) The operator of the facility where the vessel is moored, through the moorage agreement, billing statement, or facility rules, defines the use as a residential use or identifies the occupant of the vessel as a resident of the vessel or of the facility; or

(iv) The occupant or occupants identify the vessel or the facility where it is moored as their residence for voting, mail, tax, or similar purposes.

(63) "Riparian" means relating to or living or located on the bank of a natural water course, such as a stream, lake or tidewater.

(64) "Scientific reserves" means sites set aside for scientific research projects and/or areas of unusually rich plant and animal communities suitable for continuing scientific observation.

(65) "Second class shorelands" means the shores of a navigable lake or river belonging to the state, not subject to tidal flow, lying between the line of ordinary high water and the line of navigability, and more than two miles from the corporate limits of any city (RCW ((79.90.045)) 79.105.060(17)). These boundary definitions represent the general rule; however, exceptions do exist. To determine if shorelands are more than two miles from the corporate limits of a city, the distance is measured along the shoreline from the intersection of the corporate limit with the shoreline.

(66) "Second class tidelands" means the shores of navigable tidal waters belonging to the state, lying outside of and more than two miles from the corporate limits of any city and between the line of ordinary high tide and the line of extreme low tide (RCW ((79.90.035)) 79.105.060(18)). In general, the line of ordinary high tide is the landward boundary. The line of extreme low tide is the waterward boundary. To determine if the tidelands are more than two miles from the corporate limits of a city, the distance is measured along the shoreline from the intersection of the corporate limit with the shoreline.

(67) "Shore" means that space of land which is alternately covered and left dry by the rising and falling of the water level of a lake, river or tidal area.

(68) "State-owned aquatic lands" means those aquatic lands and waterways administered by the department of natural resources or managed under department agreement by a port district. "State-owned aquatic lands" does not include aquatic lands owned in fee by, or withdrawn for the use of, state agencies other than the department of natural resources (RCW ((79.90.465)) 79.105.060(20)).

(69) "Statewide value." The term statewide value applies to aquatic land uses and natural resources whose use, management, or intrinsic nature have statewide implications. Such uses and resources may be either localized or distrib-

uted statewide. Aquatic land uses of statewide value provide major statewide public benefits. Public use and access, renewable resource use and water-dependent use have been cited by the legislature as examples of such uses. Aquatic land natural resources of statewide value are those critical or uniquely suited to aquatic land uses of statewide value or to environmental quality. For example, wild and scenic rivers, high quality public use beaches and aquatic lands fronting state parks are of statewide value for public use and access. Commercial clam and geoduck beds and sites uniquely suited to aquaculture are of statewide value to renewable resource use. Harbor areas are of statewide value to water-dependent navigation and commerce. Certain aquatic land habitats and plant and animal populations are of statewide value to recreational and commercial fisheries, wildlife protection, and scientific study.

(70) "Streamway" means stream dependent corridor of single or multiple, wet or dry channel, or channels within which the usual seasonal or storm water run-off peaks are contained, and within which environment the flora, fauna, soil and topography is dependent on or influenced by the height and velocity of the fluctuating river currents.

(71) "Terminal" means a point of interchange between land and water carriers, such as a pier, wharf, or group of such, equipped with facilities for care and handling of cargo and/or passengers (RCW ((79.90.465)) 79.105.060(21)).

(72) "Thread of stream - thalweg" means the center of the main channel of the stream at the natural and ordinary stage of water.

(73) "Town" means a municipal corporation of the fourth class having not less than three hundred inhabitants and not more than fifteen hundred inhabitants at the time of its organization (RCW 35.01.040).

(74) "Vessel" means a floating structure that is designed primarily for navigation, is normally capable of self propulsion and use as a means of transportation, and meets all applicable laws and regulations pertaining to navigation and safety equipment on vessels, including, but not limited to, registration as a vessel by an appropriate government agency.

(75) "Water-dependent use" means use which cannot logically exist in any location but on the water. Examples include, but are not limited to, waterborne commerce; terminal and transfer facilities; ferry terminals; watercraft sales in conjunction with other water dependent uses; watercraft construction, repair, and maintenance; moorage and launching facilities; aquaculture; log booming; and public fishing piers and parks (RCW ((79.90.465(1))) 79.105.060(24)).

(76) "Waterfront" means a parcel of property with upland characteristics which includes within its boundary, a physical interface with the existing shoreline of a body of water.

(77) "Water oriented use" means use which historically has been dependent on a waterfront location, but with existing technology could be located away from the waterfront. Examples include, but are not limited to, wood products manufacturing, watercraft sales, fish processing, petroleum refining, sand and gravel processing, log storage, and houseboats (RCW ((79.90.465)) 79.105.060(25)).

(78) "Waterway" means an area platted across aquatic lands or created by a waterway district providing for access

between the uplands and open water, or between navigable bodies of water.

(79) "Wetted perimeter" means a fluctuating water line which separates submerged river beds from the dry shoreland areas at any given time.

AMENDATORY SECTION (Amending Resolution No. 469, filed 11/9/84)

**WAC 332-30-108 Establishment of new harbor areas.** (1) The policies and standards in this section apply to establishment of new harbor areas by the harbor line commission under Article XV of the Washington Constitution and to establishment of new harbor areas in Lake Washington by the commissioner of public lands under RCW ((79.94.240)) 79.125.520.

(2) New harbor areas will only be established to serve the following purposes:

(a) Reserving adequate urban space for navigation and commerce facilities; and

(b) Preventing urban development from disrupting navigation.

(3) New harbor areas will only be established when a need is demonstrated by existing development or by plans, studies, project proposals or other evidence of development potential in, or waterward of, the proposed harbor area.

(4) Unless there is an overriding statewide navigation and commerce need, new harbor areas will only be established when:

(a) Compatible with local land use and shoreline management plans;

(b) Supported by the city, county and port district;

(c) The area is physically and environmentally suitable for navigation and commerce purposes; and

(d) Necessary support facilities and services are likely to be available.

(5) The shoreline length of a new harbor area established along a city's waterfront will be determined by the need and purposes to be served and by conformance with subsection (4) of this section.

(6) Harbor line placement standards.

(a) Harbor lines will be placed to serve constitutional harbor area purposes as they relate to the individual site in question.

(b) Harbor lines will be placed to provide practical development guidance. Harbor lines will relate to navigation and commerce development which has occurred or can reasonably be expected to occur.

(c) Inner harbor lines will be placed at the boundary of public aquatic land ownership. Inner harbor lines may be placed waterward of the boundary of public ownership to avoid conflicts with other guidelines in this section.

(d) Outer harbor lines will generally be placed near the ends of existing conforming structures located on public aquatic lands. The lines shall provide adequate space for navigation and commerce and prevent development from interfering with navigation.

(e) Unless there is an overriding statewide navigation and commerce need, harbor lines will be placed in accordance with:

- (i) Local, state and federal land use plans and environmental regulations;
- (ii) Maintenance of environmental quality;
- (iii) Existing abutting harbor lines; and
- (iv) Existing aquatic land development.

**AMENDATORY SECTION** (Amending Resolution No. 470, filed 11/9/84)

**WAC 332-30-114 Management agreements with port districts.** By mutual, formal, written agreement the department may authorize a port district to manage some or all of those aquatic lands within the port district meeting the criteria stated in subsection (2) of this section. The port district shall adhere to the aquatic land management laws and policies of the state as specified in chapters ~~((79.90 through 79.96))~~ 79.105 through 79.140 RCW. Port district management of state aquatic lands shall be consistent with all department regulations contained in chapter 332-30 WAC. These requirements shall govern the port's management of state aquatic lands. The administrative procedures used to carry out these responsibilities shall be those provided for port districts under Title 53 RCW.

(1) Interpretations. Phrases used in legislation (RCW ~~((79.90-475))~~ 79.105.420) providing for management agreements with ports shall have the following interpretation:

(a) "Administrative procedures" means conducting business by the port district and its port commission.

(b) "Aquatic lands abutting or used in conjunction with and contiguous to" means state-owned aquatic lands which share a common or coincident boundary with an upland parcel or in the event the state aquatic land does not attach to an upland parcel (i.e., bedlands, harbor areas, etc.), this term shall include the aquatic land adjacent to and waterward of the port owned or controlled aquatic parcel which has a common or coincident boundary to the upland parcel.

(c) "Diligently pursued" means such steady and earnest effort by the port district and the department which results in the resolution of any deficiencies preventing the issuance of a management agreement to the port.

(d) "Leasehold interest" means the benefits and obligations of both the lessor and lessee resulting from a lease agreement.

(e) "Model management agreement" means a document approved by the board of natural resources to be used for all individual management agreements with port districts.

(f) "Operating management" means the planning, organizing, staffing, coordinating, and controlling for all activities occurring on a property.

(g) "Otherwise managed" means having operating management for a property.

(h) "Revenue attributable" means all rentals, fees, royalties, and/or other payments generated from the use of a parcel; or the most likely amount of money due for the use of a parcel as determined by procedures in chapter 332-30 WAC, whichever is greater.

(2) Criteria for inclusion. State-owned parcels of aquatic lands, including those under lease or which may come under lease to a port, abutting port district uplands may be included in a management agreement if criteria set forth in RCW

~~((79.90-475))~~ 79.105.420 are met and if there is documentation of ownership, a lease in good standing, or agreement for operating management, in the name of the port district for the upland parcel.

(3) A model management agreement and any amendments thereto shall be developed by the department and representatives of the port industry. The board of natural resources shall review and approve the model management agreement and any subsequent amendments.

(4) Processing requests. The following application requirements, review procedures, and time frame for responses involved in the issuance of a management agreement to a port district shall apply.

(a) Application requirements. The following items must be submitted to the department by the port district in order for its request to be an application for a management agreement:

(i) A copy of a resolution of the port commission that directs the port district to seek a management agreement;

(ii) An exhibit showing the location of and a description adequate to allow survey for each parcel of state-owned aquatic land to be included in the agreement, plus sufficient information on abutting port parcels to satisfy the requirements of subsection (2) of this section;

(iii) The name, address, and phone number of the person or persons that should be contacted if the department has any questions about the application.

(b) Time frames for responses:

(i) Within thirty days of receipt of an application, the department shall notify the port district if its application is complete or incomplete;

(ii) Within thirty days of receipt of notification by the department of any incompleteness in their application, the port district shall submit the necessary information;

(iii) Within ninety days of receipt of notification by the department that the application is complete, the port district and department shall take all steps necessary to enter into an agreement.

**AMENDATORY SECTION** (Amending Resolution No. 500, filed 11/5/85)

**WAC 332-30-117 Waterways.** (1) **Purpose and applicability.** This section describes the requirements for authorizing use and occupation of waterways under the department's authority as proprietor of state-owned aquatic lands. This section applies to waterways established in accordance with RCW ~~((79.93.010 and 79.93.020))~~ 79.120.010 and 79.120.020. This section does not apply to uses of Salmon Bay Waterway, or to the East and West Duwamish Waterways in Seattle authorized under RCW ~~((79.93.040))~~ 79.120.040.

(2) **Priority use.** Providing public navigation routes between water and land for conveniences of navigation and commerce is the priority waterway use.

(3) **Permit requirement.** In order to assure availability of waterways for present and future conveniences of navigation and commerce, moorage (other than transient moorage for fewer than 30 days), and other waterway uses shall require prior authorization from the department. Permits may be issued for terms not exceeding one year if there will be no

significant interference with the priority waterway use or short-term moorage. Permits may be issued for terms not exceeding five years for uses listed in subsection (4) of this section in instances in which existing development, land use, ownership, or other factors are such that the current and projected demand for priority waterway uses is reduced or absent.

(4) **Permit priority.** In cases of competing demands for waterways, the following order of priority will apply:

(a) Facilities which provide public access to adjacent properties for loading and unloading of watercraft;

(b) Water-dependent commerce, as defined in WAC 332-30-115(1), related to use of the adjacent properties;

(c) Other water-dependent uses;

(d) Facilities for nonnavigational public access;

(e) Other activities consistent with the requirements in WAC 332-30-131(4) for public use facilities.

(5) **Waterway permits.** All necessary federal, state, and local permits shall be acquired by those proposing to use waterways. Copies of permits must be furnished to the department prior to authorizing the use of waterways.

(6) **Obstructions.** Permanent obstruction of waterways, including filling is prohibited. Structures associated with authorized uses in waterways shall be capable of ready removal. Where feasible, anchors and floats shall be preferred over pilings.

(7) **Permit process.** Applications for waterway permits will be processed as follows:

(a) Local government review of permit applications will be requested.

(b) Public comment will be gathered through the shoreline permit process, if applicable. If no shoreline permit is required, public comment will be gathered through the methods described in WAC 332-41-510(3).

(c) Applications will be reviewed for consistency with the policy contained in this chapter.

(d) Evaluation will consider existing, planned, and foreseeable needs and demands for higher priority uses in the waterway and in the associated water body.

(8) The department will require waterway permittees to provide security in accordance with WAC 332-30-122(5) to insure the provisions of waterway permits are fulfilled.

(9) **Cancellation.** Permission to use waterways is subject to cancellation in order to satisfy the needs of higher priority waterway uses. Transient moorage may be required to move at any time. Waterway permits are cancellable upon ninety days' notice when the sites are needed for higher priority uses.

(10) **Monitoring.** Local governments will be encouraged to monitor waterway use and to report any uses not in compliance with this regulation.

(11) **Planning.** Planning for waterway use will be encouraged. The shoreline planning process should provide for the long range needs of preferred waterway uses and other statewide values. Planning should also consider the availability of other public property, such as platted street ends, to serve anticipated needs.

(12) **Existing uses.** Existing waterway uses, structures, and obstructions will be reviewed for compliance with this section. Uses not in compliance shall be removed within one

year from the date notification of noncompliance is mailed unless the public interest requires earlier removal. Unless early removal is required, removal may be postponed if the department receives a request for vacation of the waterway from the city or port district in accordance with RCW ((79.93.060)) 79.120.060. If the request for waterway vacation is denied, the structure must be removed within six months of mailing of notice of denial or within one year of the original date of notification of noncompliance, whichever is later.

(13) **Fees.** Waterway permit fees will be determined on the same basis as required for similar types of uses on other state-owned aquatic lands.

(14) **Filled areas.** Certain waterways contain unauthorized fill material. The filled areas have generally assumed the characteristics of the abutting upland. Nonwater-dependent uses may be allowed on existing fills when there will be no interference with priority or other permitted waterway uses and when permitted under applicable local, state, and federal regulations.

AMENDATORY SECTION (Amending Order 342, filed 7/1/80)

**WAC 332-30-119 Sale of second class shorelands.** (1) Under RCW ((79.01.474)) 79.125.450 state-owned second class shorelands on lakes legally determined or considered by the department of natural resources to be navigable, may be sold to private owners of abutting upland property where it is determined by the board of natural resources that the shorelands have minimal public value for uses such as providing access, recreation or other public benefit. The amount of shoreland subject to sale to any one individual shall be the amount fronting a lot within a recorded subdivision plat; or the greater of 100 feet or ten percent of the frontage owned by the applicant outside of a recorded subdivision. However, it shall be in the public interest to retain ownership of publicly owned second class shorelands on navigable lakes where any of the following conditions exist:

(a) The shorelands are natural, conservancy, or equivalent designated areas under the local shoreline master program.

(b) The shorelands are located in front of land with public upland ownership or public access easements.

(c) Further sales of shorelands would preclude the establishment of public access to the lake, or adversely affect the public use and access to the lake.

(2) Prior to the sale of second class shorelands on a navigable lake, the department will:

(a) Depict on a suitable map the current ownership of all shorelands and identify those shorelands potentially available for sale as provided under WAC 332-30-119(1).

(b) Identify any privately owned shorelands, acquisition of which would benefit the public.

(c) Identify and establish the waterward boundary of the shorelands potentially available for sale or acquisition.

(d) Make an appraisal of the value of the shorelands potentially available for sale or acquisition in accordance with as many of the following techniques as are appropriate to the parcels in question:



(i) The market value of shorelands as of the last equivalent sale before the moratorium multiplied by the percentage increase in value of the abutting upland during the same period, i.e.,

$$\text{FMV} = (\text{V2}/\text{V1}) \times (\text{S1})$$

FMV = Current fair market value of shorelands

S1 = Value of shorelands at time of last equivalent sale

V1 = Value of abutting upland at time of last equivalent shoreland sale

V2 = Current fair market value of upland to a maximum of 150 feet shoreward

(ii) Techniques identified in adopted aquatic land management WACs e.g. WAC 332-30-125

(iii) The sales price of the shoreland shall be the fair market value as determined in (2)(d)(i)(ii) but not less than five percent of the fair market value of the abutting uplands, less improvements, to a maximum depth of one hundred fifty feet landward from the line of ordinary high water.

(e) If necessary, prepare a lake management plan in cooperation with local government to guide future department activities on the publicly owned aquatic lands.

(3) The board of natural resources shall determine whether or not the sale would be in the public interest, and a sales price shall be established by the department of natural resources in a reasonable period of time.

AMENDATORY SECTION (Amending Order 580, filed 11/5/91, effective 12/6/91)

**WAC 332-30-122 Aquatic land use authorization.** All requirements in this section shall apply to the department. Subsection (2) of this section (except subsection (2)(a)(iii) and (b)(iii) of this section), subsections (3)(a), and (4)(a) shall apply to port districts managing aquatic lands under a management agreement (WAC 332-30-114).

**(1) General requirements.**

(a) In addition to other requirements of law, aquatic land activities that interfere with the use by the general public of an area will require authorization from the department by way of agreement, lease, permit, or other instrument.

(i) Suitable instruments shall be required for all structures on aquatic lands except for those federal structures serving the needs of navigation.

(ii) The beds of navigable waters may be leased to the owner or lessee of the abutting tideland or shoreland. This preference lease right is limited to the area between the landward boundary of the beds and the -3 fathom contour, or 200 feet waterward, whichever is closer to shore. However, the distance from shore may be less in locations where it is necessary to protect the navigational rights of the public.

(iii) When proposing to lease aquatic lands to someone other than the abutting property owner, that owner shall be notified of the intention to lease the area. When not adverse to the public's ownership, the abutting owner's water access needs may be reasonably accommodated.

(b) Determination of the area encumbered by an authorization for use shall be made by the department based on the impact to public use and subsequent management of any remaining unencumbered public land.

(i) Operations involving fixed structures will include the area physically encumbered plus the open water area needed to operate the facility.

(ii) Areas for individual mooring buoys will be a circle with a radius equal to the expected swing of the vessel or object moored. Only the area encumbered at any given point in time shall be used to calculate any rentals due.

(iii) Areas for utility line easements will normally be ten feet wider than the overall width of the structure(s) placed in the right of way.

(c) All necessary federal, state and local permits shall be acquired by those proposing to use aquatic lands. Copies of permits must be furnished to the department prior to authorizing the use of aquatic lands. When evidence of interest in aquatic land is necessary for application for a permit, an authorization instrument may be issued prior to permit approval but conditioned on receiving the permit.

(2) **Application review.** In addition to other management considerations, the following special analysis shall be given to specific proposed uses:

(a) Environment.

(i) Authorization instruments shall be written to insure that structures and activities on aquatic lands are properly designed, constructed, maintained and conducted in accordance with sound environmental practices.

(ii) Uses which cause adverse environmental impacts may be authorized on aquatic lands only upon compliance with applicable environmental laws and regulations and appropriate steps as may be directed are taken to mitigate substantial or irreversible damage to the environment.

(iii) Nonwater-dependent uses which have significant adverse environmental impacts shall not be authorized.

(b) Public use and access.

(i) Wherever practical, authorization instruments for use of aquatic lands shall be written to provide for public access to the water.

(ii) Areas allocated for first-come, first-served public use shall not be managed to produce a profit for a concessionaire or other operator without a fee being charged.

(iii) Notice will be served to lessees of tidelands and shorelands allocated for future public use that prior to renewal of current leases, such leases will be modified to permit public use or will be terminated.

(c) Authorization to use aquatic lands shall not be granted to any person or organization which discriminates on the basis of race, color, creed, religion, sex, age, or physical or mental handicap.

(d) Authorization instruments for the installation of underwater pipelines, outfalls and cables may be granted when proper provisions are included to insure against substantial or irreversible damage to the environment and there is no practical upland alternative.

(3) **Rents and fees.**

(a) When proposed uses of aquatic lands requiring an authorization instrument (other than in harbor areas) have an identifiable and quantifiable but acceptable adverse impact on state-owned aquatic land, both within and without the authorized area, the value of that loss or impact shall be paid by the one so authorized in addition to normal rental to the department or port as is appropriate.

(b) Normal rentals shall be calculated based on the classification of the aquatic land use(s) occurring on the property. Methods for each class of use are described in specific WAC sections.

(c) Advance payments for two or more years may be collected in those situations where annual payments are less than document preparation and administration costs.

(d) Rentals for leases will normally be billed annually, in advance. If requested by a lessee in good standing, billings will be made:

(i) Quarterly on a prorated basis when annual rental exceeds four thousand dollars; or

(ii) Monthly on a prorated basis when annual rental exceeds twelve thousand dollars.

(e) A one percent per month charge shall be made on any amounts which are past due, unless those amounts are appealed. Users of aquatic properties shall not be considered in good standing when they have amounts more than thirty days past due.

**(4) Structures and improvements on aquatic lands.**

(a) Authorization for placing structures and improvements on public aquatic lands shall be based on the intended use, other uses in the immediate area, and the effect on navigational rights of public and private aquatic land owners. Structures and improvements shall:

(i) Conform to the laws and regulations of any public authority;

(ii) Be kept in good condition and repair by the authorized user of the aquatic lands;

(iii) Not be, nor become, a hazard to navigation;

(iv) Be removed by the authorized user as stipulated in the authorization instrument.

(b) In addition to aquatic land rentals and fees, rent shall be charged for use of those structures and improvements:

(i) Owned by the department, under contract to the department for management; or that become state property under RCW ((79.94.320)) 79.125.300;

(ii) As may be agreed upon as part of the authorization document;

(iii) Installed on an authorized area without written concurrence of the department; or

(iv) Not covered by an application for use of aquatic lands, or a lawsuit challenging such requirements, within ninety days after the date of mailing of the department's written notification of unauthorized occupancy of public aquatic lands.

(c) Only land rental and fees shall be charged for public aquatic lands occupied by those structures and improvements that are:

(i) Authorized in writing by the department;

(ii) Installed prior to June 1, 1971 (effective date of the Shoreline Management Act) on an area authorized for use from the department; or

(iii) Covered by an application for use of aquatic lands within ninety days after the date of mailing of the department's written notification of unauthorized occupancy of public aquatic lands.

**(5) Insurance, bonds, and other security.**

(a) The department may require authorized users of aquatic lands to carry insurance, bonding, or provide other

forms of security as may be appropriate for the use or uses occurring on public property, in order to ensure its sustained utility and future value.

(b) Proof of coverage shall be acceptable to the department if provided by any of the following:

(i) Insurance and/or bonding companies licensed by the state;

(ii) Recognized insurance or bonding agent for the authorized user;

(iii) Savings account assignment from authorized user to department; or

(iv) Cash deposit.

(c) The amount of security required of each user shall be determined by the department and adjusted periodically as needed.

(i) Any portion of the required security relating to payment of rent or fees shall be limited to an amount not exceeding two year's rental or fees.

(ii) Required security related to other terms of the agreement shall be based on the estimated cost to the department of enforcing compliance with those terms.

(iii) Cash deposits shall not be required in an amount exceeding one-twelfth of the annual rental or fees. If this amount is less than the total required security, the remainder shall be provided through other forms listed in (b) of this subsection.

(d) Security must be provided on a continual basis for the life of the agreement. Security arrangements for less than the life of the agreement shall be accepted as long as those arrangements are kept in force through a series of renewals or extensions.

AMENDATORY SECTION (Amending Resolution No. 470, filed 11/9/84)

**WAC 332-30-123 Aquatic land use rentals for water-dependent uses.** All requirements in this section shall apply to the department and to port districts managing aquatic lands under a management agreement (WAC 332-30-114). The annual rental for water-dependent use leases of state-owned aquatic land shall be: The per unit assessed value of the upland tax parcel, exclusive of improvements, multiplied by the units of lease area multiplied by thirty percent multiplied by the real rate of return. Expressed as a formula, it is:  $UV \times LA \times .30 \times r = AR$ . Each of the letter variables in this formula have specific criteria for their use as described below. This step by step presentation covers the typical situations within each section first, followed by alternatives for more unique situations.

**(1) Overall considerations.**

(a) Criteria for use of formula. The formula:

(i) Shall be applied to all leases having structural uses that require a physical interface with upland property when a water-dependent use occurs on such uplands (in conjunction with the water-dependent use on the aquatic lands);

(ii) Shall be used for remote moorage leases by selecting an upland parcel as detailed in subsection (2) of this section;

(iii) Shall not be used for areas of filled state-owned aquatic lands having upland characteristics where the department can charge rent for such fills (see WAC 332-30-125),

renewable and nonrenewable resource uses, or areas meeting criteria for public use (see WAC 332-30-130); and

(iv) Shall cease being used for leases intended for water-dependent uses when the lease area is not actively developed for such purposes as specified in the lease contract. Rental in such situations shall be determined under the appropriate section of this chapter.

(b) Criteria for applicability to leases. The formula shall be used to calculate rentals for:

(i) All new leases and all pending applications to lease or re-lease as of October 1, 1984;

(ii) All existing leases, where the lease allows calculation of total rent by the appropriate department methods in effect at the time of rental adjustment. Leases in this category previously affected by legislated rental increase limits, shall have the formula applied on the first lease anniversary date after September 30, 1984. Other conditions of these leases not related to rent shall continue until termination or amendment as specified by the lease contract. Leases in this category not previously affected by legislated rental increase limits and scheduled for a rent adjustment after October 1, 1985, shall have the option of retaining the current rent or electing to pay the formula rent under the same conditions as specified in (iii) of this subsection.

(iii) Leases containing specific rent adjustment procedures or schedules shall have the rent determined by the formula when requested by the lessee. Holders of such leases shall be notified prior to their lease anniversary date of both the lease contract rent and formula rent. A selection of the formula rent by the lessee shall require an amendment to the lease which shall include all applicable aquatic land laws and implementing regulations.

**(2) Physical criteria of upland tax parcels.**

(a) Leases used in conjunction with and supportive of activities on the uplands. The upland tax parcel used shall be waterfront and have some portion with upland characteristics. If no upland tax parcel meets these criteria, then an alternative shall be selected under the criteria of subsection (4) of this section.

(b) Remote moorage leases. The upland tax parcel used shall be waterfront, have some portion with upland characteristics; and

(i) If the remote moorage is associated with a local upland facility, be an appropriate parcel at the facility; or

(ii) If the remote moorage is similar in nature of use to moorages in the area associated with a local upland facility, be an appropriate parcel at the facility; or

(iii) If the remote moorage is not associated with a local upland facility, be the parcel closest in distance to the moorage area.

(c) Priority of selection. If more than one upland tax parcel meets the physical criteria, the priority of selection shall be:

(i) The parcel that is structurally connected to the lease area;

(ii) The parcel that abuts the lease area;

(iii) The parcel closest in distance to the lease area.

If more than one upland tax parcel remains after this selection priority, then each upland tax parcel will be used for its portion of the lease area. If there is mutual agreement with

the lessee, a single upland tax parcel may be used for the entire lease area. When the unit value of the upland tax parcels are equal, only one upland tax parcel shall be used for the lease area.

(d) The unit value of the upland tax parcel shall be expressed in terms of dollars per square foot or dollars per acre, by dividing the assessed value of the upland tax parcel by the number of square feet or acres in the upland tax parcel. This procedure shall be used in all cases even if the value attributable to the upland tax parcel was assessed using some other unit of value, e.g., front footage, or lot value. Only the "land value" category of the assessment record shall be used; not any assessment record category related to improvements.

(3) **Consistent assessment.** In addition to the criteria in subsection (2) of this section, the upland tax parcel's assessed value must be consistent with the purposes of the lease and method of rental establishment. On this basis, the following situations will be considered inconsistent and shall either require adjustment as specified, or selection of an alternative upland tax parcel under subsection (4) of this section:

(a) The upland tax parcel is not assessed. (See chapter 84.36 RCW Exemptions);

(b) Official date of assessment is more than four years old. (See RCW 84.41.030);

(c) The "assessment" results from a special tax classification not reflecting fair market value. Examples include classifications under: State-regulated utilities (chapter 84.12 RCW), (~~Reforestation lands (chapter 84.28 RCW),~~) Timber and forest lands (chapter 84.33 RCW), and Open space (chapter 84.34 RCW). This inconsistency may be corrected by substituting the full value for the parcel if such value is part of the assessment records;

(d) If the assessed valuation of the upland tax parcel to be used is under appeal as a matter of record before any county or state agency, the valuation on the assessor's records shall be used, however, any changes in valuation resulting from such appeal will result in an equitable adjustment of future rental;

(e) The majority of the upland tax parcel area is not used for a water-dependent purpose. This inconsistency may be corrected by using the value and area of the portion of the upland tax parcel that is used for water-dependent purposes if this portion can be segregated from the assessment records; and

(f) The size of the upland tax parcel in acres or square feet is not known or its small size results in a nominal valuation, e.g., unbuildable lot.

(4) **Selection of the nearest comparable upland tax parcel.** When the upland tax parcel does not meet the physical criteria or has an inconsistent assessment that can't be corrected from the assessment records, an alternative upland tax parcel shall be selected which meets the criteria. The nearest upland tax parcel shall be determined by measurement along the shoreline from the inconsistent upland tax parcel.

(a) The alternative upland tax parcel shall be located by order of selection priority:

(i) Within the same city as the lease area, and if not applicable or found;

(ii) Within the same county and water body as the lease area, and if not found;

- (iii) Within the same county on similar bodies of water, and if not found;
- (iv) Within the state.
- (b) Within each locational priority of (a) of this subsection, the priority for a comparable upland tax parcel shall be:
  - (i) The same use class within the water-dependent category as the lease area use;
  - (ii) Any water-dependent use within the same upland zoning;
  - (iii) Any water-dependent use; and
  - (iv) Any water-oriented use.
- (5) **Aquatic land lease area.** The area under lease shall be expressed in square feet or acres.

(a) Where more than one use class separately exist on a lease area, the formula shall only be applied to the water-dependent use area. Other use areas of the lease shall be treated according to the regulations for the specific use.

(b) If a water-dependent and a nonwater-dependent use exist on the same portion of the lease, the rent for such portion shall be negotiated taking into account the proportion of the improvements each use occupies.

**(6) Real rate of return.**

(a) Until July 1, 1989, the real rate of return to be used in the formula shall be five percent.

(b) On July 1, 1989, and on each July 1 thereafter the department shall calculate the real rate of return for that fiscal year under the following limitations:

- (i) It shall not change by more than one percentage point from the rate in effect for the previous fiscal year; and
- (ii) It shall not be greater than seven percent nor less than three percent.

(7) **Annual inflation adjustment of rent.** The department shall use the inflation rate on a fiscal year basis e.g., the inflation rate for calendar year 1984 shall be used during the period July 1, 1985 through June 30, 1986. The rate will be published in a newspaper of record. Adjustment to the annual rent of a lease shall occur on the anniversary date of the lease except when the rent is redetermined under subsection (9) of this section. The inflation adjustment each year is the inflation rate times the previous year's rent except in cases of stairstepping.

**(8) Stairstepping rental changes.**

(a) Initial increases for leases in effect on October 1, 1984. If the application of the formula results in an increase of more than one hundred dollars and more than thirty-three percent, stairstepping to the formula rent shall occur over the first three years in amounts equal to thirty-three percent of the difference between each year's inflation adjusted formula rent and the previous rent.

Example

Previous rent = \$100.00    Formula rent = \$403.00    Inflation = 5%/yr.

Yr.	Formula Rent	Previous Rent	Difference	33%	Stairstep Rent
1	\$403.00	\$100.00	\$303.00	\$100.00	\$200.00
2	423.15	100.00	323.15	106.64	306.64
3	444.31	100.00	344.31	113.62	420.26
4	466.52	-	-	-	466.52

(b) Initial decreases for leases in effect on October 1, 1984. If the application of the formula results in a decrease of

more than thirty-three percent, stairstepping to the formula rent shall occur over the first three years in amounts equal to thirty-three percent of the difference between the previous rent and each year's inflation adjusted formula rent.

Example

Previous rent = \$403.00    Formula rent = \$100.00    Inflation = 5%/yr.

Yr.	Previous Rent	Formula Rent	Difference	33%	Stairstep Rent
1	\$403.00	\$100.00	\$303.00	\$100.00	\$303.00
2	403.00	105.00	298.00	98.34	204.66
3	403.00	110.25	292.75	96.61	108.05
4	-	115.76	-	-	115.76

(c) If a lease in effect on October 1, 1984, contains more than one water-dependent or water-oriented use and the rental calculations for each such use (e.g., log booming and log storage) result in different rentals per unit of lease area, the total of the rents for those portions of the lease area shall be used to determine if the stairstepping provisions of (a) or (b) of this subsection apply to the lease.

(d) If a lease in effect on October 1, 1984, contains a nonwater-dependent use in addition to a water-dependent or oriented use, the stairstepping provisions of (a) or (b) of this subsection:

- (i) Shall apply to the water-dependent use area if it exists separately (see subsection (5)(a) of this section);
- (ii) Shall not apply to any portion of the lease area jointly occupied by a water-dependent and nonwater-dependent use (see subsection (5)(b) of this section).

(e) Subsequent increases. After completion of any initial stairstepping under (a) and (b) of this subsection due to the first application of the formula, the rent for any lease or portion thereof calculated by the formula shall not increase by more than fifty percent per unit area from the previous year's per unit area rent.

(f) All initial stairstepping of rentals shall only occur during the term of existing leases.

(9) The annual rental shall be redetermined by the formula every four years or as provided by the existing lease language. If an existing lease calls for redetermination of rental during an initial stairstepping period, it shall be determined on the scheduled date and applied (with inflation adjustments) at the end of the initial stairstep period.

AMENDATORY SECTION (Amending Order 343, filed 7/3/80)

**WAC 332-30-127 Unauthorized use and occupancy of aquatic lands (see RCW ((79.01.474)) 79.105.200 and 79.125.200).**

(1) Aquatic lands determined to be state owned, but occupied for private use through accident or without prior approval, may be leased if found to be in the public interest.

(2) Upon discovery of an unauthorized use of aquatic land, the responsible party will be immediately notified of his status. If the use will not be authorized, he will be served notice in writing requiring him to vacate the premises within thirty days. If the law and department policy will permit the use, the occupant is to be encouraged to lease the premises.

(3) The trespassing party occupying aquatic lands without authority will be assessed a monthly use and occupancy

fee for such use beginning at the time notification of state ownership is first provided to them and continuing until they have vacated the premises or arranged for a right to occupy through execution of a lease as provided by law.

(4) The use and occupancy fee is sixty percent higher than full fair market rental and is intended to encourage either normal leasing or vacation of aquatic land.

(5) In those limited circumstances when a use cannot be authorized by a lease even though it may be in the public interest to permit the structure or activity, the fair market rental will be charged and billed on an annual basis.

(6) The use and occupancy billing is to be made after the use has occurred and conveys no rights in advance. Payment is due by the tenth of the month following the original notification, and if not received, a notice is to be sent. If payment is not received within thirty days of this notice and monthly thereafter by the tenth of each month during the period of the use and occupancy lease or if the improvement has not been removed from the aquatic land, an unlawful detainer action against the party in trespass will be filed along with an action to collect past due rental.

**AMENDATORY SECTION** (Amending Resolution No. 500, filed 11/5/85)

**WAC 332-30-128 Rent review.** This section shall not apply to port districts managing aquatic lands under a management agreement (WAC 332-30-114).

(1) **Eligibility to request review.** Any lessee or applicant to lease or release state-owned aquatic lands may request review of any rent proposed to be charged by the department.

(2) **Dispute officers.** The manager of the marine lands division will be the rental dispute officer (RDO). The supervisor of the department, or his designee, will be the rental dispute appeals officer (RDAO).

(3) **Submittals.** A request for review of the rent (an original and two copies) shall be submitted within thirty days of notification by the department of the rent due from the lessee/applicant. The request for review shall contain sufficient information for the officers to make a decision on the appropriateness of the rent initially determined by the department. The burden of proof for showing that the rent is incorrect shall rest with the lessee/applicant.

(4) **Rental due.** The request for review shall be accompanied by one year's rent payment based on the preceding year's rate, or a portion thereof as determined by RCW ((79.90.530)) 79.105.340; or based on the rate proposed by the department, or a portion thereof as determined by RCW ((79.90.530)) 79.105.340, whichever is less. The applicant shall pay any additional rent or be entitled to a refund, with interest, within thirty days after completion of the review process provided in this section.

(5) **Contents of request.** The request for review shall state what the lessee/applicant believes the rent should be and shall contain, at the minimum, all necessary documentation to justify the lessee/applicant's position. This information shall include but not be limited to:

(a) **Rationale.** Why the rent established by the department is inappropriate. The supporting documentation for

nonwater-dependent leases may include appraisals by professionally accredited appraisers.

(b) **Lease information.** A description of state-owned aquatic land under lease which shall include, but not be limited to:

- (i) Lease or application number;
- (ii) Map showing location of lease or proposed lease;
- (iii) Legal description of lease area including area of lease;
- (iv) The permitted or intended use on the leasehold; and
- (v) The actual or current use on the leasehold premises.

(c) **Substitute upland parcel.** A lessee/applicant whose lease rent is determined according to RCW ((79.90.480)) 79.105.240 (water-dependent leases) and who disputes the choice of the upland parcel as provided by WAC 332-30-123, shall indicate the upland parcel that should be substituted in the rental determination and shall provide the following information on the parcel:

- (i) The county parcel number;
- (ii) Its assessed value;
- (iii) Its area in square feet or acres;
- (iv) A map showing the location of the parcel; and
- (v) A statement indicating the land use on the parcel and justifying why the parcel should be substituted.

(6) **RDO review.**

(a) The RDO shall evaluate the request for review within fifteen days of filing to determine if any further support materials are needed from the lessee/applicant or the department.

(b) The lessee/applicant or the department shall provide any needed materials to the RDO within thirty days of receiving a request from the RDO.

(c) The RDO may, at any time during the review, order a conference between the lessee/applicant and department staff to try to settle the rent dispute.

(d) The RDO shall issue a decision within sixty days of filing of the request. Such decision shall contain findings of fact for the decision. If a decision cannot be issued within that time, the lessee/applicant's request will automatically be granted and the rent proposed by the lessee/applicant will be the rent for the lease until the next rent revaluation; provided that, the RDO may extend the review period for one sixty-day period.

(7) **RDAO review.**

(a) The RDAO may, within fifteen days of the final decision by the RDO, be petitioned to review that decision.

(b) If the RDAO declines to review the petition on the decision of the RDO, the RDO's decision shall be the final decision of the RDAO.

(c) If the RDAO consents to review the decision, the review may only consider the factual record before the RDO and the written findings and decision of the RDO. The RDAO shall issue a decision on the petition containing written findings within thirty days of the filing of the petition. This decision shall be the RDAO's final decision.

(8) **Board review.**

(a) The board of natural resources (board) may, within fifteen days of the final RDAO decision, be petitioned to review that decision.

(b) If the board declines to review the petition, the RDAO decision shall be the final decision of the board.

(c) If the board decides to review the petition, the department and the lessee/applicant shall present written statements on the final decision of the RDAO within fifteen days of the decision to review. The board may request oral statements from the lessee/applicant or the department if the board decides a decision cannot be made solely on the written statements.

(d) The board shall issue a decision on the petition within sixty days of the filing of the written statements by the lessee/applicant and the department.

**AMENDATORY SECTION** (Amending Order 710, filed 10/17/02, effective 11/17/02)

**WAC 332-30-139 Marinas and moorages.** (1) Moorage facilities developed on aquatic lands should meet the following design criteria:

(a) Moorage shall be designed so as to be compatible with the local environment and to minimize adverse esthetic impacts.

(b) Open moorage is preferred in relatively undeveloped areas and locations where view preservation is desirable, and/or where leisure activities are prevalent.

(c) Covered moorage may be considered in highly developed areas and locations having a commercial environment.

(d) Enclosed moorage should be confined to areas of an industrial character where there is a minimum of esthetic concern.

(e) In general, covered moorage is preferred to enclosed moorage and open moorage is preferred to covered moorage.

(f) View encumbrance due to enclosed moorage shall be avoided in those areas where views are an important element in the local environment.

(g) In order to minimize the impact of moorage demand on natural shorelines, large marina developments in urban areas should be fostered in preference to numerous small marinas widely distributed.

(h) The use of floating breakwaters shall be considered as protective structures before using solid fills.

(i) Dry moorage facilities (stacked dry boat storage) shall be considered as an alternative to wet storage in those locations where such storage will:

(i) Significantly reduce environmental or land use impacts within the water area of the immediate shoreline.

(ii) Reduce the need for expansion of existing wet storage when such expansion would significantly impact the environment or adjacent land use.

(2) Anchorages suitable for use by transient, recreational boaters will be identified and established by the department in appropriate locations so as to provide additional moorage space.

(3) Upland sewage disposal approved by local government and appropriate state agencies is required for all vessels used as a residence.

(4) The department shall work with federal, state, local government agencies and other groups to determine acceptable locations for marina development, properly distributed to meet projected public need for the period 1980 to 2010.

(5) The department may lease open water moorage and anchorage areas only to local governments that have autho-

itized the establishment of open water moorage and anchorage areas in their local Shoreline Master Programs within five years of the effective date of this rule. With the department's approval, the local government lessee may install mooring buoys or other floating moorage devices, designate anchorage locations, sublease moorage and anchorage in the area, collect rent and fees for such moorage and anchorage, and otherwise manage the area as a moorage facility. All open water moorage and anchorage areas must meet the following requirements:

(a) Open water moorage and anchorage areas must meet all relevant requirements normally applicable to a marina lease, which may include the placement, design, limitation on the number of vessels or floating houses, and operation of the area and any improvements within the area, payment of rent to the department, consideration of navigational and environmental impacts, and all other applicable permits and other requirements of law.

(b) Open water moorage and anchorage areas may not be in a harbor area nor in any location or configuration that would interfere with water-borne commerce and navigation.

(c) The leasing of state-owned aquatic lands for open water moorage and anchorage areas is subject to all preferences accorded upland, tideland, or shoreland owners in RCW ((~~79.94.070, 79.94.260, 79.94.280, 79.95.010~~)) 79.125.400, 79.125.460, 79.125.410, 79.130.010, and WAC 332-30-122.

(d) Any vessel used for residential use or floating house in an open water moorage and anchorage area must comply with WAC 332-30-171.

(e) Except for nongrandfathered floating house moorage as defined in WAC 332-30-171 (7)(a)(ii), nonwater-dependent uses and commercial uses are prohibited in open water moorage and anchorage areas. Uses prohibited by this subsection (e) are allowed when necessary because of an emergency that immediately threatens human life or property, for the duration of the emergency only.

The department will not lease an open water moorage and anchorage area to an entity other than a local government agency. This restriction shall not affect use authorizations to public or private entities for mooring buoys, aquaculture net pens, or other floating structures otherwise allowed by law.

**AMENDATORY SECTION** (Amending Order 710, filed 10/17/02, effective 11/17/02)

**WAC 332-30-144 Private recreational docks.** (1) **Applicability.** This section implements the permission created by RCW ((~~79.90.105~~)) 79.105.430, Private recreational docks, which allows abutting residential owners, under certain circumstances, to install private recreational docks without charge. The limitations set forth in this section apply only to use of state-owned aquatic lands for private recreational docks under RCW ((~~79.90.105~~)) 79.105.430. No restriction or regulation of other types of uses on aquatic lands is provided. This section shall not apply to port districts managing aquatic lands under a management agreement (WAC 332-30-114).

(2) **Eligibility.** The permission shall apply only to the following:

(a) An "abutting residential owner," being the owner of record of property physically bordering on public aquatic land and either used for single family housing or for a multi-family residence not exceeding four units per lot.

(b) A "dock," being a securely anchored or fixed, open walkway structure visible to boaters and kept in good repair extending from the upland property, primarily used as an aid to boating by the abutting residential owner(s), and accommodating moorage by not more than four pleasure boats typical to the body of water on which the dock is located. Two or more abutting residential owners may install and maintain a single joint-use dock provided it meets all other design requirements of this section; is the only dock used by those owners; and that the dock fronts one of the owners' property.

(c) A "private recreational purpose," being a nonincome-producing, leisure-time, and discretionary use by the abutting residential owner(s).

(d) State-owned aquatic lands outside harbor areas designated by the harbor line commission.

(3) **Uses not qualifying.** Examples of situations not qualifying for the permission include:

(a) Yacht and boat club facilities;

(b) Floating houses, as defined in WAC 332-30-106(23), and vessels used as a residence (as defined in WAC 332-30-106(62));

(c) Resorts;

(d) Multifamily dwellings, including condominium ownerships, with more than four units;

(e) Uses other than docks such as launches and railways not part of the dock, bulkheads, landfills, dredging, breakwaters, mooring buoys, swim floats, and swimming areas.

(4) **Limitations.**

(a) The permission does not apply to areas where the state has issued a reversionary use deed such as for shellfish culture, hunting and fishing, or park purposes; published an allocation of a special use and the dock is inconsistent with the allocation; or granted an authorization for use such as a lease, easement, or material purchase.

(b) Each dock owner using the permission is responsible for determining the availability of the public aquatic lands. Records of the department are open for public review. The department will research the availability of the public aquatic lands upon written request. A fee sufficient to cover costs shall be charged for this research.

(c) The permission is limited to docks that conform to adopted shoreline master programs and other local ordinances.

(d) The permission is not a grant of exclusive use of public aquatic lands to the dock owner. It does not prohibit public use of any aquatic lands around or under the dock. Owners of docks located on state-owned tidelands or shorelands must provide a safe, convenient, and clearly available means of pedestrian access over, around, or under the dock at all tide levels. However, dock owners are not required to allow public use of their docks or access across private lands to state-owned aquatic lands.

(e) The permission is not transferable or assignable to anyone other than a subsequent owner of the abutting upland property and is continuously dependent on the nature of ownership and use of the properties involved.

(f) Vessels used as a residence and floating houses are not permitted to be moored at a private recreational dock, except when such moorage is necessary because of an emergency that immediately threatens human life or property, for the duration of the emergency only.

(5) **Revocation.** The permission may be revoked or canceled if:

(a) The dock or abutting residential owner has not met the criteria listed in subsection (2) or (4) of this section; or

(b) The dock significantly interferes with navigation or with navigational access to and from other upland properties. This degree of interference shall be determined from the character of the shoreline and waterbody, the character of other in-water development in the vicinity, and the degree of navigational use by the public and adjacent property owners;

(c) The dock interferes with preferred water-dependent uses established by law; or

(d) The dock is a public health or safety hazard.

(6) **Appeal of revocation.** Upon receiving written notice of revocation or cancellation, the abutting residential owner shall have thirty days from the date of notice to file for an administrative hearing under the contested case proceedings of chapter ((34-04)) 34.05 RCW. If the action to revoke the permission is upheld, the owner shall correct the cited conditions and shall be liable to the state for any compensation due to the state from the use of the aquatic lands from the date of notice until permission requirements are met or until such permission is no longer needed. If the abutting residential owner disclaims ownership of the dock, the department may take actions to have it removed.

(7) **Current leases.** Current lessees of docks meeting the criteria in this section will be notified of their option to cancel the lease. They will be provided a reasonable time to respond. Lack of response will result in cancellation of the lease by the department.

(8) **Property rights.** No property rights in, or boundaries of, public aquatic lands are established by this section.

(9) **Lines of navigability.** The department will not initiate establishment of lines of navigability on any shorelands unless requested to do so by the shoreland owners or their representatives.

(10) Nothing in this section is intended to address statutes relating to sales of second class shorelands.

AMENDATORY SECTION (Amending Order 343, filed 7/3/80)

**WAC 332-30-163 River management.** (1) Use and/or modification of any river system shall recognize basic hydraulic principles, as well as harmonize as much as possible with the existing aquatic ecosystems, and human needs.

(2) Priority consideration will be given to the preservation of the streamway environment with special attention given to preservation of those areas considered esthetically or environmentally unique.

(3) Bank and island stabilization programs which rely mainly on natural vegetative systems as holding elements will be encouraged.

(4) Research will be encouraged to develop alternative methods of channel control, utilizing natural systems of stabilization.

(5) Natural plant and animal communities and other features which provide an ecological balance to a streamway, will be recognized in evaluating competing human use and protected from significant human impact.

(6) Normal stream depositions of logs, uprooted tree snags and stumps which abut on shorelands and do not intrude on the navigational channel or reduce flow, or adversely redirect a river course, and are not harmful to life and property, will generally be left as they lie, in order to protect the resultant dependent aquatic systems.

(7) Development projects will not, in most cases, be permitted to fill indentations such as mudholes, eddies, pools and aeration drops.

(8) Braided and meandering channels will be protected from development.

(9) River channel relocations will be permitted only when an overriding public benefit can be shown. Filling, grading, lagooning or dredging which would result in substantial detriment to navigable waters by reason of erosion, sedimentation or impairment of fish and aquatic life will not be authorized.

(10) Sand and gravel removals will not be permitted below the wetted perimeter of navigable rivers except as authorized under a department of fisheries and game hydraulics permit (RCW ((~~75.20.100~~)) 75.55.100). Such removals may be authorized for maintenance and improvement of navigational channels.

(11) Sand and gravel removals above the wetted perimeter of a navigable river (which are not harmful to public health and safety) will be considered when any or all of the following situations exist:

(a) No alternative local upland source is available, and then the amount of such removals will be determined on a case by case basis after consideration of existing state and local regulations.

(b) The removal is designed to create or improve a feature such as a pond, wetland or other habitat valuable for fish and wildlife.

(c) The removal provides recreational benefits.

(d) The removal will aid in reducing a detrimental accumulation of aggregates in downstream lakes and reservoirs.

(e) The removal will aid in reducing damage to private or public land and property abutting a navigable river.

(12) Sand and gravel removals above the wetted perimeter of a navigable river will not be considered when:

(a) The location of such material is below a dam and has inadequate supplementary feeding of gravel or sand.

(b) Detached bars and islands are involved.

(c) Removal will cause unstable hydraulic conditions detrimental to fish, wildlife, public health and safety.

(d) Removal will impact esthetics of nearby recreational facilities.

(e) Removal will result in negative water quality according to department of ecology standards.

(13) Bank dumping and junk revetment will not be permitted on aquatic lands.

(14) Sand and gravel removal leases shall be conditioned to allow removal of only that amount which is naturally replenished on an annual basis.

AMENDATORY SECTION (Amending Order 640, filed 3/11/99, effective 4/11/99)

**WAC 332-30-170 Tideland and shoreland exchange.**

The department will use this rule when it considers exchanging tidelands or shorelands with private individuals or public entities pursuant to RCW ((~~79.90.457~~)) 79.105.400. The department may exchange these aquatic lands if the exchange is in the public interest and will actively contribute to the public benefits established in RCW ((~~79.90.455~~)) 79.105.030. Those benefits are: Encouraging direct public use and access; fostering water-dependent uses; ensuring environmental protection; utilizing renewable resources; and generating revenue in a manner consistent with these benefits. The department may not exchange state-owned harbor areas or waterways.

(1) **Eligibility criteria.** The department may consider exchanging ownership of tidelands or shorelands with private and other public landowners if the proposed exchange meets the eligibility criteria set forth in (a) and (b) of this subsection.

(a) The economic values of the parcels must be equal or the exchange must result in a net economic gain to the state. The economic value must be determined by a qualified independent appraiser and/or economist and accomplished through a methodology accepted by the department.

(b) The tidelands or shorelands to be conveyed into state ownership must abut navigable water.

(2) **Evaluation criteria.** Subject to available funding, the department will evaluate eligible proposed exchanges according to the following criteria. The department will give priority and preference to proposed exchanges which, in the department's judgment, are in the public interest by providing the greatest public benefits, the least negative impacts, and the most appropriate resolution of other considerations, as set forth in (a), (b) and (c) of this subsection.

(a) The tidelands or shorelands to be conveyed into state ownership must have one or more of the following characteristics:

(i) Be or abut a critical and/or an essential habitat identified by the National Marine Fisheries Service, state natural resource management agency(s), and/or the United States Department of Fish and Wildlife;

(ii) Be or abut a critical area identified by jurisdictions under chapter 36.70A RCW;

(iii) Be an area beneficial to sediment transport and/or nearshore habitat function identified by the National Marine Fisheries Service, state natural resource management agency(s), and/or the United States Department of Fish and Wildlife;

(iv) Be actively used or abut a parcel used in the commercial production of food or fibre or other renewable resource production (for example, commercial grade beds of shellfish and aquaculture facilities);

(v) Abut a state or national wildlife refuge;



(vi) Abut an upland parcel with public upland ownership, easements, or some other formalized agreement that would allow direct public use of and access to the water;

(vii) Be actively used or abut parcel(s) actively used for water-dependent uses or allow for water dependent use;

(viii) Contain a historic or archaeological property listed on or eligible to be listed on the National Register of Historic Places; or

(ix) Generate or have the potential to generate higher revenues than the parcel being transferred out-of-state ownership in a manner consistent with the benefits listed in RCW ((79.90.455)) 79.105.030.

(b) The proposed exchange must have beneficial or no negative impacts on:

(i) Navigation;

(ii) The diversity and health of the local environment including the production and utilization of renewable resources;

(iii) The quantity and quality of public access to the waterfront;

(iv) Treaty rights of federally recognized tribes. The department will solicit comments on a proposed exchange from affected tribes; and

(v) Hazardous waste and contaminated sediments liability issues.

(c) The following issues must also be considered:

(i) Consistency with plans and development guidelines of public ports, counties, cities and other local, state, and federal agencies;

(ii) The relative manageability of the tidelands or shorelands to be exchanged including, but not limited to, the effect of the exchange on management costs, liability and upland access, and the relative proximity of the tidelands or shorelands to be exchanged to other state-owned shorelands or tidelands; and

(iii) The cumulative impacts of similar exchanges on water dependent uses, nonrenewable and renewable natural resources, and total aquatic lands acreage managed by the department.

**(3) Recommendation to the board of natural resources.** The department will provide its recommendations to the board of natural resources in writing, addressing whether the exchange meets the criteria in this rule and the positive and negative impacts of the exchange on public benefits and resources. The department will provide copies of its recommendations to the proponent of the exchange. In general, an exchange should only be recommended by the department and approved by the board of natural resources when, in the department's and the board's judgment, the public benefits associated with the exchange outweigh the negative impacts or other diminution in public benefits.

AMENDATORY SECTION (Amending Order 710, filed 10/17/02, effective 11/17/02)

**WAC 332-30-171 Residential uses on state-owned aquatic lands.** (1) **Application.** This section applies to residential uses, as defined in WAC 332-30-106(62), and floating houses, moorage facilities, and vessels, as defined in WAC 332-30-106 (23), (38) and (74), as they relate to resi-

dential uses, on state-owned aquatic lands. All requirements in this section shall apply to the department and to port districts managing aquatic lands under a management agreement (WAC 332-30-114). This section does not apply to: Activities or structures on aquatic lands not owned by the state; vessels used solely for recreational or transient purposes; floating houses or vessels used as hotels, motels or boatels; or vessels owned and operated by the United States military.

(2) **Limits on the number of residential uses.** Residential uses on state-owned aquatic lands shall only occur in accordance with all federal, state, and local laws. The following apply only to leases entered into following the effective date of this rule unless otherwise provided in subsection (3) of this section.

(a) The total number of slips which may be allocated for residential uses in any marina, pier, open water moorage and anchorage area, or other moorage facility shall be limited to ten percent of the total number of slips within a marina, unless otherwise established as provided in (b) or (c) of this subsection. For the purposes of determining the exact number of residential slips, the department shall round to nearest whole number.

(b) Upon the effective date of this rule, the ten percent limit can be changed by local government, through amendments to the local shoreline master program and/or issuance of a shoreline substantial development conditional use permit, if all of the following conditions are met:

(i) Methods to handle the upland disposal and best management practices for the increased waste associated with residential use are expressly addressed and required; and

(ii) Specific locations for residential use slips do not adversely impact habitat or interfere with water-dependent uses.

(c) If a local shoreline master program or local ordinance has established a different percentage limit prior to the date this rule takes effect, the limit established in that shoreline master program or local ordinance shall be the recognized percentage limit. After the effective date of this rule, changes to the percentage limit shall only be recognized by DNR as the percentage limit if the changes are made through amendments to the Shoreline Master Program or adoption of a shoreline substantial development conditional use permit.

(d) Application of the percentage limit to moorage facilities that occupy both state-owned aquatic and privately owned aquatic lands.

(i) If the city or county jurisdiction has not established a percentage limit, then the total number of vessels used as a residence and floating houses in any moorage facility shall be limited to ten percent of the total number of slips or spaces usable for moorage or anchorage in that facility. In this case, when a moorage facility occupies both state-owned and nonstate-owned aquatic lands, the percent limit will be calculated using only the total number of slips that are located on state-owned aquatic lands and will be applied only to the portion of the facility located on state-owned aquatic lands.

(ii) If a county or city has established a percent limit, and a moorage facility occupies both state-owned and nonstate-owned aquatic lands, the department may authorize any or all of the floating houses or vessels with residential uses within

the entire facility to be located in the portion of the facility on state-owned aquatic lands.

(e) If a moorage facility has so few moorage slips or spaces that the percent limit allows for less than one residential use slip, then one residential use slip may be authorized, if not otherwise prohibited by the city or county jurisdiction.

**(3) Excess residential use slips.**

(a) This subsection shall apply to all lessees occupying state-owned aquatic lands under written leases with the department as of the effective date of this rule. Within one hundred eighty days of the effective date of this rule, each existing moorage facility lessee shall document the existing percentage of residential use slips within their facility and report this information to the department. This reported percentage shall be referred to as the "reported existing percentage" for the moorage facility lessee.

(i) If the reported existing percentage of residential use slips is greater than the ten percent limit established in this rule, or other locally established limit as described in subsection (2)(b) or (c) of this section, then the reported existing percentage will establish the allowable residential use percentage at the beginning of a new lease for the same moorage facility, regardless of whether ownership of the facility changes subject to attrition described in subsection (3)(b) of this section. At the time the new lease is entered into, those residential uses in excess of the reported existing percentage will be required to vacate the moorage facility.

(ii) If the reported existing percentage of residential use slips is less than or equal to the ten percent limit established in this rule, or other locally established limit as described in subsection (2)(b) or (c) of this section, then the percentage limit established in this rule, or other locally established limit as described in subsection (2)(b) or (c) of this section, will establish the allowable residential use percentage at the beginning of a new lease for the same moorage facility, regardless of whether ownership of the facility changes. At the time the new lease is entered into, those residential uses in excess of the ten percent limit established in this rule, or other locally established limit as described in subsection (2)(b) or (c) of this section, will be required to vacate the moorage facility.

(iii) If a moorage facility lessee fails to report the existing percentage of residential slips within their facility within one hundred eighty days of the effective date of this rule, then the percentage limit established in this rule, or other locally established limit as described in subsection (2)(b) or (c) of this section, will establish the allowable residential use percentage at the beginning of a new lease for the same moorage facility, regardless of whether ownership of the facility changes. At the time the new lease is entered into, those residential uses in excess of the ten percent limit established in this rule, or other locally established limit as described in subsection (2)(b) or (c) of this section, will be required to vacate the moorage facility.

(b) The purpose of this subsection is to describe the process of attrition used to reach compliance with the percentage limit or locally established percentage limit. For all leases entered into following the effective date of this rule, if there are more residential use slips in a moorage facility than allowed by the percent limit, then no new or additional resi-

dential use slips, including replacements for grandfathered floating houses under subsection (7)(a) of this section, shall be authorized in that facility. In such cases, any residential uses that leave the facility for a period of time greater than thirty days may not return to the facility until the total number of residential use slips is below the percent limit. For purposes of counting the thirty days described in this subsection (3)(b), the department shall not include time needed for repairs to the vessels or floating houses, nor any time when a vessel is away from the moorage facility but the owner or operator of the vessel continuously maintains a written moorage agreement for that facility.

(c) Marina owners, operators, and/or managers may decrease the ten percent limit on a site-specific basis.

**(4) Waste disposal.** The following apply to all leases entered into following the effective date of this rule:

(a) Sewage. All treated and untreated sewage shall be disposed of upland, in accordance with federal, state, and local laws. This section does not require specific disposal methods so long as the measures established by the lessee and the department ensure upland disposal.

(b) Oil and toxic substances. All oil, grease, corrosive liquids, and other toxic substances shall be disposed of upland, in accordance with federal, state, and local laws. This section does not require specific disposal methods so long as the measures established by the lessee and the department ensure upland disposal.

(c) Solid waste. All solid waste shall be disposed of upland, in accordance with federal, state, and local laws. This section does not require specific disposal methods so long as the measures established by the lessee and the department ensure upland disposal.

(d) Gray water. All gray water shall be disposed of in accordance with federal, state, and local laws. Moorage facilities shall develop and implement best management practices to avoid, to the maximum extent possible, all discharges into waters above state-owned aquatic land, of wastewater from showers, baths, sinks, laundry, decks, and other miscellaneous sources, otherwise known as "gray water." For those unavoidable discharges, the best management practices shall minimize discharges, to the maximum extent possible, of gray water from showers, baths, sinks, laundry, decks, and other miscellaneous sources.

**(5) Responsibilities of lessees with residential uses.** The following apply to leases entered into following the effective date of this rule:

(a) Each department lessee must establish and implement measures satisfactory to the department for ensuring upland waste disposal, and the avoidance or minimization of any discharge of waste, as described in (c) of this subsection, onto or in the waters above state-owned aquatic lands from vessels used for residential use and floating houses. This shall include a contingency plan in case of failure or unavailability of the waste disposal methods identified by the lessee and approved by the department.

(b) Each department lessee must annually, or as otherwise provided in the lease, provide the department with evidence that all vessels used for residential use and floating houses in their facility comply with this rule and the terms of the department lease.

(c) Each department lessee shall fully describe the waste disposal measures. These measures may include, but are not limited to:

- (i) Connection to an upland sewage system;
- (ii) Periodic sewage pump-out service, either at a pump-out station or with transportable pump-out equipment, including prepayment for such services and proof of participation by residential occupants;
- (iii) Installation of appropriate waste receptacles;
- (iv) Back-up and clean-up facilities and procedures as needed in case of failure or temporary unavailability of waste disposal systems;
- (v) Educational efforts, such as posting of notices, distribution of information, and training for residents on waste disposal methods and requirements;
- (vi) Monitoring of activities within the facility to prevent or identify and remedy improper waste disposal;
- (vii) Contractual requirements in moorage subleases requiring proper waste disposal by residents; and/or
- (viii) Other best management practices and/or best available technologies that are established by any local, state, or federal agency, including the department, or by any appropriate nongovernmental organization, that are satisfactory to the department to ensure upland disposal of waste and avoid or minimize any discharge of waste onto or in the waters above state-owned aquatic lands.

(d) Consistent with all federal, state, and local laws and regulations, all leases issued by the department after the effective date of this rule for moorage facilities with residential uses within them shall require and specify:

- (i) Methods to handle the upland disposal and best management practices for the increased waste associated with residential use;
- (ii) Specific locations for residential use slips that do not adversely impact habitat or interfere with water-dependent uses.

(6) **Vessels.** Moorage of a vessel, as defined in WAC 332-30-106(74), is a water-dependent use.

(7) **Floating houses.** Moorage of a floating house, as defined in WAC 332-30-106(23), is a water-oriented use.

(a) **Classifying floating house moorage under RCW ((79.90.465(2))) 79.105.060(25).** In classifying floating house moorage under ((RCW 79.90.465(2))) 79.105.060(25), the department will apply the following rules:

(i) If a floating house moorage site had a floating house moored there under a department lease on October 1, 1984, or if a floating house was moored there for at least three years before October 1, 1984, then the department will classify that site as a water-dependent use for the purposes of determining rent. Such sites may be referred to as "grandfathered" sites.

(ii) If a floating house moorage site did not have a floating house moored there under a department lease on October 1, 1984, nor for at least three years before October 1, 1984, then the department shall classify that site as a nonwater-dependent use. Such sites may be referred to as "nongrandfathered" sites.

(iii) The classification of a grandfathered or nongrandfathered floating house moorage site applies to the specific aquatic land being utilized for moorage of the floating house, not to the floating house itself.

(iv) The department shall classify each individual floating house moorage slip within a moorage facility as a separate site. This may result in a marina containing both grandfathered and nongrandfathered floating house moorage sites.

(v) If a floating house vacates a grandfathered moorage site and either returns within thirty days or is replaced with another floating house within thirty days, then the moorage site will remain grandfathered.

(vi) If a floating house vacates a grandfathered moorage site and does not return within thirty days, future moorage of that floating house in the same or a different site shall be non-grandfathered, unless the floating house qualifies as a replacement floating house under (a)(v) of this subsection.

(vii) After October 1, 1984, if a grandfathered site ceased or ceases being used for floating house moorage for more than thirty consecutive days, then the site shall no longer be grandfathered.

(viii) When counting the thirty days described in (a)(v) through (vii) of this subsection, the department will exclude any reasonable time needed for repair of the floating house.

(ix) If a lessee redesignates a grandfathered floating house moorage slip within the lease area, consistent with the lease requirements, and notifies the department in advance of where the slip is to be relocated, then the slip will remain grandfathered. However, if a nongrandfathered site has a floating house relocated to it after the effective date of this rule, the site shall not be designated as grandfathered as provided in this subsection, (7)(a)(ix).

(x) If a floating house was moored at a grandfathered site on October 1, 1984, but was relocated to a site authorized by the department so that on the effective date of this rule the floating house is moored at a nongrandfathered site, then the department may classify this new location as a grandfathered site if the floating house meets all of the following criteria:

(A) The floating house was on state-owned aquatic land leased on October 1, 1984, or was on state-owned aquatic lands for three years prior to October 1, 1984;

(B) The floating house was continuously on state-owned aquatic lands from October 1, 1984, until the effective date of this rule, except for any reasonable time needed for repair of the house; and

(C) The department receives, within one year after the effective date of this rule, a request to have the current moorage site classified as a grandfathered site.

(b) **Managing grandfathered floating house moorage.** Floating houses moored in grandfathered sites that meet all applicable laws and rules, and are consistent with all lease requirements, may remain. The department shall charge the water-dependent rental rate for such moorage.

(c) **Managing nongrandfathered floating house moorage.**

(i) The department may authorize floating house moorage at a nongrandfathered site only if the department determines that the following conditions are met:

(A) All conditions as set forth in this section;

(B) The specific sites and circumstances for floating house moorage have been identified in an adopted local shoreline management plan that provides for the present and future needs of all uses, considers cumulative impacts to habitat and resources of statewide value, identifies specific areas

or situations in which floating house moorage will be allowed, and justifies the exceptional nature of those areas or situations; and

(C) The floating house moorage is compatible with water-dependent uses existing in or planned for the area.

(ii) If a floating house is moored at a nongrandfathered site that does not meet the conditions in (c)(i) of this subsection, but the site is authorized by a department lease and the floating house and moorage meet all conditions as set forth in this section and is consistent with all lease requirements, then the floating house may remain until the termination of the lease or one year after the effective date of this rule, whichever is later. Thereafter, unless at that time the floating house meets the conditions in (c)(i) of this subsection, the floating house must vacate the nongrandfathered site.

(iii) If a floating house is moored at a nongrandfathered site that does not meet the conditions in (c)(i) of this subsection and is not authorized by a department lease, then the floating house must vacate the site within one year from the effective date of this rule, unless at that time it meets the conditions in (c)(i) of this subsection and the department chooses to grant a lease.

(iv) For nongrandfathered floating house moorage sites, the department shall charge the nonwater-dependent rental rate. If a leased area contains both nongrandfathered floating house moorage along with grandfathered floating house moorage or other water-dependent uses, then the nonwater-dependent rental rate shall be applied to a proportionate share of any common areas used in conjunction with the nongrandfathered floating house moorage, including, but not limited to, docks, breakwaters, and open water areas for ingress and egress to the facility.

(8) **Open water moorage.** For the purposes of this section, open water moorage and anchorage areas are defined in WAC 332-30-106(45).

(a) Vessels used for residential use and floating houses shall be moored, anchored, or otherwise secured only at a marina, pier, or similar fixed moorage facility that is connected to the shoreline, or in open water moorage and anchorage areas described under WAC 332-30-139(5) and subject to the restrictions therein. Vessels used for residential use and floating houses shall not be moored, anchored or otherwise secured in open waters above state-owned aquatic lands away from a fixed moorage facility that is connected to the shoreline, nor be moored, anchored, or otherwise secured to any natural feature in the water or on the shoreline, except within an open water moorage and anchorage area. A vessel used for residential use or floating house may moor in areas prohibited by this subsection (8)(a) when necessary because of an emergency that immediately threatens human life or property, for the duration of the emergency only.

(b) Any vessel used for residential use or floating house that is moored on state-owned aquatic lands on the effective date of this rule, and complies with all other applicable laws and all lease requirements, but does not comply with (a) of this subsection, may remain until one year after the effective date of this rule or until the termination date of the existing department lease, whichever is later. Thereafter, unless at that time it meets the conditions in (a) of this subsection, the vessel used for residential use or floating house must vacate the

site. The department shall not authorize or reauthorize any moorage for vessels used for residential use or floating houses that do not comply with (a) of this subsection.





