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Chapter 173-303 WAC

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Dangerous waste regulations

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173-303-010
Purpose.

This regulation implements chapter 70.105 RCW, the Hazardous Waste Management Act of 1976 as amended, and implements, in part, chapters 70.105A, 70.105D, and 15.54 RCW, and Subtitle C of Public Law 94-580, the Resource Conservation and Recovery Act, which the legislature has empowered the department to implement. The purposes of this regulation are to:

(1) Designate those solid wastes which are dangerous or extremely hazardous to the public health and environment;

Note: The terms public health and human health are used in this chapter interchangeably.

(2) Provide for surveillance and monitoring of dangerous and extremely hazardous wastes until they are detoxified, reclaimed, neutralized, or disposed of safely;

(3) Provide the form and rules necessary to establish a system for manifesting, tracking, reporting, monitoring, recordkeeping, sampling, and labeling dangerous and extremely hazardous wastes;

(4) Establish the siting, design, operation, closure, post-closure, financial, and monitoring requirements

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for dangerous and extremely hazardous waste transfer, treatment, storage, and disposal facilities;

(5) Establish design, operation, and monitoring requirements for managing the state's extremely hazardous waste disposal facility;

(6) Establish and administer a program for permitting dangerous and extremely hazardous waste management facilities; and

(7) Encourage recycling, reuse, reclamation, and recovery to the maximum extent possible.

[Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-010, filed 11/30/04, effective 1/1/05; 00-11-040 (Order 99-01), § 173-303-010, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapter 70.105 RCW. 86-12-057 (Order DE-85-10), § 173-303-010, filed 6/3/86; 84-09-088 (Order DE 83-36), § 173-303-010, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-010, filed 2/10/82. Formerly WAC 173-302-010.]

173-303-016
Identifying solid waste.

(1) Purpose and applicability.

(a) The purpose of this section is to identify those materials that are and are not solid wastes.

(b)(i) The definition of solid waste contained in this section applies only to wastes that also are dangerous for purposes of the regulations implementing chapter 70.105 RCW. For example, it does not apply to materials (such as nondangerous scrap, paper, textiles, or rubber) that are not otherwise dangerous wastes and that are recycled.

(ii) This section identifies only some of the materials which are solid wastes and dangerous wastes under chapter 70.105 RCW. A material which is not defined as a solid waste in this section, or is not a dangerous waste identified or listed in this section, is still a solid waste and a dangerous waste for purposes of these sections if reason and authority exists under chapter 70.105 RCW and WAC 173-303-960. Within the constraints of chapter 70.105 RCW, this includes but is not limited to any material that: Is accumulated, used, reused, or handled in a manner that poses a threat to public health or the environment; or, due to the dangerous constituent(s) in it, when used or reused would pose a threat to public health or the environment.

(c) Certain materials are solid wastes but are excluded from the requirements of this chapter by WAC 173-303-071 and 173-303-073.

(2) The following terms are used and have the meanings as defined in WAC 173-303-040:

(a) Boiler

(b) By-product

(c) Incinerator

(d) Industrial furnace

(e) Reclaim

(f) Recover

(g) Recycle

(h) Used or reused (see reuse or use)

(i) Sludge

(j) Scrap metal

(k) Spent material

(l) Excluded scrap metal

(m) Processed scrap metal

(n) Home scrap metal

(o) Prompt scrap metal

(3) Definition of solid waste.

(a) A solid waste is any discarded material that is not excluded by WAC 173-303-017(2) or that is not excluded by variance granted under WAC 173-303-017(5).

(b) A discarded material is any material that is:

(i) Abandoned, as explained in subsection (4) of this section; or

(ii) Recycled, as explained in subsection (5) of this section; or

(iii) Considered inherently waste-like, as explained in subsection (6) of this section. Persons registering micronutrient or waste-derived fertilizers under chapter 15.54 RCW must submit information required by the department to indicate compliance with this chapter. The required minimum information is described in WAC 173-303-505; or

(iv) A military munition identified as a solid waste at WAC 173-303-578(2).

(4) Materials are solid waste if they are abandoned by being:

(a) Disposed of; or

(b) Burned or incinerated; or

(c) Accumulated, stored, or treated (but not recycled) before or in lieu of being abandoned by being disposed of, burned, or incinerated.

(5) Materials are solid wastes if they are recycled -- or accumulated, stored, or treated before recycling -- as specified in (a) through (d) of this subsection.

(a) Used in a manner constituting disposal. Materials noted with a "*" in column 1 of Table 1 are solid wastes when they are:

(i)(A) Applied to or placed on the land in a manner that constitutes disposal; or

(B) Used to produce products that are applied to or placed on the land or are otherwise contained in products that are applied to or placed on the land (in which cases the product itself remains a solid waste).

(ii) However, commercial chemical products listed in WAC 173-303-9903 or which exhibit any of the criteria or characteristics listed in WAC 173-303-090 or 173-303-100 are not solid wastes if they are applied to the land and that is their ordinary manner of use.

(b) Burning for energy recovery. Materials noted with a "*" in column 2 of Table 1 are solid wastes when they are:

(i) Burned to recover energy;

(ii) Used to produce a fuel or are otherwise contained in fuels (in which cases the fuel itself remains a

solid waste).

However, commercial chemical products listed in WAC 173-303-9903 or which exhibit any of the criteria or characteristics listed in WAC 173-303-090 or 173-303-100 are not solid wastes if they are themselves fuels.

(c) Reclaimed. Materials noted with a "*" in column 3 of Table 1 are solid wastes when reclaimed.

(d)(i) Accumulated speculatively. Materials noted with a "*" in column 4 of Table 1 are solid wastes when accumulated speculatively.

(ii) A material is "accumulated speculatively" if it is accumulated before being recycled. A material is not accumulated speculatively, however, if the person accumulating it can show that the material is potentially recyclable and has a feasible means of being recycled; and that--during the calendar year (commencing on January 1)--the amount of material that is recycled, or transferred to a different site for recycling, equals at least seventy-five percent by weight or volume of the amount of that material accumulated at the beginning of the period. In calculating the percentage of turnover, the seventy-five percent requirement is to be applied to each material of the same type (e.g., slags from a single smelting process) that is recycled in the same way (i.e., from which the same material is recovered or that is used in the same way). Materials accumulating in units that would be exempt from regulation under WAC 173-303-071 (3)(n) are not to be included in making the calculation. (Materials that are already defined as solid wastes also are not to be included in making the calculation.) Materials are no longer in this category once they are removed from accumulation for recycling, however.

TABLE 1

	Use constituting disposal WAC 173-303-016(5)(a)	Energy recovery/ fuel WAC 173-303-016 (5)(b)	Reclamation WAC 173-303-016 (5)(c)	Speculative accumulation WAC 173-303-016 (5)(d)
Spent materials	(*)	(*)	(*)	(*)
Commercial chemical products	(*)	(*)	----	----
By-products listed in WAC 173-303-9904	(*)	(*)	(*)	(*)
Sludges listed in WAC 173-303-9904	(*)	(*)	(*)	(*)
By-products				

exhibiting a characteristic[1] or criteria[2]	(*)	(*)	----	(*)
Sludges exhibiting a characteristic[1] or criteria[2]	(*)	(*)	----	(*)
Scrap metal other than excluded scrap metal (see WAC 173-303-016 (2)(l))	(*)	(*)	(*)	(*)

Note: The terms "spent materials," "sludges," "by-products," "scrap metal" and "processed scrap metal" are defined in WAC 173-303-040.

[1] The characteristics of dangerous waste are described in WAC 173-303-090.

[2] The dangerous waste criteria are described in WAC 173-303-100.

(6) Inherently waste-like materials. The following materials are solid wastes when they are recycled in any manner:

(a) Dangerous Waste Nos. F020, F021 (unless used as an ingredient to make a product at the site of generation), F022, F023, F026, and F028.

(b) Secondary materials fed to a halogen acid furnace that exhibit a characteristic of a dangerous waste or are listed as a dangerous waste as defined in WAC 173-303-090 or 173-303-080 through 173-303-082, except for brominated material that meets the following criteria:

(i) The material must contain a bromine concentration of at least 45%; and

(ii) The material must contain less than a total of 1% of toxic organic compounds listed in WAC 173-303-9905; and

(iii) The material is processed continually on-site in the halogen acid furnace via direct conveyance (hard piping).

(c) The department will use the following criteria to add wastes to (a) of this subsection:

(i)(A) The materials are ordinarily disposed of, burned, or incinerated; or

(B) The materials contain toxic constituents listed in WAC 173-303-9905 and these constituents are not ordinarily found in raw materials or products for which the materials substitute (or are found in raw materials or products in smaller concentrations) and are not used or reused during the recycling process; and

(ii) The material may pose a substantial hazard to human health or the environment when recycled.

(7) Documentation of claims that materials are not solid wastes or are conditionally exempt from regulation. Respondents in actions to enforce regulations implementing chapter 70.105 RCW who raise a claim that a certain material is not a solid waste, or is conditionally exempt from regulation, must demonstrate that there is a known market or disposition for the material, and that they meet the terms of the exclusion or exemption. In doing so, they must provide appropriate documentation (such as contracts showing that a second person uses the material as an ingredient in a production process) to demonstrate that the material is not a waste, or is exempt from regulation. In addition, owners or operators of facilities claiming that they actually are recycling materials must show that they have the necessary equipment to do so.

[Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW 70.105.007. 00-11-040 (Order 99-01), § 173-303-016, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-016, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-016, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-016, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 86-12-057 (Order DE-85-10), § 173-303-016, filed 6/3/86; 84-14-031 (Order DE 84-22), § 173-303-016, filed 6/27/84.]

173-303-017
Recycling processes involving solid waste.

(1) The purpose of this section is to identify those materials that are and are not solid wastes when recycled. Certain materials, as described in subsection (2) of this section, would not typically be considered to involve waste management and are exempt from the requirements of this chapter. All recycling processes not exempted by subsection (2) of this section are subject to the recycling requirements of WAC 173-303-120.

(2) General categories of materials that are not solid waste when recycled.

(a) Except as provided in subsection (3) of this section, materials are not solid wastes when they can be shown to be recycled by being:

(i) Used or reused as ingredients in an industrial process to make a product provided the materials are not being reclaimed; or

(ii) Used or reused as effective substitutes for commercial products; or

(iii) Returned to the original process from which they are generated, without first being reclaimed or land disposed. The material must be returned as a substitute for feedstock materials. In cases where the original process to which the material is returned is a secondary process, the materials must be managed such that there is no placement on the land.

(b) Except as provided in subsection (3) of this section, the department has determined that the following materials when used as described are not solid wastes:

(i) Pulping liquors (e.g., black liquor) that are reclaimed in a pulping liquor recovery furnace and then reused in the pulping process;

(ii) Spent pickle liquor which is reused in wastewater treatment at a facility holding a national pollutant discharge elimination system (NPDES) permit, or which is being accumulated, stored, or treated before such reuse;

(iii) Spent sulfuric acid used to produce virgin sulfuric acid.

(3) The following materials are solid wastes, even if the recycling involves use, reuse, or return to the original process (as described in subsection (2)(a) of this section):

(a) Materials used in a manner constituting disposal, or used to produce products that are applied to the land; or

(b) Materials burned for energy recovery, used to produce a fuel, or contained in fuels; or

(c) Materials accumulated speculatively as defined in WAC 173-303-016 (5)(d)(ii); or

(d) Materials listed in WAC 173-303-016(6); or

(e) Any materials that the department determines are being accumulated, used, reused or handled in a manner that poses a threat to public health or the environment.

(4) Documentation of claims that materials are not solid wastes or are conditionally exempt from regulation. Respondents in actions to enforce regulations implementing chapter 70.105 RCW who raise a claim that a certain material is not a solid waste, or is conditionally exempt from regulation, must demonstrate that there is a known market or disposition for the material, and that they meet the terms of the exclusion or exemption. In doing so, they must provide appropriate documentation (such as contracts showing that a second person uses the material as an ingredient in a production process) to demonstrate that the material is not a waste, or is exempt from regulation. In addition, owners or operators of facilities claiming that they actually are recycling materials must show that they have the necessary equipment to do so.

(5) Variances from classification as a solid waste.

(a) In accordance with the standards and criteria in (b) of this subsection and the procedures in subsection (7) of this section, the department may determine on a case-by-case basis that the following recycled materials are not solid wastes:

(i) Materials that are accumulated speculatively without sufficient amounts being recycled (as defined in WAC 173-303-016 (5)(d)(ii));

(ii) Materials that are reclaimed and then reused within the original production process in which they were generated;

(iii) Materials that have been reclaimed but must be reclaimed further before the materials are completely recovered;

(iv) State-only dangerous materials (not regulated as hazardous wastes (defined in WAC 173-303-040) by EPA) which serve as an effective substitute for a commercial product or raw material.

(b) Standards and criteria for variances from classification as a solid waste.

(i) The department may grant requests for a variance from classifying as a solid waste those materials that are accumulated speculatively without sufficient amounts being recycled if the applicant demonstrates that sufficient amounts of the material will be recycled or transferred for recycling in the following year. If a variance is granted, it is valid only for the following year, but can be renewed, on an annual basis, by filing a new application. The department's decision will be based on the following criteria:

(A) The manner in which the material is expected to be recycled, when the material is expected to be recycled, and whether this expected disposition is likely to occur (for example, because of past practice, market factors, the nature of the material, or contractual arrangements for recycling);

(B) The reason that the applicant has accumulated the material for one or more years without recycling seventy-five percent of the volume accumulated at the beginning of the year;

(C) The quantity of material already accumulated and the quantity expected to be generated and accumulated before the material is recycled;

(D) The extent to which the material is handled to minimize loss;

(E) Other relevant factors.

(ii) The department may grant requests for a variance from classifying as a solid waste those materials that are reclaimed and then reused as feedstock within the original production process in which the materials were generated if the reclamation operation is an essential part of the production process. This determination will be based on the following criteria:

(A) How economically viable the production process would be if it were to use virgin materials, rather than reclaimed materials;

(B) The prevalence of the practice on an industry-wide basis;

(C) The extent to which the material is handled before reclamation to minimize loss;

(D) The time periods between generating the material and its reclamation, and between reclamation and return to the original primary production process;

(E) The location of the reclamation operation in relation to the production process;

(F) Whether the reclaimed material is used for the purpose for which it was originally produced when it is returned to the original process, and whether it is returned to the process in substantially its original form;

(G) Whether the person who generates the material also reclaims it;

(H) Other relevant factors.

(iii) The department may grant requests for a variance from classifying as a solid waste those materials that have been reclaimed but must be reclaimed further before recovery is completed if, after initial reclamation, the resulting material is commodity-like (even though it is not yet a commercial product, and has to be reclaimed further). This determination will be based on the following factors:

(A) The degree of processing the material has undergone and the degree of further processing that is required;

(B) The value of the material after it has been reclaimed;

(C) The degree to which the reclaimed material is like an analogous raw material;

(D) The extent to which an end market for the reclaimed material is guaranteed;

(E) The extent to which the reclaimed material is handled to minimize loss;

(F) Other relevant factors.

(iv) The department may grant requests for a variance from classifying as a solid waste those materials that serve as an effective substitute for a commercial product or raw material, when such material is not regulated as hazardous waste (defined in WAC 173-303-040) by EPA, if the materials are recycled in a manner such that they more closely resemble products or raw materials rather than wastes. This determination will be based on the following factors:

(A) The effectiveness of the material for the claimed use;

(B) The degree to which the material is like an analogous raw material or product;

(C) The extent to which the material is handled to minimize loss or escape to the environment;

(D) The extent to which an end market for the reclaimed material is guaranteed;

(E) The time period between generating the material and its recycling;

(F) Other factors as appropriate.

(6) Variance to be classified as a boiler.

In accordance with the standards and criteria in WAC 173-303-040 (definition of "boiler"), and the procedures in subsection (7) of this section, the department may determine on a case-by-case basis that certain enclosed devices using controlled flame combustion are boilers, even though they do not otherwise meet the definition of boiler contained in WAC 173-303-040, after considering the following criteria:

(a) The extent to which the unit has provisions for recovering and exporting thermal energy in the form of steam, heated fluids, or heated gases; and

(b) The extent to which the combustion chamber and energy recovery equipment are of integral design; and

(c) The efficiency of energy recovery, calculated in terms of the recovered energy compared with the thermal value of the fuel; and

(d) The extent to which exported energy is utilized; and

(e) The extent to which the device is in common and customary use as a "boiler" functioning primarily to produce steam, heated fluids, or heated gases; and

(f) Other factors, as appropriate.

(7) Procedures for variances from classification as a solid waste or to be classified as a boiler.

The department will use the following procedures in evaluating applications for variances from classification as a solid waste or applications to classify particular enclosed controlled flame combustion devices as boilers:

(a) The applicant must apply to the department for the variance. The application must address the relevant criteria contained in subsections (5)(b) or (6) of this section.

(b) The department will evaluate the application and issue a draft public notice tentatively granting or denying the application. Notification of this tentative decision will be provided by newspaper advertisement and radio broadcast in the locality where the recycler is located. The department will accept comment on the tentative decision for thirty days, and may also hold a public hearing upon request or at its discretion. The department will issue a final decision after receipt of comments and after the hearing (if any).

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-017, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-017, filed 10/19/95, effective 11/19/95. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-017, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 87-14-029 (Order DE-87-4), § 173-303-017, filed 6/26/87; 86-12-057 (Order DE-85-10), § 173-303-017, filed 6/3/86; 84-14-031 (Order DE 84-22), § 173-303-017, filed 6/27/84.]

173-303-020
Applicability.

Except as expressly provided elsewhere herein, this chapter 173-303 WAC applies to all persons who handle dangerous wastes and solid wastes that may designate as dangerous wastes including, but not limited to:

(1) Generators;

(2) Transporters;

(3) Owners and operators of dangerous waste recycling, transfer, storage, treatment, and disposal facilities; and

(4) The operator of the state's extremely hazardous waste management facility.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-020, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-020, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapter 70.105 RCW. 84-09-088 (Order DE 83-36), § 173-303-020, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-020, filed 2/10/82. Formerly WAC 173-302-020.]

173-303-030
Abbreviations.

The following abbreviations are used in this regulation.

ASTM - American Society for Testing Materials

APHA - American Public Health Association

CDC - Center for Disease Control

CFR - Code of Federal Regulations

DOT - Department of Transportation

°C - degrees Celsius

DW - dangerous waste

DWS - drinking water standards of the Safe Drinking Water Act

EHW - extremely hazardous waste

EP - extraction procedure

EPA - Environmental Protection Agency

°F - degrees Fahrenheit

g - gram

IARC - International Agency for Research on Cancer

IFC - International Fire Code

kg - kilogram (one thousand grams)

L - liter

lb - pound

LC_{50} - median lethal concentration

LD_{50} - median lethal dose

M - molar (gram molecular weights per liter of solution)

mg - milligram (one thousandth of a gram)

NFPA - National Fire Protection Association

NIOSH - National Institute for Occupational Safety and Health

pH - negative logarithm of the hydrogen ion concentration

POTW - publicly owned treatment works

ppm - parts per million (weight/weight)

RCRA - Resource Conservation and Recovery Act

RCW - Revised Code of Washington

TSD facility - treatment, storage, or disposal facility

UBC - Uniform Building Code

UFC - Uniform Fire Code

USCG - United States Coast Guard

USGS - United States Geological Survey

WAC - Washington Administrative Code

% - percent

- number

[Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-030, filed 11/30/04, effective 1/1/05. Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-030, filed 10/19/95, effective 11/19/95. Statutory Authority: Chapter 70.105 RCW. 84-09-088 (Order DE 83-36), § 173-303-030, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-030, filed 2/10/82. Formerly WAC 173-302-030.]

173-303-040
Definitions.

When used in this chapter, the following terms have the meanings given below.

"Aboveground tank" means a device meeting the definition of "tank" in this section and that is situated in such a way that the entire surface area of the tank is completely above the plane of the adjacent surrounding surface and the entire surface area of the tank (including the tank bottom) is able to be visually inspected.

"Active life" of a facility means the period from the initial receipt of dangerous waste at the facility until the department receives certification of final closure.

"Active portion" means that portion of a facility which is not a closed portion, and where dangerous waste recycling, reuse, reclamation, transfer, treatment, storage or disposal operations are being or have been conducted after:

The effective date of the waste's designation by 40 CFR Part 261; and

March 10, 1982, for wastes designated only by this chapter and not designated by 40 CFR Part 261.

(See also "closed portion" and "inactive portion.")

"Active range" means a military range that is currently in service and is being regularly used for range activities.

"Acute hazardous waste" means dangerous waste sources (listed in WAC 173-303-9904) F020, F021, F022, F023, F026, or F027, and discarded chemical products (listed in WAC 173-303-9903) that are identified with a dangerous waste number beginning with a "P", including those wastes mixed with source, special nuclear, or by-product material subject to the Atomic Energy Act of 1954. The abbreviation "AHW" will be used in this chapter to refer to those dangerous and mixed wastes which are acute hazardous wastes. Note - the terms acute and acutely are used interchangeably.

"Ancillary equipment" means any device including, but not limited to, such devices as piping, fittings, flanges, valves, and pumps, that is used to distribute, meter, or control the flow of dangerous waste from its point of generation to a storage or treatment tank(s), between dangerous waste storage and treatment tanks to a point of disposal on-site, or to a point of shipment for disposal off-site.

"Aquifer" means a geologic formation, group of formations, or part of a formation capable of yielding a significant amount of ground water to wells or springs.

"Batch" means any waste which is generated less frequently than once a month.

"Battery" means a device consisting of one or more electrically connected electrochemical cells which is designed to receive, store, and deliver electric energy. An electrochemical cell is a system consisting of an anode, cathode, and an electrolyte, plus such connections (electrical and mechanical) as may be needed to allow the cell to deliver or receive electrical energy. The term battery also includes an intact, unbroken battery from which the electrolyte has been removed.

"Berm" means the shoulder of a dike.

"Boiler" means an enclosed device using controlled flame combustion and having the following characteristics:

The unit must have physical provisions for recovering and exporting thermal energy in the form of steam, heated fluids, or heated gases; and

The unit's combustion chamber and primary energy recovery section(s) must be of integral design. To be of integral design, the combustion chamber and the primary energy recovery section(s) (such as waterwalls and superheaters) must be physically formed into one manufactured or assembled unit. A unit in which the combustion chamber and the primary energy recovery section(s) are joined only by ducts or connections carrying flue gas is not integrally designed; however, secondary energy recovery equipment (such as economizers or air preheaters) need not be physically formed into the same unit as the combustion chamber and the primary energy recovery section. The following units are not precluded from being boilers solely because they are not of integral design: Process heaters (units that transfer energy directly to a process stream), and fluidized bed combustion units; and

While in operation, the unit must maintain a thermal energy recovery efficiency of at least sixty percent, calculated in terms of the recovered energy compared with the thermal value of the fuel; and

The unit must export and utilize at least seventy-five percent of the recovered energy, calculated on an annual basis. In this calculation, no credit will be given for recovered heat used internally in the same unit. (Examples of internal use are the preheating of fuel or combustion air, and the driving of induced or forced draft fans or feedwater pumps); or

The unit is one which the department has determined, on a case-by-case basis, to be a boiler, after considering the standards in WAC 173-303-017(6).

"By-product" means a material that is not one of the primary products of a production process and is not solely or separately produced by the production process. Examples are process residues such as slags or distillation column bottoms. The term does not include a coproduct that is produced for the general public's use and is ordinarily used in the form it is produced by the process.

"Carbon regeneration unit" means any enclosed thermal treatment device used to regenerate spent activated carbon.

"Carcinogenic" means a material known to contain a substance which has sufficient or limited evidence as a human or animal carcinogen as listed in both IARC and either IRIS or HEAST.

"Cathode ray tube" or "CRT" means a vacuum tube, composed primarily of glass, which is the visual or video display component of an electronic device. A used, intact CRT means a CRT whose vacuum has not been released. A used, broken CRT means glass removed from its housing or casing whose vacuum has been released.

"Chemical agents and chemical munitions" are defined as in 50 U.S.C. section 1521 (j)(1).

"Cleanup-only facility" means a site, including any contiguous property owned or under the control of the owner or operator of the site, where the owner or operator is or will be treating, storing, or disposing of remediation waste, including dangerous remediation waste, and is not, has not and will not be treating, storing or disposing of dangerous waste that is not remediation waste. A cleanup-only facility is not a "facility" for purposes of corrective action under WAC 173-303-646.

"Closed portion" means that portion of a facility which an owner or operator has closed, in accordance with the approved facility closure plan and all applicable closure requirements.

"Closure" means the requirements placed upon all TSD facilities to ensure that all such facilities are closed in an acceptable manner (see also "post-closure").

"Commercial chemical product or manufacturing chemical intermediate" refers to a chemical substance which is manufactured or formulated for commercial or manufacturing use which consists of the commercially pure grade of the chemical, any technical grades of the chemical that are produced or marketed, and all formulations in which the chemical is the sole active ingredient.

"Commercial fertilizer" means any substance containing one or more recognized plant nutrients and which is used for its plant nutrient content and/or which is designated for use or claimed to have value in promoting plant growth, and includes, but is not limited to, limes, gypsum, and manipulated animal manures and vegetable compost. The commercial fertilizer must be registered with the state or local agency regulating the fertilizer in the locale in which the fertilizer is being sold or applied.

"Compliance procedure" means any proceedings instituted pursuant to the Hazardous Waste Management Act as amended in 1980 and 1983, and chapter 70.105A RCW, or regulations issued under authority of state law, which seeks to require compliance, or which is in the nature of an enforcement action or an action to cure a violation. A compliance procedure includes a notice of intention to terminate a permit pursuant to WAC 173-303-830(5), or an application in the state superior court for appropriate relief under the Hazardous Waste Management Act. A compliance procedure is considered to be pending from the time a notice of violation or of intent to terminate a permit is issued or judicial proceedings are begun, until the department notifies the owner or operator in writing that the violation has been corrected or that the procedure has been withdrawn or discontinued.

"Component" means either the tank or ancillary equipment of a tank system.

"Constituent" or "dangerous waste constituent" means a chemically distinct component of a dangerous waste stream or mixture.

"Container" means any portable device in which a material is stored, transported, treated, disposed of, or otherwise handled.

"Containment building" means a hazardous waste management unit that is used to store or treat hazardous waste under the provisions of WAC 173-303-695.

"Contingency plan" means a document setting out an organized, planned, and coordinated course of action to be followed in case of a fire, explosion, or release of dangerous waste or dangerous waste constituents which could threaten human health or environment.

"Contract" means the written agreement signed by the department and the state operator.

"Corrosion expert" means a person who, by reason of his knowledge of the physical sciences and the principles of engineering and mathematics, acquired by a professional education and related practical experience, is qualified to engage in the practice of corrosion control on buried or submerged metal piping systems and metal tanks. Such a person must be certified as being qualified by the National Association of Corrosion Engineers (NACE) or be a registered professional engineer who has certification or licensing that includes education and experience in corrosion control on buried or submerged metal piping systems and metal tanks.

"CRT collector" means a person who receives CRTs for recycling, repair, resale, or donation.

"CRT glass manufacturer" means an operation or part of an operation that uses a furnace to manufacture CRT glass.

"CRT processing" means conducting all of the following activities:

- Receiving broken or intact CRTs; and

- Intentionally breaking intact CRTs or further breaking or separating broken CRTs; and

- Sorting or otherwise managing glass removed from CRT monitors.

"Dangerous waste constituents" means those constituents listed in WAC 173-303-9905 and any other constituents that have caused a waste to be a dangerous waste under this chapter.

"Dangerous waste management unit" is a contiguous area of land on or in which dangerous waste is placed, or the largest area in which there is a significant likelihood of mixing dangerous waste constituents in the same area. Examples of dangerous waste management units include a surface impoundment, a waste pile, a land treatment area, a landfill cell, an incinerator, a tank and its associated piping and underlying containment system and a container storage area. A container alone does not constitute a unit; the unit includes containers and the land or pad upon which they are placed.

"Dangerous wastes" means those solid wastes designated in WAC 173-303-070 through 173-303-100 as dangerous, or extremely hazardous or mixed waste. As used in this chapter, the words "dangerous waste" will refer to the full universe of wastes regulated by this chapter. The abbreviation "DW" will refer only to that part of the regulated universe which is not extremely hazardous waste. (See also "extremely hazardous waste," "hazardous waste," and "mixed waste" definitions.)

"Debris" means solid material exceeding a 60 mm particle size that is intended for disposal and that is: A manufactured object; or plant or animal matter; or natural geologic material. However, the following materials are not debris: Any material for which a specific treatment standard is provided in 40 CFR Part 268 Subpart D (incorporated by reference in WAC 173-303-140 (2)(a)); process residuals such as smelter slag and residues from the treatment of waste, wastewater, sludges, or air emission residues; and intact containers of hazardous waste that are not ruptured and that retain at least seventy-five percent of their original volume. A mixture of debris that has not been treated to the standards provided by 40 CFR 268.45 and other material is subject to regulation as debris if the mixture is comprised primarily of debris, by volume, based on visual inspection.

"Department" means the department of ecology.

"Dermal LD_{50}" means the single dosage in milligrams per kilogram (mg/kg) body weight which, when dermally (skin) applied for 24 hours, within 14 days kills half of a group of ten rabbits each weighing between 2.0 and 3.0 kilograms.

"Designated facility" means a dangerous waste treatment, storage, or disposal facility that has received a permit (or interim status) in accordance with the requirements of this chapter, has received a permit (or interim status) from another state authorized in accordance with 40 CFR Part 271, has received a permit (or interim status) from EPA in accordance with 40 CFR Part 270, has a permit by rule under WAC 173-303-802(5), or is regulated under WAC 173-303-120 (4)(c) or 173-303-525 when the dangerous waste is to be recycled, and that has been designated on the manifest pursuant to WAC 173-303-180(1). If a waste is destined to a facility in an authorized state that has not yet obtained authorization to regulate that particular waste as dangerous, then the designated facility must be a facility allowed by the receiving state to accept

such waste. The following are designated facilities only for receipt of state-only waste; they cannot receive federal hazardous waste from off-site: Facilities operating under WAC 173-303-500 (2)(c).

"Designation" is the process of determining whether a waste is regulated under the dangerous waste lists, WAC 173-303-080 through 173-303-082; or characteristics, WAC 173-303-090; or criteria, WAC 173-303-100. The procedures for designating wastes are in WAC 173-303-070. A waste that has been designated as a dangerous waste may be either DW or EHW.

"Destination facility" means a facility that treats, disposes of, or recycles a particular category of universal waste, except those management activities described in WAC 173-303-573 (9)(a), (b) and (c) and 173-303-573 (20)(a), (b) and (c). A facility at which a particular category of universal waste is only accumulated, is not a destination facility for purposes of managing that category of universal waste.

"Dike" means an embankment or ridge of natural or man-made materials used to prevent the movement of liquids, sludges, solids, or other substances.

"*Dioxins and furans (D/F)*" means tetra, penta, hexa, hepta, and octa-chlorinated dibenzo dioxins and furans.

"Director" means the director of the department of ecology or his designee.

"Discharge" or "dangerous waste discharge" means the accidental or intentional release of hazardous substances, dangerous waste or dangerous waste constituents such that the substance, waste or a waste constituent may enter or be emitted into the environment.

"Disposal" means the discharging, discarding, or abandoning of dangerous wastes or the treatment, decontamination, or recycling of such wastes once they have been discarded or abandoned. This includes the discharge of any dangerous wastes into or on any land, air, or water.

"Domestic sewage" means untreated sanitary wastes that pass through a sewer system to a publicly owned treatment works (POTW) for treatment.

"Draft permit" means a document prepared under WAC 173-303-840 indicating the department's tentative decision to issue or deny, modify, revoke and reissue, or terminate a permit. A notice of intent to terminate or deny a permit are types of draft permits. A denial of a request for modification, revocation and reissuance, or termination as discussed in WAC 173-303-830 is not a draft permit.

"Drip pad" is an engineered structure consisting of a curbed, free-draining base, constructed of nonearthen materials and designed to convey preservative kick-back or drippage from treated wood, precipitation, and surface water run-on to an associated collection system at wood preserving plants.

"Elementary neutralization unit" means a device which:

Is used for neutralizing wastes which are dangerous wastes only because they exhibit the corrosivity characteristics defined in WAC 173-303-090 or are listed in WAC 173-303-081, or in 173-303-082 only for this reason; and

Meets the definition of tank, tank system, container, transport vehicle, or vessel.

"Enforceable document" means an order, consent decree, plan or other document that meets the requirements of 40 CFR 271.16(e) and is issued by the director to apply alternative requirements for closure, post-closure, ground water monitoring, corrective action or financial assurance under WAC 173-303-610 (1)(d), 173-303-645 (1)(e), or 173-303-620 (8)(d) or, as incorporated by reference at WAC 173-303-400, 40 CFR 265.90(f), 265.110(d), or 265.140(d). Enforceable documents include, but are not limited to, closure plans and post-closure plans, permits issued under chapter 70.105 RCW, orders issued under chapter 70.105 RCW and orders and consent decrees issued under chapter 70.105D RCW.

"Environment" means any air, land, water, or ground water.

"EPA/state identification number" or "EPA/state ID#" means the number assigned by EPA or by the department of ecology to each generator, transporter, and TSD facility.

"Existing tank system" or "existing component" means a tank system or component that is used for the storage or treatment of dangerous waste and that is in operation, or for which installation has commenced on or prior to February 3, 1989. Installation will be considered to have commenced if the owner or operator has obtained all federal, state, and local approvals or permits necessary to begin physical construction of the site or installation of the tank system and if either:

A continuous on-site physical construction or installation program has begun; or

The owner or operator has entered into contractual obligations, which cannot be canceled or modified without substantial loss, for physical construction of the site or installation of the tank system to be completed within a reasonable time.

"Excluded scrap metal" is processed scrap metal, unprocessed home scrap metal, and unprocessed prompt scrap metal.

"Existing TSD facility" means a facility which was in operation or for which construction commenced on or before November 19, 1980, for wastes designated by 40 CFR Part 261, or August 9, 1982, for wastes designated only by this chapter and not designated by 40 CFR Part 261. A facility has commenced construction if the owner or operator has obtained permits and approvals necessary under federal, state, and local statutes, regulations, and ordinances and either:

A continuous on-site, physical construction program has begun; or

The owner or operator has entered into contractual obligation, which cannot be canceled or modified without substantial loss, for physical construction of the facility to be completed within a reasonable time.

"Explosives or munitions emergency" means a situation involving the suspected or detected presence of unexploded ordnance (UXO), damaged or deteriorated explosives or munitions, an improvised explosive device (IED), other potentially explosive material or device, or other potentially harmful military chemical munitions or device, that creates an actual or potential imminent threat to human health, including safety, or the environment, including property, as determined by an explosives or munitions emergency response specialist. Such situations may require immediate and expeditious action by an explosives or munitions emergency response specialist to control, mitigate, or eliminate the threat.

"Explosives or munitions emergency response" means all immediate response activities by an explosives and munitions emergency response specialist to control, mitigate, or eliminate the actual or potential threat encountered during an explosives or munitions emergency. An explosives or munitions emergency response may include in-place render-safe procedures, treatment or destruction of the explosives or munitions and/or transporting those items to another location to be rendered safe, treated, or destroyed. Any reasonable delay in the completion of an explosives or munitions emergency response caused by a necessary, unforeseen, or uncontrollable circumstance will not terminate the explosives or munitions emergency. Explosives and munitions emergency responses can occur on either public or private lands and are not limited to responses at RCRA facilities.

"Explosives or munitions emergency response specialist" means an individual trained in chemical or conventional munitions or explosives handling, transportation, render-safe procedures, or destruction techniques. Explosives or munitions emergency response specialists include Department of Defense (DOD) emergency explosive ordnance disposal (EOD), technical escort unit (TEU), and DOD-certified civilian or contractor personnel; and other federal, state, or local government, or civilian personnel similarly trained in explosives or munitions emergency responses.

"Extremely hazardous waste" means those dangerous and mixed wastes designated in WAC 173-303-100 as extremely hazardous. The abbreviation "EHW" will be used in this chapter to refer to those dangerous and mixed wastes which are extremely hazardous. (See also "dangerous waste" and "hazardous waste" definitions.)

"Facility" means:

□ All contiguous land, and structures, other appurtenances, and improvements on the land used for recycling, reusing, reclaiming, transferring, storing, treating, or disposing of dangerous waste. A facility may consist of several treatment, storage, or disposal operational units (for example, one or more landfills, surface impoundments, or combination of them). Unless otherwise specified in this chapter, the terms

"facility," "treatment, storage, disposal facility," "TSD facility," "dangerous waste facility" or "waste management facility" are used interchangeably.

□ For purposes of implementing corrective action under WAC 173-303-64620 or 173-303-64630, "facility" also means all contiguous property under the control of an owner or operator seeking a permit under chapter 70.105 RCW or chapter 173-303 WAC and includes the definition of facility at RCW 70.105D.020(4).

"Facility mailing list" means the mailing list for a facility maintained by the department in accordance with WAC 173-303-840 (3)(e)(I)(D).

"Final closure" means the closure of all dangerous waste management units at the facility in accordance with all applicable closure requirements so that dangerous waste management activities under WAC 173-303-400 and 173-303-600 through 173-303-670 are no longer conducted at the facility. Areas only subject to generator standards WAC 173-303-170 through 173-303-230 need not be included in final closure.

"Fish LC50" means the concentration that will kill fifty percent of the exposed fish in a specified time period. For book designation, LC50 data must be derived from an exposure period greater than or equal to twenty-four hours. A hierarchy of species LC50 data should be used that includes (in decreasing order of preference) salmonids, fathead minnows (Pimephales promelas), and other fish species. For the ninety-six-hour static acute fish toxicity test, described in WAC 173-303-110 (3)(b)(i), coho salmon (Oncorhynchus kisutch), rainbow trout (Oncorhynchus mykiss), or brook trout (Salvelinus fontinalis) must be used.

"Food chain crops" means tobacco, crops grown for human consumption, and crops grown to feed animals whose products are consumed by humans.

"Freeboard" means the vertical distance between the top of a tank or surface impoundment dike, and the surface of the waste contained therein.

"Fugitive emissions" means the emission of contaminants from sources other than the control system exit point. Material handling, storage piles, doors, windows and vents are typical sources of fugitive emissions.

"Generator" means any person, by site, whose act or process produces dangerous waste or whose act first causes a dangerous waste to become subject to regulation.

"Genetic properties" means those properties which cause or significantly contribute to mutagenic, teratogenic, or carcinogenic effects in man or wildlife.

"Ground water" means water which fills voids below the land surface and in the earth's crust.

"Halogenated organic compounds" (HOC) means any organic compounds which, as part of their composition, include one or more atoms of fluorine, chlorine, bromine, or iodine which is/are bonded directly to a carbon atom. This definition does not apply to the federal land disposal restrictions of 40 CFR Part 268 which are incorporated by reference at WAC 173-303-140 (2)(a). Note: Additional information on HOCs may be found in *Chemical Testing Methods for Designating Dangerous Waste*, Ecology Publication #97-407.

"Hazardous debris" means debris that contains a hazardous waste listed in WAC 173-303-9903 or 173-303-9904, or that exhibits a characteristic of hazardous waste identified in WAC 173-303-090.

"Hazardous substances" means any liquid, solid, gas, or sludge, including any material, substance, product, commodity, or waste, regardless of quantity, that exhibits any of the physical, chemical or biological properties described in WAC 173-303-090 or 173-303-100.

"Hazardous wastes" means those solid wastes designated by 40 CFR Part 261, and regulated as hazardous and/or mixed waste by the United States EPA. This term will never be abbreviated in this chapter to avoid confusion with the abbreviations "DW" and "EHW." (See also "dangerous waste" and "extremely hazardous waste" definitions.)

"Home scrap metal" is scrap metal as generated by steel mills, foundries, and refineries such as turnings, cuttings, punchings, and borings.

"Ignitable waste" means a dangerous waste that exhibits the characteristic of ignitability described in WAC 173-303-090(5).

"Inactive portion" means that portion of a facility which has not recycled, treated, stored, or disposed dangerous waste after:

The effective date of the waste's designation, for wastes designated under 40 CFR Part 261; and

March 10, 1982, for wastes designated only by this chapter and not designated by 40 CFR Part 261.

"Inactive range" means a military range that is not currently being used, but that is still under military control and considered by the military to be a potential range area, and that has not been put to a new use that is incompatible with range activities.

"Incinerator" means any enclosed device that:

Uses controlled flame combustion and neither meets the criteria for classification as a boiler, sludge dryer, or carbon regeneration unit, nor is listed as an industrial furnace; or

Meets the definition of infrared incinerator or plasma arc incinerator.

"Incompatible waste" means a dangerous waste which is unsuitable for placement in a particular device or facility because it may corrode or decay the containment materials, or is unsuitable for mixing with another waste or material because the mixture might produce heat or pressure, fire or explosion, violent reaction, toxic dusts, fumes, mists, or gases, or flammable fumes or gases.

"Independent qualified registered professional engineer" means a person who is licensed by the state of Washington, or a state which has reciprocity with the state of Washington as defined in RCW 18.43.100, and who is not an employee of the owner or operator of the facility for which construction or modification certification is required. A qualified professional engineer is an engineer with expertise in the specific area for which a certification is given.

"Industrial-furnace" means any of the following enclosed devices that are integral components of manufacturing processes and that use thermal treatment to accomplish recovery of materials or energy: Cement kilns; lime kilns; aggregate kilns; phosphate kilns; blast furnaces; smelting, melting, and refining furnaces (including pyrometallurgical devices such as cupolas, reverberator furnaces, sintering machines, roasters and foundry furnaces); titanium dioxide chloride process oxidation reactors; coke ovens; methane reforming furnaces; combustion devices used in the recovery of sulfur values from spent sulfuric acid; pulping liquor recovery furnaces; combustion devices used in the recovery of sulfur values from spent sulfuric acid; and halogen acid furnaces (HAFs) for the production of acid from halogenated dangerous waste generated by chemical production facilities where the furnace is located on the site of a chemical production facility, the acid product has a halogen acid content of at least 3%, the acid product is used in a manufacturing process, and, except for dangerous waste burned as fuel, dangerous waste fed to the furnace has a minimum halogen content of 20% as-generated. The department may decide to add devices to this list on the basis of one or more of the following factors:

The device is designed and used primarily to accomplish recovery of material products;

The device burns or reduces secondary materials as ingredients in an industrial process to make a material product;

The device burns or reduces secondary materials as effective substitutes for raw materials in processes using raw materials as principal feedstocks;

The device burns or reduces raw materials to make a material product;

The device is in common industrial use to produce a material product; and

Other factors, as appropriate.

"Infrared incinerator" means any enclosed device that uses electric powered resistance heaters as a source of radiant heat followed by an afterburner using controlled flame combustion and which is not listed as an industrial furnace.

"Inground tank" means a device meeting the definition of "tank" in this section whereby a portion of the tank wall is situated to any degree within the ground, thereby preventing visual inspection of that external surface area of the tank that is in the ground.

"Inner liner" means a continuous layer of material placed inside a tank or container which protects the construction materials of the tank or container from the waste or reagents used to treat the waste.

"Installation inspector" means a person who, by reason of his knowledge of the physical sciences and the principles of engineering, acquired by a professional education and related practical experience, is qualified to supervise the installation of tank systems.

"Interim status permit" means a temporary permit given to TSD facilities which qualify under WAC 173-303-805.

"Knowledge" means sufficient information about a waste to reliably substitute for direct testing of the waste. To be sufficient and reliable, the "knowledge" used must provide information necessary to manage the waste in accordance with the requirements of this chapter.

Note: "Knowledge" may be used by itself or in combination with testing to designate a waste pursuant to WAC 173-303-070 (3)(c), or to obtain a detailed chemical, physical, and/or biological analysis of a waste as required in WAC 173-303-300(2).

"Lamp," also referred to as "universal waste lamp" means any type of high or low pressure bulb or tube portion of an electric lighting device that generates light through the discharge of electricity either directly or indirectly as radiant energy. Universal waste lamps include, but are not limited to, fluorescent, mercury vapor, metal halide, high-pressure sodium and neon. As a reference, it may be assumed that four, four-foot, one-inch diameter unbroken fluorescent tubes are equal to 2.2 pounds in weight.

"Land disposal" means placement in or on the land, except in a corrective action management unit or staging pile, and includes, but is not limited to, placement in a landfill, surface impoundment, waste pile, injection well, land treatment facility, salt dome formation, salt bed formation, underground mine or cave, or placement in a concrete vault, or bunker intended for disposal purposes.

"Landfill" means a disposal facility, or part of a facility, where dangerous waste is placed in or on land and which is not a pile, a land treatment facility, a surface impoundment, or an underground injection well, a salt dome formation, a salt bed formation, an underground mine, a cave, or a corrective action management unit.

"Land treatment" means the practice of applying dangerous waste onto or incorporating dangerous waste into the soil surface so that it will degrade or decompose. If the waste will remain after the facility is closed, this practice is disposal.

"Large quantity handler of universal waste" means a universal waste handler (as defined in this section) who accumulates 11,000 pounds or more total of universal waste (batteries, thermostats, mercury-containing equipment, and lamps calculated collectively) and/or who accumulates more than 2,200 pounds of lamps at any time. This designation as a large quantity handler of universal waste is retained through the end of the calendar year in which 11,000 pounds or more total of universal waste and/or 2,200 pounds of lamps is accumulated.

"Leachable inorganic waste" means solid dangerous waste (i.e., passes paint filter test) that is not an organic/carbonaceous waste and exhibits the toxicity characteristic (dangerous waste numbers D004 to D011, only) under WAC 173-303-090(8).

"Leachate" means any liquid, including any components suspended in the liquid, that has percolated through or drained from dangerous waste.

"Leak-detection system" means a system capable of detecting the failure of either the primary or secondary containment structure or the presence of a release of dangerous waste or accumulated liquid in the secondary containment structure. Such a system must employ operational controls (e.g., daily visual inspections for releases into the secondary containment system of aboveground tanks) or consist of an interstitial monitoring device designed to detect continuously and automatically the failure of the primary or secondary containment structure or the presence of a release of dangerous waste into the secondary

containment structure.

"Legal defense costs" means any expenses that an insurer incurs in defending against claims of third parties brought under the terms and conditions of an insurance policy.

"Liner" means a continuous layer of man-made or natural materials which restrict the escape of dangerous waste, dangerous waste constituents, or leachate through the sides, bottom, or berms of a surface impoundment, waste pile, or landfill.

"Major facility" means a facility or activity classified by the department as major.

"Manifest" means the shipping document, prepared in accordance with the requirements of WAC 173-303-180, which is used to identify the quantity, composition, origin, routing, and destination of a dangerous waste while it is being transported to a point of transfer, disposal, treatment, or storage.

"Manufacturing process unit" means a unit which is an integral and inseparable portion of a manufacturing operation, processing a raw material into a manufacturing intermediate or finished product, reclaiming spent materials or reconditioning components.

"Marine terminal operator" means a person engaged in the business of furnishing wharfage, dock, pier, warehouse, covered and/or open storage spaces, cranes, forklifts, bulk loading and/or unloading structures and landings in connection with a highway or rail carrier and a water carrier. A marine terminal operator includes, but is not limited to, terminals owned by states and their political subdivisions; railroads who perform port terminal services not covered by their line haul rates; common carriers who perform port terminal services; and warehousemen and stevedores who operate port terminal facilities.

"Mercury-containing equipment" means a device or part of a device (excluding batteries, thermostats, and lamps) that contains elemental mercury necessary for its operation. Examples of mercury-containing equipment include thermometers, manometers, and electrical switches.

"Micronutrient fertilizer" means a produced or imported commercial fertilizer that contains commercially valuable concentrations of micronutrients but does not contain commercially valuable concentrations of nitrogen, phosphoric acid, available phosphorous, potash, calcium, magnesium, or sulfur. Micronutrients are boron, chlorine, cobalt, copper, iron, manganese, molybdenum, sodium, and zinc.

"Military" means the Department of Defense (DOD), the Armed Services, Coast Guard, National Guard, Department of Energy (DOE), or other parties under contract or acting as an agent for the foregoing, who handle military munitions.

"Military munitions" means all ammunition products and components produced or used by or for the U.S. Department of Defense or the U.S. Armed Services for national defense and security, including military munitions under the control of the Department of Defense, the U.S. Coast Guard, the U.S. Department of Energy (DOE), and National Guard personnel. The term military munitions includes: Confined gaseous, liquid, and solid propellants, explosives, pyrotechnics, chemical and riot control agents, smokes, and incendiaries used by DOD components, including bulk explosives and chemical warfare agents, chemical munitions, rockets, guided and ballistic missiles, bombs, warheads, mortar rounds, artillery ammunition, small arms ammunition, grenades, mines, torpedoes, depth charges, cluster munitions and dispensers, demolition charges, and devices and components thereof. Military munitions do not include wholly inert items, improvised explosive devices, and nuclear weapons, nuclear devices, and nuclear components thereof. However, the term does include nonnuclear components of nuclear devices, managed under DOE's nuclear weapons program after all required sanitization operations under the Atomic Energy Act of 1954, as amended, have been completed.

"Military range" means designated land and water areas set aside, managed, and used to conduct research on, develop, test, and evaluate military munitions and explosives, other ordnance, or weapon systems, or to train military personnel in their use and handling. Ranges include firing lines and positions, maneuver areas, firing lanes, test pads, detonation pads, impact areas, and buffer zones with restricted access and exclusionary areas.

"Miscellaneous unit" means a dangerous waste management unit where dangerous waste is treated, stored, or disposed of and that is not a container, tank, surface impoundment, pile, land treatment unit, landfill, incinerator, boiler, industrial furnace, underground injection well with appropriate technical standards

under 40 CFR Part 146, containment building, corrective action management unit, temporary unit, staging pile, or unit eligible for a research, development, and demonstration permit under WAC 173-303-809.

"Mixed waste" means a dangerous, extremely hazardous, or acutely hazardous waste that contains both a nonradioactive hazardous component and, as defined by 10 CFR 20.1003, source, special nuclear, or by-product material subject to the Atomic Energy Act of 1954 (42 U.S.C. 2011 et seq.).

"New tank system" or "new tank component" means a tank system or component that will be used for the storage or treatment of dangerous waste and for which installation has commenced after February 3, 1989; except, however, for purposes of WAC 173-303-640 (4)(g)(ii) and 40 CFR 265.193 (g)(2) as adopted by reference in WAC 173-303-400(3), a new tank system is one for which construction commences after February 3, 1989. (See also "existing tank system.")

"New TSD facility" means a facility which began operation or for which construction commenced after November 19, 1980, for wastes designated by 40 CFR Part 261, or August 9, 1982, for wastes designated only by this chapter and not designated by 40 CFR Part 261.

"NIOSH registry" means the registry of toxic effects of chemical substances which is published by the National Institute for Occupational Safety and Health.

"Nonsudden accident" or "nonsudden accidental occurrence" means an unforeseen and unexpected occurrence which takes place over time and involves continuous or repeated exposure.

"Occurrence" means an accident, including continuous or repeated exposure to conditions, which results in bodily injury or property damage which the owner or operator neither expected nor intended to occur.

"Off-specification used oil fuel" means used oil fuel that exceeds any specification level described in Table 1 in WAC 173-303-515.

"Onground tank" means a device meeting the definition of "tank" in this section and that is situated in such a way that the bottom of the tank is on the same level as the adjacent surrounding surface so that the external tank bottom cannot be visually inspected.

"On-site" means the same or geographically contiguous property which may be divided by public or private right of way, provided that the entrance and exit between the properties is at a cross-roads intersection, and access is by crossing as opposed to going along the right of way. Noncontiguous properties owned by the same person but connected by a right of way which they control and to which the public does not have access, are also considered on-site property.

"Operator" means the person responsible for the overall operation of a facility. (See also "state operator.")

"Oral LD_{50}" means the single dosage in milligrams per kilogram (mg/kg) body weight, when orally administered, which, within 14 days, kills half a group of ten or more white rats each weighing between 200 and 300 grams.

"Organic/carbonaceous waste" means a dangerous waste that contains combined concentrations of greater than ten percent organic/carbonaceous constituents in the waste; organic/carbonaceous constituents are those substances that contain carbon-hydrogen, carbon-halogen, or carbon-carbon chemical bonding.

"Partial closure" means the closure of a dangerous waste management unit in accordance with the applicable closure requirements of WAC 173-303-400 and 173-303-600 through 173-303-695 at a facility that contains other active dangerous waste management units. For example, partial closure may include the closure of a tank (including its associated piping and underlying containment systems), landfill cell, surface impoundment, waste pile, or other dangerous waste management unit, while other units of the same facility continue to operate.

"Permit" means an authorization which allows a person to perform dangerous waste transfer, storage, treatment, or disposal operations, and which typically will include specific conditions for such facility operations. Permits must be issued by one of the following:

The department, pursuant to this chapter;

United States EPA, pursuant to 40 CFR Part 270; or

Another state authorized by EPA, pursuant to 40 CFR Part 271.

"Permit-by-rule" means a provision of this chapter stating that a facility or activity is deemed to have a dangerous waste permit if it meets the requirements of the provision.

"Persistence" means the quality of a material that retains more than half of its initial activity after one year (365 days) in either a dark anaerobic or dark aerobic environment at ambient conditions. Persistent compounds are either halogenated organic compounds (HOC) or polycyclic aromatic hydrocarbons (PAH) as defined in this section.

"Person" means any person, firm, association, county, public or municipal or private corporation, agency, or other entity whatsoever.

"Pesticide" means but is not limited to: Any substance or mixture of substances intended to prevent, destroy, control, repel, or mitigate any insect, rodent, nematode, mollusk, fungus, weed, and any other form of plant or animal life, or virus (except virus on or in living man or other animal) which is normally considered to be a pest or which the department of agriculture may declare to be a pest; any substance or mixture of substances intended to be used as a plant regulator, defoliant, or desiccant; any substance or mixture of substances intended to be used as spray adjuvant; and, any other substance intended for such use as may be named by the department of agriculture by regulation. Herbicides, fungicides, insecticides, and rodenticides are pesticides for the purposes of this chapter.

"Pile" means any noncontainerized accumulation of solid, nonflowing dangerous waste that is used for treatment or storage.

"Plasma arc incinerator" means any enclosed device using a high intensity electrical discharge or arc as a source of heat followed by an afterburner using controlled flame combustion and which is not listed as an industrial furnace.

"Point source" means any confined and discrete conveyance from which pollutants are or may be discharged. This term includes, but is not limited to, pipes, ditches, channels, tunnels, wells, cracks, containers, rolling stock, concentrated animal feeding operations, or watercraft, but does not include return flows from irrigated agriculture.

"Polycyclic aromatic hydrocarbons" (PAH) means those hydrocarbon molecules composed of two or more fused benzene rings. For purposes of this chapter, the PAHs of concern for designation are: Acenaphthene, acenaphthylene, fluorene, anthracene, fluoranthene, phenanthrene, benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, pyrene, chrysene, benzo(a)pyrene, dibenz(a,h)anthracene, indeno(1,2,3-c,d)pyrene, benzo(g,h,i)perylene, dibenzo [(a,e), (a,h), (a,i), and (a,1)] pyrenes, and dibenzo(a,j) acridine.

"Post-closure" means the requirements placed upon disposal facilities (e.g., landfills, impoundments closed as disposal facilities, etc.) after closure to ensure their environmental safety for a number of years after closure. (See also "closure.")

"Processed scrap metal" is scrap metal that has been manually or physically altered to either separate it into distinct materials to enhance economic value or to improve the handling of materials. Processed scrap metal includes, but is not limited to, scrap metal which has been baled, shredded, sheared, chopped, crushed, flattened, cut, melted, or separated by metal type (that is, sorted), and fines, drosses and related materials that have been agglomerated. Note: Shredded circuit boards being sent for recycling are not considered processed scrap metal. They are covered under the exclusion from the definition of solid waste for shredded circuit boards being recycled (WAC 173-303-071 (3)(gg)).

"Prompt scrap metal" is scrap metal as generated by the metal working/fabrication industries and includes such scrap metal as turnings, cuttings, punchings, and borings. Prompt scrap is also known as industrial or new scrap metal.

"Publicly owned treatment works" or "POTW" means any device or system, owned by the state or a

municipality, which is used in the treatment, recycling, or reclamation of municipal sewage or liquid industrial wastes. This term includes sewers, pipes, or other conveyances only if they convey wastewater to a POTW.

"Qualified ground water scientist" means a scientist or engineer who has received a baccalaureate or post-graduate degree in the natural sciences or engineering, and has sufficient training and experience in ground water hydrology and related fields to make sound professional judgments regarding ground water monitoring and contaminant fate and transport. Sufficient training and experience may be demonstrated by state registration, professional certifications, or completion of accredited university courses.

"Reactive waste" means a dangerous waste that exhibits the characteristic of reactivity described in WAC 173-303-090(7).

"Reclaim" means to process a material in order to recover useable products, or to regenerate the material. Reclamation is the process of reclaiming.

"Recover" means extract a useable material from a solid or dangerous waste through a physical, chemical, biological, or thermal process. Recovery is the process of recovering.

"Recycle" means to use, reuse, or reclaim a material.

"Recycling unit" is a contiguous area of land, structures and equipment where materials designated as dangerous waste or used oil are placed or processed in order to recover useable products or regenerate the original materials. For the purposes of this definition, "placement" does not mean "storage" when conducted within the provisions of WAC 173-303-120(4). A container, tank, or processing equipment alone does not constitute a unit; the unit includes containers, tanks or other processing equipment, their ancillary equipment and secondary containment system, and the land upon which they are placed.

"Registration number" means the number assigned by the department of ecology to a transporter who owns or leases and operates a ten-day transfer facility within Washington state.

"Regulated unit" means any new or existing surface impoundment, landfill, land treatment area or waste pile that receives any dangerous waste after:

July 26, 1982, for wastes regulated by 40 CFR Part 261;

October 31, 1984 for wastes designated only by this chapter and not regulated by 40 CFR Part 261; or

The date six months after a waste is newly identified by amendments to 40 CFR Part 261 or this chapter which cause the waste to be regulated.

"Release" means any intentional or unintentional spilling, leaking, pouring, emitting, emptying, discharging, injecting, pumping, escaping, leaching, dumping, or disposing of dangerous wastes, or dangerous constituents as defined at WAC 173-303-64610(4), into the environment and includes the abandonment or discarding of barrels, containers, and other receptacles containing dangerous wastes or dangerous constituents and includes the definition of release at RCW 70.105D.020(20).

"Remediation waste" means all solid and dangerous wastes, and all media (including ground water, surface water, soils, and sediments) and debris, that are managed for implementing cleanup.

"Replacement unit" means a landfill, surface impoundment, or waste pile unit from which all or substantially all of the waste is removed, and that is subsequently reused to treat, store, or dispose of dangerous waste. "Replacement unit" does not apply to a unit from which waste is removed during closure, if the subsequent reuse solely involves the disposal of waste from that unit and other closing units or corrective action areas at the facility, in accordance with an approved closure plan or EPA or state approved corrective action.

"Representative sample" means a sample which can be expected to exhibit the average properties of the sample source.

"Reuse or use" means to employ a material either:

As an ingredient (including use as an intermediate) in an industrial process to make a product (for

example, distillation bottoms from one process used as feedstock in another process). However, a material will not satisfy this condition if distinct components of the material are recovered as separate end products (as when metals are recovered from metal-containing secondary materials); or

In a particular function or application as an effective substitute for a commercial product (for example, spent pickle liquor used as phosphorous precipitant and sludge conditioner in wastewater treatment).

"Runoff" means any rainwater, leachate, or other liquid which drains over land from any part of a facility.

"Run-on" means any rainwater, leachate, or other liquid which drains over land onto any part of a facility.

"Satellite accumulation area" means a location at or near any point of generation where hazardous waste is initially accumulated in containers (during routine operations) prior to consolidation at a designated ninety-day accumulation area or storage area. The area must be under the control of the operator of the process generating the waste or secured at all times to prevent improper additions of wastes into the satellite containers.

"Schedule of compliance" means a schedule of remedial measures in a permit including an enforceable sequence of interim requirements leading to compliance with this chapter.

"Scrap metal" means bits and pieces of metal parts (e.g., bars, turnings, rods, sheets, wire) or metal pieces that may be combined together with bolts or soldering (e.g., radiators, scrap automobiles, railroad box cars), which when worn or superfluous can be recycled.

"Sludge" means any solid, semisolid, or liquid waste generated from a municipal, commercial, or industrial wastewater treatment plant, water supply treatment plant, or air pollution control facility. This term does not include the treated effluent from a wastewater treatment plant.

"Sludge dryer" means any enclosed thermal treatment device that is used to dehydrate sludge and that has a maximum total thermal input, excluding the heating value of the sludge itself, of 2,500 Btu/lb of sludge treated on a wet-weight basis.

"Small quantity handler of universal waste" means a universal waste handler (as defined in this section) who does not accumulate 11,000 pounds or more total of universal waste (batteries, thermostats, mercury-containing equipment, and lamps, calculated collectively) and/or who does not accumulate more than 2,200 pounds of lamps at any time.

"Solid acid waste" means a dangerous waste that exhibits the characteristic of low pH under the corrosivity tests of WAC 173-303-090 (6)(a)(iii).

"Solid waste management unit" or "SWMU" means any discernible location at a facility, as defined for the purposes of corrective action, where solid wastes have been placed at any time, irrespective of whether the location was intended for the management of solid or dangerous waste. Such locations include any area at a facility at which solid wastes, including spills, have been routinely and systematically released. Such units include regulated units as defined by chapter 173-303 WAC.

"Sorbent" means a material that is used to soak up free liquids by either adsorption or absorption, or both. *Sorb* means to either adsorb or absorb, or both.

"Special incinerator ash" means ash residues resulting from the operation of incineration or energy recovery facilities managing municipal solid waste from residential, commercial and industrial establishments, if the ash residues are designated as dangerous waste only by this chapter and not designated as hazardous waste by 40 CFR Part 261.

"Special waste" means any state-only dangerous waste that is solid only (nonliquid, nonaqueous, nongaseous), that is: Corrosive waste (WAC 173-303-090 (6)(b)(ii)), toxic waste that has Category D toxicity (WAC 173-303-100(5)), PCB waste (WAC 173-303-9904 under State Sources), or persistent waste that is not EHW (WAC 173-303-100(6)). Any solid waste that is regulated by the United States EPA as hazardous waste cannot be a special waste.

"Spent material" means any material that has been used and as a result of contamination can no longer serve the purpose for which it was produced without processing.

"Stabilization" and "solidification" means a technique that limits the solubility and mobility of dangerous waste constituents. Solidification immobilizes a waste through physical means and stabilization immobilizes the waste by bonding or chemically reacting with the stabilizing material.

"Staging pile" means an accumulation of solid, nonflowing, remediation waste that is not a containment building or a corrective action management unit and that is used for temporary storage of remediation waste for implementing corrective action under WAC 173-303-646 or other clean up activities.

"State-only dangerous waste" means a waste designated only by this chapter, chapter 173-303 WAC, and is not regulated as a hazardous waste under 40 CFR Part 261.

"State operator" means the person responsible for the overall operation of the state's extremely hazardous waste facility on the Hanford Reservation.

"Storage" means the holding of dangerous waste for a temporary period. "Accumulation" of dangerous waste, by the generator on the site of generation, is not storage as long as the generator complies with the applicable requirements of WAC 173-303-200 and 173-303-201.

"Sudden accident" means an unforeseen and unexpected occurrence which is not continuous or repeated in nature.

"Sump" means any pit or reservoir that meets the definition of tank and those troughs/trenches connected to it that serves to collect dangerous waste for transport to dangerous waste storage, treatment, or disposal facilities; except that as used in the landfill, surface impoundment, and waste pile rules, "sump" means any lined pit or reservoir that serves to collect liquids drained from a leachate collection and removal system or leak detection system for subsequent removal from the system.

"Surface impoundment" means a facility or part of a facility which is a natural topographic depression, man-made excavation, or diked area formed primarily of earthen materials (although it may be lined with man-made materials), and which is designed to hold an accumulation of liquid dangerous wastes or dangerous wastes containing free liquids. The term includes holding, storage, settling, and aeration pits, ponds, or lagoons, but does not include injection wells.

"Tank" means a stationary device designed to contain an accumulation of dangerous waste, and which is constructed primarily of nonearthen materials to provide structural support.

"Tank system" means a dangerous waste storage or treatment tank and its associated ancillary equipment and containment system.

"Temporary unit" means a tank or container that is not an accumulation unit under WAC 173-303-200 and that is used for temporary treatment or storage of remediation waste for implementing corrective action under WAC 173-303-646 or other clean up activities.

"*TEQ*" means toxicity equivalence, the international method of relating the toxicity of various dioxin/furan congeners to the toxicity of 2,3,7,8-tetrachlorodibenzo-p-dioxin.

"Thermal treatment" means the treatment of dangerous waste in a device which uses elevated temperatures as the primary means to change the chemical, physical, or biological character or composition of the dangerous waste. Examples of thermal treatment processes are incineration, molten salt, pyrolysis, calcination, wet air oxidation, and microwave discharge.

"Thermostat" means a temperature control device that contains metallic mercury in an ampule attached to a bimetal sensing element, and mercury-containing ampules that have been removed from these temperature control devices in compliance with the requirements of WAC 173-303-573 (9)(b)(ii) or (20)(b)(ii).

"TLm_{96}" means the same as "Aquatic LC_{50}."

"Totally enclosed treatment facility" means a facility for treating dangerous waste which is directly connected to a production process and which prevents the release of dangerous waste or dangerous waste constituents into the environment during treatment.

"Toxic" means having the properties to cause or to significantly contribute to death, injury, or illness of man or wildlife.

"Transfer facility" means any transportation related facility including loading docks, parking areas, storage areas, buildings, piers, and other similar areas where shipments of dangerous waste are held, consolidated, or transferred within a period of ten days or less during the normal course of transportation.

"Transport vehicle" means a motor vehicle, water vessel, or rail car used for the transportation of cargo by any mode. Each cargo-carrying body (trailer, railroad freight car, steamship, etc.) is a separate transport vehicle.

"Transportation" means the movement of dangerous waste by air, rail, highway, or water.

"Transporter" means a person engaged in the off-site transportation of dangerous waste.

"Travel time" means the period of time necessary for a dangerous waste constituent released to the soil (either by accident or intent) to enter any on-site or off-site aquifer or water supply system.

"Treatability study" means a study in which a dangerous waste is subjected to a treatment process to determine: Whether the waste is amenable to the treatment process; what pretreatment (if any) is required; the optimal process conditions needed to achieve the desired treatment; the efficiency of a treatment process for a specific waste or wastes; or the characteristics and volumes of residuals from a particular treatment process. Also included in this definition for the purpose of the exemptions contained in WAC 173-303-071 (3)(r) and (s), are liner compatibility, corrosion, and other material compatibility studies and toxicological and health effects studies. A "treatability study" is not a means to commercially treat or dispose of dangerous waste.

"Treatment" means the physical, chemical, or biological processing of dangerous waste to make such wastes nondangerous or less dangerous, safer for transport, amenable for energy or material resource recovery, amenable for storage, or reduced in volume, with the exception of compacting, repackaging, and sorting as allowed under WAC 173-303-400(2) and 173-303-600(3).

"Treatment zone" means a soil area of the unsaturated zone of a land treatment unit within which dangerous wastes are degraded, transformed or immobilized.

"Triple rinsing" means the cleaning of containers in accordance with the requirements of WAC 173-303-160 (2)(b), containers.

"Underground injection" means the subsurface emplacement of fluids through a bored, drilled, or driven well, or through a dug well, where the depth of the dug well is greater than the largest surface dimension.

"Underground tank" means a device meeting the definition of "tank" in this section whose entire surface area is totally below the surface of and covered by the ground.

"Unexploded ordnance (UXO)" means military munitions that have been primed, fused, armed, or otherwise prepared for action, and have been fired, dropped, launched, projected, or placed in such a manner as to constitute a hazard to operations, installation, personnel, or material and remain unexploded either by malfunction, design, or any other cause.

"Unfit-for-use tank system" means a tank system that has been determined through an integrity assessment or other inspection to be no longer capable of storing or treating dangerous waste without posing a threat of release of dangerous waste to the environment.

"Universal waste" means any of the following dangerous wastes that are subject to the universal waste requirements of WAC 173-303-573:

Batteries as described in WAC 173-303-573(2);

Thermostats as described in WAC 173-303-573(3);

Lamps as described in WAC 173-303-573(5); and

Mercury-containing equipment as described in WAC 173-303-573(4).

"Universal waste handler":

Means:

A generator (as defined in this section) of universal waste; or

The owner or operator of a facility, including all contiguous property, that receives universal waste from other universal waste handlers, accumulates universal waste, and sends universal waste to another universal waste handler, to a destination facility, or to a foreign destination.

Does not mean:

A person who treats (except under the provisions of WAC 173-303-573 (9)(a), (b), or (c) or (20)(a), (b), or (c)) disposes of, or recycles universal waste; or

A person engaged in the off-site transportation of universal waste by air, rail, highway, or water, including a universal waste transfer facility.

"Universal waste transfer facility" means any transportation-related facility including loading docks, parking areas, storage areas and other similar areas where shipments of universal waste are held during the normal course of transportation for ten days or less.

"Universal waste transporter" means a person engaged in the off-site transportation of universal waste by air, rail, highway, or water.

"Unsaturated zone" means the zone between the land surface and the water table.

"Uppermost aquifer" means the geological formation nearest the natural ground surface that is capable of yielding ground water to wells or springs. It includes lower aquifers that are hydraulically interconnected with this aquifer within the facility property boundary.

"Used oil" means any oil that has been refined from crude oil, or any synthetic oil, that has been used and as a result of such use is contaminated by physical or chemical impurities.

"Vessel" includes every description of watercraft, used or capable of being used as a means of transportation on the water.

"Waste-derived fertilizer" means a commercial fertilizer that is derived in whole or in part from solid waste as defined in chapter 70.95 or 70.105 RCW, or rules adopted thereunder, but does not include fertilizers derived from biosolids or biosolid products regulated under chapter 70.95J RCW or wastewaters regulated under chapter 90.48 RCW.

"Wastewater treatment unit" means a device that:

Is part of a wastewater treatment facility which is subject to regulation under either:

Section 402 or section 307(b) of the Federal Clean Water Act; or

Chapter 90.48 RCW, State Water Pollution Control Act, provided that the waste treated at the facility is a state-only dangerous waste; and

Handles dangerous waste in the following manner:

Receives and treats or stores an influent wastewater; or

Generates and accumulates or treats or stores a wastewater treatment sludge; and

Meets the definition of tank or tank system in this section.

"Water or rail (bulk shipment)" means the bulk transportation of dangerous waste which is loaded or

carried on board a vessel or railcar without containers or labels.

"Zone of engineering control" means an area under the control of the owner/operator that, upon detection of a dangerous waste release, can be readily cleaned up prior to the release of dangerous waste or dangerous constituents to ground water or surface water.

Any terms used in this chapter which have not been defined in this section have either the same meaning as set forth in Title 40 CFR Parts 260, 264, 270, and 124 or else have their standard, technical meaning.

As used in this chapter, words in the masculine gender also include the feminine and neuter genders, words in the singular include the plural, and words in the plural include the singular.

[Statutory Authority: Chapters 70.95N, 70.105, and 70.105D RCW. 07-21-013 (Order 07-05), § 173-303-040, filed 10/5/07, effective 11/5/07. Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-040, filed 11/30/04, effective 1/1/05; 00-11-040 (Order 99-01), § 173-303-040, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-040, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-040, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-040, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-040, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 89-02-059 (Order 88-24), § 173-303-040, filed 1/4/89; 87-14-029 (Order DE-87-4), § 173-303-040, filed 6/26/87; 86-12-057 (Order DE-85-10), § 173-303-040, filed 6/3/86; 84-09-088 (Order DE 83-36), § 173-303-040, filed 4/18/84. Statutory Authority: RCW 70.95.260 and chapter 70.105 RCW. 82-05-023 (Order DE 81-33), § 173-303-040, filed 2/10/82. Formerly WAC 173-302-040.]

Notes:

Reviser's note: The brackets and enclosed material in the text of the above section occurred in the copy filed by the agency.

173-303-045
References to EPA's hazardous waste and permit regulations.

(1) Any references in this chapter to any parts, subparts, or sections from EPA's hazardous waste regulations, including 40 CFR Parts 260 through 280 and Part 124, are in reference to those rules as they existed on July 1, 2003, except for the following: The National Environmental Performance Track Program accumulation requirements, incorporated at WAC 173-303-200(5), are from the April 22, 2004, Federal Register Volume 69, Number 78. Copies of the appropriate referenced federal requirements are available upon request from the department.

(2) The following sections and any cross-reference to these sections are not incorporated or adopted by reference because they are provisions that EPA cannot delegate to states:

(a) 40 CFR Parts 260.1 (b)(4)-(6).

(b) 40 CFR Parts 264.1 (d) and (f); 265.1 (c)(4);264.149-150 and 265.149-150; 264.301(l); and 265.430.

(c) 40 CFR Parts 268.5 and 268.6; 268 Subpart B; 268.42(b) and 268.44 (a) through (g).

(d) 40 CFR Parts 270.1 (c)(1)(i); 270.3; 270.60(b); and 270.64.

(e) 40 CFR Parts 124.1 (b)-(e); 124.4; 124.5(e); 124.9; 124.10 (a)(1)(iv); 124.12(e); 124.14(d); 124.15 (b)(2); 124.16; 124.17(b); 124.18; 124.19; and 124.21.

(3) The following sections and any cross-references to these citations are not incorporated or adopted by reference: 40 CFR Parts 260.20-260.22.

(4) Where EPA's regulations are incorporated by reference:

(a) "Regional administrator" means "the department."

(b) "Administrator" means "director."

(c) "Director" means "department."

(d) These substitutions should be made as appropriate. They should not be made where noted otherwise in this chapter. They should not be made where another EPA region is referred to, where a provision cannot be delegated to the state, or where the director referred to is the director of another agency.

[Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-045, filed 11/30/04, effective 1/1/05. Statutory Authority: Chapters 70.105 and 70.105D RCW. 03-07-049 (Order 02-03), § 173-303-045, filed 3/13/03, effective 4/13/03. Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW 70.105.007. 00-11-040 (Order 99-01), § 173-303-045, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-045, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-045, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-045, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-045, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 89-02-059 (Order 88-24), § 173-303-045, filed 1/4/89; 87-14-029 (Order DE-87-4), § 173-303-045, filed 6/26/87; 86-12-057 (Order DE-85-10), § 173-303-045, filed 6/3/86; 84-09-088 (Order DE 83-36), § 173-303-045, filed 4/18/84. Statutory Authority: RCW 70.95.260 and chapter 70.105 RCW. 82-05-023 (Order DE 81-33), § 173-303-045, filed 2/10/82.]

173-303-050
Department of ecology cleanup authority.

The department may conduct or contract for the removal of dangerous wastes or hazardous substances where there has been or is a potential for discharge or release, regardless of quantity or concentration, which could pose a threat to public health or the environment.

[Statutory Authority: Chapter 70.105 RCW. 84-09-088 (Order DE 83-36), § 173-303-050, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-050, filed 2/10/82. Formerly WAC 173-302-060.]

173-303-060
Notification and identification numbers.

(1) Any person who generates, transports, offers for transport, or transfers a dangerous waste, or who owns or operates a dangerous waste TSD facility must have a current EPA/state identification number (EPA/state ID#). An EPA/state ID# is issued to TSD facilities and generators by site. A state registration number is assigned to transfer facilities by site. Any person who offers a dangerous waste to a transporter or to a dangerous waste TSD facility that does not have an EPA/state ID#, or whose EPA/state ID# has been cancelled or withdrawn, is in violation of this regulation.

(2) Every person who must have an EPA/state ID#, and who has not already received their ID#, must notify the department by obtaining and completing a Washington State Dangerous Waste Site Identification Form according to the instructions on the form and submitting the completed form to the department. Any person already assigned an EPA/state ID# must notify the department of any changes to their company's name, mailing address, ownership, physical location, or type of dangerous waste activity, by submitting a revised form. A revised form must be submitted prior to adding or dropping any of the following activities: Permitted treating, storing and/or disposing, immediate recycling, transporting, permit by rule, and/or treatment by generator. Any change in site location will require the issuance of a new EPA/state ID# for waste generation and management facilities. An EPA/state ID# may not be used at new company locations. A company that has obtained an ID# as a "transporter only" can move to a new location and continue to use the same ID#. A revised Dangerous Waste Site Identification Form must be submitted to the department. A

Dangerous Waste Site Identification Form and instructions for its completion may be obtained by contacting the department.

(3) Any person with an EPA/state ID# may request that his ID# be withdrawn if he will no longer be handling dangerous waste at the site the ID# has been assigned to. Any person whose ID# has been withdrawn must notify the department before he uses the ID# at any later date. Notification must be in writing, except in the case of emergencies (e.g., fires, spills, etc.) such notification may be provided by telephone first, and followed within one week by a written notification. Withdrawal will only be granted when all applicable requirements of this chapter and chapter 173-305 WAC have been met.

(4) Any person with an EPA/state ID# may request that his ID# be cancelled if he will no longer occupy the site. Notification must be in writing. An EPA/state ID# will be considered cancelled only after all applicable requirements of this chapter and chapter 173-305 WAC have been met.

(5) Any person with a current EPA/state ID# must submit an annual report as required by WAC 173-303-070(8), 173-303-220, and 173-303-390. Any person who has withdrawn or cancelled their ID# must submit an annual report up to the effective date of cancellation or withdrawal. The generator should write the effective date on the Dangerous Waste Site Identification Form for the cancellation or withdrawal; it is the date by which all regulated waste activities (generation, transportation, and management) have ceased at the site.

[Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-060, filed 11/30/04, effective 1/1/05; 00-11-040 (Order 99-01), § 173-303-060, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-060, filed 10/19/95, effective 11/19/95. Statutory Authority: Chapter 70.105 RCW. 87-14-029 (Order DE-87-4), § 173-303-060, filed 6/26/87; 86-12-057 (Order DE-85-10), § 173-303-060, filed 6/3/86; 84-09-088 (Order DE 83-36), § 173-303-060, filed 4/18/84. Statutory Authority: RCW 70.95.260 and chapter 70.105 RCW. 82-05-023 (Order DE 81-33), § 173-303-060, filed 2/10/82.]

173-303-070
Designation of dangerous waste.

(1) Purpose and applicability.

(a) This section describes the procedures for determining whether or not a solid waste is DW or EHW.

(b) The procedures in this section are applicable to any person who generates a solid waste (including recyclable materials) that is not exempted or excluded by this chapter or by the department. Any person who must determine whether or not their solid waste is designated must follow the procedures set forth in subsection (3) of this section. Any person who determines by these procedures that their waste is designated DW or EHW is subject to all applicable requirements of this chapter.

(c) The requirements for the small quantity generator exemption are found in subsection (8) of this section.

(2)(a) Except as provided at WAC 173-303-070 (2)(c), once a material has been determined to be a dangerous waste, then any solid waste generated from the recycling, treatment, storage, or disposal of that dangerous waste is a dangerous waste unless and until:

(i) The generator has been able to accurately describe the variability or uniformity of the waste over time, and has been able to obtain demonstration samples which are representative of the waste's variability or uniformity; and

(ii)(A) It does not exhibit any of the characteristics of WAC 173-303-090; however, wastes that exhibit a characteristic at the point of generation may still be subject to the requirements of WAC 173-303-140 (2)(a), even if they no longer exhibit a characteristic at the point of land disposal; and

(B) If it was a listed waste under WAC 173-303-080 through 173-303-083, it also has been exempted

pursuant to WAC 173-303-910(3); or

(iii) If originally designated only through WAC 173-303-100, it does not meet any of the criteria of WAC 173-303-100.

Such solid waste will include but not be limited to any sludge, spill residue, ash emission control dust, leachate, or precipitation runoff. Precipitation runoff will not be considered a dangerous waste if it can be shown that the runoff has not been contaminated with the dangerous waste, or that the runoff is adequately addressed under existing state laws (e.g. chapter 90.48 RCW), or that the runoff does not exhibit any of the criteria or characteristics described in WAC 173-303-100.

(b) Materials that are reclaimed from solid wastes and that are used beneficially (as provided in WAC 173-303-016 and 173-303-017) are not solid wastes and hence are not dangerous wastes under this section unless the reclaimed material is burned for energy recovery or used in a manner constituting disposal.

(c)(i) A dangerous waste that is listed in WAC 173-303-081(1) or 173-303-082(1) solely because it exhibits one or more characteristics of ignitability as defined under WAC 173-303-090(5), corrosivity as defined under WAC 173-303-090(6), or reactivity as defined under WAC 173-303-090(7) is not a dangerous waste, if the waste no longer exhibits any characteristic of dangerous waste identified in WAC 173-303-090 or any criteria identified in WAC 173-303-100.

(ii) The exclusion described in (c)(i) of this subsection also pertains to:

(A) Any solid waste generated from treating, storing, or disposing of a dangerous waste listed in WAC 173-303-081(1) or 173-303-082(1) solely because it exhibits the characteristics of ignitability, corrosivity, or reactivity as regulated under (a) and (b) of this section.

(B) Wastes excluded under this section are subject to 40 CFR Part 268, which is incorporated by reference at WAC 173-303-140 (2)(a) (as applicable), even if they no longer exhibit a characteristic at the point of land disposal.

(3) Designation procedures.

(a) To determine whether or not a solid waste is designated as a dangerous waste a person must:

(i) First, determine if the waste is a listed discarded chemical product, WAC 173-303-081;

(ii) Second, determine if the waste is a listed dangerous waste source, WAC 173-303-082;

(iii) Third, if the waste is not listed in WAC 173-303-081 or 173-303-082, or for the purposes of compliance with the federal land disposal restrictions as adopted by reference in WAC 173-303-140, determine if the waste exhibits any dangerous waste characteristics, WAC 173-303-090; and

(iv) Fourth, if the waste is not listed in WAC 173-303-081 or 173-303-082, and does not exhibit a characteristic in WAC 173-303-090, determine if the waste meets any dangerous waste criteria, WAC 173-303-100.

(b) A person must check each section, in the order set forth, until they determine whether the waste is designated as a dangerous waste. Once the waste is determined to be a dangerous waste, further designation is not required except as required by subsection (4) or (5) of this section. If a person has checked the waste against each section and the waste is not designated, then the waste is not subject to the requirements of chapter 173-303 WAC.

Any person who wishes to seek an exemption for a waste which has been designated DW or EHW must comply with the requirements of WAC 173-303-072.

(c) For the purpose of determining if a solid waste is a dangerous waste as identified in WAC 173-303-080 through173-303-100 , a person must either:

(i) Test the waste according to the methods, or an approved equivalent method, set forth in WAC 173-303-110; or

(ii) Apply knowledge of the waste in light of the materials or the process used, when:

(A) Such knowledge can be demonstrated to be sufficient for determining whether or not it designated and/or designated properly; and

(B) All data and records supporting this determination in accordance with WAC 173-303-210(3) are retained on-site.

(4) Testing required. Notwithstanding any other provisions of this chapter, the department may require any person to test a waste according to the methods, or an approved equivalent method, set forth in WAC 173-303-110 to determine whether or not the waste is designated under the dangerous waste lists, characteristics, or criteria, WAC 173-303-080 through 173-303-100. Such testing may be required if the department has reason to believe that the waste would be designated DW or EHW by the dangerous waste lists, characteristics, or criteria, or if the department has reason to believe that the waste is designated improperly (e.g., the waste has been designated DW but should actually be designated EHW). If a person, pursuant to the requirements of this subsection, determines that the waste is a dangerous waste or that its designation must be changed, then they are subject to the applicable requirements of this chapter 173-303 WAC. The department will base a requirement to test a waste on evidence that includes, but is not limited to:

(a) Test information indicating that the person's waste may be DW or EHW;

(b) Evidence that the person's waste is very similar to another persons' already designated DW or EHW;

(c) Evidence that the persons' waste has historically been a DW or EHW;

(d) Evidence or information about a person's manufacturing materials or processes which indicate that the wastes may be DW or EHW; or

(e) Evidence that the knowledge or test results a person has regarding a waste is not sufficient for determining whether or not it designated and/or designated properly.

(5) Additional designation required. A generator must manage dangerous waste under the most stringent management standards that apply. The following subsections describe how waste that has been designated as DW under the dangerous waste lists, WAC 173-303-080 through 173-303-082, or characteristics, WAC 173-303-090, or in the case of (c) of this subsection, under the lists, characteristics, or criteria, must be further designated under the dangerous waste criteria, WAC 173-303-100. This further designation under the criteria is necessary because it may change how the waste must be managed. Additional designation is required when:

(a) The waste is designated as DW with a QEL of 220 pounds and the generator otherwise qualifies as a small quantity generator. In this case, a generator must determine if their DW is also designated as a toxic EHW, WAC 173-303-100, with a QEL of 2.2 pounds; or

(b) The waste is designated as DW and the waste is to be discharged to a POTW operating under WAC 173-303-802(4) (Permits by rule). In this case, a generator must determine if the waste is also an EHW under WAC 173-303-100; or

(c) The waste is designated as a state-only DW and the waste is to be:

(i) Burned for energy recovery, as used oil, under the provisions of WAC 173-303-515; or

(ii) Land disposed within the state. In this case, a generator must determine if the waste is also an EHW under WAC 173-303-100.

(6) Dangerous waste numbers. When a person is reporting or keeping records on a dangerous waste, they must use all the dangerous waste numbers which they know are assignable to the waste from the dangerous waste lists, characteristics, or criteria. For example, if the waste is ignitable *and* contains more than 5 mg/l leachable lead when tested for the toxicity characteristic, they must use the dangerous waste numbers of D001 and D008. This will not be construed as requiring a person to designate their waste beyond those designation requirements set forth in subsections (2), (3), (4), and (5) of this section.

(7) Quantity exclusion limits; aggregated waste quantities.

(a) Quantity exclusion limits. In each of the designation sections describing the lists, characteristics, and criteria, quantity exclusion limits (QEL) are identified. The QEL are used to distinguish when a dangerous waste is only subject to the small quantity generator provisions, and when a dangerous waste is subject to the full requirements of this chapter. Any solid waste which is not excluded or exempted and which is listed by or exhibits the characteristics or meets the criteria of this chapter is a dangerous waste. Small quantity generators who produce dangerous waste below the QEL are subject to the requirements described in subsection (8) of this section.

(b) Aggregated waste quantities. A person may be generating, accumulating, or storing more than one kind of dangerous waste. In such cases, they must consider the aggregate quantity of their wastes when determining whether or not their waste amounts exceed the specific limits for waste accumulation or the specific quantity exclusion limits (QEL) for waste generation. Waste quantities must be aggregated for all wastes with common QEL's. Example: If a person generates 100 pounds of an ignitable waste and 130 pounds of a persistent waste, then both wastes are regulated because their aggregate waste quantity (230 pounds) exceeds their common QEL of 220 pounds. On the other hand, if a person generates one pound of a toxic EHW and 218 pounds of a corrosive waste, their quantities would not be aggregated because they do not share a common QEL (2.2 pounds and 220 pounds, respective QEL's). (Note: In order to remain a small quantity generator, the total quantity of dangerous waste generated in one month, all DW and EHW regardless of their QELs, must not equal or exceed 220 pounds. Not more than 2.2 pounds of a waste with a 2.2 pound QEL may be part of that total.)

(c) When making the quantity determinations of this subsection and WAC 173-303-170 through 173-303-230, generators must include all dangerous wastes they generate, except dangerous waste that:

(i) Is exempt from regulation under WAC 173-303-071; or

(ii) Is recycled under WAC 173-303-120 (2)(a), (3)(c), (e), (h) or (5); or

(iii) Is managed immediately upon generation only in on-site elementary neutralization units, wastewater treatment units, or totally enclosed treatment facilities as defined in WAC 173-303-040; or

(iv) Is recycled, without prior storage or accumulation, only in an on-site process subject to regulation under WAC 173-303-120 (4)(a); or

(v) Is spent lead-acid batteries managed under the requirements of WAC 173-303-120 (3)(f) and 173-303-520; or

(vi) Is universal waste managed under WAC 173-303-077 and 173-303-573.

(d) In determining the quantity of dangerous waste generated, a generator need not include:

(i) Dangerous waste when it is removed from on-site storage; or

(ii) Reserve; or

(iii) Spent materials that are generated, reclaimed, and subsequently reused on-site, as long as such spent materials have been counted once (Note: If after treatment or reclamation a residue is generated with a different waste code(s), that residue must be counted); or

(iv) The container holding/containing the dangerous waste as described under WAC 173-303-160(1).

(8) Small quantity generators.

(a) A person is a small quantity generator and subject to the requirements of this subsection if:

(i) Their waste is dangerous waste under subsection (3) of this section, and the quantity of waste generated per month (or the aggregated quantity if more than one kind of waste is generated) does not equal or exceed the quantity exclusion limit (QEL) for such waste (or wastes) as described in WAC 173-303-070(7); and

(ii) The quantity accumulated or stored does not exceed 2200 pounds for wastes with a 220 pound QEL

and 2.2 pounds for waste with a 2.2 pound QEL. (Exception: The accumulation limit for the acute hazardous wastes described in WAC 173-303-081 (2)(iv) and 173-303-082 (2)(b) is 220 lbs); and

(iii) The total quantity of dangerous waste generated in one month, all DW and EHW regardless of their QELs, does not equal or exceed 220 pounds. If a person generates any dangerous wastes that exceed the QEL or accumulates or stores waste that exceeds the accumulation limits, then all dangerous waste generated, accumulated, or stored by that person is subject to the requirements of this chapter. A small quantity generator who generates in excess of the quantity exclusion limits or, accumulates, or stores waste in excess of the accumulation limits becomes subject to the full requirements of this chapter and cannot again be a small quantity generator until after all dangerous waste on-site at the time he or she became fully regulated have been removed, treated, or disposed.

Example. If a person generates four pounds of an acute hazardous waste discarded chemical product (QEL is 2.2 pounds) and 200 pounds of an ignitable waste (QEL is 220 pounds), then both wastes are fully regulated, and the person is not a small quantity generator for either waste.

(Comment: If a generator generates acute hazardous waste in a calendar month in quantities greater than the QELs, all quantities of that acute hazardous waste are subject to full regulation under this chapter. "Full regulation" means the regulations applicable to generators of greater than 2200 pounds of dangerous wastes in a calendar month.)

(b) Small quantity generators will not be subject to the requirements of this chapter if they:

(i) Designate their waste in accordance with WAC 173-303-070; and

(ii) Manage their waste in a way that does not pose a potential threat to human health or the environment; and

(iii) Either treat or dispose of their dangerous waste in an on-site facility, or ensure delivery to an off-site facility, either of which, if located in the United States, is:

(A) Permitted (including permit-by-rule, interim status, or final status) under WAC 173-303-800 through 173-303-840;

(B) Authorized to manage dangerous waste by another state with a hazardous waste program approved under 40 CFR Part 271, or by EPA under 40 CFR Part 270;

(C) Permitted to manage moderate-risk waste under chapter 173-350 WAC (Solid waste handling standards), operated in accordance with state and local regulations, and consistent with the applicable local hazardous waste plan that has been approved by the department;

(D) A facility that beneficially uses or reuses, or legitimately recycles or reclaims the dangerous waste, or that treats the waste prior to such recycling activities;

(E) Permitted, licensed, or registered to manage municipal solid waste and, if managed in a municipal solid waste landfill is subject to 40 CFR Part 258 or chapter 173-351 WAC;

(F) Permitted, licensed, or registered by a state to manage nonmunicipal nonhazardous waste and, if managed in a nonmunicipal nonhazardous waste disposal unit after January 1, 1998, is subject to the requirements in 40 CFR 257.5 through 257.30;

(G) A publicly owned treatment works (POTW): Provided, That small quantity generator(s) comply with the provisions of the domestic sewage exclusion found in WAC 173-303-071 (3)(a); or

(H) For universal waste managed under WAC 173-303-573, a universal waste handler or destination facility subject to the requirements of WAC 173-303-573; and

(iv) Submit an annual report in accordance with WAC 173-303-220 if they have obtained an EPA/state identification number pursuant to WAC 173-303-060.

(c) If a small quantity generator's wastes are mixed with used oil, the mixture is subject to WAC 173-303-510 if it is destined to be burned for energy recovery. Any material produced from such a mixture by

processing, blending, or other treatment is also regulated if it is destined to be burned for energy recovery.

(d) If a small quantity generator's used oil is to be recycled by being burned for energy recovery or re-refined, the used oil is subject to WAC 173-303-515.

[Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-070, filed 11/30/04, effective 1/1/05. Statutory Authority: Chapters 70.105 and 70.105D RCW. 03-07-049 (Order 02-03), § 173-303-070, filed 3/13/03, effective 4/13/03. Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW 70.105.007. 00-11-040 (Order 99-01), § 173-303-070, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-070, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-070, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-070, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapter 70.105 RCW. 93-02-050 (Order 92-32), § 173-303-070, filed 1/5/93, effective 2/5/93. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-070, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 89-02-059 (Order 88-24), § 173-303-070, filed 1/4/89; 87-14-029 (Order DE-87-4), § 173-303-070, filed 6/26/87; 86-12-057 (Order DE-85-10), § 173-303-070, filed 6/3/86; 84-14-031 (Order DE 84-22), § 173-303-070, filed 6/27/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-070, filed 2/10/82.]

173-303-071
Excluded categories of waste.

(1) Purpose. Certain categories of waste have been excluded from the requirements of chapter 173-303 WAC, except for WAC 173-303-050, because they generally are not dangerous waste, are regulated under other state and federal programs, or are recycled in ways which do not threaten public health or the environment. WAC 173-303-071 describes these excluded categories of waste.

(2) Excluding wastes. Any persons who generate a common class of wastes and who seek to categorically exclude such class of wastes from the requirements of this chapter must comply with the applicable requirements of WAC 173-303-072. No waste class will be excluded if any of the wastes in the class are regulated as hazardous waste under 40 CFR Part 261.

(3) Exclusions. The following categories of waste are excluded from the requirements of chapter 173-303 WAC, except for WAC 173-303-050, 173-303-145, and 173-303-960, and as otherwise specified:

(a)(i) Domestic sewage; and

(ii) Any mixture of domestic sewage and other wastes that passes through a sewer system to a publicly owned treatment works (POTW) for treatment provided:

(A) The generator or owner/operator has obtained a state waste discharge permit issued by the department, a temporary permit obtained pursuant to RCW 90.48.200, or pretreatment permit (or written discharge authorization) from a local sewage utility delegated pretreatment program responsibilities pursuant to RCW 90.48.165;

(B) The waste discharge is specifically authorized in a state waste discharge permit, pretreatment permit or written discharge authorization, or in the case of a temporary permit the waste is accurately described in the permit application;

(C) The waste discharge is not prohibited under 40 CFR Part 403.5; and

(D) The waste prior to mixing with domestic sewage must not exhibit dangerous waste characteristics for ignitability, corrosivity, reactivity, or toxicity as defined in WAC 173-303-090, and must not meet the dangerous waste criteria for toxic dangerous waste or persistent dangerous waste under WAC 173-303-100, unless the waste is treatable in the publicly owned treatment works (POTW) where it will be received. This exclusion does not apply to the generation, treatment, storage, recycling, or other management of dangerous wastes prior to discharge into the sanitary sewage system;

(b) Industrial wastewater discharges that are point-source discharges subject to regulation under Section

402 of the Clean Water Act. This exclusion does not apply to the collection, storage, or treatment of industrial waste-waters prior to discharge, nor to sludges that are generated during industrial wastewater treatment. Owners or operators of certain wastewater treatment facilities managing dangerous wastes may qualify for a permit-by-rule pursuant to WAC 173-303-802(5);

(c) Household wastes, including household waste that has been collected, transported, stored, or disposed. Wastes that are residues from or are generated by the management of household wastes (e.g., leachate, ash from burning of refuse-derived fuel) are not excluded by this provision. "Household wastes" means any waste material (including, but not limited to, garbage, trash, and sanitary wastes in septic tanks) derived from households (including single and multiple residences, hotels and motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds, and day-use recreation areas). A resource recovery facility managing municipal solid waste will not be deemed to be treating, storing, disposing of, or otherwise managing dangerous wastes for the purposes of regulation under this chapter, if such facility:

(i) Receives and burns only:

(A) Household waste (from single and multiple dwellings, hotels, motels, and other residential sources); and

(B) Solid waste from commercial or industrial sources that does not contain dangerous waste; and

(ii) Such facility does not accept dangerous wastes and the owner or operator of such facility has established contractual requirements or other appropriate notification or inspection procedures to assure that dangerous wastes are not received at or burned in such facility;

(d) Agricultural crops and animal manures which are returned to the soil as fertilizers;

(e) Asphaltic materials designated only for the presence of PAHs by WAC 173-303-100(6). For the purposes of this exclusion, asphaltic materials means materials that have been used for structural and construction purposes (e.g., roads, dikes, paving) that were produced from mixtures of oil and sand, gravel, ash or similar substances;

(f) Roofing tars and shingles, except that these wastes are not excluded if mixed with wastes listed in WAC 173-303-081 or 173-303-082, or if they exhibit any of the characteristics specified in WAC 173-303-090;

(g) Treated wood waste and wood products including:

(i) Arsenical-treated wood that fails the test for the toxicity characteristic of WAC 173-303-090(8) (dangerous waste numbers D004 through D017 only) or that fails any state criteria, if the waste is generated by persons who utilize the arsenical-treated wood for the materials' intended end use. Intended end use means the wood product must have been used in typical treated wood applications (for example, fence posts, decking, poles, and timbers).

(ii) Wood treated with other preservatives provided such treated wood and wood waste (for example, sawdust and shavings) are, within one hundred eighty days after becoming waste:

(A) Disposed of at a landfill that is permitted in accordance with chapter 173-350 WAC, Solid waste handling standards, or chapter 173-351 WAC, criteria for municipal solid waste landfills, and provided that such wood is neither a listed waste under WAC 173-303-9903 and 173-303-9904 nor a TCLP waste under WAC 173-303-090(8); or

(B) Sent to a facility that will legitimately treat or recycle the treated wood waste, and manage any residue in accordance with that state's dangerous waste regulations; or

(C) Sent off-site to a permitted TSD facility or placed in an on-site facility which is permitted by the department under WAC 173-303-800 through 173-303-845. In addition, creosote-treated wood is excluded when burned for energy recovery in an industrial furnace or boiler that has an order of approval issued pursuant to RCW 70.94.152 by ecology or a local air pollution control authority to burn creosote treated wood.

(h) Irrigation return flows;

(i) Reserve;

(j) Mining overburden returned to the mining site;

(k) Polychlorinated biphenyl (PCB) wastes:

(i) PCB wastes whose disposal is regulated by EPA under 40 CFR 761.60 (Toxic Substances Control Act) and that are dangerous either because:

(A) They fail the test for toxicity characteristic (WAC 173-303-090(8), Dangerous waste codes D018 through D043 only); or

(B) Because they are designated only by this chapter and not designated by 40 CFR Part 261, are exempt from regulation under this chapter except for WAC 173-303-505 through173-303-525 , 173-303-960, those sections specified in subsection (3) of this section, and 40 CFR Part 266;

(ii) Wastes that would be designated as dangerous waste under this chapter solely because they are listed as WPCB under WAC 173-303-9904 when such wastes are stored and disposed in a manner equivalent to the requirements of 40 CFR Part 761 Subpart D for PCB concentrations of 50 ppm or greater.

(l) Samples:

(i) Except as provided in (l)(ii) of this subsection, a sample of solid waste or a sample of water, soil, or air, which is collected for the sole purpose of testing to determine its characteristics or composition, is not subject to any requirements of this chapter, when:

(A) The sample is being transported to a lab for testing or being transported to the sample collector after testing; or

(B) The sample is being stored by the sample collector before transport, by the laboratory before testing, or by the laboratory after testing prior to return to the sample collector; or

(C) The sample is being stored temporarily in the laboratory after testing for a specific purpose (for example, until conclusion of a court case or enforcement action).

(ii) In order to qualify for the exemptions in (l)(i) of this subsection, a sample collector shipping samples to a laboratory and a laboratory returning samples to a sample collector must:

(A) Comply with United States Department of Transportation (DOT), United States Postal Service (USPS), or any other applicable shipping requirements; or

(B) Comply with the following requirements if the sample collector determines that DOT or USPS, or other shipping requirements do not apply:

(I) Assure that the following information accompanies the sample:

(AA) The sample collector's name, mailing address, and telephone number;

(BB) The laboratory's name, mailing address, and telephone number;

(CC) The quantity of the sample;

(DD) The date of shipment;

(EE) A description of the sample; and

(II) Package the sample so that it does not leak, spill, or vaporize from its packaging.

(iii) This exemption does not apply if the laboratory determines that the waste is dangerous but the laboratory is no longer meeting any of the conditions stated in (l)(i) of this subsection;

(m) Reserve;

(n) Dangerous waste generated in a product or raw material storage tank, a product or raw material transport vehicle or vessel, a product or raw material pipeline, or in a manufacturing process unit or an associated nonwaste-treatment-manufacturing unit until it exits the unit in which it was generated. This exclusion does not apply to surface impoundments, nor does it apply if the dangerous waste remains in the unit more than ninety days after the unit ceases to be operated for manufacturing, or for storage or transportation of product or raw materials;

(o) Waste pickle liquor sludge generated by lime stabilization of spent pickle liquor from the iron and steel industry (NAICS codes 331111 and 332111), except that these wastes are not excluded if they exhibit one or more of the dangerous waste criteria (WAC 173-303-100) or characteristics (WAC 173-303-090);

(p) Wastes from burning any of the materials exempted from regulation by WAC 173-303-120 (2)(a)(vii) and (viii). These wastes are not excluded if they exhibit one or more of the dangerous waste characteristics or criteria;

(q) As of January 1, 1987, secondary materials that are reclaimed and returned to the original process or processes in which they were generated where they are reused in the production process provided:

(i) Only tank storage is involved, and the entire process through completion of reclamation is closed by being entirely connected with pipes or other comparable enclosed means of conveyance;

(ii) Reclamation does not involve controlled flame combustion (such as occurs in boilers, industrial furnaces, or incinerators);

(iii) The secondary materials are never accumulated in such tanks for over twelve months without being reclaimed;

(iv) The reclaimed material is not used to produce a fuel, or used to produce products that are used in a manner constituting disposal; and

(v) A generator complies with the requirements of chapter 173-303 WAC for any residues (e.g., sludges, filters, etc.) produced from the collection, reclamation, and reuse of the secondary materials.

(r) Treatability study samples.

(i) Except as provided in (r)(ii) of this subsection, persons who generate or collect samples for the purpose of conducting treatability studies as defined in WAC 173-303-040 are not subject to the requirements of WAC 173-303-180, 173-303-190, and 173-303-200 (1)(a), nor are such samples included in the quantity determinations of WAC 173-303-070 (7) and (8) and 173-303-201 when:

(A) The sample is being collected and prepared for transportation by the generator or sample collector; or

(B) The sample is being accumulated or stored by the generator or sample collector prior to transportation to a laboratory or testing facility; or

(C) The sample is being transported to the laboratory or testing facility for the purpose of conducting a treatability study; or

(D) The sample or waste residue is being transported back to the original generator from the laboratory or testing facility.

(ii) The exemption in (r)(i) of this subsection is applicable to samples of dangerous waste being collected and shipped for the purpose of conducting treatability studies provided that:

(A) The generator or sample collector uses (in "treatability studies") no more than 10,000 kg of media contaminated with nonacute dangerous waste, 1000 kg of nonacute dangerous waste other than contaminated media, 1 kg of acutely hazardous waste, 2500 kg of media contaminated with acutely hazardous waste for each process being evaluated for each generated waste stream; and

(B) The mass of each sample shipment does not exceed 10,000 kg; the 10,000 kg quantity may be all

media contaminated with nonacute dangerous waste or may include 2500 kg of media contaminated with acute hazardous waste, 1000 kg of dangerous waste, and 1 kg of acutely hazardous waste; and

(C) The sample must be packaged so that it will not leak, spill, or vaporize from its packaging during shipment and the requirements of (r)(ii)(C)(I) or (II) of this subsection are met.

(I) The transportation of each sample shipment complies with United States Department of Transportation (DOT), United States Postal Service (USPS), or any other applicable shipping requirements; or

(II) If the DOT, USPS, or other shipping requirements do not apply to the shipment of the sample, the following information must accompany the sample:

(AA) The name, mailing address, and telephone number of the originator of the sample;

(BB) The name, address, and telephone number of the laboratory or testing facility that will perform the treatability study;

(CC) The quantity of the sample;

(DD) The date of shipment; and

(EE) A description of the sample, including its dangerous waste number.

(D) The sample is shipped, within ninety days of being generated or of being taken from a stream of previously generated waste, to a laboratory or testing facility which is exempt under (s) of this subsection or has an appropriate final facility permit or interim status; and

(E) The generator or sample collector maintains the following records for a period ending three years after completion of the treatability study:

(I) Copies of the shipping documents;

(II) A copy of the contract with the facility conducting the treatability study;

(III) Documentation showing:

(AA) The amount of waste shipped under this exemption;

(BB) The name, address, and EPA/state identification number of the laboratory or testing facility that received the waste;

(CC) The date the shipment was made; and

(DD) Whether or not unused samples and residues were returned to the generator.

(F) The generator reports the information required under (r)(ii)(E)(III) of this subsection in its annual report.

(iii) The department may grant requests, on a case-by-case basis, for up to an additional two years for treatability studies involving bioremediation. The department may grant requests on a case-by-case basis for quantity limits in excess of those specified in (r)(ii)(A) and (B) of this subsection and (s)(iv) of this subsection, for up to an additional 5000 kg of media contaminated with nonacute dangerous waste, 500 kg of nonacute dangerous waste, 1 kg of acute hazardous waste, and 2500 kg of media contaminated with acute hazardous waste or for up to an additional 10,000 kg of wastes regulated only by this chapter and not regulated by 40 CFR Part 261, to conduct further treatability study evaluation:

(A) In response to requests for authorization to ship, store and conduct treatability studies on additional quantities in advance of commencing treatability studies. Factors to be considered in reviewing such requests include the nature of the technology, the type of process, (e.g., batch versus continuous), size of the unit undergoing testing (particularly in relation to scale-up considerations), the time/quantity of material required to reach steady state operating conditions, or test design considerations such as mass balance

calculations.

(B) In response to requests for authorization to ship, store, and conduct treatability studies on additional quantities after initiation or completion of initial treatability studies, when:

There has been an equipment or mechanical failure during the conduct of a treatability study; there is a need to verify the results of previously conducted treatability study; there is a need to study and analyze alternative techniques within a previously evaluated treatment process; or there is a need to do further evaluation of an ongoing treatability study to determine final specifications for treatment.

(C) The additional quantities and time frames allowed in (r)(iii)(A) and (B) of this subsection are subject to all the provisions in (r)(i) and (r)(ii)(C) through (F) of this subsection. The generator or sample collector must apply to the department where the sample is collected and provide in writing the following information:

(I) The reason the generator or sample collector requires additional time or quantity of sample for the treatability study evaluation and the additional time or quantity needed;

(II) Documentation accounting for all samples of dangerous waste from the waste stream which have been sent for or undergone treatability studies including the date each previous sample from the waste stream was shipped, the quantity of each previous shipment, the laboratory or testing facility to which it was shipped, what treatability study processes were conducted on each sample shipped, and the available results of each treatability study;

(III) A description of the technical modifications or change in specifications which will be evaluated and the expected results;

(IV) If such further study is being required due to equipment or mechanical failure, the applicant must include information regarding the reason for the failure or breakdown and also include what procedures or equipment improvements have been made to protect against further breakdowns; and

(V) Such other information that the department considers necessary.

(s) Samples undergoing treatability studies at laboratories and testing facilities. Samples undergoing treatability studies and the laboratory or testing facility conducting such treatability studies (to the extent such facilities are not otherwise subject to chapter 70.105 RCW) are not subject to the requirements of this chapter, except WAC 173-303-050, 173-303-145, and 173-303-960 provided that the conditions of (s)(i) through (xiii) of this subsection are met. A mobile treatment unit (MTU) may qualify as a testing facility subject to (s)(i) through (xiii) of this subsection. Where a group of MTUs are located at the same site, the limitations specified in (s)(i) through (xiii) of this subsection apply to the entire group of MTUs collectively as if the group were one MTU.

(i) No less than forty-five days before conducting treatability studies the laboratory or testing facility notifies the department in writing that it intends to conduct treatability studies under this subsection.

(ii) The laboratory or testing facility conducting the treatability study has an EPA/state identification number.

(iii) No more than a total of 10,000 kg of "as received" media contaminated with nonacute dangerous waste, 2500 kg of media contaminated with acute hazardous waste or 250 kg of other "as received" dangerous waste is subject to initiation of treatment in all treatability studies in any single day. "As received" waste refers to the waste as received in the shipment from the generator or sample collector.

(iv) The quantity of "as received" dangerous waste stored at the facility for the purpose of evaluation in treatability studies does not exceed 10,000 kg, the total of which can include 10,000 kg of media contaminated with nonacute dangerous waste, 2500 kg of media contaminated with acute hazardous waste, 1000 kg of nonacute dangerous wastes other than contaminated media, and 1 kg of acutely hazardous waste. This quantity limitation does not include treatment materials (including nondangerous solid waste) added to "as received" dangerous waste.

(v) No more than ninety days have elapsed since the treatability study for the sample was completed, or no more than one year (two years for treatability studies involving bioremediation) has elapsed since the generator or sample collector shipped the sample to the laboratory or testing facility, whichever date first

occurs. Up to 500 kg of treated material from a particular waste stream from treatability studies may be archived for future evaluation up to five years from the date of initial receipt. Quantities of materials archived are counted against the total storage limit for the facility.

(vi) The treatability study does not involve the placement of dangerous waste on the land or open burning of dangerous waste.

(vii) The laboratory or testing facility maintains records for three years following completion of each study that show compliance with the treatment rate limits and the storage time and quantity limits. The following specific information must be included for each treatability study conducted:

(A) The name, address, and EPA/state identification number of the generator or sample collector of each waste sample;

(B) The date the shipment was received;

(C) The quantity of waste accepted;

(D) The quantity of "as received" waste in storage each day;

(E) The date the treatment study was initiated and the amount of "as received" waste introduced to treatment each day;

(F) The date the treatability study was concluded;

(G) The date any unused sample or residues generated from the treatability study were returned to the generator or sample collector or, if sent to a designated TSD facility, the name of the TSD facility and its EPA/state identification number.

(viii) The laboratory or testing facility keeps, on-site, a copy of the treatability study contract and all shipping papers associated with the transport of treatability study samples to and from the facility for a period ending three years from the completion date of each treatability study.

(ix) The laboratory or testing facility prepares and submits a report to the department by March 15 of each year that estimates the number of studies and the amount of waste expected to be used in treatability studies during the current year, and includes the following information for the previous calendar year:

(A) The name, address, and EPA/state identification number of the laboratory or testing facility conducting the treatability studies;

(B) The types (by process) of treatability studies conducted;

(C) The names and addresses of persons for whom studies have been conducted (including their EPA/state identification numbers);

(D) The total quantity of waste in storage each day;

(E) The quantity and types of waste subjected to treatability studies;

(F) When each treatability study was conducted;

(G) The final disposition of residues and unused sample from each treatability study.

(x) The laboratory or testing facility determines whether any unused sample or residues generated by the treatability study are dangerous waste under WAC 173-303-070 and if so, are subject to the requirements of this chapter, unless the residues and unused samples are returned to the sample originator under the exemption in (r) of this subsection.

(xi) The laboratory or testing facility notifies the department by letter when it is no longer planning to conduct any treatability studies at the site.

(xii) The date the sample was received, or if the treatability study has been completed, the date of the

treatability study, is marked and clearly visible for inspection on each container.

(xiii) While being held on site, each container and tank is labeled or marked clearly with the words "dangerous waste" or "hazardous waste." Each container or tank must also be marked with a label or sign which identifies the major risk(s) associated with the waste in the container or tank for employees, emergency response personnel and the public.

Note: If there is already a system in use that performs this function in accordance with local, state, or federal regulations, then such system will be adequate.

(t) Petroleum-contaminated media and debris that fail the test for the toxicity characteristic of WAC 173-303-090(8) (dangerous waste numbers D018 through D043 only) and are subject to the corrective action regulations under 40 CFR Part 280.

(u) Special incinerator ash (as defined in WAC 173-303-040).

(v) Wood ash that would designate solely for corrosivity by WAC 173-303-090 (6)(a)(iii). For the purpose of this exclusion, wood ash means ash residue and emission control dust generated from the combustion of untreated wood, wood treated solely with creosote, and untreated wood fiber materials including, but not limited to, wood chips, saw dust, tree stumps, paper, cardboard, residuals from waste fiber recycling, deinking rejects, and associated wastewater treatment solids. This exclusion allows for the use of auxiliary fuels including, but not limited to, oils, gas, coal, and other fossil fuels in the combustion process.

(w)(i) Spent wood preserving solutions that have been reclaimed and are reused for their original intended purpose; and

(ii) Wastewaters from the wood preserving process that have been reclaimed and are reused to treat wood.

(iii) Prior to reuse, the wood preserving wastewaters and spent wood preserving solutions described in (w)(i) and (ii) of this subsection, so long as they meet all of the following conditions:

(A) The wood preserving wastewaters and spent wood preserving solutions are reused on-site at water borne plants in the production process for their original intended purpose;

(B) Prior to reuse, the wastewaters and spent wood preserving solutions are managed to prevent release to either land or ground water or both;

(C) Any unit used to manage wastewaters and/or spent wood preserving solutions prior to reuse can be visually or otherwise determined to prevent such releases;

(D) Any drip pad used to manage the wastewaters and/or spent wood preserving solutions prior to reuse complies with the standards in Part 265, Subpart W which is incorporated by reference at WAC 173-303-400 (3)(a), regardless of whether the plant generates a total of less than 220 pounds/month of dangerous waste; and

(E) Prior to operating pursuant to this exclusion, the plant owner or operator submits to the department a one-time notification stating that the plant intends to claim the exclusion, giving the date on which the plant intends to begin operating under the exclusion, and containing the following language: "I have read the applicable regulation establishing an exclusion for wood preserving wastewaters and spent wood preserving solutions and understand it requires me to comply at all times with the conditions set out in the regulation." The plant must maintain a copy of that document in its on-site records for a period of no less than three years from the date specified in the notice. The exclusion applies only so long as the plant meets all of the conditions. If the plant goes out of compliance with any condition, it may apply to the department for reinstatement. The department may reinstate the exclusion upon finding that the plant has returned to compliance with all conditions and that violations are not likely to recur.

(F) Additional reports.

(I) Upon determination by the department that the storage of wood preserving wastewaters and spent wood preserving solutions in tanks and/or containers poses a threat to public health or the environment, the

department may require the owner/operator to provide additional information regarding the integrity of structures and equipment used to store wood preserving wastewaters and spent wood preserving solutions. This authority applies to tanks and secondary containment systems used to store wood preserving wastewaters and spent wood preserving solutions in tanks and containers. The department's determination of a threat to public health or the environment may be based upon observations of factors that would contribute to spills or releases of wood preserving wastewaters and spent wood preserving solutions or the generation of hazardous by-products. Such observations may include, but are not limited to, leaks, severe corrosion, structural defects or deterioration (cracks, gaps, separation of joints), inability to completely inspect tanks or structures, or concerns about the age or design specification of tanks.

(II) When required by the department, a qualified, independent professional engineer registered to practice in Washington state must perform the assessment of the integrity of tanks or secondary containment systems.

(III) Requirement for facility repairs and improvements. If, upon evaluation of information obtained by the department under (w)(iii)(F)(I) of this subsection, it is determined that repairs or structural improvements are necessary in order to eliminate threats, the department may require the owner/operator to discontinue the use of the tank system or container storage unit and remove the wood preserving wastewaters and spent wood preserving solutions until such repairs or improvements are completed and approved by the department.

(x) Nonwastewater splash condenser dross residue from the treatment of K061 in high temperature metals recovery units, provided it is shipped in drums (if shipped) and not land disposed before recovery.

(y) Used oil filters that are recycled in accordance with WAC 173-303-120, as used oil and scrap metal.

(z) Used oil re-refining distillation bottoms that are used as feedstock to manufacture asphalt products.

(aa) Wastes that fail the test for the toxicity characteristic in WAC 173-303-090 because chromium is present or are listed in WAC 173-303-081 or 173-303-082 due to the presence of chromium. The waste must not designate for any other characteristic under WAC 173-303-090, for any of the criteria specified in WAC 173-303-100, and must not be listed in WAC 173-303-081 or 173-303-082 due to the presence of any constituent from WAC 173-303-9905 other than chromium. The waste generator must be able to demonstrate that:

(i) The chromium in the waste is exclusively (or nearly exclusively) trivalent chromium; and

(ii) The waste is generated from an industrial process that uses trivalent chromium exclusively (or nearly exclusively) and the process does not generate hexavalent chromium; and

(iii) The waste is typically and frequently managed in nonoxidizing environments.

(bb)(i) Nonwastewater residues, such as slag, resulting from high temperature metals recovery (HTMR) processing of K061, K062 or F006 waste, in units identified as rotary kilns, flame reactors, electric furnaces, plasma arc furnaces, slag reactors, rotary hearth furnace/electric furnace combinations or industrial furnaces (as defined in WAC 173-303-040 - blast furnaces, smelting, melting and refining furnaces, and other devices the department may add to the list - of the definition for "industrial furnace"), that are disposed in subtitle D units, provided that these residues meet the generic exclusion levels identified in the tables in this paragraph for all constituents, and exhibit no characteristics of dangerous waste. Testing requirements must be incorporated in a facility's waste analysis plan or a generator's self-implementing waste analysis plan; at a minimum, composite samples of residues must be collected and analyzed quarterly and/or when the process or operation generating the waste changes. Persons claiming this exclusion in an enforcement action will have the burden of proving by clear and convincing evidence that the material meets all of the exclusion requirements.

Constituent	Maximum for any single composite sample-TCLP (mg/l)

Generic exclusion levels for K061
and K062 nonwastewater HTMR residues

Antimony	0.10
Arsenic	0.50
Barium	7.6
Beryllium	0.010
Cadmium	0.050
Chromium (total)	0.33
(2)Lead	0.15
Mercury	0.009
Nickel	1.0
Selenium	0.16
Silver	0.30
Thallium	0.020
Zinc	70

Generic exclusion levels for
F006 nonwastewater HTMR residues

Antimony	0.10
Arsenic	0.50
Barium	7.6
Beryllium	0.010
Cadmium	0.050
Chromium (total)	0.33
Cyanide (total) (mg/kg)	1.8
Lead	0.15
Mercury	0.009
Nickel	1.0
Selenium	0.16
Silver	0.30
Thallium	0.020
Zinc	70

(ii) A one-time notification and certification must be placed in the facility's files and sent to the department for K061, K062 or F006 HTMR residues that meet the generic exclusion levels for all constituents and do not exhibit any characteristics that are sent to subtitle D units. The notification and certification that is placed in the generator's or treater's files must be updated if the process or operation generating the waste changes and/or if the subtitle D unit receiving the waste changes. However, the generator or treater need only notify the department on an annual basis if such changes occur. Such notification and certification should be sent to the department by the end of the calendar year, but no later than December 31. The notification must include the following information: The name and address of the subtitle D unit receiving the waste shipments; the dangerous waste number(s) and treatability group(s) at the initial point of generation; and, the treatment standards applicable to the waste at the initial point of generation. The certification must be signed by an authorized representative and must state as follows: "I certify under penalty of law that the generic exclusion levels for all constituents have been met without impermissible dilution and that no characteristic of dangerous waste is exhibited. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment." These wastes are not excluded if they exhibit one or more of the dangerous waste characteristics (WAC 173-303-090) or criteria (WAC 173-303-100).

(cc)(i) Oil-bearing hazardous secondary materials (that is, sludges, by-products, or spent materials) that are generated at a petroleum refinery (NAICS code 324110) and are inserted into the petroleum refining process (NAICS code 324110 - including, but not limited to, distillation, catalytic cracking, fractionation, or thermal cracking units (that is, cokers)) unless the material is placed on the land, or speculatively accumulated before being so recycled. Materials inserted into thermal cracking units are excluded under this paragraph: Provided, That the coke product also does not exhibit a characteristic of hazardous waste. Oil-

bearing hazardous secondary materials may be inserted into the same petroleum refinery where they are generated, or sent directly to another petroleum refinery, and still be excluded under this provision. Except as provided in (cc)(ii) of this subsection, oil-bearing hazardous secondary materials generated elsewhere in the petroleum industry (that is, from sources other than petroleum refineries) are not excluded under this section. Residuals generated from processing or recycling materials excluded under this paragraph, where such materials as generated would have otherwise met a listing under WAC 173-303-081 and 173-303-082, are designated as F037 listed wastes when disposed of or intended for disposal.

(ii) Recovered oil that is recycled in the same manner and with the same conditions as described in (cc)(i) of this subsection. Recovered oil is oil that has been reclaimed from secondary materials (including wastewater) generated from normal petroleum industry practices, including refining, exploration and production, bulk storage, and transportation incident thereto (NAICS codes 211111, 211112, 213111, 213112, 541360, 237120, 238910, 324110, 486110, 486910, 486210, 221210, 486210, 487110, 488210, 488999, 722310, 424710, 454311, 454312, 424720, 425110, 425120). Recovered oil does not include oil-bearing hazardous wastes listed in WAC 173-303-081 and 173-303-082; however, oil recovered from such wastes may be considered recovered oil. Recovered oil does not include used oil as defined in WAC 173-303-040.

(dd) Dangerous waste Nos. K060, K087, K141, K142, K143, K144, K145, K147, and K148, and any wastes from the coke by-products processes that are dangerous only because they exhibit the toxicity characteristic (TC) specified in WAC 173-303-090(8) when, subsequent to generation, these materials are recycled to coke ovens, to the tar recovery process as a feedstock to produce coal tar, or mixed with coal tar prior to the tar's sale or refining. This exclusion is conditioned on there being no land disposal of the wastes from the point they are generated to the point they are recycled to coke ovens or tar recovery or refining processes, or mixed with coal tar.

(ee) Biological treatment sludge from the treatment of one of the following wastes listed in WAC 173-303-9904 - organic waste (including heavy ends, still bottoms, light ends, spent solvents, filtrates, and decantates) from the production of carbamates and carbamoyl oximes (Dangerous Waste No. K156), and wastewaters from the production of carbamates and carbamoyl oximes (Dangerous Waste No. K157) unless it exhibits one or more of the characteristics or criteria of dangerous waste.

(ff) Excluded scrap metal (processed scrap metal, unprocessed home scrap metal, and unprocessed prompt scrap metal) being recycled.

(gg) Shredded circuit boards being recycled: Provided, That they are:

(i) Stored in containers sufficient to prevent a release to the environment prior to recovery; and

(ii) Free of mercury switches, mercury relays and nickel-cadmium batteries and lithium batteries.

(hh) Petrochemical recovered oil from an associated organic chemical manufacturing facility, where the oil is to be inserted into the petroleum refining process (NAICS code 324110) along with normal petroleum refinery process streams, provided:

(i) The oil is hazardous only because it exhibits the characteristic of ignitability (as defined in WAC 173-303-090(5) and/or toxicity for benzene (WAC 173-303-090(8), waste code D018); and

(ii) The oil generated by the organic chemical manufacturing facility is not placed on the land, or speculatively accumulated before being recycled into the petroleum refining process.

An "associated organic chemical manufacturing facility" is a facility where the primary NAICS code is 325110, 325120, 325188, 325192, 325193, or 325199, but where operations may also include NAICS codes 325211, 325212, 325110, 325132, 325192; and is physically colocated with a petroleum refinery; and where the petroleum refinery to which the oil being recycled is returned also provides hydrocarbon feedstocks to the organic chemical manufacturing facility. "Petrochemical recovered oil" is oil that has been reclaimed from secondary materials (that is, sludges, by-products, or spent materials, including wastewater) from normal organic chemical manufacturing operations, as well as oil recovered from organic chemical manufacturing processes.

(ii) Spent caustic solutions from petroleum refining liquid treating processes used as a feedstock to produce cresylic or naphthenic acid unless the material is placed on the land, or accumulated speculatively

as defined in WAC 173-303-016(5).

(jj) Catalyst inert support media separated from one of the following wastes listed in WAC 173-303-9904 Specific Sources - Spent hydrotreating catalyst (EPA Hazardous Waste No. K171), and Spent hydrorefining catalyst (EPA Hazardous Waste No. K172). These wastes are not excluded if they exhibit one or more of the dangerous waste characteristics or criteria.

(kk) Leachate or gas condensate collected from landfills where certain solid wastes have been disposed: Provided, That:

(i) The solid wastes disposed would meet one or more of the listing descriptions for Hazardous Waste Codes K169, K170, K171, K172, K174, K175, K176, K177, and K178 if these wastes had been generated after the effective date of the listing;

(ii) The solid wastes described in (kk)(i) of this subsection were disposed prior to the effective date of the listing;

(iii) The leachate or gas condensate does not exhibit any characteristic or criteria of dangerous waste nor is derived from any other listed hazardous waste;

(iv) Discharge of the leachate or gas condensate, including leachate or gas condensate transferred from the landfill to a POTW by truck, rail, or dedicated pipe, is subject to regulation under sections 307(b) or 402 of the Clean Water Act.

(v) As of February 13, 2001, leachate or gas condensate derived from K169 - K172 is no longer exempt if it is stored or managed in a surface impoundment prior to discharge. After November 21, 2003, leachate or gas condensate derived from K176, K177, and K178 will no longer be exempt if it is stored or managed in a surface impoundment prior to discharge. There is one exception: If the surface impoundment is used to temporarily store leachate or gas condensate in response to an emergency situation (for example, shutdown of wastewater treatment system): Provided, That the impoundment has a double liner, and: Provided further, That the leachate or gas condensate is removed from the impoundment and continues to be managed in compliance with the conditions of this paragraph after the emergency ends.

(ll) Dredged material. Dredged material as defined in 40 CFR 232.2 that is subject to:

(i) The requirements of a permit that has been issued by the U.S. Army Corps of Engineers or an approved state under section 404 of the Federal Water Pollution Control Act (33 U.S.C. 1344);

(ii) The requirements of a permit that has been issued by the U.S. Army Corps of Engineers under section 103 of the Marine Protection, Research, and Sanctuaries Act of 1972 (33 U.S.C. 1413); or

(iii) In the case of a U.S. Army Corps of Engineers civil works project, the administrative equivalent of the permits referred to in (ll)(i) and (ii) of this subsection, as provided for in U.S. Army Corps of Engineers regulations, including, for example, 33 CFR 336.1, 336.2 and 337.3.

(mm) Condensates derived from the overhead gases from kraft mill steam strippers that are used to comply with 40 CFR 63.446(e). The exemption applies only to combustion at the mill generating the condensates.

(nn)(i) Controlled substances, legend drugs, and over-the-counter drugs that are state-only dangerous wastes.

(A) Controlled substances as defined and regulated by chapter 69.50 RCW (Schedule I through V);

(B) Legend drugs as defined and regulated by chapter 69.41 RCW; and

(C) Over-the-counter drugs as defined and regulated by chapter 69.60 RCW.

(ii) Controlled substances, legend drugs, and over-the-counter drugs that are held in the custody of law enforcement agencies or possessed by any licensee as defined and regulated by chapter 69.50 RCW or Title 18 RCW and authorized to possess drugs within the state of Washington are excluded, provided the drugs are disposed of by incineration in a controlled combustion unit with a heat input rate greater than 250

million British thermal units/hour, a combustion zone temperature greater than 1500 degrees Fahrenheit, or a facility permitted to incinerate municipal solid waste.

(iii) For the purposes of this exclusion the term "drugs" means:

(A) Articles recognized in the official United States pharmacopoeia or the official homeopathic pharmacopoeia of the United States;

(B) Substances intended for use in the diagnosis, cure, mitigation, treatment, or prevention of disease in man or other animals; or

(C) Substances (other than food) intended to affect the structure or any function of the body of man or other animals, as defined in RCW 18.64.011(3). (Note: RCW 18.64.011 (3)(d) is intentionally not included in the definition of drugs for this exclusion.)

(iv) When possessed by any licensee the term drugs used in this exclusion means finished drug products.

(oo) Cathode ray tubes (CRTs) and glass removed from CRTs:

(i) Prior to processing: These materials are not solid wastes if they are destined for recycling and if they meet the following requirements:

(A) Storage. CRTs must be either:

(I) Stored in a building with a roof, floor, and walls; or

(II) Placed in a container (that is, a package or a vehicle) that is constructed, filled, and closed to minimize releases to the environment of CRT glass (including fine solid materials).

(B) Labeling. Each container in which the CRT is contained must be labeled or marked clearly with one of the following phrases: "Used cathode ray tube(s) - contains leaded glass" or "leaded glass from televisions or computers." It must also be labeled: "Do not mix with other glass materials."

(C) Transportation. CRTs must be transported in a container meeting the requirements of (oo)(i)(A)(II) and (B) of this subsection.

(D) Speculative accumulation and use constituting disposal. CRTs are subject to the limitations on speculative accumulation as defined in WAC 173-303-016 (5)(d). If they are used in a manner constituting disposal, they must comply with the applicable requirements of WAC 173-303-505 instead of the requirements of this section.

(E) Exports. In addition to the applicable conditions specified in (oo)(i)(A) through (D) of this subsection, exporters of CRTs must comply with the following requirements:

(I) Notify EPA of an intended export before the CRTs are scheduled to leave the United States. A complete notification should be submitted sixty days before the initial shipment is intended to be shipped off-site. This notification may cover export activities extending over a twelve-month or lesser period. The notification must be in writing, signed by the exporter, and include the following information:

□ Name, mailing address, telephone number and EPA/state ID number (if applicable) of the exporter of the CRTs.

□ The estimated frequency or rate at which the CRTs are to be exported and the period of time over which they are to be exported.

□ The estimated total quantity of CRTs specified in kilograms.

□ All points of entry to and departure from each foreign country through which the CRTs will pass.

□ A description of the means by which each shipment of the CRTs will be transported (for example, mode of transportation vehicle (air, highway, rail, water, etc.), type(s) of container (drums, boxes, tanks,

etc.)).

□ The name and address of the recycler and any alternate recycler.

□ A description of the manner in which the CRTs will be recycled in the foreign country that will be receiving the CRTs.

□ The name of any transit country through which the CRTs will be sent and a description of the approximate length of time the CRTs will remain in such country and the nature of their handling while there.

(II) Notifications submitted by mail should be sent to the following mailing address: Office of Enforcement and Compliance Assurance, Office of Federal Activities, International Compliance Assurance Division, (Mail Code 2254A), Environmental Protection Agency, 1200 Pennsylvania Ave., N.W., Washington, D.C. 20460. Hand-delivered notifications should be sent to: Office of Enforcement and Compliance Assurance, Office of Federal Activities, International Compliance Assurance Division, (Mail Code 2254A), Environmental Protection Agency, Ariel Rios Bldg., Room 6144, 1200 Pennsylvania Ave., N.W., Washington, D.C. In both cases, the following must be prominently displayed on the front of the envelope: "Attention: Notification of intent to export CRTs."

(III) Upon request by EPA, the exporter must furnish to EPA any additional information which a receiving country requests in order to respond to a notification.

(IV) EPA will provide a complete notification to the receiving country and any transit countries. A notification is complete when EPA receives a notification which EPA determines satisfies the requirements of (oo)(i)(E)(I) of this subsection. Where a claim of confidentiality is asserted with respect to any notification information required by (oo)(i)(E)(I) of this subsection, EPA may find the notification not complete until any such claim is resolved in accordance with 40 CFR 260.2.

(V) The export of CRTs is prohibited unless the receiving country consents to the intended export. When the receiving country consents in writing to the receipt of the CRTs, EPA will forward an "Acknowledgment of Consent" to export CRTs to the exporter. Where the receiving country objects to receipt of the CRTs or withdraws a prior consent, EPA will notify the exporter in writing. EPA will also notify the exporter of any responses from transit countries.

(VI) When the conditions specified on the original notification change, the exporter must provide EPA with a written renotification of the change, except for changes to the telephone number in (oo)(i)(E)(I)(first bullet) of this subsection and decreases in the quantity indicated pursuant to (oo)(i)(E)(I)(third bullet) of this subsection. The shipment cannot take place until consent of the receiving country to the changes has been obtained (except for changes to information about points of entry and departure and transit countries pursuant to (oo)(i)(E)(I)(fourth bullet) and (i)(E)(I)(eighth bullet) of this section) and the exporter of CRTs receives from EPA a copy of the "Acknowledgment of Consent" to export CRTs reflecting the receiving country's consent to the changes.

(VII) A copy of the "Acknowledgment of Consent" to export CRTs must accompany the shipment of CRTs. The shipment must conform to the terms of the Acknowledgment.

(VIII) If a shipment of CRTs cannot be delivered for any reason to the recycler or the alternate recycler, the exporter of CRTs must renotify EPA of a change in the conditions of the original notification to allow shipment to a new recycler in accordance with (oo)(i)(E)(VI) of this subsection and obtain another "Acknowledgment of Consent" to export CRTs.

(IX) Exporters must keep copies of notifications and "Acknowledgments of Consent" to export CRTs for a period of five years following receipt of the "Acknowledgment."

(ii) Requirements for used CRT processing: CRTs undergoing CRT processing as defined in WAC 173-303-040 are not solid wastes if they meet the following requirements:

(A) Storage. CRTs undergoing processing are subject to the requirement of (oo)(i)(D) of this subsection.

(B) Processing.

(I) All activities specified in the second and third bullets of the definition of "CRT processing" in WAC 173-

303-040 must be performed within a building with a roof, floor, and walls; and

(II) No activities may be performed that use temperatures high enough to volatilize lead from CRTs.

(iii) Processed CRT glass sent to CRT glass making or lead smelting: Glass from CRTs that is destined for recycling at a CRT glass manufacturer or a lead smelter after processing is not a solid waste unless it is speculatively accumulated as defined in WAC 173-303-016 (5)(d).

(iv) Use constituting disposal: Glass from used CRTs that is used in a manner constituting disposal must comply with the requirements of WAC 173-303-505.

(v) Notification and recordkeeping for cathode ray tubes (CRTs) exported for reuse.

(A) Persons who export CRTs for reuse must send a one-time notification to the U.S. EPA Regional Administrator. The notification must include a statement that the notifier plans to export CRTs for reuse, the notifier's name, address, and EPA/state ID number (if applicable) and the name and phone number of a contact person.

(B) Persons who export CRTs for reuse must keep copies of normal business records, such as contracts, demonstrating that each shipment of exported CRTs will be reused. This documentation must be retained for a period of at least five years from the date the CRTs were exported.

(pp) Zinc fertilizers made from hazardous wastes provided that:

(i) The fertilizers meet the following contaminant limits:

(A) For metal contaminants:

Maximum Allowable Total Concentration Constituent in Fertilizer, per Unit (1%) of Zinc (ppm)	0.3
Arsenic	
Cadmium	1.4
Chromium	0.6
Lead	2.8
Mercury	0.3

(B) For dioxin contaminants the fertilizer must contain no more than eight parts per trillion of dioxin, measured as toxic equivalent (TEQ).

(ii) The manufacturer performs sampling and analysis of the fertilizer product to determine compliance with the contaminant limits for metals no less than every six months, and for dioxins no less than every twelve months. Testing must also be performed whenever changes occur to manufacturing processes or ingredients that could significantly affect the amounts of contaminants in the fertilizer product. The manufacturer may use any reliable analytical method to demonstrate that no constituent of concern is present in the product at concentrations above the applicable limits. It is the responsibility of the manufacturer to ensure that the sampling and analysis are unbiased, precise, and representative of the product(s) introduced into commerce.

(iii) The manufacturer maintains for no less than three years records of all sampling and analyses performed for purposes of determining compliance with the requirements of (pp)(ii) of this subsection. Such records must at a minimum include:

(A) The dates and times product samples were taken, and the dates the samples were analyzed;

(B) The names and qualifications of the person(s) taking the samples;

(C) A description of the methods and equipment used to take the samples;

(D) The name and address of the laboratory facility at which analyses of the samples were performed;

(E) A description of the analytical methods used, including any cleanup and sample preparation methods; and

(F) All laboratory analytical results used to determine compliance with the contaminant limits specified in this subsection (3)(pp).

(qq) Debris. Provided the debris does not exhibit a characteristic identified in WAC 173-303-090, the following materials are not subject to regulation under this chapter:

(i) Hazardous debris that has been treated using one of the required extraction or destruction technologies specified in Table 1 of 40 CFR section 268.45, which is incorporated by reference at WAC 173-303-140 (2)(a); persons claiming this exclusion in an enforcement action will have the burden of proving by clear and convincing evidence that the material meets all of the exclusion requirements; or

(ii) Debris that the department, considering the extent of contamination, has determined is no longer contaminated with hazardous waste.

[Statutory Authority: Chapters 70.95N, 70.105, and 70.105D RCW. 07-21-013 (Order 07-05), § 173-303-071, filed 10/5/07, effective 11/5/07. Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-071, filed 11/30/04, effective 1/1/05. Statutory Authority: Chapters 70.105 and 70.105D RCW. 03-07-049 (Order 02-03), § 173-303-071, filed 3/13/03, effective 4/13/03. Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW 70.105.007. 00-11-040 (Order 99-01), § 173-303-071, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018, (Order 97-03), § 173-303-071, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-071, filed 10/19/95, effective 11/19/95; 94-12-016 (Order 93-34), § 173-303-071, filed 5/23/94, effective 6/23/94; 94-01-060 (Order 92-33), § 173-303-071, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-071, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 89-02-059 (Order 88-24), § 173-303-071, filed 1/4/89; 87-14-029 (Order DE-87-4), § 173-303-071, filed 6/26/87; 86-12-057 (Order DE-85-10), § 173-303-071, filed 6/3/86; 85-09-042 (Order DE-85-02), § 173-303-071, filed 4/15/85; 84-09-088 (Order DE 83-36), § 173-303-071, filed 4/18/84. Statutory Authority: RCW 70.95.260 and chapter 70.105 RCW. 82-05-023 (Order DE 81-33), § 173-303-071, filed 2/10/82.]

173-303-072
Procedures and bases for exempting and excluding wastes.

(1) Purpose and applicability.

(a) The purpose of this section is to describe the procedures that will be followed by generators and the department when wastes are considered for exemption or exclusion from the requirements of this chapter. Any person(s) whose waste is exempted or excluded will not be subject to the requirements of this chapter unless the department revokes the exemption or exclusion.

(b) Any person seeking a waste exemption must submit a petition to the department according to the procedures of WAC 173-303-910(3). A petition for exemption will be assessed against the applicable bases for exemption described in subsections (3), (4), and (5) of this section.

(c) Any persons seeking to categorically exclude a class of wastes must submit a petition to the department according to the procedures of WAC 173-303-910(4). A petition for exclusion will be assessed against the applicable bases for exclusion described in subsection (6) of this section.

(2) Department procedures. When considering, granting, or denying a petition for exemption or exclusion, the department will follow the appropriate procedures described in WAC 173-303-910(1).

(3) Bases for exempting wastes. To successfully petition the department to exempt a waste, the petitioner must demonstrate to the satisfaction of the department that:

(a) He has been able to accurately describe the variability or uniformity of his waste over time, and has been able to obtain demonstration samples which are representative of his waste's variability or uniformity; and, either

(b) The representative demonstration samples of his waste are not designated DW or EHW by the

dangerous waste criteria, WAC 173-303-100; or

(c) It can be shown, from information developed by the petitioner through consultation with the department, that his waste does not otherwise pose a threat to public health or the environment. However, this basis for exemption is not applicable to wastes that exhibit any of the characteristics specified in WAC 173-303-090, except 173-303-090 (6)(a)(iii).

(4) Additional bases for exempting listed wastes. In addition to the demonstrations required by subsections (3)(a) and (b) of this section, for wastes listed in WAC 173-303-081 or 173-303-082 the petitioner must also demonstrate to the satisfaction of the department that his waste is not capable of posing a substantial present or potential threat to public health or the environment when improperly treated, stored, transported, disposed of or otherwise managed. The following factors will be considered by the department when assessing such a demonstration:

(a) Whether or not the listed waste contains the constituent or constituents which caused it to be listed. (For the purposes of this subsection, the constituents referred to will include any of the dangerous waste constituents listed in WAC 173-303-9905);

(b) The nature of the threat posed by the waste constituent(s);

(c) The concentration of the constituent(s) in the waste;

(d) The potential of the constituent(s) or any degradation product of the constituent(s) to migrate from the waste into the environment under the types of improper management considered in (h) of this subsection;

(e) The persistence of the constituent(s) or any degradation product of the constituent(s);

(f) The potential for the constituent(s) or any degradation product of the constituent(s) to degrade into nonharmful constituents and the rate of degradation;

(g) The degree to which the constituent(s) or degradation product of the constituent(s) bioaccumulates in ecosystems;

(h) The plausible types of improper management to which the waste could be subjected;

(i) The quantities of the waste generated at individual generation sites or on a statewide basis. Under this factor, the department will also consider whether or not the waste is listed under WAC 173-303-081 as a discarded chemical product and occurs in a relatively pure form. Any waste discarded chemical product which exceeds the quantity exclusion limit specified in WAC 173-303-081(2) for that waste will not be exempted;

(j) The nature and severity of the public health and environmental damage that has occurred as a result of the improper management of wastes containing the constituent(s);

(k) Actions taken by other governmental agencies or regulatory programs based on the health or environmental threat posed by the waste or waste constituent(s); and

(l) Such other factors as may be appropriate.

(5) Reserve.

(6) Bases for categorically excluding classes of wastes. This subsection does not apply to any waste class that includes hazardous waste regulated under 40 CFR Part 261. To successfully petition the department to categorically exclude a class of wastes, petitioners must demonstrate to the satisfaction of the department that the petition or petitions for exclusion:

(a) Accurately describe the class of wastes for which categorical exclusion is sought and show that the class of wastes does not include any wastes which would be regulated as hazardous waste under 40 CFR Part 261;

(b) Describe the variability or uniformity of the class of wastes over time and in relation to the individual wastes that comprise the class of waste;

(c) Discuss the generators and their individual wastes that belong to the class of wastes and, to the extent practical, any generators or individual wastes that, although belonging to the class of wastes, are not represented by the petition or petitions; and

(d) For each individual waste within the class of wastes, provide the demonstration described by subsection (3) of this section, except that where it is determined by consultation with the department to be impractical to provide the demonstration for each individual waste, the petitioner or petitioners will provide the demonstration for samples of the individual wastes determined by consultation with the department to be representative of the class of wastes.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-072, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-072, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-072, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 84-14-031 (Order DE 84-22), § 173-303-072, filed 6/27/84.]

173-303-073
Conditional exclusion of special wastes.

(1) Purpose. Special wastes pose a relatively low hazard to human health and the environment. The department believes that special wastes can be safely managed with a level of protection that is intermediate between dangerous and nondangerous solid wastes. This section establishes a conditional exclusion for the management of special wastes.

(2) Exclusion. Special wastes are excluded from the requirements of chapter 173-303 WAC, except for WAC 173-303-050; 173-303-060; 173-303-140 (4)(c); 173-303-145; 173-303-960; and 173-303-510 excluding subsections (4)(a), (4)(b)(iii), (5), (6)(c), and (6)(d). In addition, special waste must be treated as dangerous waste for purposes of pollution prevention planning as required in chapters 173-307 and 173-305 WAC. Special wastes will not be considered as dangerous waste, provided they are managed in accordance with the standards in this subsection and provided they are disposed, legitimately recycled, or treated on-site consistent with the requirements of WAC 173-303-170 (3)(c).

(a) Generators may not accumulate special waste on-site for more than one hundred eighty days from the date the quantity of waste exceeds two thousand two hundred pounds. The generator must keep a written record showing the dates when accumulation of the wastes began;

(b) During accumulation, special waste must be stored in a manner to prevent releases to the environment. This includes, but is not limited to, storing wastes in compatible containers, on impermeable surfaces, or in secondary containment structures, etc.;

(c) Facilities that receive special waste for recycling must meet the requirements of (b) of this subsection and store special wastes for no more than one hundred eighty days.

(d) All workers handling special wastes must be informed of the waste's potential hazard, either through worker training, health and safety plans, or notification of workers on a case-by-case basis;

(e) Special wastes must be transported directly from their site of generation to any off-site recycling, treatment, or disposal destination. The wastes must not pass through any intermediate solid waste processing facility, such as a transfer station, unless:

(i) The transfer station operator has made specific provisions for managing special waste by physical segregation, packing, or other means to ensure that workers and the public are not exposed to the waste stream at the transfer station;

(ii) The provisions are reflected in the facilities operating plans;

(iii) The plans have been approved by the transfer station's solid waste permitting authority; and

(iv) The transfer station operator has informed workers of the wastes' potential hazard according to (d) of this subsection;

(f) A document must accompany special waste during transit which identifies the type and amount of special waste, its place of origin, the identity of the generator, and the facility to which it is directed. An example form is provided in WAC 173-303-9906. The generator and the receiving facility must maintain a record of the facilities receipt of the special waste for at least five years;

(g) Disposal of special waste must be in landfill units which:

(i) Are permitted in accordance with chapter 173-351 WAC, provided that an engineered liner is used to meet the requirements of arid landfill design requirements, WAC 173-351-300 (2)(b), or are permitted under WAC 173-303-800 through 173-303-840 or if out-of-state under 40 CFR Part 258 or Part 270; and

(ii) Are not currently undergoing corrective action under WAC 173-351-440(6), 40 CFR 258.56, or a similar requirement in state regulations approved by the United States EPA pursuant to 42 USC 6945 (c)(1)(B).

(3) Reserve.

[Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW 70.105.007. 00-11-040 (Order 99-01), § 173-303-073, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-073, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-073, filed 10/19/95, effective 11/19/95.]

173-303-075
Certification of designation.

(1) Purpose and applicability.

(a) The purpose of WAC 173-303-075 is to establish procedures by which the generator of a solid waste may apply to the department for a review of his waste, and for a determination of the designation of his waste. When a final determination is made, the department will issue a certificate of designation which will describe the status of the generator's waste with respect to the designation requirements of this chapter 173-303 WAC.

(b) The provisions of this section are applicable to any person who produces a solid waste, who may be subject to the requirements of this chapter 173-303 WAC as the generator of a dangerous waste and who wishes to obtain a certificate designating the status of his waste.

(2) Certification. Any person who produces a solid waste which could be a dangerous waste may apply to the department, in accordance with the guidelines published pursuant to WAC 173-303-075(4), for a certificate of designation for his waste.

(a) The certificate of designation will describe the status of the designation for a waste or wastes as follows:

(i) Either, the certificate will state that the waste or wastes listed in the certificate are designated dangerous waste; or

(ii) The certificate will state that the waste or wastes listed in the certificate are not designated dangerous waste under the designation lists or characteristics of WAC 173-303-080 through 173-303-090; or

(iii) The certificate will state that the waste or wastes listed in the certificate are not designated dangerous waste under the dangerous waste lists, characteristics or criteria, WAC 173-303-080 through 173-303-100.

(b) The certificate of designation will, at a minimum, include the following information:

(i) The name, address, telephone number and, where applicable, the EPA/state identification number of the person to whom the certificate is issued;

(ii) A statement of the status of the designation of the waste or wastes listed in the certificate and, if designated, whether DW or EHW;

(iii) A listing of the waste or wastes for which the certificate has been issued;

(iv) The signature of the director or his designee;

(v) The date on which the certificate was issued; and

(vi) The period of time or conditions for which the certificate is valid.

(c) Once a certificate of designation has been issued to a person, that person is no longer subject to the designation procedures of WAC 173-303-080 through 173-303-100, unless the period of time for which the certificate is valid expires, the conditions under which the certificate is valid change, or the department withdraws its certification of designation in accordance with WAC 173-303-075(5). If the certificate states that the waste or wastes listed in it are designated, then the person to whom the certificate is issued must comply with all applicable requirements of this chapter 173-303 WAC. If the certificate states that the waste or wastes listed in it are not designated, then the person to whom the certificate is issued is not subject to the requirements of this chapter 173-303 WAC, unless the certificate becomes invalid or the department withdraws its certification.

(d) While an application for a certificate of designation is pending final action by the department, the person applying for certification must comply with all applicable requirements of this chapter 173-303 WAC.

(e) While a certificate of designation is being amended, in accordance with WAC 173-303-075(5), the certificate will remain in effect except for those parts of the certificate which the department specifically suspends.

(3) Designation. Determination of the status of designation for a waste or wastes for which a certificate of designation is being sought will follow the procedures set forth in this subsection.

(a) A waste will be certified as a dangerous waste if it is designated under any of the methods set forth in WAC 173-303-080 through 173-303-100.

(b) A waste will be certified as not a dangerous waste if:

(i) It has only been checked against WAC 173-303-080 through 173-303-090 (lists and characteristics) and it is not designated; or

(ii) It has been checked against the dangerous waste lists, characteristics and criteria, WAC 173-303-080 through 173-303-100, and it is not designated.

(4) Application. Any person who wishes to apply for a certificate of designation must do so according to the certification guidelines published by and available from the department. The department will follow the procedures specified in the certification guidelines when considering an application for a certificate.

(5) Review of certification. Review of and changes to or withdrawal of certificates of designation will be performed by the department according to the procedures specified in the certification guidelines, available from the department. At a minimum, the certification guidelines provide for the following procedures:

(a) The department will periodically review each certificate of designation to insure that it is current and accurately states the proper designation for the waste or wastes listed on the certificate.

(b) The department may amend, or any person with a certificate of designation may request the department to amend, any certificate in the event that changes to the certificate are necessary to keep it current or maintain its accuracy. The person will obtain concurrence of the department if he wishes to

amend his certificate to reflect changes in the information on the certificate (e.g., new wastes, changes in waste properties, changes of address, etc.).

(c) The department reserves the authority to withdraw any certificate of designation if there is reason to believe that the certificate results in a threat to public health or the environment. If a certificate is withdrawn, then the waste or wastes listed on the certificate will be subject to all applicable requirements of this chapter 173-303 WAC.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-075, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-075, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapter 70.105 RCW. 84-09-088 (Order DE 83-36), § 173-303-075, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-075, filed 2/10/82.]

173-303-077
Requirements for universal waste.

The wastes listed in this section are exempt from regulation under WAC 173-303-140, 173-303-170 through 173-303-9907 (except for WAC 173-303-960), and except as specified in WAC 173-303-573, and therefore are not fully regulated as dangerous waste. The wastes listed in this section are subject to regulation under WAC 173-303-573:

(1) Batteries as described in WAC 173-303-573(2);

(2) Thermostats as described in WAC 173-303-573(3);

(3) Mercury-containing equipment as described in WAC 173-303-573(4); and

(4) Lamps as described in WAC 173-303-573(5).

[Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-077, filed 11/30/04, effective 1/1/05; 00-11-040 (Order 99-01), § 173-303-077, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-077, filed 1/12/98, effective 2/12/98.]

173-303-080
Dangerous waste lists.

The dangerous waste lists include:

(1) WAC 173-303-081, Discarded chemical products;

(2) WAC 173-303-082, Dangerous waste sources.

[Statutory Authority: Chapter 70.105 RCW. 89-02-059 (Order 88-24), § 173-303-080, filed 1/4/89. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-080, filed 2/10/82.]

processing, blending, or other treatment is also regulated if it is destined to be burned for energy recovery.

(d) If a small quantity generator's used oil is to be recycled by being burned for energy recovery or re-refined, the used oil is subject to WAC 173-303-515.

[Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-070, filed 11/30/04, effective 1/1/05. Statutory Authority: Chapters 70.105 and 70.105D RCW. 03-07-049 (Order 02-03), § 173-303-070, filed 3/13/03, effective 4/13/03. Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW 70.105.007. 00-11-040 (Order 99-01), § 173-303-070, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-070, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-070, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-070, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapter 70.105 RCW. 93-02-050 (Order 92-32), § 173-303-070, filed 1/5/93, effective 2/5/93. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-070, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 89-02-059 (Order 88-24), § 173-303-070, filed 1/4/89; 87-14-029 (Order DE-87-4), § 173-303-070, filed 6/26/87; 86-12-057 (Order DE-85-10), § 173-303-070, filed 6/3/86; 84-14-031 (Order DE 84-22), § 173-303-070, filed 6/27/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-070, filed 2/10/82.]

173-303-071
Excluded categories of waste.

(1) Purpose. Certain categories of waste have been excluded from the requirements of chapter 173-303 WAC, except for WAC 173-303-050, because they generally are not dangerous waste, are regulated under other state and federal programs, or are recycled in ways which do not threaten public health or the environment. WAC 173-303-071 describes these excluded categories of waste.

(2) Excluding wastes. Any persons who generate a common class of wastes and who seek to categorically exclude such class of wastes from the requirements of this chapter must comply with the applicable requirements of WAC 173-303-072. No waste class will be excluded if any of the wastes in the class are regulated as hazardous waste under 40 CFR Part 261.

(3) Exclusions. The following categories of waste are excluded from the requirements of chapter 173-303 WAC, except for WAC 173-303-050, 173-303-145, and 173-303-960, and as otherwise specified:

(a)(i) Domestic sewage; and

(ii) Any mixture of domestic sewage and other wastes that passes through a sewer system to a publicly owned treatment works (POTW) for treatment provided:

(A) The generator or owner/operator has obtained a state waste discharge permit issued by the department, a temporary permit obtained pursuant to RCW 90.48.200, or pretreatment permit (or written discharge authorization) from a local sewage utility delegated pretreatment program responsibilities pursuant to RCW 90.48.165;

(B) The waste discharge is specifically authorized in a state waste discharge permit, pretreatment permit or written discharge authorization, or in the case of a temporary permit the waste is accurately described in the permit application;

(C) The waste discharge is not prohibited under 40 CFR Part 403.5; and

(D) The waste prior to mixing with domestic sewage must not exhibit dangerous waste characteristics for ignitability, corrosivity, reactivity, or toxicity as defined in WAC 173-303-090, and must not meet the dangerous waste criteria for toxic dangerous waste or persistent dangerous waste under WAC 173-303-100, unless the waste is treatable in the publicly owned treatment works (POTW) where it will be received. This exclusion does not apply to the generation, treatment, storage, recycling, or other management of dangerous wastes prior to discharge into the sanitary sewage system;

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(b) Industrial wastewater discharges that are point-source discharges subject to regulation under Section

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Chapter 173-308 WAC
BIOSOLIDS MANAGEMENT

WAC

173-308-010	Authority and purpose.
173-308-020	Applicability.
173-308-030	Relationship to other regulations.
173-308-040	Direct enforceability.
173-308-050	Delegation of authority.
173-308-060	Biosolids not classified as solid waste.
173-308-070	Use of term, "biosolids"—Explanation.
173-308-080	Definitions.
173-308-090	Requirement for a person who prepares biosolids.
173-308-100	Requirement for a person who transports biosolids.
173-308-110	Requirement for a person who applies biosolids.
173-308-120	Requirement to obtain and provide information.
173-308-130	Additional or more stringent requirements.
173-308-140	Biosolids sampling and analysis methods.
173-308-150	Frequency of biosolids monitoring.
173-308-160	Biosolids pollutant limits.
173-308-170	Pathogen reduction.
173-308-180	Vector attraction reduction.
173-308-190	Protecting waters of the state—Agronomic rate requirement.
173-308-200	Exemptions based on the exceptional quality of biosolids.
173-308-210	Bulk biosolids applied to agricultural land.
173-308-220	Bulk biosolids applied to forestland.
173-308-230	Bulk biosolids applied to a public contact site.
173-308-240	Bulk biosolids applied to a land reclamation site.
173-308-250	Bulk biosolids applied to a lawn or home garden.
173-308-260	Biosolids sold or given away in a bag or other container.
173-308-270	Domestic septage management requirements.
173-308-275	Contents of signs for land application sites.
173-308-280	Requirements for facilities storing biosolids.
173-308-290	Recordkeeping.
173-308-295	Annual reports.
173-308-300	Disposal of municipal sewage sludge or biosolids in municipal solid waste landfill units.
173-308-310	Permitting.
173-308-320	Permit fees.
173-308-900	Appendix A—Procedure to determine the annual whole biosolids application rate.

WAC 173-308-010 Authority and purpose. (1) **Authority.** This chapter is adopted under the authority of chapters 70.95J and 70.95 RCW.

(2) **Purpose.**

(a) The purpose of this chapter is to protect human health and the environment when biosolids are applied to the land. This chapter encourages the maximum beneficial use of biosolids, and is intended to conform to all applicable federal rules adopted under the Federal Clean Water Act as it existed on February 4, 1987.

(b) This chapter establishes permitting requirements for treatment works treating domestic sewage that engage in applicable biosolids treatment or management practices, including any person, site, or facility that has been designated as a treatment works treating domestic sewage.

(c) This chapter establishes standards for the treatment, quality, and management of municipal sewage sludge and domestic septage that are directly enforceable, and that allow these materials to be classified and managed as biosolids.

(d) This chapter establishes requirements, standards, management practices, and monitoring, recordkeeping and reporting requirements that are applicable when biosolids are applied to the land and when municipal sewage sludge is disposed in a municipal solid waste landfill unit as defined in WAC 173-351-100.

(e) This chapter establishes fees for permits issued to facilities that engage in applicable biosolids management activities.

Fees under WAC 173-308-320 do not apply to persons whose activity is limited to pumping, hauling, temporarily storing, or delivering septage or biosolids to other facilities or land application sites, if:

(i) They do not engage in the treatment of the septage or biosolids;

(ii) They have not been designated as a treatment works treating domestic sewage; and

(iii) The generating and receiving facility or land application site is in compliance with the requirements of WAC 173-308-310.

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-010, filed 2/18/98, effective 3/21/98.]

WAC 173-308-020 Applicability. (1) Unless otherwise specified in this chapter, these rules apply to the following:

(a) A person who prepares biosolids;

(b) A person who stores biosolids;

(c) A person who applies biosolids to the land;

(d) Biosolids that are applied to the land;

(e) The land where biosolids are applied;

(f) The owner and lease-holder of land where biosolids are applied;

(g) A person who disposes of municipal sewage sludge in a municipal solid waste landfill;

(h) Municipal sewage sludge that is disposed of in a municipal solid waste landfill.

(2) This chapter does not apply to the following municipal sewage sludge and biosolids management facilities and practices:

(a) The firing of municipal sewage sludge in an incinerator.

(b) The placing or disposal of municipal sewage sludge or biosolids in facilities other than municipal solid waste landfills.

(3) Except as provided in (a) and (g) of this subsection, the following solid wastes are not regulated under this chapter:

(a) Sludge generated at an industrial facility during the treatment of industrial wastewater, including sewage sludge generated during the treatment of industrial wastewater combined with domestic sewage; sludge generated at an industrial facility during the treatment of only domestic sewage is considered municipal sewage sludge subject to the requirements of this chapter.

(b) Sewage sludge determined to be hazardous in accordance with chapter 70.105 RCW or rules adopted thereunder.

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(c) Sewage sludge with a concentration of polychlorinated biphenyls (PCBs) equal to or greater than 50 milligrams per kilogram of total solids (dry weight basis).

(d) Ash generated during the firing of municipal sewage sludge or biosolids in an incinerator.

(e) Grit or screenings generated during preliminary treatment of domestic sewage in a treatment works.

(f) Sludge generated during the treatment of either surface water or ground water used for drinking water.

(g) Commercial septage, industrial septage, or a mixture of domestic septage and commercial or industrial septage; on a case-by-case basis, on request of the person who applies septage to the land or at the department's discretion, the department may designate the septage in this subsection (3)(g) as septage that is domestic in quality, and require the septage to be managed in accordance with the provisions of this chapter.

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-020, filed 2/18/98, effective 3/21/98.]

WAC 173-308-030 Relationship to other regulations. In addition to the requirements of this chapter, other laws, regulations, and ordinances may also apply to biosolids. These include but are not limited to the following:

(1) Commercial fertilizers are subject to regulation by the Washington state department of agriculture. The following statutes and rules apply to biosolids meeting the definition of a commercial fertilizer under chapter 15.54 RCW:

(a) Chapter 15.54 RCW - Fertilizers, minerals, and limes; and chapter 16-200 WAC - rules relating to fertilizers, minerals and limes, including requirements for labeling, licensing, and registration;

(b) Chapter 19.94 RCW - Weights and measures; and chapter 16-666 WAC - Weights and measures—Packaging and labeling regulations.

(2) Except as required in WAC 173-308-100, the transportation of biosolids or municipal sewage sludge is subject to regulation by the Washington state utilities and transportation commission under Title 81 RCW.

(3) Facilities required to obtain permits under WAC 173-308-310 must comply with the requirements in chapter 43.21C RCW and the State Environmental Policy Act rules adopted under chapter 197-11 WAC. Public notice and hearing requirements under the State Environmental Policy Act may be coordinated with the similar requirements of this chapter.

(4) Biosolids facilities and sites where biosolids are applied to the land must comply with other applicable federal, state and local laws including zoning and land use requirements. Enforcement of other laws and regulations is the responsibility of the agency with jurisdiction.

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-030, filed 2/18/98, effective 3/21/98.]

WAC 173-308-040 Direct enforceability. All persons and facilities subject to the requirements of this chapter must comply with these rules on the effective date of the applicable regulation, regardless of whether or not a permit has been issued under WAC 173-308-310.

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-040, filed 2/18/98, effective 3/21/98.]

WAC 173-308-050 Delegation of authority. (1) Upon the request of a local health department, the department may delegate authority to implement and assist in the administration of appropriate portions of this chapter.

Delegation must be consistent with any applicable state-EPA agreement regarding delegation of federal biosolids program authority.

(2) Method of delegation.

(a) Delegation will be accomplished through an instrument of mutual consent that is acceptable to both the department and the local health department seeking delegation.

(b) The department may revoke part or all of a delegation of authority under this section if it finds that a local health department has failed to adequately carry out any portion of a delegated responsibility.

(c) As an alternative to revocation of local delegation under (b) of this subsection, the department may correct any deficiencies in a locally approved state permit element by implementing the requirements of this chapter in a separate state approved land application plan or permit. In such case the requirements of the state plan or permit will be in addition to or take precedent over local requirements.

(3) Contents of delegation agreements. At a minimum, delegation agreements must specify the authorities and responsibilities that are being delegated to a local health department. Other authorities and responsibilities are assumed to be retained by the department.

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-050, filed 2/18/98, effective 3/21/98.]

WAC 173-308-060 Biosolids not classified as solid waste. (1) The state of Washington recognizes biosolids as a valuable commodity. Biosolids are not solid waste and are not subject to regulation under solid waste laws.

(2) Municipal sewage sludge or septage that fails to meet standards for classification as biosolids is a solid waste, and may not be applied to the land.

(3) Municipal sewage sludge or septage that will be disposed in a landfill is a solid waste.

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-060, filed 2/18/98, effective 3/21/98.]

WAC 173-308-070 Use of term, "biosolids"—Explanation. Biosolids is a term adopted in state statute to distinguish municipal sewage sludge that is suitable for land application from that which is not. Under state law biosolids includes both municipal sewage sludge and septage that meet applicable criteria. Federal rules do not use the term "biosolids," and rely instead on the term "sewage sludge," which under the federal system includes domestic septage. Some federal guidance documents do use the term biosolids. Unless the context requires otherwise, biosolids is the term used in this chapter to refer to municipal sewage sludge or septage that has been or is being treated to meet standards so that it can be applied to the land. Material that will be disposed in a landfill is considered municipal sewage sludge. When the term septage is used, the reference is exclusively to septage.

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-070, filed 2/18/98, effective 3/21/98.]

WAC 173-308-080 Definitions. Unless the department determines that the context of the rule requires otherwise, the following definitions are applicable for the purposes of this chapter.

"Administrator" means the Administrator of the United States Environmental Protection Agency, or an authorized representative.

"Aerobic digestion" is the biochemical decomposition of organic matter in biosolids into carbon dioxide and water by microorganisms in the presence of air. Aerobic digestion does not include composting.

"Agricultural land" is land on which a food crop, feed crop, or fiber crop is grown. This includes range land and land used as pasture.

"Agronomic rate" is the whole biosolids application rate (dry weight basis) that will provide the amount of nitrogen required for optimum growth of vegetation, and that will not result in the violation of applicable standards or requirements for the protection of ground or surface water as established under chapter 90.48 RCW and related rules including chapters 173-200 and 173-201 WAC.

"Anaerobic digestion" is the biochemical decomposition of organic matter in biosolids into methane gas and carbon dioxide by microorganisms in the absence of air. Anaerobic digestion does not include composting.

"Annual pollutant loading rate" is the maximum amount of a pollutant that can be applied to a unit area of land during a three hundred sixty-five-day period.

"Annual whole biosolids application rate" is the maximum amount of biosolids (dry weight basis) that can be applied to a unit area of land during a three hundred sixty-five-day period.

"Apply biosolids or biosolids applied to the land" means the land application of biosolids for the purpose of beneficial use.

"Beneficial use facility" means a site or sites where biosolids are applied to the land for beneficial use, which has been permitted as a treatment works treating domestic sewage in accordance with the provisions of WAC 173-308-310, and that has been designated as a beneficial use facility through the permitting process.

"Beneficial use of biosolids" means the application of biosolids to the land for the purposes of improving soil characteristics including tilth, fertility, and stability and enhancing the growth of vegetation consistent with protecting human health and the environment.

"Biosolids" means municipal sewage sludge that is a primarily organic, semisolid product resulting from the wastewater treatment process, that can be beneficially recycled and meets all applicable requirements under this chapter. Biosolids includes a material derived from biosolids, and septic tank sludge, also known as septage, that can be beneficially recycled and meets all applicable requirements under this chapter. For the purposes of this rule, semisolid products include biosolids or products derived from biosolids ranging in character from mostly liquid to fully dried solids.

"Bulk biosolids" means biosolids that are not sold or given away in a bag or other container for application to the land.

"Ceiling concentration" means the maximum concentration of a pollutant in any biosolids sample, beyond which level the biosolids would be classified as municipal sewage sludge not suitable for application to the land. Ceiling concentrations are established in Table 1 of WAC 173-308-160.

"Class I biosolids management facility" is any publicly owned treatment works (POTW), as defined in 40 CFR 501.2, required to have an approved pretreatment program under 40 CFR 403.8(a) (including any POTW located in a state that has elected to assume local program responsibilities under 40 CFR 403.10(e)), and any treatment works treating domestic sewage, as defined in 40 CFR 122.2, classified as a Class I biosolids management facility by the EPA Regional Administrator, or in the case of approved state programs, the Regional Administrator in conjunction with the state director, because of the potential for its biosolids use or disposal practice to affect public health and the environment adversely.

"Clean Water Act" or **"CWA"** means the Clean Water Act or Federal Clean Water Act (FCWA) (formerly referred to as either the Federal Water Pollution Act or the Federal Water Pollution Control Act Amendments of 1972), Public Law 92-500, as amended by Public Law 95-217, Public Law 95-576, Public Law 96-483, Public Law 97-117, and Public Law 100-4.

"Composting" means the controlled biological degradation of organic solid waste yielding a product for use as a soil conditioner. This does not include the treatment of sewage sludge in a digester at a wastewater treatment plant.

"Cumulative pollutant loading rate" is the maximum amount of a pollutant that can be applied to an area of land from biosolids that exceed the pollutant concentration limits established in Table 3 of WAC 173-308-160.

"Density of microorganisms" is the number of microorganisms per unit mass of total solids (dry weight) in the biosolids.

"Department" means the Washington state department of ecology and, within the scope of its delegation, a local health department that has been delegated authority under WAC 173-308-050.

"Director" means the director of the department of ecology or his or her authorized representative.

"Disposal on an emergency basis" means a period up to but not exceeding one year. Generally, emergency situations requiring the use of disposal facilities will normally occur as a result of inclement weather conditions at a beneficial use site, contractual or technical difficulties in the treatment, transportation, or application of the biosolids, or as a result of short term economic or administrative barriers, any and all of which are expected to be resolved within a period of one year.

"Disposal on a long-term basis" means to adopt disposal as a preferred method of management for at least five years, or for an indefinite period of time with no expectation for pursuing other management alternatives.

"Disposal on a temporary basis" means a period of more than one but less than five years. Generally, situations requiring the temporary use of disposal facilities will nor-

mally occur as a result of deficiencies in the wastewater or biosolids treatment process, or economic, administrative, or contractual constraints which cannot be resolved in less than one year.

"**Domestic septage**" means domestic septage - Class I, Class II, or Class III as defined in this section.

"**Domestic septage - Class I**" is liquid or solid material removed from domestic septic tanks, cess pools, or similar treatment works that receive only domestic sewage, and that has had a sufficiently long residency time to be considered largely stabilized. For the purposes of managing mixed loads or batches of septage, a load or batch is considered Class I if it does not exceed twenty-five percent by volume of Class II domestic septage or twenty-five percent by volume of restaurant grease trap waste, unless otherwise approved by the regulatory authority.

"**Domestic septage - Class II**" is liquid or solid material removed from portable toilets, type III marine sanitation devices, vault toilets, pit toilets, RV holding tanks or other similar holding systems that receive only domestic sewage.

"**Domestic septage - Class III**" is liquid or solid material removed from domestic septic tanks, cess pools, or similar treatment works that receive sewage from commercial or industrial sources, but which the department has determined to be domestic in quality under WAC 173-308-020 (3)(g).

"**Domestic septage managed as biosolids originating from municipal sewage sludge**" means domestic septage managed as if it had originated from a sewage treatment process at a publicly owned treatment works.

"**Domestic sewage**" is waste and wastewater from humans or household operations that is discharged to or otherwise enters a treatment works.

"**Dry weight basis**" means calculated on the basis of having been dried at 105°C until reaching a constant mass (i.e., essentially one hundred percent solids content).

"**EPA**" means the United States Environmental Protection Agency.

"**Exceptional quality biosolids**" means biosolids that meet the pollutant concentration limits in Table 3 of WAC 173-308-160, the Class A pathogen reduction requirements in one of WAC 173-308-170 (2)(a) through (f), and the vector attraction reduction requirements in one of WAC 173-308-180 (2) through (7).

"**Facility**" means a treatment works treating domestic sewage as defined in this chapter, unless the context of the rule requires otherwise. For the purposes of this chapter a facility is considered to be new if it has not been previously approved for the treatment, storage, use, or disposal of biosolids.

"**Feed crops**" are crops produced primarily for consumption by animals.

"**Fiber crops**" are crops such as flax and cotton, including but not limited to those whose parts or by-products may be consumed by humans or used in the production or preparation of food for human consumption.

"**Food crops**" are crops consumed by humans. These include, but are not limited to, fruits, vegetables, grains, and tobacco.

"**Forest**" is an area of land that is managed for the production of timber or other forest products, or for benefits such as recreation and watershed protection, and that is or will be dominated by trees under the current system of management. For the purposes of this rule, other areas of land that are not regulated as agricultural land, public contact sites, land reclamation sites, or lawns or home gardens are considered forestland.

"**General permit,**" for the purposes of this chapter, means a permit issued by the department in accordance with the procedures established in this chapter or in chapter 173-226 WAC, to be effective in a designated geographical area, that authorizes the application of biosolids to the land or the disposal of biosolids in a municipal solid waste landfill, under which multiple treatment works treating domestic sewage may apply for coverage.

"**Geometric mean**" means the antilogarithm of the arithmetic average of the logarithms of the sample values, or the nth root of the product of n sample values.

"**Ground water**" means water in a saturated zone or stratum beneath the surface of land or below a surface water body.

"**Health department" or "local health department**" means city, county, city-county, or district public health department as defined in chapters 70.05, 70.08, and 70.46 RCW.

"**Individual permit,**" for the purposes of this chapter, means a permit issued by the department to a single treatment works treating domestic sewage in accordance with WAC 173-308-310, which authorizes the application of biosolids to the land or the disposal of biosolids in a municipal solid waste landfill.

"**Industrial wastewater**" is wastewater generated in a commercial or industrial process.

"**Land application**" is the application of biosolids to the land surface by means such as spreading or spraying; the injection of biosolids below the land surface; or the incorporation of biosolids into the soil, for the purpose of beneficial use.

"**Land with a low potential for public exposure**" is land that the public uses infrequently. This includes, but is not limited to, agricultural land, forest, and a reclamation site located in an unpopulated area (e.g., a strip mine located in a rural area).

"**Land with a high potential for public exposure**" is land that the public uses frequently. This includes, but is not limited to, a public contact site and a reclamation site located in a populated area (e.g., a construction site located in a city).

"**Local health department**" see definition of health department.

"**Monthly average**" is the arithmetic mean of all measurements taken during the month.

"**Municipal sewage sludge**" means sewage sludge generated from a publicly owned treatment works. For the purposes of this chapter, sewage sludge generated from the treatment of only domestic sewage in a privately owned or industrial treatment facility is considered municipal sewage sludge.

"**Municipality**" means a city, town, borough, county, parish, district, association, or other public body (including an inter-municipal agency of two or more of the foregoing entities) created by or under state law; or a designated and

approved management agency under section 208 of the Clean Water Act, as amended. The definition includes a special district created under state law, such as a water district, sewer district, sanitary district, utility district, drainage district, or similar entity, or an integrated waste management facility as defined in section 201(e) of the Clean Water Act, as amended, that has as one of its principal responsibilities the treatment, transport, use, or disposal of biosolids.

"Other container" is either an open or closed receptacle. This includes, but is not limited to, a bucket, a box, a carton, and a vehicle or trailer with a load capacity of one metric ton or less.

"Owner" means any person with ownership interest in a site or facility, or who exercises control over a site or facility, but does not include a person who, without participating in management of the site or facility, holds indicia of ownership primarily to protect the person's security interest.

"Pasture" is land on which animals feed directly on feed crops such as legumes, grasses, grain stubble, or stover.

"Pathogenic organisms" are disease causing organisms. These include, but are not limited to, certain bacteria, protozoa, viruses, and viable helminth ova.

"Permit" means an authorization, license, or equivalent control document issued by the director to implement the requirements of this chapter.

"Person" is an individual, association, partnership, corporation, municipality, state or federal agency, or an agent or employee thereof.

"Person who prepares biosolids" is either the person who generates biosolids during the treatment of domestic sewage in a treatment works or the person who derives a material from biosolids.

"pH" means the logarithm of the reciprocal of the hydrogen ion concentration.

"Place sewage sludge" or **"sewage sludge placed"** means to dispose of sewage sludge.

"Pollutant" is an organic substance, an inorganic substance, a combination of organic and inorganic substances, or a pathogenic organism that, after discharge and upon exposure, ingestion, inhalation, or assimilation into an organism either directly from the environment or indirectly by ingestion through the food chain, could, on the basis of information available to the Administrator of EPA, cause death, disease, behavioral abnormalities, cancer, genetic mutations, physiological malfunctions (including malfunction in reproduction), or physical deformations in either organisms or offspring of the organisms.

"Pollutant limit" is a numerical value that describes the amount of a pollutant allowed per unit amount of biosolids (e.g., milligrams per kilogram of total solids); the amount of a pollutant that can be applied to a unit area of land (e.g., kilograms per hectare); the volume of a material that can be applied to a unit area of land (e.g., gallons per acre); or the number of pathogens or indicator organisms per unit of biosolids. Pollutant limits are established in Tables 1 - 4 of WAC 173-308-160, in 173-308-170, and in 173-308-270.

"Public contact site" is land with a high potential for contact by the public. This includes, but is not limited to, public parks, ball fields, cemeteries, plant nurseries, turf farms, and golf courses.

"Publicly owned treatment works" means a treatment works treating domestic sewage that is owned by a municipality, the state of Washington, or the federal government.

"Range land" is generally open, uncultivated land dominated by herbaceous or shrubby vegetation that may be used for grazing or browsing, either by wildlife or livestock.

"Receiving-only facility" means a treatment works treating domestic sewage that only receives municipal sewage sludge or biosolids from other sources for further treatment and/or application to the land, and which does not generate any biosolids from the treatment of domestic sewage.

"Reclamation site" is drastically disturbed land that is reclaimed using biosolids. This includes, but is not limited to, strip mines and construction sites.

"Residential equivalent value" means the number of residential equivalents determined for a facility under chapter 173-224 WAC or a value similarly obtained under WAC 173-308-320.

"Restrict public access" means to minimize access of nonessential personnel to land where biosolids are applied, through the use of natural or artificial barriers, signs, remoteness, or other means.

"Saturated zone" means the zone below the water table in which all interstices are filled with water.

"Sewage sludge" is solid, semisolid, or liquid residue generated during the treatment of domestic sewage in a treatment works. Sewage sludge includes, but is not limited to, domestic septage; scum or solids removed in primary, secondary, or advanced wastewater treatment processes; and a material derived from sewage sludge. Sewage sludge does not include ash generated during the firing of sewage sludge in a sewage sludge incinerator or grit and screenings generated during preliminary treatment of domestic sewage in a treatment works.

"Significant change in biosolids management practices" means a change in the quality of biosolids that are applied to the land, either from class A to class B for pathogens, or from Table 3 to Table 1 of WAC 173-308-160 for pollutant limits; the addition of a new area to which biosolids will be applied, which was not previously disclosed during a required public notice process; for class B biosolids only, a change from nonfood crops to food crops, a change from crops where the harvestable portions do not contact the biosolids/soil mixture to crops where the harvestable portion contacts the biosolids/soil mixture, or a change in site classification from land with a low potential for public exposure to land with a high potential for public exposure; or any change or deletion of a requirement established in an approved land application plan or established as a condition of coverage under a permit that would result in a decrease in buffer size, site monitoring, or facility reporting requirements, which was not otherwise provided for in the permit or plan approval process.

"Significantly remove or reduce recognizable materials" means to remove recognizable debris from biosolids by means such as screening, or to reduce the number of recognizable items in biosolids by means such as grinding, to a level that in the opinion of the department, will not result in an aesthetic nuisance or physical hazard when biosolids are applied to the land.

"**Site**" means all areas of land, including buffer areas, which are identified in the scope of an approved site specific land application plan. A site is considered to be new or expanded when biosolids are applied to an area not approved in a site specific land application plan or that was not previously disclosed during a required public notice process.

"**Specific oxygen uptake rate (SOUR)**" is the mass of oxygen consumed per unit time per unit mass of total solids (dry weight basis) in the biosolids.

"**State**" means the state of Washington.

"**Store or storage of biosolids**" is the placing of biosolids on land on which the biosolids remain for two years or less. This does not include the placing of biosolids on land for treatment or disposal.

"**Stover**" is the nongrain, above-ground part of a grain crop, often corn or sorghum.

"**Surface waters of the state**" means surface waters of the state as defined in WAC 173-201A-020.

"**Total solids**" are the materials in biosolids that remain as residue when the biosolids are dried at 103 to 105°C.

"**Treat or treatment of biosolids**" is the preparation of biosolids for final use or disposal. This includes, but is not limited to, thickening, stabilization, and dewatering of biosolids. This does not include storage of biosolids.

"**Treatment works**" is either a federally owned, publicly owned, or privately owned device or system used to treat (including recycle and reclaim) either domestic sewage or a combination of domestic sewage and industrial waste of a liquid nature.

"**Treatment works treating domestic sewage**" means a publicly owned treatment works or any other sewage sludge or wastewater treatment devices or systems, regardless of ownership, used in the storage, treatment, recycling, and reclamation of municipal or domestic sewage or sewage sludge, including land dedicated for the disposal of sewage sludge. Treatment works treating domestic sewage also includes a beneficial use facility that has been permitted in accordance with the provisions of WAC 173-308-310, and a person, site, or facility designated as a treatment works treating domestic sewage in accordance with WAC 173-308-310 (1)(b). This definition does not include septic tanks or similar devices, but may include persons or vehicles that service septic systems and centralized septage facilities that are designated as a treatment works treating domestic sewage or are applicable under this definition.

"**Unstabilized solids**" are organic materials in biosolids that have not been treated in either an aerobic or anaerobic treatment process.

"**Vector attraction**" is the primarily odorous characteristic of biosolids that attracts rodents, flies, mosquitoes, or other organisms capable of transporting infectious agents.

"**Volatile solids**" is the amount of the total solids in biosolids that are lost when the biosolids are combusted at 550°C in the presence of excess air.

"**Waters of the state**" means waters of the state as defined in RCW 90.48.020.

"**Wetlands**" means those areas that are inundated or saturated by surface water or ground water at a frequency and duration to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-080, filed 2/18/98, effective 3/21/98.]

WAC 173-308-090 Requirement for a person who prepares biosolids. Any person who prepares biosolids must ensure that the applicable requirements in this chapter and any applicable permit issued under this chapter are met when the biosolids are applied to the land.

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-090, filed 2/18/98, effective 3/21/98.]

WAC 173-308-100 Requirement for a person who transports biosolids. (1) Any person who transports biosolids must ensure that the transportation vehicle is properly cleaned prior to use of the vehicle for the transportation of food crops, feed crops, or fiber crops.

(2) The transportation of biosolids is otherwise subject to regulation by the Washington state utilities and transportation commission under Title 81 RCW and WAC 173-308-030(2).

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-100, filed 2/18/98, effective 3/21/98.]

WAC 173-308-110 Requirement for a person who applies biosolids. A person may not apply biosolids to the land except in accordance with applicable requirements of this chapter and any applicable permit issued under this chapter.

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-110, filed 2/18/98, effective 3/21/98.]

WAC 173-308-120 Requirement to obtain and provide information. (1) It is a violation of the provisions of this chapter for any person to falsify a certification or statement that is required by these rules or to make any required certification or statement under false pretense.

(2) Any person who applies biosolids to the land must obtain information needed to comply with the requirements of this chapter.

(3) The person who prepares biosolids must provide the person who applies biosolids to the land with notice and necessary information to comply with the requirements of this chapter, including sufficient information on the concentration and types of nutrients in the biosolids needed to determine an agronomic rate for the crop under management.

(4) When a person who prepares biosolids provides the biosolids to another person who further prepares the biosolids, the person who provides the biosolids must provide the person who receives the biosolids notice and necessary information to comply with the requirements of this chapter.

(5) The person who applies bulk biosolids to the land must provide the owner or lease holder of the land on which the bulk biosolids are applied notice and necessary information to comply with the requirements of this chapter.

(6) The person who applies bulk biosolids to the land must obtain written approval of the landowner prior to applying biosolids to the land for the first time, when the bulk bio-

solids do not meet the criteria to be classified as exceptional quality.

(7) All persons required to keep and maintain records under any provision of this chapter must provide access to those records during normal business hours to a representative of the department, a local health department, or the United States EPA, and to the owner, lessor, lessee or other person with a legal management interest in the land on which the biosolids are applied, at the location where the records are kept.

(8) Any facility, including a beneficial use facility, must immediately notify all sources from which it receives biosolids, if at any time it becomes unsuitable for the purpose of receiving biosolids from those other sources.

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-120, filed 2/18/98, effective 3/21/98.]

WAC 173-308-130 Additional or more stringent requirements. On a case-by-case basis, the department may impose requirements for the beneficial use of biosolids that are in addition to or more stringent than the requirements in this chapter if the department believes that the additional or more stringent requirements are necessary to protect public health and the environment from any adverse effect of a pollutant in the biosolids.

(1) In addition to other considerations, failure of a generator, applier, or landowner to conform to any applicable requirements of this chapter may be cause to impose additional or more stringent requirements.

(2) The department will impose any additional or more stringent requirements under WAC 173-308-130 in a permit issued to the applicable facility.

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-130, filed 2/18/98, effective 3/21/98.]

WAC 173-308-140 Biosolids sampling and analysis methods. (1) **Sampling.** Samples that are collected and analyzed must be representative of the biosolids that are applied to the land.

(2) **Analysis methods.** The publications listed in this subsection are incorporated by reference in this chapter. Methods in the publications listed below must be used to analyze samples of biosolids unless other methods are approved in writing by the department. These publications are available for review during normal working hours at the Washington State Department of Ecology headquarters located at 300 Desmond Drive in Olympia, Washington.

(a) For enteric viruses use ASTM Designation: D 4994-89, *"Standard Practice for Recovery of Viruses From Wastewater Sludges,"* 1992 Annual Book of ASTM Standards: Section 11-Water and Environmental Technology, ASTM, 1916 Race Street, Philadelphia, PA 19103-1187.

(b) For fecal coliform use part 9221 E. or part 9222 D., *"Standard Methods for the Examination of Water and Wastewater,"* 18th Edition, 1992, American Public Health Association, 1015 15th Street NW, Washington, DC 20005.

(c) For helminth ova use Yanko, W.A., *"Occurrence of Pathogens in Distribution and Marketing Municipal Sludges,"* EPA 600/1-87-014, 1987. National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161 (PB 88-154273/AS).

(d) For inorganic pollutants use, *"Test Methods for Evaluating Solid Waste, Physical/Chemical Methods,"* EPA Publication SW-846, Second Edition (1982) with Updates I (April 1984) and II (April 1985) and Third Edition (November 1986) with Revision I (December 1987). Second Edition and Updates I and II are available from the National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161 (PB 87-190-291). Third Edition and Revision I are available from Superintendent of Documents, Government Printing Office, 941 North Capitol Street NE, Washington, DC 20002 (Document Number 955-001-00000-1).

For the analysis of nitrogen and other nutrients the department may specify additional analytical references that are acceptable.

(e) For salmonella sp. bacteria use part 9260 D., *"Standard Methods for the Examination of Water and Wastewater,"* 18th Edition, 1992, American Public Health Association, 1015 15th Street NW, Washington, DC 20005; or Kenner, B.A. and H.P. Clark, "Detection and enumeration of Salmonella and Pseudomonas aeruginosa," Journal of the Water Pollution Control Federation, Vol. 46, no. 9, September 1974, pp. 2163-2171. Water Environment Federation, 601 Wythe Street, Alexandria, VA 22314.

(f) For specific oxygen uptake rate (SOUR) use part 2710 B., *"Standard Methods for the Examination of Water and Wastewater,"* 18th Edition, 1992, American Public Health Association, 1015 15th Street NW, Washington, DC 20005.

(g) For total, fixed, and volatile solids use part 2540 G., *"Standard Methods for the Examination of Water and Wastewater,"* 18th Edition, 1992, American Public Health Association, 1015 15th Street NW, Washington, DC 20005.

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-140, filed 2/18/98, effective 3/21/98.]

WAC 173-308-150 Frequency of biosolids monitoring. The person who prepares biosolids is responsible for ensuring that monitoring is carried out in accordance with the requirements of this chapter and any applicable permit. The minimum frequency of monitoring for the pollutants listed in Tables 1, 2, 3 and 4 of WAC 173-308-160; the pathogen density requirements in WAC 173-308-170; and the vector attraction reduction requirements in WAC 173-308-180, is prescribed in subsection (3) of this section;

(1) The frequency of monitoring required by this section is based on the dry weight tonnage of bulk biosolids applied to the land per three hundred sixty-five-day period, or the dry weight tonnage of biosolids received per three hundred sixty-five-day period by a person who prepares biosolids that are sold or given away for application to the land.

(2) After the biosolids have been monitored for two years at the frequency in subsection (3) of this section, the person who prepares the biosolids may request the department to reduce the frequency of monitoring for pollutant concentrations, and for the pathogen density requirements in WAC 173-308-170 (2)(c)(ii) and (iii). The frequency of monitoring must not be less than once per year when biosolids are applied to the land.

(3)

MINIMUM FREQUENCY OF MONITORING

Metric tons (U.S. tons) per 365-day period	Frequency
Greater than zero but less than 290 (320)	once per year
Equal to or greater than 290 (320) but less than 1,500 (1,653)	once per quarter (four times per year)
Equal to or greater than 1,500 (1,653) but less than 15,000 (16,535)	once per 60 days (six times per year)
Equal to or greater than 15,000 (16,535)	once per month (12 times per year)

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-150, filed 2/18/98, effective 3/21/98.]

WAC 173-308-160 Biosolids pollutant limits. This section sets pollutant concentration limits, and annual and cumulative pollutant loading rate limits for biosolids that are applied to the land.

(1) Table 1 of this section sets the maximum allowable concentration (ceiling limit) of pollutants in biosolids that are applied to the land.

Municipal sewage sludge that contains any pollutant listed in Table 1 of this section at a concentration greater than the allowable ceiling limit is not biosolids, is a solid waste, and may not be applied to the land.

(2) Table 2 of this section sets the maximum quantities of pollutants that may be added to an area of land, also referred to as the cumulative pollutant loading rate. The cumulative pollutant loading rates in Table 2 apply when the concentration of any pollutant in biosolids that are applied to the land exceeds the allowable pollutant concentration limit in Table 3 of this section.

(a) A person may not apply bulk biosolids subject to the cumulative pollutant loading rates in Table 2 of this section to a land application site, if any of those rates have been reached on the site.

(b) Before bulk biosolids subject to the cumulative pollutant loading rates in Table 2 of this section are applied to the land, the person who proposes to apply the bulk biosolids must contact the local health department and the department to determine whether bulk biosolids subject to the cumulative pollutant loading rates were applied to the site before the effective date of this chapter.

(i) If bulk biosolids subject to the cumulative pollutant loading rates in Table 2 of this section have been applied to the site since July 20, 1993, and the cumulative amount of each pollutant applied to the site since that date is known, in addition to any amount subtracted in (b)(iii) of this subsection, the amount previously applied must be subtracted from the cumulative pollutant loading rate for each pollutant, to determine the remaining amount of pollutant that may be applied to the site.

(ii) If bulk biosolids subject to the cumulative pollutant loading rates in Table 2 of this section have been applied to the site since July 20, 1993, and the cumulative amount of each pollutant applied to the site in the bulk biosolids since that date is not known, additional biosolids subject to the cumulative pollutant loading rates in Table 2 of this section may not be applied to the site.

(iii) If bulk biosolids were applied to the site prior to July 20, 1993, and the cumulative amount of each pollutant applied to the site prior to that date can be determined, in addition to any amount subtracted in (b)(i) of this subsection, the amount applied must be subtracted from the cumulative pollutant loading rate for each pollutant, to determine the remaining amount of pollutant that may be applied to the site.

(iv) If bulk biosolids subject to the cumulative pollutant loading rates in Table 2 of this section have not been applied to the site, the cumulative amount of each pollutant listed in Table 2 of this section may be applied to the site.

(v) Any person who applies bulk biosolids to the land, which are subject to the cumulative pollutant loading rates in Table 2 of this section, must provide written notice prior to the initial application of bulk biosolids to the land. Notice must be submitted to the department, and to any local health department in whose jurisdiction the biosolids will be applied. The department and the local health department must retain and provide access to the notice. The notice must include:

(A) The location, by street address if applicable, a copy of the assessor's plat map(s) with the application area(s) clearly shown or the latitude and longitude of the approximate center of each land application site, and the section, township and range of each quarter section on which biosolids are applied; and

(B) The name, address, telephone number, and National Pollutant Discharge Elimination System or state waste discharge permit number and state biosolids permit number (if applicable) of the person who prepared the biosolids and also of the person who applies (if applicable) the bulk biosolids.

(3) Table 3 of this section sets a lower pollutant concentration threshold which, when achieved, relieves the person who prepares biosolids and the person who applies biosolids, from certain requirements related to recordkeeping, reporting, and labeling.

(4) Table 4 of this section sets annual pollutant loading rates used to derive an annual whole biosolids application rate. Table 4 is applicable only when biosolids that are sold or given away in a bag or other container for application to the land exceed any of the pollutant concentration limits in Table 3 of this section. The person who prepares the biosolids must provide information on compliance with this requirement on a label or information sheet as required under WAC 173-308-260 (1)(b)(ii) and (4)(b).

TABLE 1 - CEILING CONCENTRATION LIMITS

POLLUTANT	CEILING CONCENTRATION*
Arsenic	75
Cadmium	85
Copper	4300
Lead	840
Mercury	57
Molybdenum	75
Nickel	420

POLLUTANT	CEILING CONCENTRATION*
Selenium	100
Zinc	7500

*** Milligrams per kilogram - dry weight basis**

TABLE 2 - CUMULATIVE POLLUTANT LOADING RATES

POLLUTANT	CUMULATIVE POLLUTANT LOADING RATE*
Arsenic	41
Cadmium	39
Copper	1500
Lead	300
Mercury	17
Nickel	420
Selenium	100
Zinc	2800

*** Kilograms per hectare - dry weight basis**

TABLE 3 - POLLUTANT CONCENTRATION LIMITS

POLLUTANT	LIMIT*
Arsenic	41
Cadmium	39
Copper	1500
Lead	300
Mercury	17
Nickel	420
Selenium	100
Zinc	2800

*** Monthly average concentration in milligrams per kilogram - dry weight basis**

TABLE 4 - ANNUAL POLLUTANT LOADING RATES

POLLUTANT	ANNUAL POLLUTANT LOADING RATE*
Arsenic	2.0
Cadmium	1.9
Copper	75
Lead	15
Mercury	0.85
Nickel	21
Selenium	5.0
Zinc	140

*** Killograms per hectare per 365 day period**

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-160, filed 2/18/98, effective 3/21/98.]

WAC 173-308-170 Pathogen reduction. (1) This section contains the requirements for biosolids to be classified either Class A or Class B with respect to pathogens.

(a) The requirements in subsection (2)(a)(i) and (ii), or (b)(i) and (ii), or (c)(i), (ii), and (iii), or (d)(i), (ii) and (iii), or (e)(i) and (ii), or (f)(i) and (ii) of this section must be met for biosolids to be Class A for pathogens.

(b) The Class A pathogen requirements must be met at the same time or before the vector attraction reduction requirements in WAC 173-308-180 (2), (3), or (4).

(c) The requirements in subsection (3)(a), (b), or (c) of this section must be met for biosolids to be Class B for pathogens.

(2) **Biosolids - Class A.**

(a) Class A - Alternative 1.

(i) The density of fecal coliform in the biosolids must be less than 1000 Most Probable Number per gram of total solids (dry weight basis), or the density of *Salmonella* sp. bacteria in the biosolids must be less than three Most Probable Number per four grams of total solids (dry weight basis) at the time the biosolids are used; at the time the biosolids are prepared for sale or give away in a bag or other container for application to the land; or at the time the biosolids or material derived from biosolids are prepared to meet the requirements for exemption in WAC 173-308-200; and

(ii) The time and temperature requirements in (a)(ii)(A), (B), (C), or (D) of this subsection must be met.

(A) When the percent solids of the biosolids is seven percent or higher, the temperature of the biosolids must be 50°C or higher; the time period must be twenty minutes or longer; and the temperature and time period must be determined using equation (1), except when small particles of biosolids are heated by either warmed gases or an immiscible liquid;

$$D = \frac{131{,}700{,}000}{10^{0.1400t}} \qquad \text{Equation (1)}$$

Where,

D = time in days.

t = temperature in degrees Celsius.

(B) When the percent solids of the biosolids is seven percent or higher and small particles of biosolids are heated by either warmed gases or an immiscible liquid, the temperature of the biosolids must be 50° C or higher; the time period must be fifteen seconds or longer; and the temperature and time period must be determined using equation (1);

(C) When the percent solids of the biosolids is less than seven percent and the time period is at least fifteen seconds, but less than thirty minutes, the temperature and time period must be determined using equation (1);

(D) When the percent solids of the biosolids is less than seven percent; the temperature of the biosolids is 50°C or higher; and the time period is thirty minutes or longer, the temperature and time period must be determined using equation (2).

$$D = \frac{50{,}070{,}000}{10^{(0.1400t)}} \qquad \text{Equation (2)}$$

Where,

D = time in days.
t = temperature in degrees Celsius.

(b) Class A - Alternative 2.

(i) The density of fecal coliform in the biosolids must be less than 1000 Most Probable Number per gram of total solids (dry weight basis), or the density of *Salmonella* sp. bacteria in the biosolids must be less than three Most Probable Number per four grams of total solids (dry weight basis) at the time the biosolids are used; at the time the biosolids are prepared for sale or give away in a bag or other container for application to the land; or at the time the biosolids or material derived from biosolids is prepared to meet the requirements for exemption in WAC 173-308-200; and

(ii) The pH of the biosolids that are used must be raised to above twelve and remain above twelve for seventy-two hours; and

(A) The temperature of the biosolids must be above 52°C for twelve hours or longer during the period that the pH of the biosolids is above twelve; and

(B) At the end of the seventy-two-hour period during which the pH of the biosolids is above twelve, the biosolids must be air dried to achieve a percent solids in the biosolids greater than fifty percent.

(c) Class A - Alternative 3.

(i) The density of fecal coliform in the biosolids must be less than 1000 Most Probable Number per gram of total solids (dry weight basis), or the density of *Salmonella* sp. bacteria in biosolids must be less than three Most Probable Number per four grams of total solids (dry weight basis) at the time the biosolids are used; at the time the biosolids are prepared for sale or give away in a bag or other container for application to the land; or at the time the biosolids or material derived from biosolids is prepared to meet the requirements for exemption in WAC 173-308-200; and

(ii) The biosolids must be analyzed prior to pathogen treatment to determine whether the biosolids contain enteric viruses; and

(A) When the density of enteric viruses in the biosolids prior to pathogen treatment is less than one plaque-forming unit per four grams of total solids (dry weight basis), the biosolids are Class A with respect to enteric viruses until the next monitoring episode for the biosolids; or

(B) When the density of enteric viruses in the biosolids prior to pathogen treatment is equal to or greater than one plaque-forming unit per four grams of total solids (dry weight basis), the biosolids are Class A with respect to enteric viruses when the density of enteric viruses in the biosolids after pathogen treatment is less than one plaque-forming unit per four grams of total solids (dry weight basis) and when the values or ranges of values for the operating parameters for the pathogen treatment process that produces the biosolids that meets the enteric virus density requirement are documented.

(C) After the enteric virus reduction in (c)(ii)(B) of this subsection is demonstrated for the pathogen treatment process, the biosolids continue to be Class A with respect to enteric viruses when the values for the pathogen treatment process operating parameters are consistent with the values or ranges of values documented.

(iii) The biosolids must be analyzed prior to pathogen treatment to determine whether the biosolids contains viable helminth ova; and

(A) When the density of viable helminth ova in the biosolids prior to pathogen treatment is less than one per four grams of total solids (dry weight basis), the biosolids are Class A with respect to viable helminth ova until the next monitoring episode for the biosolids; or

(B) When the density of viable helminth ova in the biosolids prior to pathogen treatment is equal to or greater than one per four grams of total solids (dry weight basis), the biosolids are Class A with respect to viable helminth ova when the density of viable helminth ova in the biosolids after pathogen treatment is less than one per four grams of total solids (dry weight basis) and when the values or ranges of values for the operating parameters for the pathogen treatment process that produces the biosolids that meets the viable helminth ova density requirement are documented.

(C) After the viable helminth ova reduction in (c)(iii)(B) of this subsection is demonstrated for the pathogen treatment process, the biosolids continues to be Class A with respect to viable helminth ova when the values for the pathogen treatment process operating parameters are consistent with the values or ranges of values documented.

(d) Class A - Alternative 4.

(i) The density of fecal coliform in the biosolids must be less than 1000 Most Probable Number per gram of total solids (dry weight basis), or the density of *Salmonella* sp. bacteria in the biosolids must be less than three Most Probable Number per four grams of total solids (dry weight basis) at the time the biosolids are used; at the time the biosolids are prepared for sale or give away in a bag or other container for application to the land; or at the time the biosolids or material derived from biosolids is prepared to meet the requirements for exemption in WAC 173-308-200; and

(ii) The density of enteric viruses in the biosolids must be less than one plaque-forming unit per four grams of total solids (dry weight basis) at the time the biosolids are used; at the time the biosolids are prepared for sale or give away in a bag or other container for application to the land; or at the time the biosolids or material derived from biosolids is prepared to meet the requirements for exemption in WAC 173-308-200, unless otherwise specified by the department; and

(iii) The density of viable helminth ova in the biosolids must be less than one per four grams of total solids (dry weight basis) at the time the biosolids are used; at the time the biosolids are prepared for sale or give away in a bag or other container for application to the land; or at the time the biosolids or material derived from biosolids is prepared to meet the requirements for exemption in WAC 173-308-200, unless otherwise specified by the department.

(e) Class A - Alternative 5.

(i) The density of fecal coliform in the biosolids must be less than 1000 Most Probable Number per gram of total solids (dry weight basis), or the density of *Salmonella* sp. bacteria in the biosolids must be less than three Most Probable Number per four grams of total solids (dry weight basis) at the time the biosolids are used; at the time the biosolids are prepared for sale or give away in a bag or other container for application to the land; or at the time the biosolids or material

derived from biosolids is prepared to meet the requirements for exemption in WAC 173-308-200; and

(ii) The biosolids must be treated in one of the processes to further reduce pathogens described in (e)(ii)(A) through (G) of this subsection.

(A) Composting.

(I) Using either the within-vessel composting method or the static aerated pile composting method, the temperature of the biosolids must be maintained at 55°C or higher for three days.

(II) Using the windrow composting method, the temperature of the biosolids must be maintained at 55°C or higher for fifteen days or longer. During the period when the compost is maintained at 55°C or higher, there must be a minimum of five turnings of the windrow.

(B) Heat drying. Biosolids must be dried by direct or indirect contact with hot gases to reduce the moisture content of the biosolids to ten percent or less. Either the temperature of the biosolids particles must exceed 80°C or the wet bulb temperature of the gas in contact with the biosolids as the biosolids leaves the dryer must exceed 80°C.

(C) Heat treatment. Liquid biosolids must be heated to a temperature of 180°C or higher for thirty minutes.

(D) Thermophilic aerobic digestion. Liquid biosolids must be agitated with air or oxygen to maintain aerobic conditions and the mean cell residence time of the biosolids must be at least ten days at 55 to 60°C.

(E) Beta ray irradiation. Biosolids must be irradiated with beta rays from an accelerator at dosages of at least 1.0 megarad at room temperature (ca. 20°C).

(F) Gamma ray irradiation. Biosolids must be irradiated with gamma rays from certain isotopes, such as Cobalt 60 and Cesium 137, at room temperature (ca. 20°C).

(G) Pasteurization. The temperature of the biosolids must be maintained at 70°C or higher for thirty minutes or longer.

(f) Class A - Alternative 6.

(i) The density of fecal coliform in the biosolids must be less than 1000 Most Probable Number per gram of total solids (dry weight basis), or the density of *Salmonella* sp. bacteria in the biosolids must be less than three Most Probable Number per four grams of total solids (dry weight basis) at the time the biosolids are used; at the time the biosolids are prepared for sale or give away in a bag or other container for application to the land; or at the time the biosolids or material derived from biosolids is prepared to meet the requirements for exemption in WAC 173-308-200; and

(ii) The biosolids must be treated in a process that is equivalent to a process to further reduce pathogens. Pathogen equivalency for biosolids applied to land under jurisdiction of the state of Washington will be determined by the department or by the EPA with the approval and concurrence of the department.

(3) **Biosolids - Class B.**

(a) Class B - Alternative 1.

(i) Seven samples of the biosolids must be collected at the time the biosolids are used; and

(ii) The geometric mean of the density of fecal coliform of the samples must be less than 2,000,000 Most Probable Number per gram of total solids (dry weight basis) or 2,000,000 Colony Forming Units per gram of total solids (dry weight basis).

(b) Class B - Alternative 2. The biosolids must be treated in one of the processes to significantly reduce pathogens described in (b)(i) through (v) of this subsection.

(i) Aerobic digestion. The biosolids must be agitated with air or oxygen to maintain aerobic conditions for a specific mean cell residence time at a specific temperature. Values for the mean cell residence time and temperature must be between forty days at 20°C and sixty days at 15°C.

(ii) Air drying. The biosolids must be dried on sand beds or on paved or unpaved basins. The biosolids must dry for a minimum of three months. During two of the three months, the ambient average daily temperature must be above 0°C.

(iii) Anaerobic digestion. The biosolids must be treated in the absence of air for a specific mean cell residence time at a specific temperature. Values for the mean cell residence time and temperature must be between fifteen days at 35 to 55°C and sixty days at 20°C.

(iv) Composting. Using the within-vessel, static aerated pile, or windrow composting methods, the temperature of the biosolids must be raised to 40°C or higher and remain at 40°C or higher for five days. For four hours during the five days, the temperature in the compost pile must exceed 55°C.

(v) Lime stabilization. Sufficient lime must be added to the biosolids to raise the pH of the biosolids to twelve after two hours of contact.

(c) Class B - Alternative 3. The biosolids must be treated in a process that is equivalent to a process to significantly reduce pathogens. Pathogen equivalency for biosolids applied to land under jurisdiction of the state of Washington will be determined by the department or by the EPA with the approval and concurrence of the department.

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-170, filed 2/18/98, effective 3/21/98.]

WAC 173-308-180 Vector attraction reduction. (1) When vector attraction reduction is accomplished prior to application of biosolids to the land, the requirements in one of subsections (2) through (7) of this section must be met.

The vector attraction reduction requirements in subsection (2), (3), or (4) of this section must be met at the same time or after the Class A pathogen requirements in WAC 173-308-170.

(2) The mass of volatile solids in the biosolids must be reduced by a minimum of thirty-eight percent (see calculation procedures in *"Environmental Regulations and Technology —Control of Pathogens and Vector Attraction in Sewage Sludge,"* EPA-625/R-92/013, 1992, U.S.EPA, Cincinnati, OH 45268.)

(a) When the thirty-eight percent volatile solids reduction requirement in this subsection (2) cannot be met for anaerobically digested biosolids, vector attraction reduction can be demonstrated by digesting a portion of the previously digested biosolids anaerobically in the laboratory in a bench-scale unit for forty additional days at a temperature between

30 and 37°C. After the forty-day period, the vector attraction reduction requirement is met if the volatile solids in the biosolids at the beginning of that period are reduced by less than seventeen percent.

(b) When the thirty-eight percent volatile solids reduction requirement in this subsection (2) cannot be met for aerobically digested biosolids, vector attraction reduction can be demonstrated by digesting a portion of the previously digested biosolids that has a percent solids of two percent or less aerobically in the laboratory in a bench-scale unit for thirty additional days at 20°C. After the thirty-day period, the vector attraction reduction requirement is met if the volatile solids in the biosolids at the beginning of that period are reduced by less than fifteen percent.

(3) The specific oxygen uptake rate (SOUR) for biosolids treated in an aerobic process must be less than or equal to 1.5 milligrams of oxygen per hour per gram of total solids (dry weight basis) at a temperature of 20°C.

(4) The biosolids must be treated in an aerobic process for fourteen days or longer. During that time, the temperature of the biosolids must be higher than 40°C and the average temperature of the biosolids must be higher than 45°C.

(5) The pH of the biosolids must be raised to twelve or higher by alkali addition and, without the addition of more alkali, must remain at twelve or higher for two hours and then at 11.5 or higher for an additional twenty-two hours.

(6) For biosolids that do not contain unstabilized solids generated in a primary wastewater treatment process, the percent solids must be equal to or greater than seventy-five percent based on the moisture content and total solids prior to mixing with other materials.

(7) For biosolids that contain unstabilized solids generated in a primary wastewater treatment process, the percent solids must be equal to or greater than ninety percent based on the moisture content and total solids prior to mixing with other materials.

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-180, filed 2/18/98, effective 3/21/98.]

WAC 173-308-190 Protecting waters of the state—Agronomic rate requirement. In accordance with water quality standards for ground waters of the state of Washington, chapter 173-200 WAC, biosolids must be applied to the land in a manner approved by the department, and at not greater than agronomic rates unless otherwise specified by the department in accordance with subsection (1) or (2) of this section. Agronomic rate determinations must take into account nitrogen supplied from other sources such as manures and commercial fertilizers as well as biosolids.

(1) Biosolids applied to land reclamation sites may be applied in excess of agronomic rates if approved by the department in a site specific land application plan developed under WAC 173-308-310(6).

(2) For the purposes of furthering necessary research efforts, biosolids may be applied at greater than agronomic rates to limited areas of land if approved by the department in a site specific land application plan developed under WAC 173-308-310(6). In addition to the elements required under WAC 173-308-310(6), the land application plan for a research project must also include:

(a) A research proposal describing the nature of the project, what may be learned, the anticipated benefits, provisions for progress reports and peer review, and interpretation of results;

(b) An explanation for the sizing of the research plot(s). Plot size must not exceed the minimum area required to support the goals of the research; and

(c) A discussion of any potential adverse impacts of application rates in excess of agronomic rates, along with potential mitigation or response to adverse effects if observed.

(3) The person who prepares exceptional quality biosolids that are sold or given away to another person must provide sufficient information to allow the person who receives the biosolids to determine an agronomic rate of application.

(4) The person who applies exceptional quality biosolids to the land is responsible for compliance with the agronomic rate requirement in this section.

(5) When the potential for ground water contamination due to biosolids application exists, the department may require ground water monitoring or other conditions in accordance with WAC 173-200-080. If it is determined that an enforcement criterion may be violated, an evaluation must be conducted to demonstrate compliance with the provisions of WAC 173-200-050 (3)(b)(vi).

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-190, filed 2/18/98, effective 3/21/98.]

WAC 173-308-200 Exemptions based on the exceptional quality of biosolids. (1) The person who prepares and the person who applies biosolids that meet criteria to be classified as exceptional quality are exempt from the following requirements:

(a) The site management and access restrictions in WAC 173-308-210(4), 173-308-220(4), 173-308-230(4), and 173-308-240(4);

(b) The labeling requirement derived from Table 4 of WAC 173-308-160 for the annual whole biosolids application rate in WAC 173-308-260 (1)(b)(ii);

(c) The requirement in WAC 173-308-120(6) for obtaining prior written approval of the landowner;

(d) The land application plan requirements of WAC 173-308-310(6), except as provided in WAC 173-308-310 (6)(a)(ii) or (iii);

(e) The recordkeeping requirements in WAC 173-308-210 (5)(b), 173-308-220 (5)(b), 173-308-230 (5)(b), and 173-308-240 (6)(b);

(f) The requirements in WAC 173-308-300 (2)(a) and (b) for approved plans when used as a component of intermediate or final cover in a municipal solid waste landfill.

(2) On a case-by-case basis, the director may apply any or all of the site management and access restrictions exempted under WAC 173-308-200 (1)(a) after determining that the requirements are necessary to protect public health and the environment from any adverse effect that may occur from a pollutant in the bulk biosolids.

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-200, filed 2/18/98, effective 3/21/98.]

WAC 173-308-210 Bulk biosolids applied to agricultural land. (1) **Pollutant concentrations.**

(a) The concentration of a pollutant in bulk biosolids that are applied to agricultural land may not exceed the allowable ceiling limit in Table 1 of WAC 173-308-160.

(b) If the concentration of a pollutant in bulk biosolids that are applied to agricultural land exceeds the pollutant concentration limits in Table 3 of WAC 173-308-160, then the total cumulative loading rate for each pollutant may not exceed the limit in Table 2 of WAC 173-308-160, as required in WAC 173-308-160 (1)(b)(i).

(2) **Pathogens.** Bulk biosolids that are applied to agricultural land must be Class A for pathogens, or they must be Class B for pathogens and the site management and access restrictions in subsection (4)(a)(i) through (x) and (b)(i) through (iii) of this section must be met.

(3) **Vector attraction reduction.**

(a) Bulk biosolids that are applied to agricultural land must meet one of the vector attraction reduction requirements in WAC 173-308-180 (2) through (7) before they are applied to the land; or the requirements of (b)(i) or (ii) of this subsection must be met.

(b)(i) The biosolids must be injected below the surface of the land; and

(A) No significant amount of the biosolids may be present on the land surface within one hour after the biosolids are injected; and

(B) When the biosolids are Class A for pathogens, the biosolids must be injected below the land surface within eight hours after being discharged from the pathogen treatment process.

(ii) Biosolids must be incorporated into the soil within six hours after application to the land;

When biosolids that are incorporated into the soil are Class A with respect to pathogens, the biosolids must be applied to the land within eight hours after being discharged from the pathogen treatment process.

(4) **Site management and access restrictions.**

(a) The site management and access restrictions in (a)(i) through (x) and (b)(i) through (iii) of this subsection are applicable to biosolids that are Class B for pathogens when they are applied to agricultural land.

(i) Food crops, feed crops, and fiber crops must not be harvested for thirty days after application of biosolids.

(ii) Food crops with harvested parts that touch the biosolids/soil mixture and are totally above the land surface must not be harvested for fourteen months after application of biosolids.

(iii) Food crops with harvested parts below the surface of the land must not be harvested for twenty months after application of biosolids when the biosolids remain on the land surface for four months or longer prior to incorporation into the soil.

(iv) Food crops with harvested parts below the surface of the land must not be harvested for thirty-eight months after application of biosolids when the biosolids remain on the land surface for less than four months prior to incorporation into the soil.

(v) Livestock must not be allowed to graze on the land for thirty days after application of biosolids.

(vi) Turf grown on land where biosolids are applied must not be harvested for one year after application of the biosolids when the harvested turf is placed on either land with a high potential for public exposure or a lawn, unless otherwise specified by the department.

(vii) Public access to land with a high potential for public exposure must be restricted for one year after application of biosolids.

(viii) Public access to land with a low potential for public exposure must be restricted for thirty days after application of biosolids.

(ix) Unless otherwise approved in a site specific land application plan under WAC 173-308-310 (6)(b), during the time when access is restricted, signs must be posted around the application site at all significant points of access, and otherwise around the perimeter so that they can be noticed and read by a reasonably observant person. The required content of signs is listed in WAC 173-308-275.

It is a violation of these rules for any person to remove a sign posted in accordance with the requirements of (a)(ix) of this subsection during the period when access is restricted.

(x) Biosolids must not be applied to the land within one hundred feet of a well unless otherwise approved in a permit issued in accordance with the requirements of this chapter.

(b) The site management restrictions in (b)(i) through (iii) of this subsection are applicable to biosolids that do not meet standards to be classified as exceptional quality when they are applied to agricultural land.

(i) Bulk biosolids may not be applied to land that is ten meters or less from surface waters of the state, unless otherwise specified by the department.

(ii) Bulk biosolids may not be applied to the land so that they enter a wetland or waters of the state, unless approved in a permit issued by the department or by EPA with the approval of the department.

(iii) Bulk biosolids may not be applied to the land if they are likely to adversely affect a threatened or endangered species listed under WAC 232-12-011 or 232-12-014 or its critical habitat.

(5) **Recordkeeping.**

(a) The person who prepares biosolids for application to agricultural land must keep the records required in WAC 173-308-290 (2) and (3).

(b) The person who applies biosolids that do not meet criteria to be classified as exceptional quality to agricultural land must keep the records required in WAC 173-308-290(4).

(6) **Reporting.** The person who prepares biosolids for application to agricultural land must submit an annual report in accordance with the requirements of WAC 173-308-295.

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-210, filed 2/18/98, effective 3/21/98.]

WAC 173-308-220 Bulk biosolids applied to forestland. (1) **Pollutant concentrations.**

(a) The concentration of a pollutant in bulk biosolids that are applied to forestland may not exceed the allowable ceiling limit in Table 1 of WAC 173-308-160.

(b) If the concentration of a pollutant in bulk biosolids that are applied to forestland exceeds the pollutant concentration limits in Table 3 of WAC 173-308-160, then the total

cumulative loading rate for each pollutant may not exceed the limit in Table 2 of WAC 173-308-160, as required in WAC 173-308-160 (1)(b)(i).

(2) **Pathogens.** Bulk biosolids that are applied to forestland must be Class A for pathogens, or they must be Class B for pathogens and the site management and access restrictions in subsection (4)(a)(i) through (ix) and (b)(i) through (iii) of this section must be met.

(3) **Vector attraction reduction.**

(a) Bulk biosolids that are applied to forestland must meet one of the vector attraction reduction requirements in WAC 173-308-180 (2) through (7) before they are applied to the land; or the requirements of (b)(i) or (ii) of this subsection must be met.

(b)(i) The biosolids must be injected below the surface of the land; and

(A) No significant amount of the biosolids may be present on the land surface within one hour after the biosolids are injected; and

(B) When the biosolids are Class A for pathogens, the biosolids must be injected below the land surface within eight hours after being discharged from the pathogen treatment process.

(ii) Biosolids must be incorporated into the soil within six hours after application to the land.

When biosolids that are incorporated into the soil are Class A with respect to pathogens, the biosolids must be applied to the land within eight hours after being discharged from the pathogen treatment process.

(4) **Site management and access restrictions.**

(a) The site management and access restrictions in (a)(i) through (ix) and (b)(i) through (iii) of this subsection are applicable to biosolids that are Class B for pathogens when they are applied to forestland.

(i) Food crops, feed crops, and fiber crops must not be harvested for thirty days after application of biosolids.

(ii) Food crops with harvested parts that touch the biosolids/soil mixture and are totally above the land surface must not be harvested for fourteen months after application of biosolids.

(iii) Food crops with harvested parts below the surface of the land must not be harvested for twenty months after application of biosolids when the biosolids remain on the land surface for four months or longer prior to incorporation into the soil.

(iv) Food crops with harvested parts below the surface of the land must not be harvested for thirty-eight months after application of biosolids when the biosolids remain on the land surface for less than four months prior to incorporation into the soil.

(v) Livestock must not be allowed to graze on the land for thirty days after application of biosolids.

(vi) Public access to land with a high potential for public exposure must be restricted for one year after application of biosolids.

(vii) Public access to land with a low potential for public exposure must be restricted for thirty days after application of biosolids.

(viii) Unless otherwise approved in a site specific land application plan under WAC 173-308-310 (6)(b), during the time when access is restricted, signs must be posted around the application site at all significant points of access, and otherwise around the perimeter so that they can be noticed and read by a reasonably observant person. The required content of signs is listed in WAC 173-308-275.

It is a violation of these rules for any person to remove a sign posted in accordance with the requirements of (a)(viii) of this subsection during the period when access is restricted.

(ix) Biosolids must not be applied to the land within one hundred feet of a well unless otherwise approved in a permit issued in accordance with the requirements of this chapter.

(b) The site management restrictions in (b)(i) through (iii) of this subsection are applicable to biosolids that do not meet standards to be classified as exceptional quality when they are applied to forestland.

(i) Bulk biosolids may not be applied to land that is ten meters or less from surface waters of the state, unless otherwise specified by the department.

(ii) Bulk biosolids may not be applied to the land so that they enter a wetland or waters of the state, unless approved in a permit issued by the department, or by EPA with the approval of the department.

(iii) Bulk biosolids may not be applied to the land if they are likely to adversely affect a threatened or endangered species listed under WAC 232-12-011 or 232-12-014 or its critical habitat.

(5) **Recordkeeping.**

(a) The person who prepares biosolids for application to forestland must keep the records required in WAC 173-308-290 (2) and (3).

(b) The person who applies biosolids that do not meet criteria to be classified as exceptional quality to forestland must keep the records required in WAC 173-308-290(4).

(6) **Reporting.** The person who prepares biosolids for application to forestland must submit an annual report in accordance with the requirements of WAC 173-308-295.

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-220, filed 2/18/98, effective 3/21/98.]

WAC 173-308-230 Bulk biosolids applied to a public contact site. (1) **Pollutant concentrations.**

(a) The concentration of a pollutant in bulk biosolids that are applied to a public contact site may not exceed the ceiling limit in Table 1 of WAC 173-308-160.

(b) If the concentration of a pollutant in bulk biosolids that are applied to a public contact site exceeds the pollutant concentration limits in Table 3 of WAC 173-308-160, then the total cumulative loading rate for each pollutant may not exceed the limit in Table 2 of WAC 173-308-160, as required in WAC 173-308-160 (1)(b)(i).

(2) **Pathogens.** Bulk biosolids that are applied to a public contact site must be Class A for pathogens, or they must be Class B for pathogens and the site management and access restrictions in WAC 173-308-230 (4)(a)(i) through (ix) and (b)(i) through (iii) must be met.

(3) **Vector attraction reduction.**

(a) Bulk biosolids that are applied to a public contact site must meet one of the vector attraction reduction requirements in WAC 173-308-180 (2) through (7) before they are applied

to the land; or the requirements of (b)(i) or (ii) of this subsection must be met.

(b)(i) The biosolids must be injected below the surface of the land; and

(A) No significant amount of the biosolids may be present on the land surface within one hour after the biosolids are injected; and

(B) When the biosolids are Class A for pathogens, the biosolids must be injected below the land surface within eight hours after being discharged from the pathogen treatment process.

(ii) Biosolids must be incorporated into the soil within six hours after application to the land.

When biosolids that are incorporated into the soil are Class A with respect to pathogens, the biosolids must be applied to the land within eight hours after being discharged from the pathogen treatment process.

(4) **Site management and access restrictions.**

(a) The site management and access restrictions in (a)(i) through (ix) and (b)(i) through (iii) of this subsection are applicable to biosolids that are Class B for pathogens when they are applied to a public contact site.

(i) Food crops, feed crops, and fiber crops must not be harvested for thirty days after application of biosolids.

(ii) Food crops with harvested parts that touch the biosolids/soil mixture and are totally above the land surface must not be harvested for fourteen months after application of biosolids.

(iii) Food crops with harvested parts below the surface of the land must not be harvested for twenty months after application of biosolids when the biosolids remain on the land surface for four months or longer prior to incorporation into the soil.

(iv) Food crops with harvested parts below the surface of the land must not be harvested for thirty-eight months after application of biosolids when the biosolids remain on the land surface for less than four months prior to incorporation into the soil.

(v) Livestock must not be allowed to graze on the land for thirty days after application of biosolids.

(vi) Turf grown on land where biosolids are applied must not be harvested for one year after application of the biosolids when the harvested turf is placed on either land with a high potential for public exposure or a lawn, unless otherwise specified by the department.

(vii) Public access must be restricted for one year after application of biosolids.

(viii) Unless otherwise approved in a site specific land application plan under WAC 173-308-310 (6)(b), during the time when access is restricted, signs must be posted around the application site at all significant points of access, and otherwise around the perimeter so that they can be noticed and read by a reasonably observant person. The required content of signs is listed in WAC 173-308-275.

It is a violation of these rules for any person to remove a sign posted in accordance with the requirements of (a)(viii) of this subsection during the period when access is restricted.

(ix) Biosolids must not be applied to the land within one hundred feet of a well unless otherwise approved in a permit issued in accordance with the requirements of this chapter.

(b) The site management restrictions in (b)(i) through (iii) of this subsection are applicable to biosolids that do not meet standards to be classified as exceptional quality when they are applied to a public contact site.

(i) Bulk biosolids may not be applied to land that is ten meters or less from surface waters of the state, unless otherwise specified by the department.

(ii) Bulk biosolids may not be applied to the land so that they enter a wetland or waters of the state, unless approved in a permit issued by the department, or by EPA with the approval of the department.

(iii) Bulk biosolids may not be applied to the land if they are likely to adversely affect a threatened or endangered species listed under WAC 232-12-011 or 232-12-014 or its critical habitat.

(5) **Recordkeeping.**

(a) The person who prepares bulk biosolids for application to a public contact site must keep the records required in WAC 173-308-290 (2) and (3).

(b) The person who applies bulk biosolids that do not meet criteria to be classified as exceptional quality to a public contact site must keep the records required in WAC 173-308-290(4).

(6) **Reporting.** The person who prepares bulk biosolids for application to a public contact site must submit an annual report in accordance with the requirements of WAC 173-308-295.

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-230, filed 2/18/98, effective 3/21/98.]

WAC 173-308-240 Bulk biosolids applied to a land reclamation site. (1) **Pollutant concentrations.**

(a) The concentration of a pollutant in bulk biosolids that are applied to a land reclamation site may not exceed the allowable ceiling limit in Table 1 of WAC 173-308-160.

(b) If the concentration of a pollutant in bulk biosolids that are applied to a land reclamation site exceeds the pollutant concentration limits in Table 3 of WAC 173-308-160, then the total cumulative loading rate for each pollutant may not exceed the limit in Table 2 of WAC 173-308-160, as required in WAC 173-308-160 (1)(b)(i).

(2) **Pathogens.** Bulk biosolids that are applied to a land reclamation site must be Class A for pathogens, or the bulk biosolids must be Class B for pathogens and the site management and access restrictions in subsection (4)(a)(i) through (x) and (b)(i) through (iii) of this section must be met.

(3) **Vector attraction reduction.**

(a) Bulk biosolids that are applied to a land reclamation site must meet one of the vector attraction reduction requirements in WAC 173-308-180 (2) through (7) before they are applied to the land; or the requirements of (b)(i) or (ii) of this subsection must be met.

(b)(i) The biosolids must be injected below the surface of the land; and

(A) No significant amount of the biosolids may be present on the land surface within one hour after the biosolids are injected; and

(B) When the biosolids are Class A for pathogens, the biosolids must be injected below the land surface within eight

hours after being discharged from the pathogen treatment process.

(ii) Biosolids must be incorporated into the soil within six hours after application to the land.

When biosolids that are incorporated into the soil are Class A with respect to pathogens, the biosolids must be applied to the land within eight hours after being discharged from the pathogen treatment process.

(4) **Site management and access restrictions.**

(a) The site management and access restrictions in (a)(i) through (x) and (b)(i) through (iii) of this subsection are applicable to biosolids that are Class B for pathogens when they are applied to a land reclamation site.

(i) Food crops, feed crops, and fiber crops must not be harvested for thirty days after application of biosolids.

(ii) Food crops with harvested parts that touch the biosolids/soil mixture and are totally above the land surface must not be harvested for fourteen months after application of biosolids.

(iii) Food crops with harvested parts below the surface of the land must not be harvested for twenty months after application of biosolids when the biosolids remain on the land surface for four months or longer prior to incorporation into the soil.

(iv) Food crops with harvested parts below the surface of the land must not be harvested for thirty-eight months after application of biosolids when the biosolids remain on the land surface for less than four months prior to incorporation into the soil.

(v) Livestock must not be allowed to graze on the land for thirty days after application of biosolids.

(vi) Turf grown on land where biosolids are applied must not be harvested for one year after application of the biosolids when the harvested turf is placed on either land with a high potential for public exposure or a lawn, unless otherwise specified by the department.

(vii) Public access to land with a high potential for public exposure must be restricted for one year after application of biosolids.

(viii) Public access to land with a low potential for public exposure must be restricted for thirty days after application of biosolids.

(ix) Unless otherwise approved in a site specific land application plan under WAC 173-308-310 (6)(b), during the time when access is restricted, signs must be posted around the application site at all significant points of access, and otherwise around the perimeter so that they can be noticed and read by a reasonably observant person. The required content of signs is listed in WAC 173-308-275.

It is a violation of these rules for any person to remove a sign posted in accordance with the requirements of (a)(ix) of this subsection during the period when access is restricted.

(x) Biosolids must not be applied to the land within one hundred feet of a well unless otherwise approved in a permit issued in accordance with the requirements of this chapter.

(b) The site management restrictions in (b)(i) through (iii) of this subsection are applicable to biosolids that do not meet standards to be classified as exceptional quality when they are applied to a land reclamation site.

(i) Bulk biosolids may not be applied to land that is ten meters or less from surface waters of the state, unless otherwise specified by the department;

(ii) Bulk biosolids may not be applied to the land so that they enter a wetland or waters of the state, unless approved in a permit issued by the department, or by EPA with the approval of the department;

(iii) Bulk biosolids may not be applied to the land if they are likely to adversely affect a threatened or endangered species listed under WAC 232-12-011 or 232-12-014 or its critical habitat.

(5) **Application exceeding agronomic rates.** In accordance with WAC 173-308-190 (1) and (5), when biosolids will be applied to a land reclamation site in excess of agronomic rates, the application rate must be approved in a site specific land application plan by the department. The department may require that an evaluation be conducted as specified in WAC 173-200-080. Where it is determined that an enforcement criterion may be violated, the evaluation must be conducted to demonstrate compliance with the provisions of WAC 173-200-050 (3)(b)(vi).

(6) **Recordkeeping.**

(a) The person who prepares biosolids for application to a land reclamation site must keep the records required in WAC 173-308-290 (2) and (3).

(b) The person who applies biosolids that do not meet criteria to be classified as exceptional quality to a land reclamation site must keep the records required in WAC 173-308-290(4).

(7) **Reporting.**

The person who prepares biosolids for application to a land reclamation site must submit an annual report in accordance with the requirements of WAC 173-308-295.

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-240, filed 2/18/98, effective 3/21/98.]

WAC 173-308-250 Bulk biosolids applied to a lawn or home garden. (1) Bulk biosolids that are applied to a lawn or home garden must meet the criteria to be classified as exceptional quality as defined in WAC 173-308-080.

(2) **Recordkeeping.** The person who prepares bulk biosolids for application to a lawn or home garden must keep the records required in WAC 173-308-290 (2) and (3).

(3) **Reporting.** The person who prepares bulk biosolids for application to a lawn or home garden must submit annual reports in accordance with the requirements of WAC 173-308-295.

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-250, filed 2/18/98, effective 3/21/98.]

WAC 173-308-260 Biosolids sold or given away in a bag or other container. (1) **Pollutant concentrations.**

(a) The concentration of a pollutant in biosolids that are sold or given away in a bag or other container may not exceed the allowable ceiling limit in Table 1 of WAC 173-308-160.

(b) If biosolids that are sold or given away in a bag or other container exceed the pollutant concentration limits in Table 3 of WAC 173-308-160, then:

(i) The mathematical product of the concentration of each pollutant in the biosolids and the annual whole biosolids

application rate for the biosolids must not cause the annual pollutant loading rate for the pollutant in Table 4 of WAC 173-308-160 to be exceeded;

The procedure for determining the annual whole biosolids application rate that complies with the requirement in (b)(i) of this subsection is specified in Appendix A of this chapter.

(ii) The annual whole biosolids application rate as calculated in (b)(i) of this subsection, or the recommended agronomic rate, whichever is less, must be included on the label or information sheet required in WAC 173-308-260(4).

(2) **Pathogens.** Biosolids that are sold or given away in a bag or other container must be Class A for pathogens.

(3) **Vector attraction.** One of the vector attraction reduction requirements in WAC 173-308-180 (2) through (7) must be met when biosolids are sold or given away in a bag or other container for application to the land.

(4) **Label or information sheet required.** Any person who prepares biosolids that are sold or given away in a bag or other container in the state of Washington, must comply with the requirements of (a)(i) through (vi) of this subsection when the biosolids product is prepared or derived from biosolids that do not meet exceptional quality standards.

(a) A label must be affixed to the bag or other container in which biosolids are sold or given away, or an information sheet must be provided to the person who receives biosolids that are sold or given away in a bag or other container. The label or information sheet must contain the following information:

(i) The name, address, and phone number of the person who prepared the biosolids.

(ii) A statement or information indicating that the product complies with applicable regulations for biosolids or that the product has been prepared to meet standards that make it safe for its intended use when used in accordance with the directions provided by the manufacturer.

(iii) A statement or information that encourages proper use of the product and protection of public health and the environment. This may include information on agronomic rates, product storage, hygiene, and protection of surface or ground water resources.

(iv) Agronomic rates for typical applications or guidance on how to determine the agronomic rate of application.

(v) A statement or information indicating that the product contains or is derived from biosolids.

(vi) Any additional information needed to facilitate safe use of the product.

(b) In addition to the information required in (a)(i) through (vi) of this subsection, the information in subsection (1)(b)(ii) of this section when the pollutant limits in Table 3 of WAC 173-308-160 are exceeded.

(c) Any person who prepares biosolids that are sold or distributed outside the jurisdiction of the state of Washington, must comply with the requirements in 40 CFR Part 503.14(e), as applicable.

(5) **Recordkeeping.** The person who prepares biosolids for sale or give away in a bag or other container must keep the records required in WAC 173-308-290 (2) and (5).

(6) **Reporting.** The person who prepares biosolids for sale or give away in a bag or other container must submit annual reports in accordance with the requirements of WAC 173-308-295.

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-260, filed 2/18/98, effective 3/21/98.]

WAC 173-308-270 Domestic septage management requirements. (1) Domestic septage may not be applied to a public contact site, a lawn, or a home garden, unless it is managed as biosolids originating from municipal sewage sludge according to this subsection (1).

When domestic septage managed as biosolids originating from municipal sewage is applied to the land, unless otherwise provided, all applicable requirements for biosolids must be met, including but not limited to requirements for pathogen and vector attraction reduction, site management and access restrictions, pollutant concentration limits, agronomic rates, obtaining and providing information, sampling and analysis, and recordkeeping and reporting.

(2) Domestic septage that is applied to the land must be treated by a process such as physical screening or grinding, or another approved method must be employed to significantly remove or reduce recognizable materials when septage is applied to the land.

(3) **Pathogens.**

(a) When domestic septage - class II is applied to the land, the alkaline stabilization requirement of (b) of this subsection must be met, or the Class B pathogen requirements in one of WAC 173-308-170 (3)(a) through (c) and the site management and access restrictions in subsection (5)(a)(i) through (ix) and (b)(i) through (iv) of this section must be met.

(b) When domestic septage - class I or III is applied to the land, the pH of the septage must be raised to twelve or higher by alkali addition and, without the addition of more alkali, must remain at twelve or higher for thirty minutes and the site management and access restrictions in subsection (5)(a)(i) through (ix) of this section must be met, or, when pH adjustment is not used to achieve pathogen reduction requirements, the site management and access restrictions in subsection (5)(a)(i) through (ix) and (b)(i) through (iv) of this section must be met.

(4) **Vector attraction reduction.** The requirements in one of (a), (b), or (c) of this subsection, must be met when domestic septage is applied to the land.

(a) The septage must be injected below the surface of the land;

(i) No significant amount of septage may be present on the land surface within one hour after the septage is injected; and

(ii) When the septage is Class A for pathogens, the septage must be injected below the land surface within eight hours after being discharged from the pathogen treatment process.

(b) Septage must be incorporated into the soil within six hours after application to the land;

When septage that is incorporated into the soil is Class A with respect to pathogens, the septage must be applied to the land within eight hours after being discharged from the pathogen treatment process.

(c) The pH of the septage must be raised to twelve or higher by alkali addition and, without the addition of more alkali, must remain at twelve or higher for thirty minutes.

(5) **Site management and access restrictions.**

(a) The site management and access restrictions in (a)(i) through (ix) of this subsection are applicable when domestic septage is applied to the land.

(i) Food crops, feed crops, and fiber crops must not be harvested for thirty days after the application of septage.

(ii) Food crops with harvested parts that touch the septage/soil mixture and are totally above the land surface must not be harvested for fourteen months after application of septage.

(iii) Food crops with harvested parts below the surface of the land must not be harvested for twenty months after application of septage when the septage remains on the land surface for four months or longer prior to incorporation into the soil.

(iv) Food crops with harvested parts below the surface of the land must not be harvested for thirty-eight months after application of septage when the septage remains on the land surface for less than four months prior to incorporation into the soil.

(v) Unless otherwise approved in a site specific land application plan under WAC 173-308-310 (6)(b), during the time when access is restricted, signs must be posted around the application site at all significant points of access, and otherwise around the perimeter so that they can be noticed and read by a reasonably observant person. The required content of signs is listed in WAC 173-308-275.

It is a violation of these rules for any person to remove a sign posted in accordance with the requirements of subsection (4)(a)(v) of this section during the period when access is restricted.

(vi) Septage must not be applied to land that is one hundred feet or less from surface waters of the state, unless otherwise specified by the department;

(vii) Septage must not be applied to the land so that it enters a wetland or waters of the state, unless approved in a permit issued by the department, or by EPA with the approval of the department;

(viii) Septage must not be applied to the land if it is likely to adversely affect a threatened or endangered species listed under WAC 232-12-011 or 232-12-014 or its critical habitat.

(ix) Septage must not be applied to the land within one hundred feet of a well unless otherwise approved in a permit issued in accordance with the requirements of this chapter.

(b) In addition to the site management and access restrictions in (a)(i) through (ix) of this subsection, the additional site management and access restrictions in (b)(i) through (iv) of this subsection apply to domestic septage if the pH adjustment requirement of subsection (3)(b) of this section is not met when septage is applied to the land.

(i) Livestock must not be allowed to graze on the land for thirty days after application of septage.

(ii) Turf grown on land where septage is applied must not be harvested for one year after application of the septage when the harvested turf is placed on either land with a high potential for public exposure or a lawn, unless otherwise specified by the department.

(iii) Public access to land with a high potential for public exposure must be restricted for one year after the application of septage.

(iv) Public access to land with a low potential for public exposure must be restricted for thirty days after the application of septage.

(6) Except as provided in this subsection (6), septage that is applied to the land must be applied at a rate not exceeding the rate determined by equation (3).

$$AAR = N / 0.0026 \qquad \text{Equation (3)}$$

Where:

AAR = Annual application rate in gallons per acre per three hundred sixty-five-day period.

N = Amount of nitrogen in pounds per acre per 365 day period needed by the crop or vegetation grown on the land.

A person may not apply domestic septage to the land during a three hundred sixty-five-day period if the annual application rate in this subsection (6) has been reached during that period, unless the domestic septage is managed as biosolids originating from municipal sewage sludge per subsection (1) of this section.

(7) **Monitoring.**

(a) Samples of domestic septage that are collected and analyzed must be representative of the material that is applied to the land.

(b) When domestic septage - class I, II, or III is applied to the land and pH adjustment is used to meet any pathogen or vector attraction reduction requirement, each container of domestic septage that is applied to the land must be monitored to determine compliance with pH requirements.

(8) **Recordkeeping.** The person who prepares septage and the person who applies septage must keep the records required in WAC 173-308-290(6).

(9) **Reporting.** Facilities that prepare septage for application to the land, and persons who apply septage to the land, which is not prepared at a treatment works treating domestic sewage must submit annual reports in accordance with the requirements of WAC 173-308-295.

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-270, filed 2/18/98, effective 3/21/98.]

WAC 173-308-275 Contents of signs for land application sites. (1) When signs are required for the purpose of restricting access, they must contain at least the following information:

(a) The name and address or phone number of the generator and if different, the person who applies;

(b) The names, addresses, and phone numbers of the regulatory and permitting authorities;

(c) The material that is being applied (biosolids or a more detailed description);

(d) Notice that access is restricted, and if desired, the date after which access is no longer restricted; and

(e) If applicable, a notice on limitations regarding the harvest of edible plants from the site.

(2) With the consent of the department, "no trespassing" signs may be substituted for the informational signs required under subsection (1) of this section.

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-275, filed 2/18/98, effective 3/21/98.]

WAC 173-308-280 Requirements for facilities storing biosolids. (1) Facilities storing biosolids must do so in accordance with the provisions of a permit issued under this chapter, if an applicable permit has been issued.

(2) Biosolids may not be stored in a manner that would be likely to result in the contamination of ground water, surface water, air, or land under current conditions or in the case of fire or flood.

(3) Facilities storing liquid biosolids in surface impoundments must meet the requirements in WAC 173-304-430 and other applicable sections of chapter 173-304 WAC that apply to the design, construction, and operation of surface impoundments.

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-280, filed 2/18/98, effective 3/21/98.]

WAC 173-308-290 Recordkeeping. (1)(a) Both the person who prepares biosolids and the person who applies bulk biosolids to the land must keep certain records and certification statements showing that applicable standards for biosolids quality, treatment, and management have been met. Records must also be kept on the amount and type biosolids applied to the land under different management scenarios or that are disposed of in a municipal solid waste landfill.

(b) A responsible official as described in WAC 173-308-310(8) must sign all certification statements required under this section.

(2) The person who prepares biosolids must keep the following records (amounts recorded as dry tons):

(a) The amount of bulk biosolids applied by the preparer or the preparer's agents to agricultural land;

(b) The amount of bulk biosolids applied by the preparer or the preparer's agents to forestland;

(c) The amount of bulk biosolids applied by the preparer or the preparer's agents to a public contact site;

(d) The amount of bulk biosolids applied by the preparer or the preparer's agents to a land reclamation site;

(e) The amount of bulk biosolids applied by the preparer or the preparer's agents to a lawn or home garden;

(f) The amount of biosolids that are sold or given away by the preparer in a bag or other container for application to the land;

(g) The amount of biosolids in a compost or blended biosolids product that is sold or given away by the preparer in bulk form or in a bag or other container for application to the land;

(h) The amount of bulk biosolids that are sold or given away by the preparer to another person who prepares biosolids for application to the land;

(i) The amount of bulk biosolids that are sold or given away by the preparer to a person other than an agent of the preparer for application to the land; and

(j) The amount of biosolids that are disposed in a municipal solid waste landfill on an emergency, temporary, or long-term basis.

(3) When bulk biosolids are applied to the land, the person who prepares the biosolids must develop and maintain the following information, as applicable, for five years:

(a) If the pollutant limits in Table 3 of WAC 173-308-160 were met, laboratory analysis data showing that those limits were met; or, if the pollutant ceiling concentrations in Table 1 of WAC 173-308-160 were met, laboratory analysis data showing that those limits were met.

(b) If the Class A pathogen requirements in one of WAC 173-308-170 (2)(a) through (f) were met, process monitoring and/or laboratory analysis data showing that those requirements were met, and a description of how those requirements were met; or, if the Class B pathogen standards in one of WAC 173-308-170 (3)(a), (b), or (c) were met, process monitoring and/or laboratory analysis data showing that those requirements were met, and a description of how those requirements were met.

(c) If the vector attraction reduction requirements in one of WAC 173-308-180 (2) through (7) were met, process monitoring and/or laboratory analysis monitoring data showing that those requirements were met and a description of how those requirements were met.

(d) One of the following certification statements, as applicable:

(i) If the vector attraction reduction requirements in one of WAC 173-308-180 (2) through (7) were met, the following signed certification: "I certify, under penalty of law, that the (insert Class A or Class B as appropriate) pathogen requirements in (insert one of WAC 173-308-170 (2)(a), (b), (c), (d), (e), or (f) if Class A, or insert one of WAC 173-308-170 (3)(a), (b), or (c) if Class B), and the vector attraction reduction requirement in (insert one of the vector attraction reduction requirements in WAC 173-308-180 (2) through (7)) have been met. This determination was made under my direction and supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that pathogen and vector attraction reduction requirements have been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."

(ii) If the vector attraction reduction requirements in one of WAC 173-308-180 (2) through (7) were not met, the following signed certification: "I certify, under penalty of law, that the (insert Class A or Class B as appropriate) pathogen requirements in (insert one of WAC 173-308-170 (2)(a), (b), (c), (d), (e), or (f) if Class A, or insert one of WAC 173-308-170 (3)(a), (b), or (c) if Class B) have been met. This determination was made under my direction and supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that pathogen reduction requirements have been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."

(4) When bulk biosolids are applied to the land, the person who applies the biosolids must develop and maintain the

following information, as applicable, for five years or indefinitely as required in (c) of this subsection:

(a) If the Class B pathogen standards in one of WAC 173-308-170 (3)(a), (b), or (c) were met, a description of how the site management and access restrictions in WAC 173-308-210 (4)(a)(i) through (x), or WAC 173-308-220 (4)(a)(i) through (ix), or WAC 173-308-230 (4)(a)(i) through (ix), or WAC 173-308-240 (4)(a)(i) through (x), as applicable, were met for each site on which biosolids were applied.

The following signed certification: "I certify, under penalty of law, that the site management and access restrictions in (insert WAC 173-308-210 (4)(a)(i) through (x), or WAC 173-308-220 (4)(a)(i) through (ix), or WAC 173-308-230 (4)(a)(i) through (ix), or WAC 173-308-240 (4)(a)(i) through (x), as applicable) have been met for each site on which bulk biosolids were applied. This determination was made under my direction and supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the site management and access restrictions have been met. I am aware that there are significant penalties for false certification including fine and imprisonment."

(b) If the vector attraction reduction requirements in WAC 173-308-210 (3)(b)(i) or (ii), WAC 173-308-220 (3)(b)(i) or (ii), WAC 173-308-230 (3)(b)(i) or (ii), or WAC 173-308-240 (4)(b)(i) or (ii) were met, a description of how those requirements were met.

The following signed certification: "I certify, under penalty of law, that the vector attraction reduction requirement in (insert WAC 173-308-210 (3)(b)(i) or (ii), WAC 173-308-220 (3)(b)(i) or (ii), WAC 173-308-230 (3)(b)(i) or (ii), WAC 173-308-240 (3)(b)(i) or (ii), as applicable) has been met for each site on which biosolids were applied. This determination was made under my direction and supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the vector attraction reduction and site management requirements have been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."

(c) If the pollutant ceiling concentration limits in Table 1 of WAC 173-308-160 were met (but the concentration limits in Table 3 were exceeded), the information in (c)(i) through (v) of this subsection must be developed and kept indefinitely.

(i) The location, by street address if applicable, a copy of the assessor's plat map(s) with the application area(s) clearly shown or the latitude and longitude of the approximate center of each land application site, and the section, township, and range of each quarter section on which biosolids were applied.

(ii) The number of hectares in each site on which bulk biosolids were applied.

(iii) The date and time bulk biosolids were applied to each site.

(iv) The cumulative amount of each pollutant (i.e., kilograms) listed in Table 2 of WAC 173-308-160 in the bulk biosolids applied to each site, including the amount(s) in WAC 173-308-160 (2)(b)(i) and (iii).

(v) The amount of biosolids (i.e., dry metric tons) applied to each site.

(d) A description of how the requirement to obtain information under WAC 173-308-160 (2)(b) was met.

(i) The following signed certification: "I certify, under penalty of law, that the requirement to obtain information under WAC 173-308-160 (2)(b) has been met for each site on which bulk biosolids were applied. This determination was made under my direction and supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the requirements to obtain information have been met. I am aware that there are significant penalties for false certification including fine and imprisonment."

(ii) If the biosolids that were applied to the land did not meet standards to be classified as exceptional quality, and the site management restrictions in WAC 173-308-210 (4)(b)(i) through (iii), or WAC 173-308-220 (4)(b)(i) through (iii), or WAC 173-308-230 (4)(b)(i) through (iii), or WAC 173-308-240 (4)(b)(i) through (iii) were met, the following signed certification:

"I certify, under penalty of law, that the site management restrictions in (insert WAC 173-308-210 (4)(b)(i) through (iii), or WAC 173-308-220 (4)(b)(i) through (iii), or WAC 173-308-230 (4)(b)(i) through (iii), or WAC 173-308-240 (4)(b)(i) through (iii), as applicable) were met for each site on which bulk biosolids were applied. This determination was made under my direction and supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the site management restrictions have been met. I am aware that there are significant penalties for false certification including fine and imprisonment."

(5) When biosolids are sold or given away in a bag or other container for application to the land, the person who prepares the biosolids must develop and maintain the following information, as applicable, for five years:

(a) If the pollutant limits in Table 3 of WAC 173-308-160 were met, laboratory analysis data showing that those limits were met; or, if the pollutant ceiling concentrations in Table 1 of WAC 173-308-160 were met, laboratory analysis data showing that those limits were met.

(b) Process monitoring and/or laboratory analysis data showing that the Class A pathogen requirements in one of WAC 173-308-170 (2)(a) through (f) were met, and a description of how those requirements were met.

(c) Process monitoring and/or laboratory analysis data showing that the vector attraction reduction requirements in one of WAC 173-308-180 (2) through (7) were met, and a description of how those requirements were met.

(d) The following certification statement:

"I certify, under penalty of law, that the Class A pathogen requirement in (insert one of WAC 173-308-170 (2)(a), (b), (c), (d), (e), or (f) if Class A), and the vector attraction reduction requirement in (insert one of WAC 173-308-180 (2) through (7)) have been met. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that pathogen requirement and vector attraction reduction

requirements have been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."

(e) When the biosolids are subject to the requirements of WAC 173-308-160(4), the concentration in the biosolids of each pollutant listed in Table 4 of WAC 173-308-160, and the annual whole biosolids application rate that does not cause the annual pollutant loading rates in Table 4 of WAC 173-308-160 to be exceeded.

The following certification statement:

"I certify, under penalty of law, that the labeling and notification requirement in WAC 173-308-260 (1)(b)(ii) has been met. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the labeling and notification requirements are met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."

(6) When domestic septage is applied to the land, the person who applies the domestic septage must develop and maintain the following information, as applicable, for five years:

(a) The location, by street address if applicable, a copy of the assessor's plat map(s) with the application area(s) clearly shown or the latitude and longitude of the approximate center of each land application site, and the section, township and range of each quarter section on which septage is applied.

(b) The number of acres in each site on which septage is applied.

(c) The date and time septage is applied to each site.

(d) The nitrogen requirement for the crop or vegetation grown on each site during a three hundred sixty-five-day period.

(e) The rate, in gallons per acre per three hundred sixty-five-day period, at which septage is applied to each site and the total number of gallons of septage applied to each site;

(f) The source of the septage, including the name and address of the individual or business where the septage was generated, or in the case of a centralized septage treatment facility, the name of the person or business who delivered the septage, the dates of delivery, and how much septage was delivered.

(g) The class of septage as defined in WAC 173-308-080.

(h) A description of how the pathogen requirements in WAC 173-308-270 (3)(a) or (b) were met.

(i) A description of how the vector attraction reduction requirements in one of WAC 173-308-270 (4)(a), (b), or (c) were met.

(j) A description of how the applicable site management and access restriction requirements in WAC 173-308-270(5) were met.

(k) The following signed certification: "I certify, under penalty of law, that the pathogen requirements in (insert either WAC 173-308-270 (3)(a) or (b)), the vector attraction reduction requirements in (insert one of WAC 173-308-270 (4)(a), (b), or (c)), and the applicable site management and access restriction requirements in WAC 173-308-270(5) have been met. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the pathogen and vector attraction reduction requirements and site management and access restrictions have been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-290, filed 2/18/98, effective 3/21/98.]

WAC 173-308-295 Annual reports. (1) Class I biosolids management facilities, treatment works treating domestic sewage with a design flow rate equal to or greater than one million gallons per day, and those that serve 10,000 people or more, must submit to the department by March 1 of each year, the following information for the preceding calendar year:

(a) All applicable information required under WAC 173-308-290 (2), (3) and (5);

(b) The information in WAC 173-308-290 (4)(c)(i) through (v) and WAC 173-308-290 (4)(d) and (d)(i) and (ii) when ninety percent or more of any of the cumulative pollutant loading rates in Table 2 of WAC 173-308-160 have been reached.

(2) Other facilities and treatment works treating domestic sewage that are not required to submit an annual report under WAC 173-308-295(1) must submit part or all of any applicable information in WAC 173-308-290 (1)(a) and (b) as required by the department on the written request of the department, or in accordance with the requirements of an applicable permit issued by the department.

(3) All persons who apply septage to the land must submit to the department by March 1 of each year, the following information for the preceding calendar year:

(a) The number of gallons of septage applied to the land.

(b) The number of acres of land to which septage was applied.

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-295, filed 2/18/98, effective 3/21/98.]

WAC 173-308-300 Disposal of municipal sewage sludge or biosolids in municipal solid waste landfill units. (1) When biosolids are placed in a municipal solid waste landfill unit they are considered solid waste (municipal sewage sludge).

(2) The use of municipal sewage sludge or biosolids that are subject to regulation under this chapter, as daily cover or as an amendment to daily cover is not a beneficial use and is considered disposal.

The use of biosolids as a component of landfill intermediate or final cover is considered a beneficial use if it is consistent with an approved landfill plan of operations or closure/post-closure plan.

(a) Landfills that use biosolids that do not meet standards to be classified as exceptional quality as a component of intermediate or final cover must have an approved site specific land application plan that meets the requirements of WAC 173-308-310(6) and 173-308-210, 173-308-230, or 173-308-240, as applicable.

(b) For the purposes of beneficial use on a municipal solid waste landfill unit, a site specific land application plan may recognize an approved plan of operations or closure/post-closure plan that addresses the substantive requirements of WAC 173-308-310(6) and 173-308-210, 173-308-230, or 173-308-240, as applicable.

(3) Any landfill accepting municipal sewage sludge for disposal must be in compliance with the requirements of chapter 173-351 WAC and 40 CFR Part 258.

(4) Municipal sewage sludge that is disposed in a municipal solid waste landfill must meet the liquids in landfills restrictions of WAC 173-351-200(9).

(5) Municipal sewage sludge that is disposed in a municipal solid waste landfill must not be hazardous waste as defined in chapter 173-303 WAC.

(6) Disposal on an emergency or temporary basis. Facilities wishing to dispose of municipal sewage sludge in a municipal solid waste landfill on an emergency or temporary basis must meet the conditions of (a) through (c) of this subsection and those in WAC 173-351-220(10).

(a) The person proposing to dispose of municipal sewage sludge must obtain a written determination from the local health department where the biosolids are being or would be land applied, that a potentially unhealthful circumstance exists under present conditions of management or would result from further land application of the biosolids, and that other management options are unavailable or would pose a threat to human health or the environment.

(b) Upon making the determination in (a) of this subsection, the local health department must notify the department in writing, of its findings and the basis for its determination. In its notification, the local health department must state the date on which disposal is approved to commence, any conditions, and the date after which continued disposal is prohibited.

(i) If the municipal sewage sludge is proposed to be disposed of in a municipal solid waste landfill outside the jurisdiction of the local health department in (b) of this subsection, the person proposing to dispose of the municipal sewage sludge must obtain written approval for disposal from the health department in the receiving jurisdiction.

(ii) If the jurisdictional health department in (b)(i) of this subsection, approves disposal of the municipal sewage sludge, the person proposing the disposal must forward a copy of the jurisdictional health department's determination to the department.

(c) Any person wishing to dispose of municipal sewage sludge in a municipal solid waste landfill on a temporary basis must submit a plan for approval to the department. The plan must include the following information:

(i) The conditions that make disposal necessary.

(ii) The steps that will be taken to correct the conditions in (c)(i) of this subsection, so that disposal will not become a long-term management option.

(iii) A time table for implementing the steps to be taken in (c)(ii) of this subsection.

(7) Disposal on a long-term basis.

(a) Facilities wishing to dispose of municipal sewage sludge in a municipal solid waste landfill on a long-term basis must have authorization to do so in a valid NPDES or state waste discharge permit issued under chapter 90.48 RCW, or a valid permit issued in accordance with this chapter.

(b) Any person wishing to engage in the disposal of municipal sewage sludge in a municipal solid waste landfill on a long-term basis must meet the conditions of (b)(i) and (ii) of this subsection and those in subsections (3), (4), and (5) of this section.

(i) The person proposing to dispose of municipal sewage sludge or biosolids must demonstrate to the satisfaction of the department that other options for disposal or beneficial use are economically infeasible.

(ii) The person proposing to dispose of municipal sewage sludge must provide the department with written approval for disposal from the local health department in the receiving jurisdiction.

(8) All facilities that dispose of municipal sewage sludge in a municipal solid waste landfill must submit the information in WAC 173-308-290 (2)(j), as required under WAC 173-308-295.

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-300, filed 2/18/98, effective 3/21/98.]

WAC 173-308-310 Permitting. (1) Applicable facilities—Application required.

(a) Except as provided in (a) of this subsection, all treatment works treating domestic sewage that engage in practices regulated under this chapter are applicable facilities, and must apply for an individual permit or for coverage under a general permit for the final use or disposal of biosolids.

Facilities that compost biosolids, and those facilities where only septage is applied to the land or collected and treated prior to application to the land, do not require permitting under this chapter if:

(i) A permit is not otherwise required in order to comply with the Federal Clean Water Act;

(ii) The department and local health department agree that a permit issued by the local health department will be adequate;

(iii) The conditions of the permit issued by the local health department meet or exceed the requirements of this chapter; and

(iv) The department does not otherwise find that a state issued permit is necessary because one or more of the conditions in (b)(i) through (iv) of this subsection exists.

(b) Designation as a treatment works treating domestic sewage. In addition to facilities meeting the definition of a treatment works treating domestic sewage in WAC 173-308-080, the department may designate any person, site, or facility that treats, uses, transports, or applies biosolids, as a treatment works treating domestic sewage, and require the owner or operator to apply for a permit if:

(i) The department determines that a permit is necessary to protect human health or the environment from the adverse effect of a pollutant in the biosolids;

(ii) The department determines that a permit is necessary to protect human health or the environment from poor biosolids management practices;

(iii) The department determines that a permit is necessary to ensure compliance with any of the requirements in this chapter; or

(iv) Bulk biosolids originating from a source or location outside the jurisdiction of the state of Washington are being applied to the land or received at any site.

(c) It is a violation of this chapter for a facility to fail to submit a permit application to the department as required by these rules.

(2) **General and individual permits.** The department will issue permits for the treatment and final use or disposal of biosolids.

(a) The department will issue, modify, revoke and reissue, and terminate general permits in accordance with the procedures in chapter 173-226 WAC.

(b) The department will accept and consider applications for coverage under a general permit, modify conditions of coverage, revoke and reauthorize coverage, or terminate coverage under a general permit in accordance with the provisions of this chapter.

(c) The department will issue, modify, revoke and reissue, or terminate individual permits in accordance with the provisions of this chapter.

(3) **Permit selection.**

(a) After the department has issued a general permit for the final use or disposal of biosolids, all applicable facilities must submit a notice of intent or apply for coverage under the general permit, unless:

(i) The facility has a current individual permit issued under this chapter;

(ii) The department requires a facility to apply for an individual permit; or

(iii) On written request of the applicant, the department has granted permission to apply for an individual permit.

(A) A facility may request an individual permit if a practice it proposes is not addressed in a general permit issued by the department.

(B) A facility may seek coverage under a general permit for any portion of its biosolids management practices that are applicable under the general permit, and may also request an individual permit for any portion of its biosolids management practices that are not applicable under the general permit.

(iv) The department may require any facility applying for an individual permit under (a)(iii)(A) or (B) of this subsection to limit its practices for the final use or disposal of biosolids to those that are authorized in a general permit, and to apply for a general permit.

(b) The department may notify a facility that it is covered by a general permit, even if the facility has not submitted a permit application or notice of intent as required under this subsection (3).

(i) A facility so notified may request an individual permit in accordance with the provisions of (a)(iii) of this subsection.

(ii) Facilities that are notified of coverage under (b) of this subsection must submit a notice of intent or permit application as directed by the department.

(4) **Timing of applications and notices of intent – renewal of coverage.**

(a) Except for facilities in (e)(i) and (f) of this subsection, existing facilities that are class one biosolids management facilities, publicly owned treatment works with a design flow rate equal to or greater than one million gallons per day, and those that serve a population of 10,000 people or more must either:

(i) Submit an application for coverage under a general permit within ninety days after issuance of a biosolids general permit by the department; or

(ii) Submit a notice of intent within ninety days of issuance of an applicable general permit, followed by a complete permit application within one hundred eighty days of issuance of the applicable general permit.

(b) Except for facilities in (a), (e)(i), and (f) of this subsection, existing facilities must submit a notice of intent to be covered under a general permit within ninety days after issuance of a biosolids general permit by the department.

(c) Except for facilities in (e)(ii) and (f) of this subsection, new facilities that are class one biosolids management facilities, publicly owned treatment works with a design flow rate equal to or greater than one million gallons per day, and those that serve a population of 10,000 people or more must submit an application for coverage under a general permit or a request for an individual permit at least one hundred eighty days in advance of engaging in applicable biosolids management activities.

(d) Except for facilities in (c), (e)(ii) and (f) of this subsection, new facilities must submit a notice of intent to be covered under a general permit or a request for an individual permit at least one hundred eighty days in advance of engaging in applicable biosolids management activities.

(e)(i) Existing facilities that have not been previously permitted under this subsection that wish to request an individual permit under subsection (3)(a)(iii) of this section must do so within thirty days of issuance of a biosolids general permit by the department.

(ii) New facilities that wish to request an individual permit under subsection (3)(a)(iii) of this section must do so at least one hundred eighty days in advance of engaging in applicable biosolids management activities.

(f) Facilities that have been directed to apply for an individual permit under subsection (3)(a)(ii) of this section must submit an application for an individual permit as directed by the department, but the department will allow at least ninety days for a submittal.

(g) Facilities that are denied an individual permit must submit a notice of intent or a complete permit application for coverage under a general permit as would otherwise be required, within sixty days after being denied an individual permit unless a later date is authorized by the department.

(h) Facilities, other than those in (a) of this subsection, that have submitted a notice of intent to be covered under a general permit must submit a complete permit application as follows:

(i) Except as required under (h)(iv) of this subsection, if the facility is subject to permitting under chapter 173-216 or 173-220 WAC, a complete permit application is due on the date when an application for a state waste discharge or NPDES permit, or for renewal thereof, is due, or one hundred eighty days after issuance of the applicable general permit, whichever is later.

(ii) Except as required under (h)(iv) of this subsection, if the facility is not subject to permitting under chapter 173-216 or 173-220 WAC but is subject to permitting under chapter

173-304 WAC and local solid waste ordinances, a complete permit application is due on the date when an application for a local solid waste permit, or for renewal thereof, is due, or one hundred eighty days after issuance of the applicable general permit, whichever is later.

(iii) Other facilities that have submitted a notice of intent must submit a complete permit application as directed by the department, but the department will allow at least ninety days for a submittal.

(iv) The department may require facilities under (h)(i) and (ii) of this subsection to submit a complete permit application at an earlier date for the purpose of expediting the permitting process, or if the department finds that any of the conditions in subsection (1)(b)(i) through (iv) of this section are met. Facilities required to make an early submittal must do so within ninety days from the time of the first request unless a later date is authorized by the department.

(i) Renewal of coverage.

(A) All facilities permitted under this section must submit a notice of intent to continue coverage under a general permit or for initial coverage under a general permit, or an application for an individual permit or for renewal of an individual permit, at least one hundred eighty days prior to the expiration date of their applicable permit.

Facilities that are submitting a notice of intent must submit a complete updated permit application according to the schedule in (a) through (h) of this subsection.

(B) When a facility has made timely and sufficient notice of intent or application as required in (i) of this subsection, an expiring permit remains in effect and enforceable until:

(I) The application has been denied;

(II) A replacement permit has been issued by the department; or

(III) The department has cancelled the expired permit.

(C) Unless the department specifies otherwise in a renewing general permit, or notifies a facility directly, facilities previously covered under a general permit issued in accordance with subsection (2) of this section are automatically covered under a new general permit if they reapply for coverage in accordance with (i) of this subsection; and

(I) The facility will not implement a significant change in biosolids management practices under the new permit; and

(II) The public notice requirements of subsection (11) of this section have been met and there are no sustainable objections to continuation of coverage.

(D) For facilities that are renewing coverage under a general permit, land application plans required under subsection (6) of this section that have been previously approved are automatically approved under the new general permit as long as biosolids management practices remain consistent with the approved plan.

(E) Coverage under an expired permit for permittees who fail to submit a timely and sufficient application or notice of intent shall cease on the expiration date of the permit.

(5) **Contents of permit applications – notices of intent.**

(a) All facilities must submit a complete and factually correct permit application in accordance with the schedule established in subsection (4) of this section, on forms or in a format specified by the department. When complete, all permit applications must contain at least the information in (a)(i) through (xi) of this subsection:

(i) The activities conducted by the applicant that require it to obtain a permit, and if applying under a general permit, the name of the permit;

(ii) Name, mailing address, and location of the facility for which the application is submitted;

(iii) The operator's name, address, telephone number, ownership status, and status as federal, state, private, public, or other entity;

(iv) Whether or not the facility or any associated facilities or land applications sites are located on Indian or federal lands;

(v) A listing of other relevant environmental permits, and all permits or construction approvals received or applied for under any of the following programs:

(A) Hazardous waste management program under the Resource Conservation and Recovery Act;

(B) Underground injection control program under the Safe Drinking Water Act;

(C) National pollutant discharge elimination system program under the Clean Water Act;

(D) Prevention of significant deterioration program under the Clean Air Act;

(E) Nonattainment program under the Clean Air Act;

(F) National emission standards for hazardous pollutants preconstruction approval under the Clean Air Act;

(G) Ocean dumping permits under the Marine Protection, Research, and Sanctuaries Act;

(H) Dredge or fill permits under section 404 of the Clean Water Act;

(vi) A map extending one mile beyond the property boundaries of the facility, showing the location and means of access to the facility, and additional maps if necessary, showing the same for any associated treatment or storage facilities.

(vii) Any biosolids monitoring data the applicant has for the last two years, including for land application sites any available soil, or surface or ground water monitoring data, with a description of the sampling locations, and for wells the approximate depth to ground water.

(viii) A description of the applicant's biosolids use and disposal practices including, where applicable, the location of any sites where the applicant transfers biosolids for treatment or disposal, as well as the name of the applicator or other contractor who applies the biosolids to land if different from the applicant;

(ix) Land application plans, as required under subsection (6) of this section;

(x) The amount of biosolids produced and the amount of biosolids applied to the land during the previous year, and estimated to be produced or applied to the land on an annual basis during the life of the permit;

(xi) Any information required to determine the appropriate standards for permitting under this chapter, and any other information the department may request and reasonably require to assess biosolids use and disposal practices, to determine whether or not to issue a permit, or to ascertain appropriate permit requirements under this chapter.

(b) A notice of intent to be covered under a general permit for biosolids recycling must contain:

(i) The name of the general permit under which coverage is being sought, and a statement declaring the applicant's intent to comply with the requirements of the permit.

(ii) The information required in (a)(i) through (iii) of this subsection, and the location and a description of any site(s) where biosolids are treated, stored, disposed, or applied, and whether or not any permit, including a local solid waste permit has been issued for a site.

(iii) Any information specifically required for a notice of intent under the applicable general permit.

(6) **Land application plans.** (a) Land application plans are not required when exceptional quality biosolids are applied to the land, except as specified in (a)(ii) or (iii) of this subsection.

(i) Any person who prepares exceptional quality biosolids for application to the land must determine and assure to the extent practicable, through recordkeeping and other means, that all applicable criteria of this chapter and any applicable permit are met when bulk exceptional quality biosolids are applied to the land.

(ii) Any person who prepares exceptional quality biosolids for application to the land and who fails to satisfy the requirements in (a)(i) of this subsection, may be required to submit a general or site specific land application plan, or both, for any or all sites where bulk exceptional quality biosolids are applied to the land, and may also be required to comply with the public notice requirements in subsection (11) of this section.

(iii) The department may require a site specific land application plan for any site where bulk exceptional quality biosolids are proposed to be applied if the plan is necessary to evaluate potential permit conditions or if the department finds there would be a strong benefit to the public from the preparation of a site specific plan.

(iv) The department may require advance notice prior to the application of bulk exceptional quality biosolids to the land. In such case the department will notify the facility in writing of the conditions requiring advance notice, the length of advance notice required, and the length of time the requirement for advance notice will remain in effect.

(b) Land application plans are required when bulk biosolids that do not meet criteria to be classified as exceptional quality are applied to the land. Except when biosolids are delivered to a beneficial use facility as provided in (g) of this subsection, facilities that propose to apply biosolids to the land that do not meet criteria to be classified as exceptional quality must either:

(i) Submit with their permit application a site specific land application plan for each site where biosolids will be applied during the life of the permit; or

(ii) Submit with their permit application a general land application plan, and at a later date prior to applying biosolids to a site, a site specific land application plan for each site where biosolids will be applied to the land;

(iii) Facilities that submit a general land application plan may also submit at the same time any available site specific land application plans for approval.

(c) All site specific land application plans must be consistent with a facility's general land application plan, if a general land application plan is required.

(d) Each site specific land application plan must provide information necessary to determine if the site is appropriate for land application of biosolids, and a description of how the site will be managed. At a minimum, site specific land application plans must address the following:

(i) In accordance with the provisions of WAC 173-308-160 (2)(b), whether or not it is known or can be determined that biosolids containing pollutants in excess of the values established in Table 3 of WAC 173-308-160 have ever been applied to the site, and if so:

(A) The date(s) when the biosolids were applied (if known);

(B) The amount of biosolids applied (if known);

(C) The concentrations of the pollutants in the biosolids (if known);

(D) The area(s) of the site to which the biosolids were applied (if known);

(ii) A discussion of the types of crops grown or expected to be grown, their intended end use (e.g., pasture grass for a feed crop, corn as a food crop), and the current distribution of crops on the site;

(iii) An explanation of how agronomic rates will be determined during the life of the site, along with any currently available calculations. Whenever agronomic rates are determined or conditions change (i.e., a change in crops or agronomic rates) an update of the agronomic rate calculations must be filed with the department;

(iv) Method(s) of application;

(v) Seasonal and daily timing of biosolids applications;

(vi) Any available data from soils, surface water, or ground water monitoring collected from the site within the last two years;

(vii) The name of the county and water resource inventory area where biosolids will be applied;

(viii) A description of how biosolids will be stored at the site and also addressing related off-site storage;

(ix) Site map(s) showing:

(A) The location and means of access to the facility;

(B) The number of acres in the site;

(C) Location and extent of any wetlands on the site;

(D) A topographic relief of the application site and surrounding area;

(E) Adjacent properties and uses and their zoning classification;

(F) Any seasonal surface water bodies located on the site or perennial surface water bodies within 1/4 mile of the site;

(G) The location of any wells within 1/4 mile of the site that are listed in public records or otherwise known to the applicant, whether for domestic, irrigation, or other purposes;

(H) The width of buffer zones to surface waters, property boundaries and other features requiring buffers;

(I) The presence and extent of any threatened or endangered species or related critical habitat;

(J) The location of any critical areas on site, as required to be identified under chapter 36.70A RCW in the county's growth management plan;

(K) The location and size of any areas that will be used to store biosolids.

(e) Except for facilities under (e)(vi) of this subsection, applicants including beneficial use facilities intending to

apply biosolids to the land that do not meet criteria to be classified as exceptional quality, to sites for which a site specific land application plan is not submitted as a part of the permit application, must submit for approval as a part of their permit application, a general land application plan that at a minimum:

(i) Describes the geographical area covered by the plan, including the names of all counties and water resource inventory areas where biosolids may be applied;

(ii) Identifies site selection criteria;

(iii) Describes how sites will be managed;

(iv) Provides for not less than thirty days advance notice to the department of new or expanded land application sites, including those subject to provisional approval under subsection (17) of this section, to allow time for the department to object prior to the biosolids application; and

(v) Provides for advance public notice as required in subsection (11) of this section, and that is reasonably calculated to reach potentially interested adjacent and abutting property owners; except

(vi) A general land application plan is not required when biosolids are provided to a beneficial use facility and the requirements of (g) of this subsection are met.

(f) As individual sites are identified in accordance with the general land application plan in (6)(e) of this subsection, facilities, including beneficial use facilities applying biosolids that do not meet criteria to be classified as exceptional quality must develop and submit the information required for site specific land application plans in (d) of this subsection.

(g) When biosolids are provided to a beneficial use facility that has been permitted as a treatment works treating domestic sewage, the person who prepares the biosolids is not required to prepare a land application plan for the biosolids that will be applied to the beneficial use facility if:

(i) As a part of the permit application, the person who prepares the biosolids identifies the beneficial use facility(ies) to which biosolids may be provided, or, if specific beneficial use facilities cannot be identified, specifies the criteria by which beneficial use facilities may be selected at a future date; and

(ii) At least thirty days in advance of delivering biosolids to the beneficial use facility the person who prepares the biosolids submits to the department a certification statement, signed in accordance with the provisions of subsection (8) of this section by the person who prepares the biosolids, stipulating the following:

(A) That the applicable site specific land application plan and other management plans approved for the beneficial use facility are appropriate to the quality of biosolids being provided by the person who prepared the biosolids;

(B) That the person who prepared the biosolids has reviewed the public notice conducted by the beneficial use facility and the conditions in subsection (11)(d) of this section have been met, or additional public notice has been conducted in accordance with subsection (11) of this section;

(h) All land application plans, including those authorized under provisional approval in accordance with subsection (17) of this section, are subject to review and final approval by the department. If a land application plan is found to be insufficient, the department may either request additional information or may impose additional requirements as a condition of approval. Any additional requirements imposed under (h) of this subsection are considered to be permit requirements, fully enforceable in accordance with the provisions of this chapter and the applicable permit.

(7) **Submitting permit applications and notices of intent.** Facilities must submit copies of their permit application or notice of intent as follows:

(a) The original must be submitted to the biosolids coordinator at the headquarters office of the department of ecology, and one copy must be submitted to each regional office of the department of ecology where biosolids will be treated or applied to the land.

(b) Unless a local health department otherwise requests as provided in (b) of this subsection, one copy must be submitted to the local health department in each county where biosolids will be treated, stored, applied to the land, or disposed in a municipal solid waste landfill.

Local health departments that elect not to participate in the implementation of this chapter may notify the department in writing that they do not wish to receive copies of permit applications or land application plans.

(8) **Signatories to permit applications, notices of intent, reports, and other documents.**

(a) Applications. All permit applications must be signed as follows:

(i) For a corporation. By a responsible corporate officer. For the purpose of this chapter, a responsible corporate officer means:

(A) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy-making or decision-making functions for the corporation; or

(B) The manager of one or more manufacturing, production, or operating facilities employing more than two hundred fifty persons or having gross annual sales or expenditures exceeding twenty-five million dollars (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

(ii) For a partnership or sole proprietorship. By a general partner or the proprietor, respectively;

(iii) For a municipality, state, federal, or other public agency. By either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a federal agency includes:

(A) The chief executive officer of the agency; or

(B) A senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.

(b) All reports required by permits, and other information requested by the department must be signed by a person described in (a) of this subsection, or by a duly authorized representative of that person. A person is a duly authorized representative only if:

(i) The authorization is made in writing by a person described in (a) of this subsection;

(ii) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant

manager, superintendent, position of equivalent responsibility; or an individual or position having overall responsibility for environmental matters; and

(iii) The written authorization is submitted to the department.

(c) Changes to authorization. If an authorization under (b) of this subsection is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of (b) of this subsection must be submitted to the department prior to or together with any reports, information, or applications to be signed by an authorized representative.

(d) Certification. Any person signing a document under (a) or (b) of this subsection must make the following certification, unless a different certification is applicable under another related section of this chapter:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

(9) **Public access to information.** In accordance with chapter 42.17 RCW, the department must provide, upon request, any information submitted as part of an application for an individual permit or for coverage under a general permit, except as provided in (a) of this subsection.

(a) In accordance with chapters 42.17, 43.21A, 70.105, and 90.52 RCW, the department must protect any information (other than information on the quality of biosolids) contained in applications as confidential upon a showing by any person that the information, if made public, would divulge methods or processes entitled to protection as trade secrets of the person.

(b) Any information accorded confidential status, whether or not contained in any application form, must be disclosed, upon request, to the regional administrator of EPA.

(10) **Recordkeeping required for permit applications.** Applicants must keep records of all information used to complete permit applications and any supplemental information submitted for a period of five years, or longer if otherwise required by this chapter, the conditions of the applicable permit, or other state or local laws;

(11) **Public notice and comment period.**

(a) All facilities that are applying for coverage under a general permit, facilities applying for renewal of coverage under a general permit that propose a significant change in biosolids management practices, and those applying for an individual permit or for renewal thereof, must issue public notice within each county where they will prepare biosolids for application to the land, and except as provided in (c) and (d) of this subsection, in each county where biosolids not meeting the criteria to be classified as exceptional quality will be applied to the land. Notice must be given as follows:

(i) The applicant must publish two notices, at intervals of at least one week, in a newspaper of general circulation in each county where biosolids are proposed to be applied to the land.

(ii) The applicant must mail a copy of the notice to any person or group that has notified the applicant in writing of an interest in the applicant's biosolids management activities.

(iii) For a period of at least thirty days, beginning not later than the last date of newspaper publication required in (a)(i) of this subsection, notice must be posted at all sites identified in the permit application where bulk biosolids that do not meet the standards to be classified as exceptional quality will be applied to the land;

(A) When newspaper notice is not required for new sites being proposed in accordance with an approved general land application plan per (c) of this subsection, the thirty-day notice period in (a)(iii) of this subsection begins when the direct mail notice requirement of (a)(ii) of this subsection has been met.

(B) It is a violation of these rules for any person to remove a sign posted in accordance with the requirements of (a)(iii) of this subsection during the public notice period.

(iv) Notice must be given by any other method required by the department.

(v) At the time of the initial notice, copies of the notice and an explanation of all places where and when the notice was or will be published or posted must be submitted to:

(A) The contact person in the regional or headquarters office of the department of ecology that has lead responsibility for the permit; and

(B) The local health department in each county where biosolids will be treated, stored, applied to the land, or disposed in a municipal solid waste landfill, unless the local health department has waived receipt of notification under subsection (7)(b) of this section.

(b) Notices under (a) of this subsection must contain the information in (b)(i) through (xi) of this subsection:

(i) The name and address of the facility seeking the permit or filing a notice of intent, and a contact person;

(ii) When the local health department has accepted delegation of responsibility under WAC 173-308-050, the address of the local health department and a contact person;

(iii) The address of the regional or headquarters office of the department of ecology that has lead responsibility for the permit, and a contact person;

(iv) A brief statement of the applicant's biosolids management practices for which a permit is sought or a notice of intent is being submitted;

(v) If coverage under a general permit is being sought, the name of the general permit or the name and location of the site if notice is being given for a site specific land application plan;

(vi) The statement: "Any person wishing to comment on this application or desiring to present their views regarding this application to the department of ecology or its delegated representative must do so in writing within thirty days of the last date of newspaper publication of this notice. Comments should be addressed to (insert the name and address of the person identified in (b)(vii) of this subsection)."

(vii) The person to whom comments should be addressed is the person in (b)(vii)(A) or (B) of this subsection, whichever is appropriate;

(A) When the application or notice of intent is for coverage under a general permit or for an individual permit, the person to whom comments should be directed is the department of ecology contact in (b)(iii) of this subsection.

(B) When the proposal is for a specific land application site, the person to whom comments should be directed is the department of ecology contact in (b)(iii) of this subsection, except where responsibility has been delegated to a local health department, in which case the recipient of comments should be the local health department contact in (b)(ii) of this subsection.

(viii) A statement specifying:

(A) Whether or not the permit application contains any information about current or proposed biosolids application sites;

(B) Whether or not the permit application contains a plan specifying how future application sites will be identified;

(C) If biosolids will be provided to any other facility, including a beneficial use facility; and

(D) How the public will be notified regarding the selection of future land application sites.

(ix) The time and place of any public hearing or meeting that will be held or the procedures to request one, and other procedures by which the public may participate in the final permit decision;

(x) The means by which an interested person or organization can have their name placed on a list to be maintained by the applicant for the purpose of future notification of biosolids management activities.

On written request of the person seeking to have their name added to the list of interested parties, all facilities maintaining a list of interested persons or organizations under (b)(x) of this subsection must provide written confirmation by certified mail, return receipt requested, to each interested person or organization that their name has been placed on the list.

(xi) Any additional information considered necessary or proper.

(c) Except as provided in (d) of this subsection, public notice for a new or expanded land application site that is being proposed in accordance with an approved general land application plan must be satisfied as follows:

(i) If site specific local approval is required to be obtained through integrated project review under the State Growth Management Act and the substantive notice requirements of (b) of this subsection are met, public notice for the purposes of this rule will be satisfied by compliance with the public notice requirements of the local integrated project review process;

(ii) Public notice conducted in accordance with the State Environmental Policy Act satisfies the public notice requirements of this rule for new or expanded land application sites if the substantive requirements of (b) of this subsection are met and the site is specifically identified in an environmental checklist that is available for public review and comment;

(iii) The public notice process for new or expanded land application sites not applicable under (c)(i) or (ii) of this subsection must meet the requirements of (a)(ii) through (v) and (b) of this subsection.

(d) Facilities that will provide biosolids to a permitted beneficial use facility must conduct public notice in accordance with this subsection as follows:

(i) Public notice must be given when applying for an individual permit or for coverage under a general permit;

(ii) Other than sites that are part of a beneficial use facility, public notice must be given for all new or expanded sites where biosolids not meeting the criteria to be classified as exceptional quality will be applied to the land;

(iii) Facilities that provide biosolids to a permitted beneficial use facility are not required to carry out public notice specific to the land application of biosolids at the beneficial use facility if:

(A) Public notice given for the beneficial use facility identified the facility providing the biosolids; or

(B) Public notice given for the beneficial use facility clearly stated that biosolids would be accepted from unknown sources, including sources outside of the county in which the beneficial use facility is located, as applicable.

(e) Facilities applying for individual permits must complete the public notice requirements in this subsection at the time they apply for a permit and at the time when a draft permit is provided for formal review by the department.

(12) **Public hearings and meetings.**

(a) The department may require an applicant to hold a public hearing or meeting when applying for coverage under a general permit, for an individual permit, or for any land application plan if it finds, on the basis of requests, a significant degree of public interest, or that a public discussion might clarify one or more aspects important to compliance with the requirements of this chapter or an applicable permit.

(b) During the public comment period provided for in subsection (11) of this section, any person may request the department to require a public hearing or meeting if none has been scheduled. Any request for a public hearing or meeting must be in writing and must state the nature of the issues proposed to be raised. The department will consider all requests that are received not later than the final comment date specified in the notice required under subsection (11)(b) of this section.

(c) Notice of hearing. If the department determines that a public hearing must be held, the applicant must give notice of a public hearing in accordance with the procedures in subsection (11)(a) and (b) of this section, except that posting of sites that are not specifically subject to the hearing is not required.

(i) The notice of hearing must contain the following information:

(A) The dates of previous public notices relating to the permit application;

(B) The date, time, and place of the hearing;

(C) A brief description of the nature and purpose of the hearing, including any rules and procedures that apply.

(ii) Copies of the notice and an explanation of all places where and when the notice was published must be submitted to:

(A) The contact person in the regional or headquarters office of the department of ecology that has lead responsibility for the permit; and

(B) Any applicable local health department that has accepted delegation of authority under WAC 173-308-050.

(d) Public hearings required under this subsection, must be held in each county where biosolids will be treated or applied to the land, unless otherwise allowed by the department.

(e) Public hearings required under this subsection must be held no sooner than thirty days after the final notice of public hearing published in accordance with subsection (11)(a)(i) of this section, and at a time and place as can be reasonably expected to be convenient to the department and interested parties.

Public hearings must be attended by a representative of the permit applicant who is authorized to respond to questions from the public and the department, and by a representative of the department.

(f) Notice conducted for public meetings is the same as that required for public hearings unless otherwise allowed by the department.

(13) **Record and response to comments received.**

(a) The department will maintain a record of all written comments received during the public comment period in subsection (11) of this section, and of all comments properly submitted in response to a public hearing required under subsection (12) of this section.

(b) The department will prepare a response to all relevant comments received, and will briefly describe any changes that resulted (other than editorial changes) to an individual permit or to an applicant's coverage under a general permit.

(c) The department is not obligated to consider or respond to comments or information that is received later than thirty days after the initial date of publication of public notice, or the date of a public hearing, whichever is later.

(14) **Additional requirements.** In addition to the requirements of this chapter, the department may impose additional requirements as part of the approval process for coverage under a general permit or as conditions of an individual permit if any of the conditions in subsection (1)(b)(i) through (iv) of this section are met.

(a) Any additional requirements imposed under this subsection are considered to be permit requirements, fully enforceable in accordance with the provisions of this chapter and the applicable permit.

(b) If known, any additional requirements must be disclosed at a public hearing if a public hearing is held, or if imposed subsequent to a public hearing, must become a part of the written record required under subsection (13)(b) of this section.

(15) **Compliance schedules.**

(a) A permit may specify a schedule leading to compliance with the federal Clean Water Act and these regulations. Any compliance schedule under this section must require compliance as soon as possible, but not later than any applicable statutory deadline under the Clean Water Act or chapter 70.95J RCW.

(b) Interim dates. If a permit establishes a compliance schedule that exceeds one year from the date of permit issuance, the schedule must set forth interim requirements and the date for their achievement. The time between interim dates must not exceed six months.

(c) Reporting. The permit must require that no later than fourteen days after each interim date and the final date of compliance, the permittee must notify the department in writing of its compliance or noncompliance with the interim or final requirements.

(16) **Fact sheet required for individual permits.**

(a) The department must prepare a fact sheet for every draft individual permit for a class I biosolids management facility, for every draft individual permit requiring permit conditions developed on a case-by-case basis to implement section 405(d)(4) of the Clean Water Act, for every draft individual permit that includes a general land application plan under subsection (6)(b)(iii) of this section, and for every draft individual permit that the director finds is the subject of widespread public interest or raises major issues. The fact sheet must briefly set forth the principal facts and the significant factual, legal, methodological, and policy questions considered in preparing the draft permit. The director must send this fact sheet to the applicant and, on request, to any other person.

(b) The fact sheet must include:

(i) A brief description of the type of facility or activity that is the subject of the draft permit;

(ii) Any calculations or other necessary explanation of the derivation of conditions for biosolids use and disposal, including a citation to the applicable standards for biosolids use or disposal and reasons why they are applicable, or in the case of conditions developed on a case-by-case basis to implement section 405 (d)(4) of the Clean Water Act, an explanation of, and the bases for the conditions; and

(iii) For permits that include a general land application plan under subsection (6)(b)(iii) of this section, a brief description of how each of the required elements of the land application plan is addressed in the permit.

(17) **Approval of coverage.** After reviewing an application for an individual permit or for coverage under a general permit, and considering other pertinent information including any testimony received during a public hearing or meeting, or written comments submitted in response to a public notice, the department may approve coverage under a general permit or issue an individual permit.

(a) If coverage under a general permit is approved or an individual permit is issued, the department will notify the applicant in writing, conveying a final copy of the issued permit including any additional requirements or stipulations that are imposed as a condition of coverage under a general permit.

(b) If an application for an individual permit or for coverage under a general permit is disapproved, the department will notify the applicant in writing, including an explanation of why coverage was disapproved.

(c) On and after the effective date of this chapter, if there are no significant changes to biosolids management practices at an existing site, a facility may continue to apply biosolids to sites that were permitted by the local health department before the effective date of this chapter, in accordance with the requirements of the local health department, the applicable general permit, and this chapter, unless the department objects in writing.

(i) Facilities applicable under (c) of this subsection that have submitted a notice of intent to be covered or have been notified that they are covered under a general permit, and those that have applied for coverage under a general permit, are provisionally approved for coverage under an applicable general permit to apply biosolids to existing sites as permitted by the local health department and in accordance with the requirements of the applicable general permit and this chapter.

(ii) A beneficial use facility may not obtain provisional approval for coverage under a general permit, but may obtain provisional approval for existing land application sites after being permitted as a beneficial use facility.

(d) Except for provisionally approved facilities under this subitem (d), a facility may not engage in new biosolids management practices or implement significant changes to biosolids management practices at existing sites, or apply biosolids to new or expanded sites until all applicable requirements of this section including those for public notice, and public hearings or meetings, have been satisfied.

Facilities that have submitted a notice of intent or that have been notified of coverage under a general permit, or that have applied for coverage under a general permit, are provisionally approved for coverage under an applicable general permit to apply biosolids to sites consistent with the applicable requirements of this chapter and the applicable general permit and as approved by the local health department, if the public notice requirements under subsection (11) of this section have been fulfilled, and no request for a public hearing has been made or the department has denied the request, and all comments received have been resolved to the satisfaction of the local health department;

(e) Facilities with provisional approval are subject to further review and permitting requirements at a later date, and are subject at all times to all applicable conditions of this chapter and the applicable general permit.

(f) In no case may a lack of action by the department be construed as relieving an applicant of the obligation to comply with any of the provisions of this chapter or an applicable general permit, or as approving final use or disposal practices that are not consistent with the provisions of this chapter or an applicable general permit, or that pose a threat to human health or the environment.

(18) **Prohibition.** The department may not issue a permit when the Regional Administrator of EPA has objected in writing under 40 CFR 123.44.

(19) **Duration of permits.**

(a) Permits are issued for fixed terms, up to but not exceeding five years from the effective date of the permit.

(i) Coverage under a general permit may be issued for a period up to the remaining term of issuance for the permit.

(b) The term of a permit may not be extended by modification beyond five years.

(20) **Transfer of permit coverage.**

(a) Except as provided in (b) of this subsection, a permit may be transferred by the permittee to a new owner operator only if the permit has been modified or revoked and reissued to identify the new permittee and incorporate other requirements as may be necessary to assure compliance with the requirements of this chapter.

(b) Coverage under a permit is automatically transferred from the old permittee to a new permittee, on the date agreed to, if:

(i) A written, signed agreement, between the old and new permittees containing a specific date for transfer of permit responsibility, coverage, and liability is submitted in accordance with the requirements of subsection (7) of this section at least thirty days in advance of the proposed date of transfer; and

(ii) The department has not notified both permittees of any objection to the transfer, or of the intent to revoke coverage under the general permit.

(c) No condition or requirement of a permit or this chapter may be waived by the transfer of permit coverage from one party to another.

(21) **Modification or revocation and reissuance of individual permits and modification of conditions of coverage under a general permit.**

(a) When the department receives any information (for example, upon inspection of a facility, receipt of information submitted by the permittee as required in the permit, receipt of a request for modification or revocation and reissuance, or upon a review of the permit file), the department may determine whether or not one or more of the causes listed in (b) or (c) of this subsection for modification or revocation and reissuance, or both, exist.

(i) If cause for modification or revocation and reissuance, or both, exists, the department may modify or revoke and reissue an individual permit, or modify conditions of coverage or revoke and reissue coverage under a general permit, and may request an updated application if necessary.

(ii) When an individual permit or conditions for coverage under a general permit is/are modified, only the conditions subject to modification are reopened.

(iii) If an individual permit or authorization for coverage under a general permit is revoked and reissued, the entire individual permit or consideration of coverage under a general permit is reopened and subject to revision, and the individual permit or coverage under the general permit may be reissued for a new term.

(iv) If cause does not exist under this section, the department may not modify or revoke and reissue an individual permit or conditions of coverage under a general permit.

(b) Causes for modification. The following are causes for modification but not revocation and reissuance of individual permits or authorization of coverage under a general permit except when the permittee requests or agrees.

(i) Alterations. There are material and substantial alterations or additions to the permitted facility or activity that occurred after permit issuance that justify the application of permit conditions that are different from or absent in the existing permit.

(ii) Information. The department has received new information. Individual permits or authorization of coverage under a general permit may be modified during their terms for this cause only if the information was not available at the time of permit issuance (other than revised regulations, guidance, or test methods) and would have justified the application of different permit conditions at the time of issuance.

(iii) New regulations. New regulations have been adopted or the standards or regulations on which the permit was based have been changed by adoption of amended standards or regulations or by judicial decision after the permit was issued.

(iv) Compliance schedules. The department determines good cause exists for modification of a compliance schedule, such as an act of God, strike, flood, or materials shortage or other events over which the permittee has little or no control and for which there is no reasonable available remedy. However, in no case may a compliance schedule be modified to extend beyond an applicable Clean Water Act statutory deadline.

(v) Land application plans. When required by a permit condition to incorporate a general land application plan for beneficial use of biosolids, to revise a general land application plan, or to add a general land application plan.

(c) The following are causes to modify or alternatively, revoke and reissue, an individual permit or the conditions for coverage under a general permit.

(i) Cause exists for termination under subsection (22) of this section and the department determines that modification or revocation and reissuance is appropriate.

(ii) The department has received notification of a proposed transfer of the permit.

(d) When an individual permit or coverage under a general permit is modified or revoked and reissued, the public notice requirements of subsection (11) of this section, and if required the public hearing requirements of subsection (12) of this section must be complied with for the reopened conditions or reissued permit.

(22) **Termination of permits.** The following are causes for terminating an individual permit or coverage under a general permit during its term, or for denying a permit renewal application:

(a) Noncompliance by the permittee with any condition of the permit;

(b) The permittee's failure in the application or during the permit issuance process to disclose fully all relevant facts, or the permittee's misrepresentation of any relevant facts at any time;

(c) A determination that the permitted activity endangers human health or the environment and can only be regulated to acceptable levels by permit modification or termination; or

(d) A change in any condition that requires either a temporary or a permanent reduction or elimination of any activity controlled by the permit.

(23) **Enforcement.** Any violation of this chapter or any permit issued under this chapter, may be subject to the enforcement provisions of applicable law, including chapters 70.95 and 70.95J RCW.

(24) **Appeals.** Any person aggrieved by a decision of the department made in accordance with provisions of this chapter may appeal that decision only as provided by applicable law, including chapters 43.21B RCW and 34.05 RCW.

(25) **Requirement to coordinate permitting with delegated local health departments.** When a local health department has received delegation to administer any portion of, or to carry out any activity required under this chapter, all facilities subject to permitting under this chapter must cooperate with the department and the local health department by coordinating permitting activities so as to assure an opportunity for local health department involvement consistent with the terms of the delegation agreement.

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-310, filed 2/18/98, effective 3/21/98.]

WAC 173-308-320 Permit fees. (1) All facilities that are required to obtain a permit under this section must pay an annual biosolids permit fee to the department of ecology.

(2) Biosolids permit fees are assessed prospectively on an annual basis and apply regardless of the date of issuance of a permit.

(3) Biosolids permit fees are assessed and collected for fiscal years and are due and payable within forty-five days after the department mails a billing statement.

(a) Failure to pay a permit fee is cause for denial of coverage under a permit or revocation of existing coverage. Fees are considered delinquent if they are not received by the first invoice billing due date. Permit holders will be notified by certified letter and have thirty days to bring their account up-to-date before further action is taken by the department.

(b) The department may at its discretion mail partial billing statements two or more times per year, in which case a facility is responsible only for the amount reflected on the current (and any past due) billing statement.

(c) Receiving-only facilities, centralized septage treatment facilities, and persons who apply septage to the land that determine a residential equivalent value under subsection (4)(b) or (c) of this section may submit periodic payments as provided in (c)(i), (ii), and (iii) of this subsection, based on the actual level of service, provided that they submit a letter to the department indicating their intent to do so.

(i) Facilities under (c) of this subsection must submit a quarterly payment and statement of actual service level within ten days of the end of each quarter (not later than the 10th day of March, June, September, and December of each year), except as provided in (c)(ii) or (iii) of this subsection.

(ii) Facilities under (c) of this subsection that estimate and provide a level of service less than three hundred residential equivalents per year are subject to a fee of $0.00 per residential equivalent and are not required to submit periodic payments, but must submit a statement of actual service level at least once per year.

(iii) Facilities under (c) of this subsection that calculate an annual residential equivalent value equal to or greater than three hundred residential equivalents per year may withhold a payment for any quarter where the total amount due is less than fifty dollars, provided a statement of the actual service level is submitted and that all accounts are brought up-to-date by July 10th of each year.

(4) The permit fee schedule is based on the number of residences or residential equivalents (residential equivalent value) contributing to a permittee's biosolids management system, and incorporates the annual fiscal growth factor calculated under chapter 43.135 RCW.

(a) For facilities with NPDES permits issued under chapter 173-220 WAC or state waste discharge permits issued under chapter 173-216 WAC, the department will use resi-

dential equivalent values determined under chapter 173-224 WAC.

(b) The residential equivalent value for receiving-only facilities other than septage facilities in (c) of this subsection is the sum of the fraction of residential equivalent values contributed from all sources, as determined by considering the portion of the current annual biosolids production of each originating source that is provided to the receiving facility.

A receiving-only facility must determine an estimated residential equivalent value based on projected capacity as detailed in the permit application submitted under WAC 173-308-310 and the method described in (b) of this subsection.

(c) For centralized septage treatment facilities and persons who apply septage to the land, 1,250 gallons of septage received for treatment or applied to the land is equal to one residential equivalent as shown in Equation (4).

$$REV = \frac{\text{Gallons of septage received or applied to the land}}{\text{1,250 Gallons per Residental Equivalent}} \quad \text{Equation (4)}$$

A centralized septage treatment facility and a person who applies septage to the land must determine an estimated residential equivalent value based on projected capacity as detailed in the permit application submitted under WAC 173-308-310 and the method described in (c) of this subsection.

(d) Equation (5) below is used to calculate permit fees:

$$\text{Permit Fee} = (REV \times \text{Cost per } RE_{FGF}) \text{ where:} \quad \text{Equation (5)}$$

(i) REV= residential equivalent value.

(ii) FGF= An annual fiscal growth factor expressed as a percentage, as determined under chapter 43.135 RCW.

(iii) Cost per RE_{FGF}= cost per residential equivalent in dollars including a fiscal growth factor. The cost per RE_{FGF} is obtained by multiplying the cost per residential equivalent in the preceding year by the current year's fiscal growth factor as follows in (6):

$$\text{Cost per } RE_{FGF} = \text{Previous year's cost per RE} \times [1 + (FGF)] \quad \text{Equation (6)}$$

For implementation of the fiscal growth factor, the base year for all biosolids permit fees will be fiscal year 1998, ending June 30, 1998. In the base year, the FGF will be zero.

(e) Unless a lower cost is specified in a permit, the cost per residential equivalent in the base year will be as follows:

(i) $0.00 per residential equivalent for any permit for any facility with a total residential equivalent value of less than 300, including those that would otherwise fall under (e)(ii) through (v) of this subsection.

(ii) $0.015 per residential equivalent for a permit authorizing municipalities that own or operate incinerators that fire municipal sewage sludge to dispose of municipal sewage sludge generated by their own facility in a municipal solid waste landfill or through another facility on an emergency basis.

(iii) $.20 per residential equivalent for permits authorizing disposal in a municipal solid waste landfill, except for facilities under (e)(ii) of this subsection.

(iv) $0.04 per residential equivalent for permits issued to receiving-only facilities as defined in WAC 173-308-080.

(v) $0.162 per residential equivalent for permits authorizing any other type of biosolids management activity, including but not limited to the following:

(A) Direct beneficial use by a treatment works treating domestic sewage;

(B) Transfer from one facility to another facility, including delivery of biosolids to an incinerator from nonincinerating jurisdictions;

(C) Prolonged treatment or storage, including lagoon systems;

(D) Treatment or land application of septage.

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-320, filed 2/18/98, effective 3/21/98.]

WAC 173-308-900 Appendix A—Procedure to determine the annual whole biosolids application rate. When biosolids are sold or given away in a bag or other container for application to the land, and any of the pollutant concentration limits in Table 3 of WAC 173-308-160 are exceeded, the mathematical product of the concentration in the biosolids of each pollutant listed in Table 4 of WAC 173-308-160 and the annual whole biosolids application rate (AWBAR) must not cause the annual pollutant loading rate for the pollutant in Table 4 of WAC 173-308-160 to be exceeded. This appendix contains the procedure used to determine an AWBAR that does not cause the annual pollutant loading rates in Table 4 of WAC 173-308-160 to be exceeded. The relationship between the annual pollutant loading rate (APLR) for a pollutant and the annual whole biosolids application rate (AWBAR) is shown in equation (7).

$$APLR = C^* AWBAR * 0.001 \quad \text{Equation (7)}$$

Where:

APLR = Annual pollutant loading rate in kilograms per hectare per 365 day period.

C = Pollutant concentration in milligrams, per kilogram of total solids (dry weight basis).

AWBAR = Annual whole biosolids application rate in metric tons per hectare per 365 day period (dry weight basis).

0.001 = A conversion factor.

To determine the AWBAR, equation (7) is rearranged into equation (8):

$$AWBAR = \frac{APLR}{C * 0.001} \quad \text{Equation (8)}$$

The procedure used to determine the AWBAR is presented below.

Procedure:

1. Analyze a sample of the biosolids to determine the concentration for each of the pollutants listed in Table 4 of WAC 173-308-160.

2. Using the pollutant concentrations from Step 1 and the APLRs from Table 4 of WAC 173-308-160, calculate an AWBAR for each pollutant using equation (8).

3. The correct AWBAR is the lowest AWBAR calculated in Step 2.

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-900, filed 2/18/98, effective 3/21/98.]

Chapter 173-308 WAC
BIOSOLIDS MANAGEMENT

WAC

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173-308-320	Permit fees.
173-308-900	Appendix A—Procedure to determine the annual whole biosolids application rate.

WAC 173-308-010 Authority and purpose. (1) **Authority.** This chapter is adopted under the authority of chapters 70.95J and 70.95 RCW.

(2) **Purpose.**

(a) The purpose of this chapter is to protect human health and the environment when biosolids are applied to the land. This chapter encourages the maximum beneficial use of biosolids, and is intended to conform to all applicable federal rules adopted under the Federal Clean Water Act as it existed on February 4, 1987.

(b) This chapter establishes permitting requirements for treatment works treating domestic sewage that engage in applicable biosolids treatment or management practices, including any person, site, or facility that has been designated as a treatment works treating domestic sewage.

(c) This chapter establishes standards for the treatment, quality, and management of municipal sewage sludge and domestic septage that are directly enforceable, and that allow these materials to be classified and managed as biosolids.

(d) This chapter establishes requirements, standards, management practices, and monitoring, recordkeeping and reporting requirements that are applicable when biosolids are applied to the land and when municipal sewage sludge is disposed in a municipal solid waste landfill unit as defined in WAC 173-351-100.

(e) This chapter establishes fees for permits issued to facilities that engage in applicable biosolids management activities.

Fees under WAC 173-308-320 do not apply to persons whose activity is limited to pumping, hauling, temporarily storing, or delivering septage or biosolids to other facilities or land application sites, if:

(i) They do not engage in the treatment of the septage or biosolids;

(ii) They have not been designated as a treatment works treating domestic sewage; and

(iii) The generating and receiving facility or land application site is in compliance with the requirements of WAC 173-308-310.

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-010, filed 2/18/98, effective 3/21/98.]

WAC 173-308-020 Applicability. (1) Unless otherwise specified in this chapter, these rules apply to the following:

(a) A person who prepares biosolids;

(b) A person who stores biosolids;

(c) A person who applies biosolids to the land;

(d) Biosolids that are applied to the land;

(e) The land where biosolids are applied;

(f) The owner and lease-holder of land where biosolids are applied;

(g) A person who disposes of municipal sewage sludge in a municipal solid waste landfill;

(h) Municipal sewage sludge that is disposed of in a municipal solid waste landfill.

(2) This chapter does not apply to the following municipal sewage sludge and biosolids management facilities and practices:

(a) The firing of municipal sewage sludge in an incinerator.

(b) The placing or disposal of municipal sewage sludge or biosolids in facilities other than municipal solid waste landfills.

(3) Except as provided in (a) and (g) of this subsection, the following solid wastes are not regulated under this chapter:

(a) Sludge generated at an industrial facility during the treatment of industrial wastewater, including sewage sludge generated during the treatment of industrial wastewater combined with domestic sewage; sludge generated at an industrial facility during the treatment of only domestic sewage is considered municipal sewage sludge subject to the requirements of this chapter.

(b) Sewage sludge determined to be hazardous in accordance with chapter 70.105 RCW or rules adopted thereunder.

(c) Sewage sludge with a concentration of polychlorinated biphenyls (PCBs) equal to or greater than 50 milligrams per kilogram of total solids (dry weight basis).

(d) Ash generated during the firing of municipal sewage sludge or biosolids in an incinerator.

(e) Grit or screenings generated during preliminary treatment of domestic sewage in a treatment works.

(f) Sludge generated during the treatment of either surface water or ground water used for drinking water.

(g) Commercial septage, industrial septage, or a mixture of domestic septage and commercial or industrial septage; on a case-by-case basis, on request of the person who applies septage to the land or at the department's discretion, the department may designate the septage in this subsection (3)(g) as septage that is domestic in quality, and require the septage to be managed in accordance with the provisions of this chapter.

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-020, filed 2/18/98, effective 3/21/98.]

WAC 173-308-030 Relationship to other regulations. In addition to the requirements of this chapter, other laws, regulations, and ordinances may also apply to biosolids. These include but are not limited to the following:

(1) Commercial fertilizers are subject to regulation by the Washington state department of agriculture. The following statutes and rules apply to biosolids meeting the definition of a commercial fertilizer under chapter 15.54 RCW:

(a) Chapter 15.54 RCW - Fertilizers, minerals, and limes; and chapter 16-200 WAC - rules relating to fertilizers, minerals and limes, including requirements for labeling, licensing, and registration;

(b) Chapter 19.94 RCW - Weights and measures; and chapter 16-666 WAC - Weights and measures—Packaging and labeling regulations.

(2) Except as required in WAC 173-308-100, the transportation of biosolids or municipal sewage sludge is subject to regulation by the Washington state utilities and transportation commission under Title 81 RCW.

(3) Facilities required to obtain permits under WAC 173-308-310 must comply with the requirements in chapter 43.21C RCW and the State Environmental Policy Act rules adopted under chapter 197-11 WAC. Public notice and hearing requirements under the State Environmental Policy Act may be coordinated with the similar requirements of this chapter.

(4) Biosolids facilities and sites where biosolids are applied to the land must comply with other applicable federal, state and local laws including zoning and land use requirements. Enforcement of other laws and regulations is the responsibility of the agency with jurisdiction.

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-030, filed 2/18/98, effective 3/21/98.]

WAC 173-308-040 Direct enforceability. All persons and facilities subject to the requirements of this chapter must comply with these rules on the effective date of the applicable regulation, regardless of whether or not a permit has been issued under WAC 173-308-310.

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-040, filed 2/18/98, effective 3/21/98.]

WAC 173-308-050 Delegation of authority. (1) Upon the request of a local health department, the department may delegate authority to implement and assist in the administration of appropriate portions of this chapter.

Delegation must be consistent with any applicable state-EPA agreement regarding delegation of federal biosolids program authority.

(2) Method of delegation.

(a) Delegation will be accomplished through an instrument of mutual consent that is acceptable to both the department and the local health department seeking delegation.

(b) The department may revoke part or all of a delegation of authority under this section if it finds that a local health department has failed to adequately carry out any portion of a delegated responsibility.

(c) As an alternative to revocation of local delegation under (b) of this subsection, the department may correct any deficiencies in a locally approved state permit element by implementing the requirements of this chapter in a separate state approved land application plan or permit. In such case the requirements of the state plan or permit will be in addition to or take precedent over local requirements.

(3) Contents of delegation agreements. At a minimum, delegation agreements must specify the authorities and responsibilities that are being delegated to a local health department. Other authorities and responsibilities are assumed to be retained by the department.

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-050, filed 2/18/98, effective 3/21/98.]

WAC 173-308-060 Biosolids not classified as solid waste. (1) The state of Washington recognizes biosolids as a valuable commodity. Biosolids are not solid waste and are not subject to regulation under solid waste laws.

(2) Municipal sewage sludge or septage that fails to meet standards for classification as biosolids is a solid waste, and may not be applied to the land.

(3) Municipal sewage sludge or septage that will be disposed in a landfill is a solid waste.

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-060, filed 2/18/98, effective 3/21/98.]

WAC 173-308-070 Use of term, "biosolids"—Explanation. Biosolids is a term adopted in state statute to distinguish municipal sewage sludge that is suitable for land application from that which is not. Under state law biosolids includes both municipal sewage sludge and septage that meet applicable criteria. Federal rules do not use the term "biosolids," and rely instead on the term "sewage sludge," which under the federal system includes domestic septage. Some federal guidance documents do use the term biosolids. Unless the context requires otherwise, biosolids is the term used in this chapter to refer to municipal sewage sludge or septage that has been or is being treated to meet standards so that it can be applied to the land. Material that will be disposed in a landfill is considered municipal sewage sludge. When the term septage is used, the reference is exclusively to septage.

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-070, filed 2/18/98, effective 3/21/98.]

WAC 173-308-080 Definitions. Unless the department determines that the context of the rule requires otherwise, the following definitions are applicable for the purposes of this chapter.

"Administrator" means the Administrator of the United States Environmental Protection Agency, or an authorized representative.

"Aerobic digestion" is the biochemical decomposition of organic matter in biosolids into carbon dioxide and water by microorganisms in the presence of air. Aerobic digestion does not include composting.

"Agricultural land" is land on which a food crop, feed crop, or fiber crop is grown. This includes range land and land used as pasture.

"Agronomic rate" is the whole biosolids application rate (dry weight basis) that will provide the amount of nitrogen required for optimum growth of vegetation, and that will not result in the violation of applicable standards or requirements for the protection of ground or surface water as established under chapter 90.48 RCW and related rules including chapters 173-200 and 173-201 WAC.

"Anaerobic digestion" is the biochemical decomposition of organic matter in biosolids into methane gas and carbon dioxide by microorganisms in the absence of air. Anaerobic digestion does not include composting.

"Annual pollutant loading rate" is the maximum amount of a pollutant that can be applied to a unit area of land during a three hundred sixty-five-day period.

"Annual whole biosolids application rate" is the maximum amount of biosolids (dry weight basis) that can be applied to a unit area of land during a three hundred sixty-five-day period.

"Apply biosolids or biosolids applied to the land" means the land application of biosolids for the purpose of beneficial use.

"Beneficial use facility" means a site or sites where biosolids are applied to the land for beneficial use, which has been permitted as a treatment works treating domestic sewage in accordance with the provisions of WAC 173-308-310, and that has been designated as a beneficial use facility through the permitting process.

"Beneficial use of biosolids" means the application of biosolids to the land for the purposes of improving soil characteristics including tilth, fertility, and stability and enhancing the growth of vegetation consistent with protecting human health and the environment.

"Biosolids" means municipal sewage sludge that is a primarily organic, semisolid product resulting from the wastewater treatment process, that can be beneficially recycled and meets all applicable requirements under this chapter. Biosolids includes a material derived from biosolids, and septic tank sludge, also known as septage, that can be beneficially recycled and meets all applicable requirements under this chapter. For the purposes of this rule, semisolid products include biosolids or products derived from biosolids ranging in character from mostly liquid to fully dried solids.

"Bulk biosolids" means biosolids that are not sold or given away in a bag or other container for application to the land.

"Ceiling concentration" means the maximum concentration of a pollutant in any biosolids sample, beyond which level the biosolids would be classified as municipal sewage sludge not suitable for application to the land. Ceiling concentrations are established in Table 1 of WAC 173-308-160.

"Class I biosolids management facility" is any publicly owned treatment works (POTW), as defined in 40 CFR 501.2, required to have an approved pretreatment program under 40 CFR 403.8(a) (including any POTW located in a state that has elected to assume local program responsibilities under 40 CFR 403.10(e)), and any treatment works treating domestic sewage, as defined in 40 CFR 122.2, classified as a Class I biosolids management facility by the EPA Regional Administrator, or in the case of approved state programs, the Regional Administrator in conjunction with the state director, because of the potential for its biosolids use or disposal practice to affect public health and the environment adversely.

"Clean Water Act" or **"CWA"** means the Clean Water Act or Federal Clean Water Act (FCWA) (formerly referred to as either the Federal Water Pollution Act or the Federal Water Pollution Control Act Amendments of 1972), Public Law 92-500, as amended by Public Law 95-217, Public Law 95-576, Public Law 96-483, Public Law 97-117, and Public Law 100-4.

"Composting" means the controlled biological degradation of organic solid waste yielding a product for use as a soil conditioner. This does not include the treatment of sewage sludge in a digester at a wastewater treatment plant.

"Cumulative pollutant loading rate" is the maximum amount of a pollutant that can be applied to an area of land from biosolids that exceed the pollutant concentration limits established in Table 3 of WAC 173-308-160.

"Density of microorganisms" is the number of microorganisms per unit mass of total solids (dry weight) in the biosolids.

"Department" means the Washington state department of ecology and, within the scope of its delegation, a local health department that has been delegated authority under WAC 173-308-050.

"Director" means the director of the department of ecology or his or her authorized representative.

"Disposal on an emergency basis" means a period up to but not exceeding one year. Generally, emergency situations requiring the use of disposal facilities will normally occur as a result of inclement weather conditions at a beneficial use site, contractual or technical difficulties in the treatment, transportation, or application of the biosolids, or as a result of short term economic or administrative barriers, any and all of which are expected to be resolved within a period of one year.

"Disposal on a long-term basis" means to adopt disposal as a preferred method of management for at least five years, or for an indefinite period of time with no expectation for pursuing other management alternatives.

"Disposal on a temporary basis" means a period of more than one but less than five years. Generally, situations requiring the temporary use of disposal facilities will nor-

mally occur as a result of deficiencies in the wastewater or biosolids treatment process, or economic, administrative, or contractual constraints which cannot be resolved in less than one year.

"**Domestic septage**" means domestic septage - Class I, Class II, or Class III as defined in this section.

"**Domestic septage - Class I**" is liquid or solid material removed from domestic septic tanks, cess pools, or similar treatment works that receive only domestic sewage, and that has had a sufficiently long residency time to be considered largely stabilized. For the purposes of managing mixed loads or batches of septage, a load or batch is considered Class I if it does not exceed twenty-five percent by volume of Class II domestic septage or twenty-five percent by volume of restaurant grease trap waste, unless otherwise approved by the regulatory authority.

"**Domestic septage - Class II**" is liquid or solid material removed from portable toilets, type III marine sanitation devices, vault toilets, pit toilets, RV holding tanks or other similar holding systems that receive only domestic sewage.

"**Domestic septage - Class III**" is liquid or solid material removed from domestic septic tanks, cess pools, or similar treatment works that receive sewage from commercial or industrial sources, but which the department has determined to be domestic in quality under WAC 173-308-020 (3)(g).

"**Domestic septage managed as biosolids originating from municipal sewage sludge**" means domestic septage managed as if it had originated from a sewage treatment process at a publicly owned treatment works.

"**Domestic sewage**" is waste and wastewater from humans or household operations that is discharged to or otherwise enters a treatment works.

"**Dry weight basis**" means calculated on the basis of having been dried at 105°C until reaching a constant mass (i.e., essentially one hundred percent solids content).

"**EPA**" means the United States Environmental Protection Agency.

"**Exceptional quality biosolids**" means biosolids that meet the pollutant concentration limits in Table 3 of WAC 173-308-160, the Class A pathogen reduction requirements in one of WAC 173-308-170 (2)(a) through (f), and the vector attraction reduction requirements in one of WAC 173-308-180 (2) through (7).

"**Facility**" means a treatment works treating domestic sewage as defined in this chapter, unless the context of the rule requires otherwise. For the purposes of this chapter a facility is considered to be new if it has not been previously approved for the treatment, storage, use, or disposal of biosolids.

"**Feed crops**" are crops produced primarily for consumption by animals.

"**Fiber crops**" are crops such as flax and cotton, including but not limited to those whose parts or by-products may be consumed by humans or used in the production or preparation of food for human consumption.

"**Food crops**" are crops consumed by humans. These include, but are not limited to, fruits, vegetables, grains, and tobacco.

"**Forest**" is an area of land that is managed for the production of timber or other forest products, or for benefits such as recreation and watershed protection, and that is or will be dominated by trees under the current system of management. For the purposes of this rule, other areas of land that are not regulated as agricultural land, public contact sites, land reclamation sites, or lawns or home gardens are considered forestland.

"**General permit,**" for the purposes of this chapter, means a permit issued by the department in accordance with the procedures established in this chapter or in chapter 173-226 WAC, to be effective in a designated geographical area, that authorizes the application of biosolids to the land or the disposal of biosolids in a municipal solid waste landfill, under which multiple treatment works treating domestic sewage may apply for coverage.

"**Geometric mean**" means the antilogarithm of the arithmetic average of the logarithms of the sample values, or the nth root of the product of n sample values.

"**Ground water**" means water in a saturated zone or stratum beneath the surface of land or below a surface water body.

"**Health department**" **or** "**local health department**" means city, county, city-county, or district public health department as defined in chapters 70.05, 70.08, and 70.46 RCW.

"**Individual permit,**" for the purposes of this chapter, means a permit issued by the department to a single treatment works treating domestic sewage in accordance with WAC 173-308-310, which authorizes the application of biosolids to the land or the disposal of biosolids in a municipal solid waste landfill.

"**Industrial wastewater**" is wastewater generated in a commercial or industrial process.

"**Land application**" is the application of biosolids to the land surface by means such as spreading or spraying; the injection of biosolids below the land surface; or the incorporation of biosolids into the soil, for the purpose of beneficial use.

"**Land with a low potential for public exposure**" is land that the public uses infrequently. This includes, but is not limited to, agricultural land, forest, and a reclamation site located in an unpopulated area (e.g., a strip mine located in a rural area).

"**Land with a high potential for public exposure**" is land that the public uses frequently. This includes, but is not limited to, a public contact site and a reclamation site located in a populated area (e.g., a construction site located in a city).

"**Local health department**" see definition of health department.

"**Monthly average**" is the arithmetic mean of all measurements taken during the month.

"**Municipal sewage sludge**" means sewage sludge generated from a publicly owned treatment works. For the purposes of this chapter, sewage sludge generated from the treatment of only domestic sewage in a privately owned or industrial treatment facility is considered municipal sewage sludge.

"**Municipality**" means a city, town, borough, county, parish, district, association, or other public body (including an inter-municipal agency of two or more of the foregoing entities) created by or under state law; or a designated and

approved management agency under section 208 of the Clean Water Act, as amended. The definition includes a special district created under state law, such as a water district, sewer district, sanitary district, utility district, drainage district, or similar entity, or an integrated waste management facility as defined in section 201(e) of the Clean Water Act, as amended, that has as one of its principal responsibilities the treatment, transport, use, or disposal of biosolids.

"Other container" is either an open or closed receptacle. This includes, but is not limited to, a bucket, a box, a carton, and a vehicle or trailer with a load capacity of one metric ton or less.

"Owner" means any person with ownership interest in a site or facility, or who exercises control over a site or facility, but does not include a person who, without participating in management of the site or facility, holds indicia of ownership primarily to protect the person's security interest.

"Pasture" is land on which animals feed directly on feed crops such as legumes, grasses, grain stubble, or stover.

"Pathogenic organisms" are disease causing organisms. These include, but are not limited to, certain bacteria, protozoa, viruses, and viable helminth ova.

"Permit" means an authorization, license, or equivalent control document issued by the director to implement the requirements of this chapter.

"Person" is an individual, association, partnership, corporation, municipality, state or federal agency, or an agent or employee thereof.

"Person who prepares biosolids" is either the person who generates biosolids during the treatment of domestic sewage in a treatment works or the person who derives a material from biosolids.

"pH" means the logarithm of the reciprocal of the hydrogen ion concentration.

"Place sewage sludge" or **"sewage sludge placed"** means to dispose of sewage sludge.

"Pollutant" is an organic substance, an inorganic substance, a combination of organic and inorganic substances, or a pathogenic organism that, after discharge and upon exposure, ingestion, inhalation, or assimilation into an organism either directly from the environment or indirectly by ingestion through the food chain, could, on the basis of information available to the Administrator of EPA, cause death, disease, behavioral abnormalities, cancer, genetic mutations, physiological malfunctions (including malfunction in reproduction), or physical deformations in either organisms or offspring of the organisms.

"Pollutant limit" is a numerical value that describes the amount of a pollutant allowed per unit amount of biosolids (e.g., milligrams per kilogram of total solids); the amount of a pollutant that can be applied to a unit area of land (e.g., kilograms per hectare); the volume of a material that can be applied to a unit area of land (e.g., gallons per acre); or the number of pathogens or indicator organisms per unit of biosolids. Pollutant limits are established in Tables 1 - 4 of WAC 173-308-160, in 173-308-170, and in 173-308-270.

"Public contact site" is land with a high potential for contact by the public. This includes, but is not limited to, public parks, ball fields, cemeteries, plant nurseries, turf farms, and golf courses.

"Publicly owned treatment works" means a treatment works treating domestic sewage that is owned by a municipality, the state of Washington, or the federal government.

"Range land" is generally open, uncultivated land dominated by herbaceous or shrubby vegetation that may be used for grazing or browsing, either by wildlife or livestock.

"Receiving-only facility" means a treatment works treating domestic sewage that only receives municipal sewage sludge or biosolids from other sources for further treatment and/or application to the land, and which does not generate any biosolids from the treatment of domestic sewage.

"Reclamation site" is drastically disturbed land that is reclaimed using biosolids. This includes, but is not limited to, strip mines and construction sites.

"Residential equivalent value" means the number of residential equivalents determined for a facility under chapter 173-224 WAC or a value similarly obtained under WAC 173-308-320.

"Restrict public access" means to minimize access of nonessential personnel to land where biosolids are applied, through the use of natural or artificial barriers, signs, remoteness, or other means.

"Saturated zone" means the zone below the water table in which all interstices are filled with water.

"Sewage sludge" is solid, semisolid, or liquid residue generated during the treatment of domestic sewage in a treatment works. Sewage sludge includes, but is not limited to, domestic septage; scum or solids removed in primary, secondary, or advanced wastewater treatment processes; and a material derived from sewage sludge. Sewage sludge does not include ash generated during the firing of sewage sludge in a sewage sludge incinerator or grit and screenings generated during preliminary treatment of domestic sewage in a treatment works.

"Significant change in biosolids management practices" means a change in the quality of biosolids that are applied to the land, either from class A to class B for pathogens, or from Table 3 to Table 1 of WAC 173-308-160 for pollutant limits; the addition of a new area to which biosolids will be applied, which was not previously disclosed during a required public notice process; for class B biosolids only, a change from nonfood crops to food crops, a change from crops where the harvestable portions do not contact the biosolids/soil mixture to crops where the harvestable portion contacts the biosolids/soil mixture, or a change in site classification from land with a low potential for public exposure to land with a high potential for public exposure; or any change or deletion of a requirement established in an approved land application plan or established as a condition of coverage under a permit that would result in a decrease in buffer size, site monitoring, or facility reporting requirements, which was not otherwise provided for in the permit or plan approval process.

"Significantly remove or reduce recognizable materials" means to remove recognizable debris from biosolids by means such as screening, or to reduce the number of recognizable items in biosolids by means such as grinding, to a level that in the opinion of the department, will not result in an aesthetic nuisance or physical hazard when biosolids are applied to the land.

"**Site**" means all areas of land, including buffer areas, which are identified in the scope of an approved site specific land application plan. A site is considered to be new or expanded when biosolids are applied to an area not approved in a site specific land application plan or that was not previously disclosed during a required public notice process.

"**Specific oxygen uptake rate (SOUR)**" is the mass of oxygen consumed per unit time per unit mass of total solids (dry weight basis) in the biosolids.

"**State**" means the state of Washington.

"**Store or storage of biosolids**" is the placing of biosolids on land on which the biosolids remain for two years or less. This does not include the placing of biosolids on land for treatment or disposal.

"**Stover**" is the nongrain, above-ground part of a grain crop, often corn or sorghum.

"**Surface waters of the state**" means surface waters of the state as defined in WAC 173-201A-020.

"**Total solids**" are the materials in biosolids that remain as residue when the biosolids are dried at 103 to 105°C.

"**Treat or treatment of biosolids**" is the preparation of biosolids for final use or disposal. This includes, but is not limited to, thickening, stabilization, and dewatering of biosolids. This does not include storage of biosolids.

"**Treatment works**" is either a federally owned, publicly owned, or privately owned device or system used to treat (including recycle and reclaim) either domestic sewage or a combination of domestic sewage and industrial waste of a liquid nature.

"**Treatment works treating domestic sewage**" means a publicly owned treatment works or any other sewage sludge or wastewater treatment devices or systems, regardless of ownership, used in the storage, treatment, recycling, and reclamation of municipal or domestic sewage or sewage sludge, including land dedicated for the disposal of sewage sludge. Treatment works treating domestic sewage also includes a beneficial use facility that has been permitted in accordance with the provisions of WAC 173-308-310, and a person, site, or facility designated as a treatment works treating domestic sewage in accordance with WAC 173-308-310 (1)(b). This definition does not include septic tanks or similar devices, but may include persons or vehicles that service septic systems and centralized septage facilities that are designated as a treatment works treating domestic sewage or are applicable under this definition.

"**Unstabilized solids**" are organic materials in biosolids that have not been treated in either an aerobic or anaerobic treatment process.

"**Vector attraction**" is the primarily odorous characteristic of biosolids that attracts rodents, flies, mosquitoes, or other organisms capable of transporting infectious agents.

"**Volatile solids**" is the amount of the total solids in biosolids that are lost when the biosolids are combusted at 550°C in the presence of excess air.

"**Waters of the state**" means waters of the state as defined in RCW 90.48.020.

"**Wetlands**" means those areas that are inundated or saturated by surface water or ground water at a frequency and duration to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-080, filed 2/18/98, effective 3/21/98.]

WAC 173-308-090 Requirement for a person who prepares biosolids. Any person who prepares biosolids must ensure that the applicable requirements in this chapter and any applicable permit issued under this chapter are met when the biosolids are applied to the land.

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-090, filed 2/18/98, effective 3/21/98.]

WAC 173-308-100 Requirement for a person who transports biosolids. (1) Any person who transports biosolids must ensure that the transportation vehicle is properly cleaned prior to use of the vehicle for the transportation of food crops, feed crops, or fiber crops.

(2) The transportation of biosolids is otherwise subject to regulation by the Washington state utilities and transportation commission under Title 81 RCW and WAC 173-308-030(2).

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-100, filed 2/18/98, effective 3/21/98.]

WAC 173-308-110 Requirement for a person who applies biosolids. A person may not apply biosolids to the land except in accordance with applicable requirements of this chapter and any applicable permit issued under this chapter.

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-110, filed 2/18/98, effective 3/21/98.]

WAC 173-308-120 Requirement to obtain and provide information. (1) It is a violation of the provisions of this chapter for any person to falsify a certification or statement that is required by these rules or to make any required certification or statement under false pretense.

(2) Any person who applies biosolids to the land must obtain information needed to comply with the requirements of this chapter.

(3) The person who prepares biosolids must provide the person who applies biosolids to the land with notice and necessary information to comply with the requirements of this chapter, including sufficient information on the concentration and types of nutrients in the biosolids needed to determine an agronomic rate for the crop under management.

(4) When a person who prepares biosolids provides the biosolids to another person who further prepares the biosolids, the person who provides the biosolids must provide the person who receives the biosolids notice and necessary information to comply with the requirements of this chapter.

(5) The person who applies bulk biosolids to the land must provide the owner or lease holder of the land on which the bulk biosolids are applied notice and necessary information to comply with the requirements of this chapter.

(6) The person who applies bulk biosolids to the land must obtain written approval of the landowner prior to applying biosolids to the land for the first time, when the bulk bio-

solids do not meet the criteria to be classified as exceptional quality.

(7) All persons required to keep and maintain records under any provision of this chapter must provide access to those records during normal business hours to a representative of the department, a local health department, or the United States EPA, and to the owner, lessor, lessee or other person with a legal management interest in the land on which the biosolids are applied, at the location where the records are kept.

(8) Any facility, including a beneficial use facility, must immediately notify all sources from which it receives biosolids, if at any time it becomes unsuitable for the purpose of receiving biosolids from those other sources.

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-120, filed 2/18/98, effective 3/21/98.]

WAC 173-308-130 Additional or more stringent requirements. On a case-by-case basis, the department may impose requirements for the beneficial use of biosolids that are in addition to or more stringent than the requirements in this chapter if the department believes that the additional or more stringent requirements are necessary to protect public health and the environment from any adverse effect of a pollutant in the biosolids.

(1) In addition to other considerations, failure of a generator, applier, or landowner to conform to any applicable requirements of this chapter may be cause to impose additional or more stringent requirements.

(2) The department will impose any additional or more stringent requirements under WAC 173-308-130 in a permit issued to the applicable facility.

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-130, filed 2/18/98, effective 3/21/98.]

WAC 173-308-140 Biosolids sampling and analysis methods. (1) **Sampling.** Samples that are collected and analyzed must be representative of the biosolids that are applied to the land.

(2) **Analysis methods.** The publications listed in this subsection are incorporated by reference in this chapter. Methods in the publications listed below must be used to analyze samples of biosolids unless other methods are approved in writing by the department. These publications are available for review during normal working hours at the Washington State Department of Ecology headquarters located at 300 Desmond Drive in Olympia, Washington.

(a) For enteric viruses use ASTM Designation: D 4994-89, *"Standard Practice for Recovery of Viruses From Wastewater Sludges,"* 1992 Annual Book of ASTM Standards: Section 11-Water and Environmental Technology, ASTM, 1916 Race Street, Philadelphia, PA 19103-1187.

(b) For fecal coliform use part 9221 E. or part 9222 D., *"Standard Methods for the Examination of Water and Wastewater,"* 18th Edition, 1992, American Public Health Association, 1015 15th Street NW, Washington, DC 20005.

(c) For helminth ova use Yanko, W.A., *"Occurrence of Pathogens in Distribution and Marketing Municipal Sludges,"* EPA 600/1-87-014, 1987. National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161 (PB 88-154273/AS).

(d) For inorganic pollutants use, *"Test Methods for Evaluating Solid Waste, Physical/Chemical Methods,"* EPA Publication SW-846, Second Edition (1982) with Updates I (April 1984) and II (April 1985) and Third Edition (November 1986) with Revision I (December 1987). Second Edition and Updates I and II are available from the National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161 (PB 87-190-291). Third Edition and Revision I are available from Superintendent of Documents, Government Printing Office, 941 North Capitol Street NE, Washington, DC 20002 (Document Number 955-001-00000-1).

For the analysis of nitrogen and other nutrients the department may specify additional analytical references that are acceptable.

(e) For salmonella sp. bacteria use part 9260 D., *"Standard Methods for the Examination of Water and Wastewater,"* 18th Edition, 1992, American Public Health Association, 1015 15th Street NW, Washington, DC 20005; or Kenner, B.A. and H.P. Clark, "Detection and enumeration of Salmonella and Pseudomonas aeruginosa," Journal of the Water Pollution Control Federation, Vol. 46, no. 9, September 1974, pp. 2163-2171. Water Environment Federation, 601 Wythe Street, Alexandria, VA 22314.

(f) For specific oxygen uptake rate (SOUR) use part 2710 B., *"Standard Methods for the Examination of Water and Wastewater,"* 18th Edition, 1992, American Public Health Association, 1015 15th Street NW, Washington, DC 20005.

(g) For total, fixed, and volatile solids use part 2540 G., *"Standard Methods for the Examination of Water and Wastewater,"* 18th Edition, 1992, American Public Health Association, 1015 15th Street NW, Washington, DC 20005.

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-140, filed 2/18/98, effective 3/21/98.]

WAC 173-308-150 Frequency of biosolids monitoring. The person who prepares biosolids is responsible for ensuring that monitoring is carried out in accordance with the requirements of this chapter and any applicable permit. The minimum frequency of monitoring for the pollutants listed in Tables 1, 2, 3 and 4 of WAC 173-308-160; the pathogen density requirements in WAC 173-308-170; and the vector attraction reduction requirements in WAC 173-308-180, is prescribed in subsection (3) of this section;

(1) The frequency of monitoring required by this section is based on the dry weight tonnage of bulk biosolids applied to the land per three hundred sixty-five-day period, or the dry weight tonnage of biosolids received per three hundred sixty-five-day period by a person who prepares biosolids that are sold or given away for application to the land.

(2) After the biosolids have been monitored for two years at the frequency in subsection (3) of this section, the person who prepares the biosolids may request the department to reduce the frequency of monitoring for pollutant concentrations, and for the pathogen density requirements in WAC 173-308-170 (2)(c)(ii) and (iii). The frequency of monitoring must not be less than once per year when biosolids are applied to the land.

(3)

MINIMUM FREQUENCY OF MONITORING

Metric tons (U.S. tons) per 365-day period	Frequency
Greater than zero but less than 290 (320)	once per year
Equal to or greater than 290 (320) but less than 1,500 (1,653)	once per quarter (four times per year)
Equal to or greater than 1,500 (1,653) but less than 15,000 (16,535)	once per 60 days (six times per year)
Equal to or greater than 15,000 (16,535)	once per month (12 times per year)

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-150, filed 2/18/98, effective 3/21/98.]

WAC 173-308-160 Biosolids pollutant limits. This section sets pollutant concentration limits, and annual and cumulative pollutant loading rate limits for biosolids that are applied to the land.

(1) Table 1 of this section sets the maximum allowable concentration (ceiling limit) of pollutants in biosolids that are applied to the land.

Municipal sewage sludge that contains any pollutant listed in Table 1 of this section at a concentration greater than the allowable ceiling limit is not biosolids, is a solid waste, and may not be applied to the land.

(2) Table 2 of this section sets the maximum quantities of pollutants that may be added to an area of land, also referred to as the cumulative pollutant loading rate. The cumulative pollutant loading rates in Table 2 apply when the concentration of any pollutant in biosolids that are applied to the land exceeds the allowable pollutant concentration limit in Table 3 of this section.

(a) A person may not apply bulk biosolids subject to the cumulative pollutant loading rates in Table 2 of this section to a land application site, if any of those rates have been reached on the site.

(b) Before bulk biosolids subject to the cumulative pollutant loading rates in Table 2 of this section are applied to the land, the person who proposes to apply the bulk biosolids must contact the local health department and the department to determine whether bulk biosolids subject to the cumulative pollutant loading rates were applied to the site before the effective date of this chapter.

(i) If bulk biosolids subject to the cumulative pollutant loading rates in Table 2 of this section have been applied to the site since July 20, 1993, and the cumulative amount of each pollutant applied to the site since that date is known, in addition to any amount subtracted in (b)(iii) of this subsection, the amount previously applied must be subtracted from the cumulative pollutant loading rate for each pollutant, to determine the remaining amount of pollutant that may be applied to the site.

(ii) If bulk biosolids subject to the cumulative pollutant loading rates in Table 2 of this section have been applied to the site since July 20, 1993, and the cumulative amount of each pollutant applied to the site in the bulk biosolids since that date is not known, additional biosolids subject to the cumulative pollutant loading rates in Table 2 of this section may not be applied to the site.

(iii) If bulk biosolids were applied to the site prior to July 20, 1993, and the cumulative amount of each pollutant applied to the site prior to that date can be determined, in addition to any amount subtracted in (b)(i) of this subsection, the amount applied must be subtracted from the cumulative pollutant loading rate for each pollutant, to determine the remaining amount of pollutant that may be applied to the site.

(iv) If bulk biosolids subject to the cumulative pollutant loading rates in Table 2 of this section have not been applied to the site, the cumulative amount of each pollutant listed in Table 2 of this section may be applied to the site.

(v) Any person who applies bulk biosolids to the land, which are subject to the cumulative pollutant loading rates in Table 2 of this section, must provide written notice prior to the initial application of bulk biosolids to the land. Notice must be submitted to the department, and to any local health department in whose jurisdiction the biosolids will be applied. The department and the local health department must retain and provide access to the notice. The notice must include:

(A) The location, by street address if applicable, a copy of the assessor's plat map(s) with the application area(s) clearly shown or the latitude and longitude of the approximate center of each land application site, and the section, township and range of each quarter section on which biosolids are applied; and

(B) The name, address, telephone number, and National Pollutant Discharge Elimination System or state waste discharge permit number and state biosolids permit number (if applicable) of the person who prepared the biosolids and also of the person who applies (if applicable) the bulk biosolids.

(3) Table 3 of this section sets a lower pollutant concentration threshold which, when achieved, relieves the person who prepares biosolids and the person who applies biosolids, from certain requirements related to recordkeeping, reporting, and labeling.

(4) Table 4 of this section sets annual pollutant loading rates used to derive an annual whole biosolids application rate. Table 4 is applicable only when biosolids that are sold or given away in a bag or other container for application to the land exceed any of the pollutant concentration limits in Table 3 of this section. The person who prepares the biosolids must provide information on compliance with this requirement on a label or information sheet as required under WAC 173-308-260 (1)(b)(ii) and (4)(b).

TABLE 1 - CEILING CONCENTRATION LIMITS

POLLUTANT	CEILING CONCENTRATION*
Arsenic	75
Cadmium	85
Copper	4300
Lead	840
Mercury	57
Molybdenum	75
Nickel	420

POLLUTANT	CEILING CONCENTRATION*
Selenium	100
Zinc	7500

*** Milligrams per kilogram - dry weight basis**

TABLE 2 - CUMULATIVE POLLUTANT LOADING RATES

POLLUTANT	CUMULATIVE POLLUTANT LOADING RATE*
Arsenic	41
Cadmium	39
Copper	1500
Lead	300
Mercury	17
Nickel	420
Selenium	100
Zinc	2800

*** Kilograms per hectare - dry weight basis**

TABLE 3 - POLLUTANT CONCENTRATION LIMITS

POLLUTANT	LIMIT*
Arsenic	41
Cadmium	39
Copper	1500
Lead	300
Mercury	17
Nickel	420
Selenium	100
Zinc	2800

*** Monthly average concentration in milligrams per kilogram - dry weight basis**

TABLE 4 - ANNUAL POLLUTANT LOADING RATES

POLLUTANT	ANNUAL POLLUTANT LOADING RATE*
Arsenic	2.0
Cadmium	1.9
Copper	75
Lead	15
Mercury	0.85
Nickel	21
Selenium	5.0
Zinc	140

*** Kilograms per hectare per 365 day period**

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-160, filed 2/18/98, effective 3/21/98.]

WAC 173-308-170 Pathogen reduction. (1) This section contains the requirements for biosolids to be classified either Class A or Class B with respect to pathogens.

(a) The requirements in subsection (2)(a)(i) and (ii), or (b)(i) and (ii), or (c)(i), (ii), and (iii), or (d)(i), (ii) and (iii), or (e)(i) and (ii), or (f)(i) and (ii) of this section must be met for biosolids to be Class A for pathogens.

(b) The Class A pathogen requirements must be met at the same time or before the vector attraction reduction requirements in WAC 173-308-180 (2), (3), or (4).

(c) The requirements in subsection (3)(a), (b), or (c) of this section must be met for biosolids to be Class B for pathogens.

(2) **Biosolids - Class A.**

(a) Class A - Alternative 1.

(i) The density of fecal coliform in the biosolids must be less than 1000 Most Probable Number per gram of total solids (dry weight basis), or the density of *Salmonella* sp. bacteria in the biosolids must be less than three Most Probable Number per four grams of total solids (dry weight basis) at the time the biosolids are used; at the time the biosolids are prepared for sale or give away in a bag or other container for application to the land; or at the time the biosolids or material derived from biosolids are prepared to meet the requirements for exemption in WAC 173-308-200; and

(ii) The time and temperature requirements in (a)(ii)(A), (B), (C), or (D) of this subsection must be met.

(A) When the percent solids of the biosolids is seven percent or higher, the temperature of the biosolids must be 50°C or higher; the time period must be twenty minutes or longer; and the temperature and time period must be determined using equation (1), except when small particles of biosolids are heated by either warmed gases or an immiscible liquid;

$$D = \frac{131{,}700{,}000}{10^{0.1400t}} \qquad \text{Equation (1)}$$

Where,

D = time in days.

t = temperature in degrees Celsius.

(B) When the percent solids of the biosolids is seven percent or higher and small particles of biosolids are heated by either warmed gases or an immiscible liquid, the temperature of the biosolids must be 50° C or higher; the time period must be fifteen seconds or longer; and the temperature and time period must be determined using equation (1);

(C) When the percent solids of the biosolids is less than seven percent and the time period is at least fifteen seconds, but less than thirty minutes, the temperature and time period must be determined using equation (1);

(D) When the percent solids of the biosolids is less than seven percent; the temperature of the biosolids is 50°C or higher; and the time period is thirty minutes or longer, the temperature and time period must be determined using equation (2).

$$D = \frac{50{,}070{,}000}{10^{(0.1400t)}} \qquad \text{Equation (2)}$$

Where,

D = time in days.
t = temperature in degrees Celsius.

(b) Class A - Alternative 2.

(i) The density of fecal coliform in the biosolids must be less than 1000 Most Probable Number per gram of total solids (dry weight basis), or the density of *Salmonella* sp. bacteria in the biosolids must be less than three Most Probable Number per four grams of total solids (dry weight basis) at the time the biosolids are used; at the time the biosolids are prepared for sale or give away in a bag or other container for application to the land; or at the time the biosolids or material derived from biosolids is prepared to meet the requirements for exemption in WAC 173-308-200; and

(ii) The pH of the biosolids that are used must be raised to above twelve and remain above twelve for seventy-two hours; and

(A) The temperature of the biosolids must be above 52°C for twelve hours or longer during the period that the pH of the biosolids is above twelve; and

(B) At the end of the seventy-two-hour period during which the pH of the biosolids is above twelve, the biosolids must be air dried to achieve a percent solids in the biosolids greater than fifty percent.

(c) Class A - Alternative 3.

(i) The density of fecal coliform in the biosolids must be less than 1000 Most Probable Number per gram of total solids (dry weight basis), or the density of *Salmonella* sp. bacteria in biosolids must be less than three Most Probable Number per four grams of total solids (dry weight basis) at the time the biosolids are used; at the time the biosolids are prepared for sale or give away in a bag or other container for application to the land; or at the time the biosolids or material derived from biosolids is prepared to meet the requirements for exemption in WAC 173-308-200; and

(ii) The biosolids must be analyzed prior to pathogen treatment to determine whether the biosolids contain enteric viruses; and

(A) When the density of enteric viruses in the biosolids prior to pathogen treatment is less than one plaque-forming unit per four grams of total solids (dry weight basis), the biosolids are Class A with respect to enteric viruses until the next monitoring episode for the biosolids; or

(B) When the density of enteric viruses in the biosolids prior to pathogen treatment is equal to or greater than one plaque-forming unit per four grams of total solids (dry weight basis), the biosolids are Class A with respect to enteric viruses when the density of enteric viruses in the biosolids after pathogen treatment is less than one plaque-forming unit per four grams of total solids (dry weight basis) and when the values or ranges of values for the operating parameters for the pathogen treatment process that produces the biosolids that meets the enteric virus density requirement are documented.

(C) After the enteric virus reduction in (c)(ii)(B) of this subsection is demonstrated for the pathogen treatment process, the biosolids continue to be Class A with respect to enteric viruses when the values for the pathogen treatment process operating parameters are consistent with the values or ranges of values documented.

(iii) The biosolids must be analyzed prior to pathogen treatment to determine whether the biosolids contains viable helminth ova; and

(A) When the density of viable helminth ova in the biosolids prior to pathogen treatment is less than one per four grams of total solids (dry weight basis), the biosolids are Class A with respect to viable helminth ova until the next monitoring episode for the biosolids; or

(B) When the density of viable helminth ova in the biosolids prior to pathogen treatment is equal to or greater than one per four grams of total solids (dry weight basis), the biosolids are Class A with respect to viable helminth ova when the density of viable helminth ova in the biosolids after pathogen treatment is less than one per four grams of total solids (dry weight basis) and when the values or ranges of values for the operating parameters for the pathogen treatment process that produces the biosolids that meets the viable helminth ova density requirement are documented.

(C) After the viable helminth ova reduction in (c)(iii)(B) of this subsection is demonstrated for the pathogen treatment process, the biosolids continues to be Class A with respect to viable helminth ova when the values for the pathogen treatment process operating parameters are consistent with the values or ranges of values documented.

(d) Class A - Alternative 4.

(i) The density of fecal coliform in the biosolids must be less than 1000 Most Probable Number per gram of total solids (dry weight basis), or the density of *Salmonella* sp. bacteria in the biosolids must be less than three Most Probable Number per four grams of total solids (dry weight basis) at the time the biosolids are used; at the time the biosolids are prepared for sale or give away in a bag or other container for application to the land; or at the time the biosolids or material derived from biosolids is prepared to meet the requirements for exemption in WAC 173-308-200; and

(ii) The density of enteric viruses in the biosolids must be less than one plaque-forming unit per four grams of total solids (dry weight basis) at the time the biosolids are used; at the time the biosolids are prepared for sale or give away in a bag or other container for application to the land; or at the time the biosolids or material derived from biosolids is prepared to meet the requirements for exemption in WAC 173-308-200, unless otherwise specified by the department; and

(iii) The density of viable helminth ova in the biosolids must be less than one per four grams of total solids (dry weight basis) at the time the biosolids are used; at the time the biosolids are prepared for sale or give away in a bag or other container for application to the land; or at the time the biosolids or material derived from biosolids is prepared to meet the requirements for exemption in WAC 173-308-200, unless otherwise specified by the department.

(e) Class A - Alternative 5.

(i) The density of fecal coliform in the biosolids must be less than 1000 Most Probable Number per gram of total solids (dry weight basis), or the density of *Salmonella* sp. bacteria in the biosolids must be less than three Most Probable Number per four grams of total solids (dry weight basis) at the time the biosolids are used; at the time the biosolids are prepared for sale or give away in a bag or other container for application to the land; or at the time the biosolids or material

derived from biosolids is prepared to meet the requirements for exemption in WAC 173-308-200; and

(ii) The biosolids must be treated in one of the processes to further reduce pathogens described in (e)(ii)(A) through (G) of this subsection.

(A) Composting.

(I) Using either the within-vessel composting method or the static aerated pile composting method, the temperature of the biosolids must be maintained at 55°C or higher for three days.

(II) Using the windrow composting method, the temperature of the biosolids must be maintained at 55°C or higher for fifteen days or longer. During the period when the compost is maintained at 55°C or higher, there must be a minimum of five turnings of the windrow.

(B) Heat drying. Biosolids must be dried by direct or indirect contact with hot gases to reduce the moisture content of the biosolids to ten percent or less. Either the temperature of the biosolids particles must exceed 80°C or the wet bulb temperature of the gas in contact with the biosolids as the biosolids leaves the dryer must exceed 80°C.

(C) Heat treatment. Liquid biosolids must be heated to a temperature of 180°C or higher for thirty minutes.

(D) Thermophilic aerobic digestion. Liquid biosolids must be agitated with air or oxygen to maintain aerobic conditions and the mean cell residence time of the biosolids must be at least ten days at 55 to 60°C.

(E) Beta ray irradiation. Biosolids must be irradiated with beta rays from an accelerator at dosages of at least 1.0 megarad at room temperature (ca. 20°C).

(F) Gamma ray irradiation. Biosolids must be irradiated with gamma rays from certain isotopes, such as Cobalt 60 and Cesium 137, at room temperature (ca. 20°C).

(G) Pasteurization. The temperature of the biosolids must be maintained at 70°C or higher for thirty minutes or longer.

(f) Class A - Alternative 6.

(i) The density of fecal coliform in the biosolids must be less than 1000 Most Probable Number per gram of total solids (dry weight basis), or the density of *Salmonella* sp. bacteria in the biosolids must be less than three Most Probable Number per four grams of total solids (dry weight basis) at the time the biosolids are used; at the time the biosolids are prepared for sale or give away in a bag or other container for application to the land; or at the time the biosolids or material derived from biosolids is prepared to meet the requirements for exemption in WAC 173-308-200; and

(ii) The biosolids must be treated in a process that is equivalent to a process to further reduce pathogens. Pathogen equivalency for biosolids applied to land under jurisdiction of the state of Washington will be determined by the department or by the EPA with the approval and concurrence of the department.

(3) **Biosolids - Class B.**

(a) Class B - Alternative 1.

(i) Seven samples of the biosolids must be collected at the time the biosolids are used; and

(ii) The geometric mean of the density of fecal coliform of the samples must be less than 2,000,000 Most Probable Number per gram of total solids (dry weight basis) or 2,000,000 Colony Forming Units per gram of total solids (dry weight basis).

(b) Class B - Alternative 2. The biosolids must be treated in one of the processes to significantly reduce pathogens described in (b)(i) through (v) of this subsection.

(i) Aerobic digestion. The biosolids must be agitated with air or oxygen to maintain aerobic conditions for a specific mean cell residence time at a specific temperature. Values for the mean cell residence time and temperature must be between forty days at 20°C and sixty days at 15°C.

(ii) Air drying. The biosolids must be dried on sand beds or on paved or unpaved basins. The biosolids must dry for a minimum of three months. During two of the three months, the ambient average daily temperature must be above 0°C.

(iii) Anaerobic digestion. The biosolids must be treated in the absence of air for a specific mean cell residence time at a specific temperature. Values for the mean cell residence time and temperature must be between fifteen days at 35 to 55°C and sixty days at 20°C.

(iv) Composting. Using the within-vessel, static aerated pile, or windrow composting methods, the temperature of the biosolids must be raised to 40°C or higher and remain at 40°C or higher for five days. For four hours during the five days, the temperature in the compost pile must exceed 55°C.

(v) Lime stabilization. Sufficient lime must be added to the biosolids to raise the pH of the biosolids to twelve after two hours of contact.

(c) Class B - Alternative 3. The biosolids must be treated in a process that is equivalent to a process to significantly reduce pathogens. Pathogen equivalency for biosolids applied to land under jurisdiction of the state of Washington will be determined by the department or by the EPA with the approval and concurrence of the department.

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-170, filed 2/18/98, effective 3/21/98.]

WAC 173-308-180 Vector attraction reduction. (1) When vector attraction reduction is accomplished prior to application of biosolids to the land, the requirements in one of subsections (2) through (7) of this section must be met.

The vector attraction reduction requirements in subsection (2), (3), or (4) of this section must be met at the same time or after the Class A pathogen requirements in WAC 173-308-170.

(2) The mass of volatile solids in the biosolids must be reduced by a minimum of thirty-eight percent (see calculation procedures in *"Environmental Regulations and Technology —Control of Pathogens and Vector Attraction in Sewage Sludge,"* EPA-625/R-92/013, 1992, U.S.EPA, Cincinnati, OH 45268.)

(a) When the thirty-eight percent volatile solids reduction requirement in this subsection (2) cannot be met for anaerobically digested biosolids, vector attraction reduction can be demonstrated by digesting a portion of the previously digested biosolids anaerobically in the laboratory in a bench-scale unit for forty additional days at a temperature between

30 and 37°C. After the forty-day period, the vector attraction reduction requirement is met if the volatile solids in the biosolids at the beginning of that period are reduced by less than seventeen percent.

(b) When the thirty-eight percent volatile solids reduction requirement in this subsection (2) cannot be met for aerobically digested biosolids, vector attraction reduction can be demonstrated by digesting a portion of the previously digested biosolids that has a percent solids of two percent or less aerobically in the laboratory in a bench-scale unit for thirty additional days at 20°C. After the thirty-day period, the vector attraction reduction requirement is met if the volatile solids in the biosolids at the beginning of that period are reduced by less than fifteen percent.

(3) The specific oxygen uptake rate (SOUR) for biosolids treated in an aerobic process must be less than or equal to 1.5 milligrams of oxygen per hour per gram of total solids (dry weight basis) at a temperature of 20°C.

(4) The biosolids must be treated in an aerobic process for fourteen days or longer. During that time, the temperature of the biosolids must be higher than 40°C and the average temperature of the biosolids must be higher than 45°C.

(5) The pH of the biosolids must be raised to twelve or higher by alkali addition and, without the addition of more alkali, must remain at twelve or higher for two hours and then at 11.5 or higher for an additional twenty-two hours.

(6) For biosolids that do not contain unstabilized solids generated in a primary wastewater treatment process, the percent solids must be equal to or greater than seventy-five percent based on the moisture content and total solids prior to mixing with other materials.

(7) For biosolids that contain unstabilized solids generated in a primary wastewater treatment process, the percent solids must be equal to or greater than ninety percent based on the moisture content and total solids prior to mixing with other materials.

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-180, filed 2/18/98, effective 3/21/98.]

WAC 173-308-190 Protecting waters of the state—Agronomic rate requirement. In accordance with water quality standards for ground waters of the state of Washington, chapter 173-200 WAC, biosolids must be applied to the land in a manner approved by the department, and at not greater than agronomic rates unless otherwise specified by the department in accordance with subsection (1) or (2) of this section. Agronomic rate determinations must take into account nitrogen supplied from other sources such as manures and commercial fertilizers as well as biosolids.

(1) Biosolids applied to land reclamation sites may be applied in excess of agronomic rates if approved by the department in a site specific land application plan developed under WAC 173-308-310(6).

(2) For the purposes of furthering necessary research efforts, biosolids may be applied at greater than agronomic rates to limited areas of land if approved by the department in a site specific land application plan developed under WAC 173-308-310(6). In addition to the elements required under WAC 173-308-310(6), the land application plan for a research project must also include:

(a) A research proposal describing the nature of the project, what may be learned, the anticipated benefits, provisions for progress reports and peer review, and interpretation of results;

(b) An explanation for the sizing of the research plot(s). Plot size must not exceed the minimum area required to support the goals of the research; and

(c) A discussion of any potential adverse impacts of application rates in excess of agronomic rates, along with potential mitigation or response to adverse effects if observed.

(3) The person who prepares exceptional quality biosolids that are sold or given away to another person must provide sufficient information to allow the person who receives the biosolids to determine an agronomic rate of application.

(4) The person who applies exceptional quality biosolids to the land is responsible for compliance with the agronomic rate requirement in this section.

(5) When the potential for ground water contamination due to biosolids application exists, the department may require ground water monitoring or other conditions in accordance with WAC 173-200-080. If it is determined that an enforcement criterion may be violated, an evaluation must be conducted to demonstrate compliance with the provisions of WAC 173-200-050 (3)(b)(vi).

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-190, filed 2/18/98, effective 3/21/98.]

WAC 173-308-200 Exemptions based on the exceptional quality of biosolids. (1) The person who prepares and the person who applies biosolids that meet criteria to be classified as exceptional quality are exempt from the following requirements:

(a) The site management and access restrictions in WAC 173-308-210(4), 173-308-220(4), 173-308-230(4), and 173-308-240(4);

(b) The labeling requirement derived from Table 4 of WAC 173-308-160 for the annual whole biosolids application rate in WAC 173-308-260 (1)(b)(ii);

(c) The requirement in WAC 173-308-120(6) for obtaining prior written approval of the landowner;

(d) The land application plan requirements of WAC 173-308-310(6), except as provided in WAC 173-308-310 (6)(a)(ii) or (iii);

(e) The recordkeeping requirements in WAC 173-308-210 (5)(b), 173-308-220 (5)(b), 173-308-230 (5)(b), and 173-308-240 (6)(b);

(f) The requirements in WAC 173-308-300 (2)(a) and (b) for approved plans when used as a component of intermediate or final cover in a municipal solid waste landfill.

(2) On a case-by-case basis, the director may apply any or all of the site management and access restrictions exempted under WAC 173-308-200 (1)(a) after determining that the requirements are necessary to protect public health and the environment from any adverse effect that may occur from a pollutant in the bulk biosolids.

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-200, filed 2/18/98, effective 3/21/98.]

WAC 173-308-210 Bulk biosolids applied to agricultural land. (1) **Pollutant concentrations.**

(a) The concentration of a pollutant in bulk biosolids that are applied to agricultural land may not exceed the allowable ceiling limit in Table 1 of WAC 173-308-160.

(b) If the concentration of a pollutant in bulk biosolids that are applied to agricultural land exceeds the pollutant concentration limits in Table 3 of WAC 173-308-160, then the total cumulative loading rate for each pollutant may not exceed the limit in Table 2 of WAC 173-308-160, as required in WAC 173-308-160 (1)(b)(i).

(2) **Pathogens.** Bulk biosolids that are applied to agricultural land must be Class A for pathogens, or they must be Class B for pathogens and the site management and access restrictions in subsection (4)(a)(i) through (x) and (b)(i) through (iii) of this section must be met.

(3) **Vector attraction reduction.**

(a) Bulk biosolids that are applied to agricultural land must meet one of the vector attraction reduction requirements in WAC 173-308-180 (2) through (7) before they are applied to the land; or the requirements of (b)(i) or (ii) of this subsection must be met.

(b)(i) The biosolids must be injected below the surface of the land; and

(A) No significant amount of the biosolids may be present on the land surface within one hour after the biosolids are injected; and

(B) When the biosolids are Class A for pathogens, the biosolids must be injected below the land surface within eight hours after being discharged from the pathogen treatment process.

(ii) Biosolids must be incorporated into the soil within six hours after application to the land;

When biosolids that are incorporated into the soil are Class A with respect to pathogens, the biosolids must be applied to the land within eight hours after being discharged from the pathogen treatment process.

(4) **Site management and access restrictions.**

(a) The site management and access restrictions in (a)(i) through (x) and (b)(i) through (iii) of this subsection are applicable to biosolids that are Class B for pathogens when they are applied to agricultural land.

(i) Food crops, feed crops, and fiber crops must not be harvested for thirty days after application of biosolids.

(ii) Food crops with harvested parts that touch the biosolids/soil mixture and are totally above the land surface must not be harvested for fourteen months after application of biosolids.

(iii) Food crops with harvested parts below the surface of the land must not be harvested for twenty months after application of biosolids when the biosolids remain on the land surface for four months or longer prior to incorporation into the soil.

(iv) Food crops with harvested parts below the surface of the land must not be harvested for thirty-eight months after application of biosolids when the biosolids remain on the land surface for less than four months prior to incorporation into the soil.

(v) Livestock must not be allowed to graze on the land for thirty days after application of biosolids.

(vi) Turf grown on land where biosolids are applied must not be harvested for one year after application of the biosolids when the harvested turf is placed on either land with a high potential for public exposure or a lawn, unless otherwise specified by the department.

(vii) Public access to land with a high potential for public exposure must be restricted for one year after application of biosolids.

(viii) Public access to land with a low potential for public exposure must be restricted for thirty days after application of biosolids.

(ix) Unless otherwise approved in a site specific land application plan under WAC 173-308-310 (6)(b), during the time when access is restricted, signs must be posted around the application site at all significant points of access, and otherwise around the perimeter so that they can be noticed and read by a reasonably observant person. The required content of signs is listed in WAC 173-308-275.

It is a violation of these rules for any person to remove a sign posted in accordance with the requirements of (a)(ix) of this subsection during the period when access is restricted.

(x) Biosolids must not be applied to the land within one hundred feet of a well unless otherwise approved in a permit issued in accordance with the requirements of this chapter.

(b) The site management restrictions in (b)(i) through (iii) of this subsection are applicable to biosolids that do not meet standards to be classified as exceptional quality when they are applied to agricultural land.

(i) Bulk biosolids may not be applied to land that is ten meters or less from surface waters of the state, unless otherwise specified by the department.

(ii) Bulk biosolids may not be applied to the land so that they enter a wetland or waters of the state, unless approved in a permit issued by the department or by EPA with the approval of the department.

(iii) Bulk biosolids may not be applied to the land if they are likely to adversely affect a threatened or endangered species listed under WAC 232-12-011 or 232-12-014 or its critical habitat.

(5) **Recordkeeping.**

(a) The person who prepares biosolids for application to agricultural land must keep the records required in WAC 173-308-290 (2) and (3).

(b) The person who applies biosolids that do not meet criteria to be classified as exceptional quality to agricultural land must keep the records required in WAC 173-308-290(4).

(6) **Reporting.** The person who prepares biosolids for application to agricultural land must submit an annual report in accordance with the requirements of WAC 173-308-295.

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-210, filed 2/18/98, effective 3/21/98.]

WAC 173-308-220 Bulk biosolids applied to forestland. (1) **Pollutant concentrations.**

(a) The concentration of a pollutant in bulk biosolids that are applied to forestland may not exceed the allowable ceiling limit in Table 1 of WAC 173-308-160.

(b) If the concentration of a pollutant in bulk biosolids that are applied to forestland exceeds the pollutant concentration limits in Table 3 of WAC 173-308-160, then the total

cumulative loading rate for each pollutant may not exceed the limit in Table 2 of WAC 173-308-160, as required in WAC 173-308-160 (1)(b)(i).

(2) **Pathogens.** Bulk biosolids that are applied to forestland must be Class A for pathogens, or they must be Class B for pathogens and the site management and access restrictions in subsection (4)(a)(i) through (ix) and (b)(i) through (iii) of this section must be met.

(3) **Vector attraction reduction.**

(a) Bulk biosolids that are applied to forestland must meet one of the vector attraction reduction requirements in WAC 173-308-180 (2) through (7) before they are applied to the land; or the requirements of (b)(i) or (ii) of this subsection must be met.

(b)(i) The biosolids must be injected below the surface of the land; and

(A) No significant amount of the biosolids may be present on the land surface within one hour after the biosolids are injected; and

(B) When the biosolids are Class A for pathogens, the biosolids must be injected below the land surface within eight hours after being discharged from the pathogen treatment process.

(ii) Biosolids must be incorporated into the soil within six hours after application to the land.

When biosolids that are incorporated into the soil are Class A with respect to pathogens, the biosolids must be applied to the land within eight hours after being discharged from the pathogen treatment process.

(4) **Site management and access restrictions.**

(a) The site management and access restrictions in (a)(i) through (ix) and (b)(i) through (iii) of this subsection are applicable to biosolids that are Class B for pathogens when they are applied to forestland.

(i) Food crops, feed crops, and fiber crops must not be harvested for thirty days after application of biosolids.

(ii) Food crops with harvested parts that touch the biosolids/soil mixture and are totally above the land surface must not be harvested for fourteen months after application of biosolids.

(iii) Food crops with harvested parts below the surface of the land must not be harvested for twenty months after application of biosolids when the biosolids remain on the land surface for four months or longer prior to incorporation into the soil.

(iv) Food crops with harvested parts below the surface of the land must not be harvested for thirty-eight months after application of biosolids when the biosolids remain on the land surface for less than four months prior to incorporation into the soil.

(v) Livestock must not be allowed to graze on the land for thirty days after application of biosolids.

(vi) Public access to land with a high potential for public exposure must be restricted for one year after application of biosolids.

(vii) Public access to land with a low potential for public exposure must be restricted for thirty days after application of biosolids.

(viii) Unless otherwise approved in a site specific land application plan under WAC 173-308-310 (6)(b), during the time when access is restricted, signs must be posted around the application site at all significant points of access, and otherwise around the perimeter so that they can be noticed and read by a reasonably observant person. The required content of signs is listed in WAC 173-308-275.

It is a violation of these rules for any person to remove a sign posted in accordance with the requirements of (a)(viii) of this subsection during the period when access is restricted.

(ix) Biosolids must not be applied to the land within one hundred feet of a well unless otherwise approved in a permit issued in accordance with the requirements of this chapter.

(b) The site management restrictions in (b)(i) through (iii) of this subsection are applicable to biosolids that do not meet standards to be classified as exceptional quality when they are applied to forestland.

(i) Bulk biosolids may not be applied to land that is ten meters or less from surface waters of the state, unless otherwise specified by the department.

(ii) Bulk biosolids may not be applied to the land so that they enter a wetland or waters of the state, unless approved in a permit issued by the department, or by EPA with the approval of the department.

(iii) Bulk biosolids may not be applied to the land if they are likely to adversely affect a threatened or endangered species listed under WAC 232-12-011 or 232-12-014 or its critical habitat.

(5) **Recordkeeping.**

(a) The person who prepares biosolids for application to forestland must keep the records required in WAC 173-308-290 (2) and (3).

(b) The person who applies biosolids that do not meet criteria to be classified as exceptional quality to forestland must keep the records required in WAC 173-308-290(4).

(6) **Reporting.** The person who prepares biosolids for application to forestland must submit an annual report in accordance with the requirements of WAC 173-308-295.

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-220, filed 2/18/98, effective 3/21/98.]

WAC 173-308-230 Bulk biosolids applied to a public contact site. (1) **Pollutant concentrations.**

(a) The concentration of a pollutant in bulk biosolids that are applied to a public contact site may not exceed the ceiling limit in Table 1 of WAC 173-308-160.

(b) If the concentration of a pollutant in bulk biosolids that are applied to a public contact site exceeds the pollutant concentration limits in Table 3 of WAC 173-308-160, then the total cumulative loading rate for each pollutant may not exceed the limit in Table 2 of WAC 173-308-160, as required in WAC 173-308-160 (1)(b)(i).

(2) **Pathogens.** Bulk biosolids that are applied to a public contact site must be Class A for pathogens, or they must be Class B for pathogens and the site management and access restrictions in WAC 173-308-230 (4)(a)(i) through (ix) and (b)(i) through (iii) must be met.

(3) **Vector attraction reduction.**

(a) Bulk biosolids that are applied to a public contact site must meet one of the vector attraction reduction requirements in WAC 173-308-180 (2) through (7) before they are applied

to the land; or the requirements of (b)(i) or (ii) of this subsection must be met.

(b)(i) The biosolids must be injected below the surface of the land; and

(A) No significant amount of the biosolids may be present on the land surface within one hour after the biosolids are injected; and

(B) When the biosolids are Class A for pathogens, the biosolids must be injected below the land surface within eight hours after being discharged from the pathogen treatment process.

(ii) Biosolids must be incorporated into the soil within six hours after application to the land.

When biosolids that are incorporated into the soil are Class A with respect to pathogens, the biosolids must be applied to the land within eight hours after being discharged from the pathogen treatment process.

(4) **Site management and access restrictions.**

(a) The site management and access restrictions in (a)(i) through (ix) and (b)(i) through (iii) of this subsection are applicable to biosolids that are Class B for pathogens when they are applied to a public contact site.

(i) Food crops, feed crops, and fiber crops must not be harvested for thirty days after application of biosolids.

(ii) Food crops with harvested parts that touch the biosolids/soil mixture and are totally above the land surface must not be harvested for fourteen months after application of biosolids.

(iii) Food crops with harvested parts below the surface of the land must not be harvested for twenty months after application of biosolids when the biosolids remain on the land surface for four months or longer prior to incorporation into the soil.

(iv) Food crops with harvested parts below the surface of the land must not be harvested for thirty-eight months after application of biosolids when the biosolids remain on the land surface for less than four months prior to incorporation into the soil.

(v) Livestock must not be allowed to graze on the land for thirty days after application of biosolids.

(vi) Turf grown on land where biosolids are applied must not be harvested for one year after application of the biosolids when the harvested turf is placed on either land with a high potential for public exposure or a lawn, unless otherwise specified by the department.

(vii) Public access must be restricted for one year after application of biosolids.

(viii) Unless otherwise approved in a site specific land application plan under WAC 173-308-310 (6)(b), during the time when access is restricted, signs must be posted around the application site at all significant points of access, and otherwise around the perimeter so that they can be noticed and read by a reasonably observant person. The required content of signs is listed in WAC 173-308-275.

It is a violation of these rules for any person to remove a sign posted in accordance with the requirements of (a)(viii) of this subsection during the period when access is restricted.

(ix) Biosolids must not be applied to the land within one hundred feet of a well unless otherwise approved in a permit issued in accordance with the requirements of this chapter.

(b) The site management restrictions in (b)(i) through (iii) of this subsection are applicable to biosolids that do not meet standards to be classified as exceptional quality when they are applied to a public contact site.

(i) Bulk biosolids may not be applied to land that is ten meters or less from surface waters of the state, unless otherwise specified by the department.

(ii) Bulk biosolids may not be applied to the land so that they enter a wetland or waters of the state, unless approved in a permit issued by the department, or by EPA with the approval of the department.

(iii) Bulk biosolids may not be applied to the land if they are likely to adversely affect a threatened or endangered species listed under WAC 232-12-011 or 232-12-014 or its critical habitat.

(5) **Recordkeeping.**

(a) The person who prepares bulk biosolids for application to a public contact site must keep the records required in WAC 173-308-290 (2) and (3).

(b) The person who applies bulk biosolids that do not meet criteria to be classified as exceptional quality to a public contact site must keep the records required in WAC 173-308-290(4).

(6) **Reporting.** The person who prepares bulk biosolids for application to a public contact site must submit an annual report in accordance with the requirements of WAC 173-308-295.

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-230, filed 2/18/98, effective 3/21/98.]

WAC 173-308-240 Bulk biosolids applied to a land reclamation site. (1) **Pollutant concentrations.**

(a) The concentration of a pollutant in bulk biosolids that are applied to a land reclamation site may not exceed the allowable ceiling limit in Table 1 of WAC 173-308-160.

(b) If the concentration of a pollutant in bulk biosolids that are applied to a land reclamation site exceeds the pollutant concentration limits in Table 3 of WAC 173-308-160, then the total cumulative loading rate for each pollutant may not exceed the limit in Table 2 of WAC 173-308-160, as required in WAC 173-308-160 (1)(b)(i).

(2) **Pathogens.** Bulk biosolids that are applied to a land reclamation site must be Class A for pathogens, or the bulk biosolids must be Class B for pathogens and the site management and access restrictions in subsection (4)(a)(i) through (x) and (b)(i) through (iii) of this section must be met.

(3) **Vector attraction reduction.**

(a) Bulk biosolids that are applied to a land reclamation site must meet one of the vector attraction reduction requirements in WAC 173-308-180 (2) through (7) before they are applied to the land; or the requirements of (b)(i) or (ii) of this subsection must be met.

(b)(i) The biosolids must be injected below the surface of the land; and

(A) No significant amount of the biosolids may be present on the land surface within one hour after the biosolids are injected; and

(B) When the biosolids are Class A for pathogens, the biosolids must be injected below the land surface within eight

hours after being discharged from the pathogen treatment process.

(ii) Biosolids must be incorporated into the soil within six hours after application to the land.

When biosolids that are incorporated into the soil are Class A with respect to pathogens, the biosolids must be applied to the land within eight hours after being discharged from the pathogen treatment process.

(4) **Site management and access restrictions.**

(a) The site management and access restrictions in (a)(i) through (x) and (b)(i) through (iii) of this subsection are applicable to biosolids that are Class B for pathogens when they are applied to a land reclamation site.

(i) Food crops, feed crops, and fiber crops must not be harvested for thirty days after application of biosolids.

(ii) Food crops with harvested parts that touch the biosolids/soil mixture and are totally above the land surface must not be harvested for fourteen months after application of biosolids.

(iii) Food crops with harvested parts below the surface of the land must not be harvested for twenty months after application of biosolids when the biosolids remain on the land surface for four months or longer prior to incorporation into the soil.

(iv) Food crops with harvested parts below the surface of the land must not be harvested for thirty-eight months after application of biosolids when the biosolids remain on the land surface for less than four months prior to incorporation into the soil.

(v) Livestock must not be allowed to graze on the land for thirty days after application of biosolids.

(vi) Turf grown on land where biosolids are applied must not be harvested for one year after application of the biosolids when the harvested turf is placed on either land with a high potential for public exposure or a lawn, unless otherwise specified by the department.

(vii) Public access to land with a high potential for public exposure must be restricted for one year after application of biosolids.

(viii) Public access to land with a low potential for public exposure must be restricted for thirty days after application of biosolids.

(ix) Unless otherwise approved in a site specific land application plan under WAC 173-308-310 (6)(b), during the time when access is restricted, signs must be posted around the application site at all significant points of access, and otherwise around the perimeter so that they can be noticed and read by a reasonably observant person. The required content of signs is listed in WAC 173-308-275.

It is a violation of these rules for any person to remove a sign posted in accordance with the requirements of (a)(ix) of this subsection during the period when access is restricted.

(x) Biosolids must not be applied to the land within one hundred feet of a well unless otherwise approved in a permit issued in accordance with the requirements of this chapter.

(b) The site management restrictions in (b)(i) through (iii) of this subsection are applicable to biosolids that do not meet standards to be classified as exceptional quality when they are applied to a land reclamation site.

(i) Bulk biosolids may not be applied to land that is ten meters or less from surface waters of the state, unless otherwise specified by the department;

(ii) Bulk biosolids may not be applied to the land so that they enter a wetland or waters of the state, unless approved in a permit issued by the department, or by EPA with the approval of the department;

(iii) Bulk biosolids may not be applied to the land if they are likely to adversely affect a threatened or endangered species listed under WAC 232-12-011 or 232-12-014 or its critical habitat.

(5) **Application exceeding agronomic rates.** In accordance with WAC 173-308-190 (1) and (5), when biosolids will be applied to a land reclamation site in excess of agronomic rates, the application rate must be approved in a site specific land application plan by the department. The department may require that an evaluation be conducted as specified in WAC 173-200-080. Where it is determined that an enforcement criterion may be violated, the evaluation must be conducted to demonstrate compliance with the provisions of WAC 173-200-050 (3)(b)(vi).

(6) **Recordkeeping.**

(a) The person who prepares biosolids for application to a land reclamation site must keep the records required in WAC 173-308-290 (2) and (3).

(b) The person who applies biosolids that do not meet criteria to be classified as exceptional quality to a land reclamation site must keep the records required in WAC 173-308-290(4).

(7) **Reporting.**

The person who prepares biosolids for application to a land reclamation site must submit an annual report in accordance with the requirements of WAC 173-308-295.

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-240, filed 2/18/98, effective 3/21/98.]

WAC 173-308-250 Bulk biosolids applied to a lawn or home garden. (1) Bulk biosolids that are applied to a lawn or home garden must meet the criteria to be classified as exceptional quality as defined in WAC 173-308-080.

(2) **Recordkeeping.** The person who prepares bulk biosolids for application to a lawn or home garden must keep the records required in WAC 173-308-290 (2) and (3).

(3) **Reporting.** The person who prepares bulk biosolids for application to a lawn or home garden must submit annual reports in accordance with the requirements of WAC 173-308-295.

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-250, filed 2/18/98, effective 3/21/98.]

WAC 173-308-260 Biosolids sold or given away in a bag or other container. (1) **Pollutant concentrations.**

(a) The concentration of a pollutant in biosolids that are sold or given away in a bag or other container may not exceed the allowable ceiling limit in Table 1 of WAC 173-308-160.

(b) If biosolids that are sold or given away in a bag or other container exceed the pollutant concentration limits in Table 3 of WAC 173-308-160, then:

(i) The mathematical product of the concentration of each pollutant in the biosolids and the annual whole biosolids

application rate for the biosolids must not cause the annual pollutant loading rate for the pollutant in Table 4 of WAC 173-308-160 to be exceeded;

The procedure for determining the annual whole biosolids application rate that complies with the requirement in (b)(i) of this subsection is specified in Appendix A of this chapter.

(ii) The annual whole biosolids application rate as calculated in (b)(i) of this subsection, or the recommended agronomic rate, whichever is less, must be included on the label or information sheet required in WAC 173-308-260(4).

(2) **Pathogens.** Biosolids that are sold or given away in a bag or other container must be Class A for pathogens.

(3) **Vector attraction.** One of the vector attraction reduction requirements in WAC 173-308-180 (2) through (7) must be met when biosolids are sold or given away in a bag or other container for application to the land.

(4) **Label or information sheet required.** Any person who prepares biosolids that are sold or given away in a bag or other container in the state of Washington, must comply with the requirements of (a)(i) through (vi) of this subsection when the biosolids product is prepared or derived from biosolids that do not meet exceptional quality standards.

(a) A label must be affixed to the bag or other container in which biosolids are sold or given away, or an information sheet must be provided to the person who receives biosolids that are sold or given away in a bag or other container. The label or information sheet must contain the following information:

(i) The name, address, and phone number of the person who prepared the biosolids.

(ii) A statement or information indicating that the product complies with applicable regulations for biosolids or that the product has been prepared to meet standards that make it safe for its intended use when used in accordance with the directions provided by the manufacturer.

(iii) A statement or information that encourages proper use of the product and protection of public health and the environment. This may include information on agronomic rates, product storage, hygiene, and protection of surface or ground water resources.

(iv) Agronomic rates for typical applications or guidance on how to determine the agronomic rate of application.

(v) A statement or information indicating that the product contains or is derived from biosolids.

(vi) Any additional information needed to facilitate safe use of the product.

(b) In addition to the information required in (a)(i) through (vi) of this subsection, the information in subsection (1)(b)(ii) of this section when the pollutant limits in Table 3 of WAC 173-308-160 are exceeded.

(c) Any person who prepares biosolids that are sold or distributed outside the jurisdiction of the state of Washington, must comply with the requirements in 40 CFR Part 503.14(e), as applicable.

(5) **Recordkeeping.** The person who prepares biosolids for sale or give away in a bag or other container must keep the records required in WAC 173-308-290 (2) and (5).

(6) **Reporting.** The person who prepares biosolids for sale or give away in a bag or other container must submit annual reports in accordance with the requirements of WAC 173-308-295.

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-260, filed 2/18/98, effective 3/21/98.]

WAC 173-308-270 Domestic septage management requirements. (1) Domestic septage may not be applied to a public contact site, a lawn, or a home garden, unless it is managed as biosolids originating from municipal sewage sludge according to this subsection (1).

When domestic septage managed as biosolids originating from municipal sewage is applied to the land, unless otherwise provided, all applicable requirements for biosolids must be met, including but not limited to requirements for pathogen and vector attraction reduction, site management and access restrictions, pollutant concentration limits, agronomic rates, obtaining and providing information, sampling and analysis, and recordkeeping and reporting.

(2) Domestic septage that is applied to the land must be treated by a process such as physical screening or grinding, or another approved method must be employed to significantly remove or reduce recognizable materials when septage is applied to the land.

(3) **Pathogens.**

(a) When domestic septage - class II is applied to the land, the alkaline stabilization requirement of (b) of this subsection must be met, or the Class B pathogen requirements in one of WAC 173-308-170 (3)(a) through (c) and the site management and access restrictions in subsection (5)(a)(i) through (ix) and (b)(i) through (iv) of this section must be met.

(b) When domestic septage - class I or III is applied to the land, the pH of the septage must be raised to twelve or higher by alkali addition and, without the addition of more alkali, must remain at twelve or higher for thirty minutes and the site management and access restrictions in subsection (5)(a)(i) through (ix) of this section must be met, or, when pH adjustment is not used to achieve pathogen reduction requirements, the site management and access restrictions in subsection (5)(a)(i) through (ix) and (b)(i) through (iv) of this section must be met.

(4) **Vector attraction reduction.** The requirements in one of (a), (b), or (c) of this subsection, must be met when domestic septage is applied to the land.

(a) The septage must be injected below the surface of the land;

(i) No significant amount of septage may be present on the land surface within one hour after the septage is injected; and

(ii) When the septage is Class A for pathogens, the septage must be injected below the land surface within eight hours after being discharged from the pathogen treatment process.

(b) Septage must be incorporated into the soil within six hours after application to the land;

When septage that is incorporated into the soil is Class A with respect to pathogens, the septage must be applied to the land within eight hours after being discharged from the pathogen treatment process.

(c) The pH of the septage must be raised to twelve or higher by alkali addition and, without the addition of more alkali, must remain at twelve or higher for thirty minutes.

(5) **Site management and access restrictions.**

(a) The site management and access restrictions in (a)(i) through (ix) of this subsection are applicable when domestic septage is applied to the land.

(i) Food crops, feed crops, and fiber crops must not be harvested for thirty days after the application of septage.

(ii) Food crops with harvested parts that touch the septage/soil mixture and are totally above the land surface must not be harvested for fourteen months after application of septage.

(iii) Food crops with harvested parts below the surface of the land must not be harvested for twenty months after application of septage when the septage remains on the land surface for four months or longer prior to incorporation into the soil.

(iv) Food crops with harvested parts below the surface of the land must not be harvested for thirty-eight months after application of septage when the septage remains on the land surface for less than four months prior to incorporation into the soil.

(v) Unless otherwise approved in a site specific land application plan under WAC 173-308-310 (6)(b), during the time when access is restricted, signs must be posted around the application site at all significant points of access, and otherwise around the perimeter so that they can be noticed and read by a reasonably observant person. The required content of signs is listed in WAC 173-308-275.

It is a violation of these rules for any person to remove a sign posted in accordance with the requirements of subsection (4)(a)(v) of this section during the period when access is restricted.

(vi) Septage must not be applied to land that is one hundred feet or less from surface waters of the state, unless otherwise specified by the department;

(vii) Septage must not be applied to the land so that it enters a wetland or waters of the state, unless approved in a permit issued by the department, or by EPA with the approval of the department;

(viii) Septage must not be applied to the land if it is likely to adversely affect a threatened or endangered species listed under WAC 232-12-011 or 232-12-014 or its critical habitat.

(ix) Septage must not be applied to the land within one hundred feet of a well unless otherwise approved in a permit issued in accordance with the requirements of this chapter.

(b) In addition to the site management and access restrictions in (a)(i) through (ix) of this subsection, the additional site management and access restrictions in (b)(i) through (iv) of this subsection apply to domestic septage if the pH adjustment requirement of subsection (3)(b) of this section is not met when septage is applied to the land.

(i) Livestock must not be allowed to graze on the land for thirty days after application of septage.

(ii) Turf grown on land where septage is applied must not be harvested for one year after application of the septage when the harvested turf is placed on either land with a high potential for public exposure or a lawn, unless otherwise specified by the department.

(iii) Public access to land with a high potential for public exposure must be restricted for one year after the application of septage.

(iv) Public access to land with a low potential for public exposure must be restricted for thirty days after the application of septage.

(6) Except as provided in this subsection (6), septage that is applied to the land must be applied at a rate not exceeding the rate determined by equation (3).

Equation (3)

$$AAR = N / 0.0026$$

Where:

AAR = Annual application rate in gallons per acre per three hundred sixty-five-day period.

N = Amount of nitrogen in pounds per acre per 365 day period needed by the crop or vegetation grown on the land.

A person may not apply domestic septage to the land during a three hundred sixty-five-day period if the annual application rate in this subsection (6) has been reached during that period, unless the domestic septage is managed as biosolids originating from municipal sewage sludge per subsection (1) of this section.

(7) **Monitoring.**

(a) Samples of domestic septage that are collected and analyzed must be representative of the material that is applied to the land.

(b) When domestic septage - class I, II, or III is applied to the land and pH adjustment is used to meet any pathogen or vector attraction reduction requirement, each container of domestic septage that is applied to the land must be monitored to determine compliance with pH requirements.

(8) **Recordkeeping.** The person who prepares septage and the person who applies septage must keep the records required in WAC 173-308-290(6).

(9) **Reporting.** Facilities that prepare septage for application to the land, and persons who apply septage to the land, which is not prepared at a treatment works treating domestic sewage must submit annual reports in accordance with the requirements of WAC 173-308-295.

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-270, filed 2/18/98, effective 3/21/98.]

WAC 173-308-275 Contents of signs for land application sites. (1) When signs are required for the purpose of restricting access, they must contain at least the following information:

(a) The name and address or phone number of the generator and if different, the person who applies;

(b) The names, addresses, and phone numbers of the regulatory and permitting authorities;

(c) The material that is being applied (biosolids or a more detailed description);

(d) Notice that access is restricted, and if desired, the date after which access is no longer restricted; and

(e) If applicable, a notice on limitations regarding the harvest of edible plants from the site.

(2) With the consent of the department, "no trespassing" signs may be substituted for the informational signs required under subsection (1) of this section.

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-275, filed 2/18/98, effective 3/21/98.]

WAC 173-308-280 Requirements for facilities storing biosolids. (1) Facilities storing biosolids must do so in accordance with the provisions of a permit issued under this chapter, if an applicable permit has been issued.

(2) Biosolids may not be stored in a manner that would be likely to result in the contamination of ground water, surface water, air, or land under current conditions or in the case of fire or flood.

(3) Facilities storing liquid biosolids in surface impoundments must meet the requirements in WAC 173-304-430 and other applicable sections of chapter 173-304 WAC that apply to the design, construction, and operation of surface impoundments.

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-280, filed 2/18/98, effective 3/21/98.]

WAC 173-308-290 Recordkeeping. (1)(a) Both the person who prepares biosolids and the person who applies bulk biosolids to the land must keep certain records and certification statements showing that applicable standards for biosolids quality, treatment, and management have been met. Records must also be kept on the amount and type biosolids applied to the land under different management scenarios or that are disposed of in a municipal solid waste landfill.

(b) A responsible official as described in WAC 173-308-310(8) must sign all certification statements required under this section.

(2) The person who prepares biosolids must keep the following records (amounts recorded as dry tons):

(a) The amount of bulk biosolids applied by the preparer or the preparer's agents to agricultural land;

(b) The amount of bulk biosolids applied by the preparer or the preparer's agents to forestland;

(c) The amount of bulk biosolids applied by the preparer or the preparer's agents to a public contact site;

(d) The amount of bulk biosolids applied by the preparer or the preparer's agents to a land reclamation site;

(e) The amount of bulk biosolids applied by the preparer or the preparer's agents to a lawn or home garden;

(f) The amount of biosolids that are sold or given away by the preparer in a bag or other container for application to the land;

(g) The amount of biosolids in a compost or blended biosolids product that is sold or given away by the preparer in bulk form or in a bag or other container for application to the land;

(h) The amount of bulk biosolids that are sold or given away by the preparer to another person who prepares biosolids for application to the land;

(i) The amount of bulk biosolids that are sold or given away by the preparer to a person other than an agent of the preparer for application to the land; and

(j) The amount of biosolids that are disposed in a municipal solid waste landfill on an emergency, temporary, or long-term basis.

(3) When bulk biosolids are applied to the land, the person who prepares the biosolids must develop and maintain the following information, as applicable, for five years:

(a) If the pollutant limits in Table 3 of WAC 173-308-160 were met, laboratory analysis data showing that those limits were met; or, if the pollutant ceiling concentrations in Table 1 of WAC 173-308-160 were met, laboratory analysis data showing that those limits were met.

(b) If the Class A pathogen requirements in one of WAC 173-308-170 (2)(a) through (f) were met, process monitoring and/or laboratory analysis data showing that those requirements were met, and a description of how those requirements were met; or, if the Class B pathogen standards in one of WAC 173-308-170 (3)(a), (b), or (c) were met, process monitoring and/or laboratory analysis data showing that those requirements were met, and a description of how those requirements were met.

(c) If the vector attraction reduction requirements in one of WAC 173-308-180 (2) through (7) were met, process monitoring and/or laboratory analysis monitoring data showing that those requirements were met and a description of how those requirements were met.

(d) One of the following certification statements, as applicable:

(i) If the vector attraction reduction requirements in one of WAC 173-308-180 (2) through (7) were met, the following signed certification: "I certify, under penalty of law, that the (insert Class A or Class B as appropriate) pathogen requirements in (insert one of WAC 173-308-170 (2)(a), (b), (c), (d), (e), or (f) if Class A, or insert one of WAC 173-308-170 (3)(a), (b), or (c) if Class B), and the vector attraction reduction requirement in (insert one of the vector attraction reduction requirements in WAC 173-308-180 (2) through (7)) have been met. This determination was made under my direction and supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that pathogen and vector attraction reduction requirements have been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."

(ii) If the vector attraction reduction requirements in one of WAC 173-308-180 (2) through (7) were not met, the following signed certification: "I certify, under penalty of law, that the (insert Class A or Class B as appropriate) pathogen requirements in (insert one of WAC 173-308-170 (2)(a), (b), (c), (d), (e), or (f) if Class A, or insert one of WAC 173-308-170 (3)(a), (b), or (c) if Class B) have been met. This determination was made under my direction and supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that pathogen reduction requirements have been met I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."

(4) When bulk biosolids are applied to the land, the person who applies the biosolids must develop and maintain the

following information, as applicable, for five years or indefinitely as required in (c) of this subsection:

(a) If the Class B pathogen standards in one of WAC 173-308-170 (3)(a), (b), or (c) were met, a description of how the site management and access restrictions in WAC 173-308-210 (4)(a)(i) through (x), or WAC 173-308-220 (4)(a)(i) through (ix), or WAC 173-308-230 (4)(a)(i) through (ix), or WAC 173-308-240 (4)(a)(i) through (x), as applicable, were met for each site on which biosolids were applied.

The following signed certification: "I certify, under penalty of law, that the site management and access restrictions in (insert WAC 173-308-210 (4)(a)(i) through (x), or WAC 173-308-220 (4)(a)(i) through (ix), or WAC 173-308-230 (4)(a)(i) through (ix), or WAC 173-308-240 (4)(a)(i) through (x), as applicable) have been met for each site on which bulk biosolids were applied. This determination was made under my direction and supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the site management and access restrictions have been met. I am aware that there are significant penalties for false certification including fine and imprisonment."

(b) If the vector attraction reduction requirements in WAC 173-308-210 (3)(b)(i) or (ii), WAC 173-308-220 (3)(b)(i) or (ii), WAC 173-308-230 (3)(b)(i) or (ii), or WAC 173-308-240 (4)(b)(i) or (ii) were met, a description of how those requirements were met.

The following signed certification: "I certify, under penalty of law, that the vector attraction reduction requirement in (insert WAC 173-308-210 (3)(b)(i) or (ii), WAC 173-308-220 (3)(b)(i) or (ii), WAC 173-308-230 (3)(b)(i) or (ii), WAC 173-308-240 (3)(b)(i) or (ii), as applicable) has been met for each site on which biosolids were applied. This determination was made under my direction and supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the vector attraction reduction and site management requirements have been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."

(c) If the pollutant ceiling concentration limits in Table 1 of WAC 173-308-160 were met (but the concentration limits in Table 3 were exceeded), the information in (c)(i) through (v) of this subsection must be developed and kept indefinitely.

(i) The location, by street address if applicable, a copy of the assessor's plat map(s) with the application area(s) clearly shown or the latitude and longitude of the approximate center of each land application site, and the section, township, and range of each quarter section on which biosolids were applied.

(ii) The number of hectares in each site on which bulk biosolids were applied.

(iii) The date and time bulk biosolids were applied to each site.

(iv) The cumulative amount of each pollutant (i.e., kilograms) listed in Table 2 of WAC 173-308-160 in the bulk biosolids applied to each site, including the amount(s) in WAC 173-308-160 (2)(b)(i) and (iii).

(v) The amount of biosolids (i.e., dry metric tons) applied to each site.

(d) A description of how the requirement to obtain information under WAC 173-308-160 (2)(b) was met.

(i) The following signed certification: "I certify, under penalty of law, that the requirement to obtain information under WAC 173-308-160 (2)(b) has been met for each site on which bulk biosolids were applied. This determination was made under my direction and supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the requirements to obtain information have been met. I am aware that there are significant penalties for false certification including fine and imprisonment."

(ii) If the biosolids that were applied to the land did not meet standards to be classified as exceptional quality, and the site management restrictions in WAC 173-308-210 (4)(b)(i) through (iii), or WAC 173-308-220 (4)(b)(i) through (iii), or WAC 173-308-230 (4)(b)(i) through (iii), or WAC 173-308-240 (4)(b)(i) through (iii) were met, the following signed certification:

"I certify, under penalty of law, that the site management restrictions in (insert WAC 173-308-210 (4)(b)(i) through (iii), or WAC 173-308-220 (4)(b)(i) through (iii), or WAC 173-308-230 (4)(b)(i) through (iii), or WAC 173-308-240 (4)(b)(i) through (iii), as applicable) were met for each site on which bulk biosolids were applied. This determination was made under my direction and supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the site management restrictions have been met. I am aware that there are significant penalties for false certification including fine and imprisonment."

(5) When biosolids are sold or given away in a bag or other container for application to the land, the person who prepares the biosolids must develop and maintain the following information, as applicable, for five years:

(a) If the pollutant limits in Table 3 of WAC 173-308-160 were met, laboratory analysis data showing that those limits were met; or, if the pollutant ceiling concentrations in Table 1 of WAC 173-308-160 were met, laboratory analysis data showing that those limits were met.

(b) Process monitoring and/or laboratory analysis data showing that the Class A pathogen requirements in one of WAC 173-308-170 (2)(a) through (f) were met, and a description of how those requirements were met.

(c) Process monitoring and/or laboratory analysis data showing that the vector attraction reduction requirements in one of WAC 173-308-180 (2) through (7) were met, and a description of how those requirements were met.

(d) The following certification statement:

"I certify, under penalty of law, that the Class A pathogen requirement in (insert one of WAC 173-308-170 (2)(a), (b), (c), (d), (e), or (f) if Class A), and the vector attraction reduction requirement in (insert one of WAC 173-308-180 (2) through (7)) have been met. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that pathogen requirement and vector attraction reduction

requirements have been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."

(e) When the biosolids are subject to the requirements of WAC 173-308-160(4), the concentration in the biosolids of each pollutant listed in Table 4 of WAC 173-308-160, and the annual whole biosolids application rate that does not cause the annual pollutant loading rates in Table 4 of WAC 173-308-160 to be exceeded.

The following certification statement:

"I certify, under penalty of law, that the labeling and notification requirement in WAC 173-308-260 (1)(b)(ii) has been met. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the labeling and notification requirements are met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."

(6) When domestic septage is applied to the land, the person who applies the domestic septage must develop and maintain the following information, as applicable, for five years:

(a) The location, by street address if applicable, a copy of the assessor's plat map(s) with the application area(s) clearly shown or the latitude and longitude of the approximate center of each land application site, and the section, township and range of each quarter section on which septage is applied.

(b) The number of acres in each site on which septage is applied.

(c) The date and time septage is applied to each site.

(d) The nitrogen requirement for the crop or vegetation grown on each site during a three hundred sixty-five-day period.

(e) The rate, in gallons per acre per three hundred sixty-five-day period, at which septage is applied to each site and the total number of gallons of septage applied to each site;

(f) The source of the septage, including the name and address of the individual or business where the septage was generated, or in the case of a centralized septage treatment facility, the name of the person or business who delivered the septage, the dates of delivery, and how much septage was delivered.

(g) The class of septage as defined in WAC 173-308-080.

(h) A description of how the pathogen requirements in WAC 173-308-270 (3)(a) or (b) were met.

(i) A description of how the vector attraction reduction requirements in one of WAC 173-308-270 (4)(a), (b), or (c) were met.

(j) A description of how the applicable site management and access restriction requirements in WAC 173-308-270(5) were met.

(k) The following signed certification: "I certify, under penalty of law, that the pathogen requirements in (insert either WAC 173-308-270 (3)(a) or (b)), the vector attraction reduction requirements in (insert one of WAC 173-308-270 (4)(a), (b), or (c)), and the applicable site management and access restriction requirements in WAC 173-308-270(5) have been met. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the pathogen and vector attraction reduction requirements and site management and access restrictions have been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-290, filed 2/18/98, effective 3/21/98.]

WAC 173-308-295 Annual reports. (1) Class I biosolids management facilities, treatment works treating domestic sewage with a design flow rate equal to or greater than one million gallons per day, and those that serve 10,000 people or more, must submit to the department by March 1 of each year, the following information for the preceding calendar year:

(a) All applicable information required under WAC 173-308-290 (2), (3) and (5);

(b) The information in WAC 173-308-290 (4)(c)(i) through (v) and WAC 173-308-290 (4)(d) and (d)(i) and (ii) when ninety percent or more of any of the cumulative pollutant loading rates in Table 2 of WAC 173-308-160 have been reached.

(2) Other facilities and treatment works treating domestic sewage that are not required to submit an annual report under WAC 173-308-295(1) must submit part or all of any applicable information in WAC 173-308-290 (1)(a) and (b) as required by the department on the written request of the department, or in accordance with the requirements of an applicable permit issued by the department.

(3) All persons who apply septage to the land must submit to the department by March 1 of each year, the following information for the preceding calendar year:

(a) The number of gallons of septage applied to the land.

(b) The number of acres of land to which septage was applied.

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-295, filed 2/18/98, effective 3/21/98.]

WAC 173-308-300 Disposal of municipal sewage sludge or biosolids in municipal solid waste landfill units. (1) When biosolids are placed in a municipal solid waste landfill unit they are considered solid waste (municipal sewage sludge).

(2) The use of municipal sewage sludge or biosolids that are subject to regulation under this chapter, as daily cover or as an amendment to daily cover is not a beneficial use and is considered disposal.

The use of biosolids as a component of landfill intermediate or final cover is considered a beneficial use if it is consistent with an approved landfill plan of operations or closure/post-closure plan.

(a) Landfills that use biosolids that do not meet standards to be classified as exceptional quality as a component of intermediate or final cover must have an approved site specific land application plan that meets the requirements of WAC 173-308-310(6) and 173-308-210, 173-308-230, or 173-308-240, as applicable.

(b) For the purposes of beneficial use on a municipal solid waste landfill unit, a site specific land application plan may recognize an approved plan of operations or closure/post-closure plan that addresses the substantive requirements of WAC 173-308-310(6) and 173-308-210, 173-308-230, or 173-308-240, as applicable.

(3) Any landfill accepting municipal sewage sludge for disposal must be in compliance with the requirements of chapter 173-351 WAC and 40 CFR Part 258.

(4) Municipal sewage sludge that is disposed in a municipal solid waste landfill must meet the liquids in landfills restrictions of WAC 173-351-200(9).

(5) Municipal sewage sludge that is disposed in a municipal solid waste landfill must not be hazardous waste as defined in chapter 173-303 WAC.

(6) Disposal on an emergency or temporary basis. Facilities wishing to dispose of municipal sewage sludge in a municipal solid waste landfill on an emergency or temporary basis must meet the conditions of (a) through (c) of this subsection and those in WAC 173-351-220(10).

(a) The person proposing to dispose of municipal sewage sludge must obtain a written determination from the local health department where the biosolids are being or would be land applied, that a potentially unhealthful circumstance exists under present conditions of management or would result from further land application of the biosolids, and that other management options are unavailable or would pose a threat to human health or the environment.

(b) Upon making the determination in (a) of this subsection, the local health department must notify the department in writing, of its findings and the basis for its determination. In its notification, the local health department must state the date on which disposal is approved to commence, any conditions, and the date after which continued disposal is prohibited.

(i) If the municipal sewage sludge is proposed to be disposed of in a municipal solid waste landfill outside the jurisdiction of the local health department in (b) of this subsection, the person proposing to dispose of the municipal sewage sludge must obtain written approval for disposal from the health department in the receiving jurisdiction.

(ii) If the jurisdictional health department in (b)(i) of this subsection, approves disposal of the municipal sewage sludge, the person proposing the disposal must forward a copy of the jurisdictional health department's determination to the department.

(c) Any person wishing to dispose of municipal sewage sludge in a municipal solid waste landfill on a temporary basis must submit a plan for approval to the department. The plan must include the following information:

(i) The conditions that make disposal necessary.

(ii) The steps that will be taken to correct the conditions in (c)(i) of this subsection, so that disposal will not become a long-term management option.

(iii) A time table for implementing the steps to be taken in (c)(ii) of this subsection.

(7) Disposal on a long-term basis.

(a) Facilities wishing to dispose of municipal sewage sludge in a municipal solid waste landfill on a long-term basis must have authorization to do so in a valid NPDES or state waste discharge permit issued under chapter 90.48 RCW, or a valid permit issued in accordance with this chapter.

(b) Any person wishing to engage in the disposal of municipal sewage sludge in a municipal solid waste landfill on a long-term basis must meet the conditions of (b)(i) and (ii) of this subsection and those in subsections (3), (4), and (5) of this section.

(i) The person proposing to dispose of municipal sewage sludge or biosolids must demonstrate to the satisfaction of the department that other options for disposal or beneficial use are economically infeasible.

(ii) The person proposing to dispose of municipal sewage sludge must provide the department with written approval for disposal from the local health department in the receiving jurisdiction.

(8) All facilities that dispose of municipal sewage sludge in a municipal solid waste landfill must submit the information in WAC 173-308-290 (2)(j), as required under WAC 173-308-295.

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-300, filed 2/18/98, effective 3/21/98.]

WAC 173-308-310 Permitting. (1) Applicable facilities—Application required.

(a) Except as provided in (a) of this subsection, all treatment works treating domestic sewage that engage in practices regulated under this chapter are applicable facilities, and must apply for an individual permit or for coverage under a general permit for the final use or disposal of biosolids.

Facilities that compost biosolids, and those facilities where only septage is applied to the land or collected and treated prior to application to the land, do not require permitting under this chapter if:

(i) A permit is not otherwise required in order to comply with the Federal Clean Water Act;

(ii) The department and local health department agree that a permit issued by the local health department will be adequate;

(iii) The conditions of the permit issued by the local health department meet or exceed the requirements of this chapter; and

(iv) The department does not otherwise find that a state issued permit is necessary because one or more of the conditions in (b)(i) through (iv) of this subsection exists.

(b) Designation as a treatment works treating domestic sewage. In addition to facilities meeting the definition of a treatment works treating domestic sewage in WAC 173-308-080, the department may designate any person, site, or facility that treats, uses, transports, or applies biosolids, as a treatment works treating domestic sewage, and require the owner or operator to apply for a permit if:

(i) The department determines that a permit is necessary to protect human health or the environment from the adverse effect of a pollutant in the biosolids;

(ii) The department determines that a permit is necessary to protect human health or the environment from poor biosolids management practices;

(iii) The department determines that a permit is necessary to ensure compliance with any of the requirements in this chapter; or

(iv) Bulk biosolids originating from a source or location outside the jurisdiction of the state of Washington are being applied to the land or received at any site.

(c) It is a violation of this chapter for a facility to fail to submit a permit application to the department as required by these rules.

(2) **General and individual permits.** The department will issue permits for the treatment and final use or disposal of biosolids.

(a) The department will issue, modify, revoke and reissue, and terminate general permits in accordance with the procedures in chapter 173-226 WAC.

(b) The department will accept and consider applications for coverage under a general permit, modify conditions of coverage, revoke and reauthorize coverage, or terminate coverage under a general permit in accordance with the provisions of this chapter.

(c) The department will issue, modify, revoke and reissue, or terminate individual permits in accordance with the provisions of this chapter.

(3) **Permit selection.**

(a) After the department has issued a general permit for the final use or disposal of biosolids, all applicable facilities must submit a notice of intent or apply for coverage under the general permit, unless:

(i) The facility has a current individual permit issued under this chapter;

(ii) The department requires a facility to apply for an individual permit; or

(iii) On written request of the applicant, the department has granted permission to apply for an individual permit.

(A) A facility may request an individual permit if a practice it proposes is not addressed in a general permit issued by the department.

(B) A facility may seek coverage under a general permit for any portion of its biosolids management practices that are applicable under the general permit, and may also request an individual permit for any portion of its biosolids management practices that are not applicable under the general permit.

(iv) The department may require any facility applying for an individual permit under (a)(iii)(A) or (B) of this subsection to limit its practices for the final use or disposal of biosolids to those that are authorized in a general permit, and to apply for a general permit.

(b) The department may notify a facility that it is covered by a general permit, even if the facility has not submitted a permit application or notice of intent as required under this subsection (3).

(i) A facility so notified may request an individual permit in accordance with the provisions of (a)(iii) of this subsection.

(ii) Facilities that are notified of coverage under (b) of this subsection must submit a notice of intent or permit application as directed by the department.

(4) **Timing of applications and notices of intent – renewal of coverage.**

(a) Except for facilities in (e)(i) and (f) of this subsection, existing facilities that are class one biosolids management facilities, publicly owned treatment works with a design flow rate equal to or greater than one million gallons per day, and those that serve a population of 10,000 people or more must either:

(i) Submit an application for coverage under a general permit within ninety days after issuance of a biosolids general permit by the department; or

(ii) Submit a notice of intent within ninety days of issuance of an applicable general permit, followed by a complete permit application within one hundred eighty days of issuance of the applicable general permit.

(b) Except for facilities in (a), (e)(i), and (f) of this subsection, existing facilities must submit a notice of intent to be covered under a general permit within ninety days after issuance of a biosolids general permit by the department.

(c) Except for facilities in (e)(ii) and (f) of this subsection, new facilities that are class one biosolids management facilities, publicly owned treatment works with a design flow rate equal to or greater than one million gallons per day, and those that serve a population of 10,000 people or more must submit an application for coverage under a general permit or a request for an individual permit at least one hundred eighty days in advance of engaging in applicable biosolids management activities.

(d) Except for facilities in (c), (e)(ii) and (f) of this subsection, new facilities must submit a notice of intent to be covered under a general permit or a request for an individual permit at least one hundred eighty days in advance of engaging in applicable biosolids management activities.

(e)(i) Existing facilities that have not been previously permitted under this subsection that wish to request an individual permit under subsection (3)(a)(iii) of this section must do so within thirty days of issuance of a biosolids general permit by the department.

(ii) New facilities that wish to request an individual permit under subsection (3)(a)(iii) of this section must do so at least one hundred eighty days in advance of engaging in applicable biosolids management activities.

(f) Facilities that have been directed to apply for an individual permit under subsection (3)(a)(ii) of this section must submit an application for an individual permit as directed by the department, but the department will allow at least ninety days for a submittal.

(g) Facilities that are denied an individual permit must submit a notice of intent or a complete permit application for coverage under a general permit as would otherwise be required, within sixty days after being denied an individual permit unless a later date is authorized by the department.

(h) Facilities, other than those in (a) of this subsection, that have submitted a notice of intent to be covered under a general permit must submit a complete permit application as follows:

(i) Except as required under (h)(iv) of this subsection, if the facility is subject to permitting under chapter 173-216 or 173-220 WAC, a complete permit application is due on the date when an application for a state waste discharge or NPDES permit, or for renewal thereof, is due, or one hundred eighty days after issuance of the applicable general permit, whichever is later.

(ii) Except as required under (h)(iv) of this subsection, if the facility is not subject to permitting under chapter 173-216 or 173-220 WAC but is subject to permitting under chapter

173-304 WAC and local solid waste ordinances, a complete permit application is due on the date when an application for a local solid waste permit, or for renewal thereof, is due, or one hundred eighty days after issuance of the applicable general permit, whichever is later.

(iii) Other facilities that have submitted a notice of intent must submit a complete permit application as directed by the department, but the department will allow at least ninety days for a submittal.

(iv) The department may require facilities under (h)(i) and (ii) of this subsection to submit a complete permit application at an earlier date for the purpose of expediting the permitting process, or if the department finds that any of the conditions in subsection (1)(b)(i) through (iv) of this section are met. Facilities required to make an early submittal must do so within ninety days from the time of the first request unless a later date is authorized by the department.

(i) Renewal of coverage.

(A) All facilities permitted under this section must submit a notice of intent to continue coverage under a general permit or for initial coverage under a general permit, or an application for an individual permit or for renewal of an individual permit, at least one hundred eighty days prior to the expiration date of their applicable permit.

Facilities that are submitting a notice of intent must submit a complete updated permit application according to the schedule in (a) through (h) of this subsection.

(B) When a facility has made timely and sufficient notice of intent or application as required in (i) of this subsection, an expiring permit remains in effect and enforceable until:

(I) The application has been denied;

(II) A replacement permit has been issued by the department; or

(III) The department has cancelled the expired permit.

(C) Unless the department specifies otherwise in a renewing general permit, or notifies a facility directly, facilities previously covered under a general permit issued in accordance with subsection (2) of this section are automatically covered under a new general permit if they reapply for coverage in accordance with (i) of this subsection; and

(I) The facility will not implement a significant change in biosolids management practices under the new permit; and

(II) The public notice requirements of subsection (11) of this section have been met and there are no sustainable objections to continuation of coverage.

(D) For facilities that are renewing coverage under a general permit, land application plans required under subsection (6) of this section that have been previously approved are automatically approved under the new general permit as long as biosolids management practices remain consistent with the approved plan.

(E) Coverage under an expired permit for permittees who fail to submit a timely and sufficient application or notice of intent shall cease on the expiration date of the permit.

(5) **Contents of permit applications – notices of intent.**

(a) All facilities must submit a complete and factually correct permit application in accordance with the schedule established in subsection (4) of this section, on forms or in a format specified by the department. When complete, all permit applications must contain at least the information in (a)(i) through (xi) of this subsection:

(i) The activities conducted by the applicant that require it to obtain a permit, and if applying under a general permit, the name of the permit;

(ii) Name, mailing address, and location of the facility for which the application is submitted;

(iii) The operator's name, address, telephone number, ownership status, and status as federal, state, private, public, or other entity;

(iv) Whether or not the facility or any associated facilities or land applications sites are located on Indian or federal lands;

(v) A listing of other relevant environmental permits, and all permits or construction approvals received or applied for under any of the following programs:

(A) Hazardous waste management program under the Resource Conservation and Recovery Act;

(B) Underground injection control program under the Safe Drinking Water Act;

(C) National pollutant discharge elimination system program under the Clean Water Act;

(D) Prevention of significant deterioration program under the Clean Air Act;

(E) Nonattainment program under the Clean Air Act;

(F) National emission standards for hazardous pollutants preconstruction approval under the Clean Air Act;

(G) Ocean dumping permits under the Marine Protection, Research, and Sanctuaries Act;

(H) Dredge or fill permits under section 404 of the Clean Water Act;

(vi) A map extending one mile beyond the property boundaries of the facility, showing the location and means of access to the facility, and additional maps if necessary, showing the same for any associated treatment or storage facilities.

(vii) Any biosolids monitoring data the applicant has for the last two years, including for land application sites any available soil, or surface or ground water monitoring data, with a description of the sampling locations, and for wells the approximate depth to ground water.

(viii) A description of the applicant's biosolids use and disposal practices including, where applicable, the location of any sites where the applicant transfers biosolids for treatment or disposal, as well as the name of the applicator or other contractor who applies the biosolids to land if different from the applicant;

(ix) Land application plans, as required under subsection (6) of this section;

(x) The amount of biosolids produced and the amount of biosolids applied to the land during the previous year, and estimated to be produced or applied to the land on an annual basis during the life of the permit;

(xi) Any information required to determine the appropriate standards for permitting under this chapter, and any other information the department may request and reasonably require to assess biosolids use and disposal practices, to determine whether or not to issue a permit, or to ascertain appropriate permit requirements under this chapter.

(b) A notice of intent to be covered under a general permit for biosolids recycling must contain:

(i) The name of the general permit under which coverage is being sought, and a statement declaring the applicant's intent to comply with the requirements of the permit.

(ii) The information required in (a)(i) through (iii) of this subsection, and the location and a description of any site(s) where biosolids are treated, stored, disposed, or applied, and whether or not any permit, including a local solid waste permit has been issued for a site.

(iii) Any information specifically required for a notice of intent under the applicable general permit.

(6) **Land application plans.** (a) Land application plans are not required when exceptional quality biosolids are applied to the land, except as specified in (a)(ii) or (iii) of this subsection.

(i) Any person who prepares exceptional quality biosolids for application to the land must determine and assure to the extent practicable, through recordkeeping and other means, that all applicable criteria of this chapter and any applicable permit are met when bulk exceptional quality biosolids are applied to the land.

(ii) Any person who prepares exceptional quality biosolids for application to the land and who fails to satisfy the requirements in (a)(i) of this subsection, may be required to submit a general or site specific land application plan, or both, for any or all sites where bulk exceptional quality biosolids are applied to the land, and may also be required to comply with the public notice requirements in subsection (11) of this section.

(iii) The department may require a site specific land application plan for any site where bulk exceptional quality biosolids are proposed to be applied if the plan is necessary to evaluate potential permit conditions or if the department finds there would be a strong benefit to the public from the preparation of a site specific plan.

(iv) The department may require advance notice prior to the application of bulk exceptional quality biosolids to the land. In such case the department will notify the facility in writing of the conditions requiring advance notice, the length of advance notice required, and the length of time the requirement for advance notice will remain in effect.

(b) Land application plans are required when bulk biosolids that do not meet criteria to be classified as exceptional quality are applied to the land. Except when biosolids are delivered to a beneficial use facility as provided in (g) of this subsection, facilities that propose to apply biosolids to the land that do not meet criteria to be classified as exceptional quality must either:

(i) Submit with their permit application a site specific land application plan for each site where biosolids will be applied during the life of the permit; or

(ii) Submit with their permit application a general land application plan, and at a later date prior to applying biosolids to a site, a site specific land application plan for each site where biosolids will be applied to the land;

(iii) Facilities that submit a general land application plan may also submit at the same time any available site specific land application plans for approval.

(c) All site specific land application plans must be consistent with a facility's general land application plan, if a general land application plan is required.

(d) Each site specific land application plan must provide information necessary to determine if the site is appropriate for land application of biosolids, and a description of how the site will be managed. At a minimum, site specific land application plans must address the following:

(i) In accordance with the provisions of WAC 173-308-160 (2)(b), whether or not it is known or can be determined that biosolids containing pollutants in excess of the values established in Table 3 of WAC 173-308-160 have ever been applied to the site, and if so:

(A) The date(s) when the biosolids were applied (if known);

(B) The amount of biosolids applied (if known);

(C) The concentrations of the pollutants in the biosolids (if known);

(D) The area(s) of the site to which the biosolids were applied (if known);

(ii) A discussion of the types of crops grown or expected to be grown, their intended end use (e.g., pasture grass for a feed crop, corn as a food crop), and the current distribution of crops on the site;

(iii) An explanation of how agronomic rates will be determined during the life of the site, along with any currently available calculations. Whenever agronomic rates are determined or conditions change (i.e., a change in crops or agronomic rates) an update of the agronomic rate calculations must be filed with the department;

(iv) Method(s) of application;

(v) Seasonal and daily timing of biosolids applications;

(vi) Any available data from soils, surface water, or ground water monitoring collected from the site within the last two years;

(vii) The name of the county and water resource inventory area where biosolids will be applied;

(viii) A description of how biosolids will be stored at the site and also addressing related off-site storage;

(ix) Site map(s) showing:

(A) The location and means of access to the facility;

(B) The number of acres in the site;

(C) Location and extent of any wetlands on the site;

(D) A topographic relief of the application site and surrounding area;

(E) Adjacent properties and uses and their zoning classification;

(F) Any seasonal surface water bodies located on the site or perennial surface water bodies within 1/4 mile of the site;

(G) The location of any wells within 1/4 mile of the site that are listed in public records or otherwise known to the applicant, whether for domestic, irrigation, or other purposes;

(H) The width of buffer zones to surface waters, property boundaries and other features requiring buffers;

(I) The presence and extent of any threatened or endangered species or related critical habitat;

(J) The location of any critical areas on site, as required to be identified under chapter 36.70A RCW in the county's growth management plan;

(K) The location and size of any areas that will be used to store biosolids.

(e) Except for facilities under (e)(vi) of this subsection, applicants including beneficial use facilities intending to

apply biosolids to the land that do not meet criteria to be classified as exceptional quality, to sites for which a site specific land application plan is not submitted as a part of the permit application, must submit for approval as a part of their permit application, a general land application plan that at a minimum:

(i) Describes the geographical area covered by the plan, including the names of all counties and water resource inventory areas where biosolids may be applied;

(ii) Identifies site selection criteria;

(iii) Describes how sites will be managed;

(iv) Provides for not less than thirty days advance notice to the department of new or expanded land application sites, including those subject to provisional approval under subsection (17) of this section, to allow time for the department to object prior to the biosolids application; and

(v) Provides for advance public notice as required in subsection (11) of this section, and that is reasonably calculated to reach potentially interested adjacent and abutting property owners; except

(vi) A general land application plan is not required when biosolids are provided to a beneficial use facility and the requirements of (g) of this subsection are met.

(f) As individual sites are identified in accordance with the general land application plan in (6)(e) of this subsection, facilities, including beneficial use facilities applying biosolids that do not meet criteria to be classified as exceptional quality must develop and submit the information required for site specific land application plans in (d) of this subsection.

(g) When biosolids are provided to a beneficial use facility that has been permitted as a treatment works treating domestic sewage, the person who prepares the biosolids is not required to prepare a land application plan for the biosolids that will be applied to the beneficial use facility if:

(i) As a part of the permit application, the person who prepares the biosolids identifies the beneficial use facility(ies) to which biosolids may be provided, or, if specific beneficial use facilities cannot be identified, specifies the criteria by which beneficial use facilities may be selected at a future date; and

(ii) At least thirty days in advance of delivering biosolids to the beneficial use facility the person who prepares the biosolids submits to the department a certification statement, signed in accordance with the provisions of subsection (8) of this section by the person who prepares the biosolids, stipulating the following:

(A) That the applicable site specific land application plan and other management plans approved for the beneficial use facility are appropriate to the quality of biosolids being provided by the person who prepared the biosolids;

(B) That the person who prepared the biosolids has reviewed the public notice conducted by the beneficial use facility and the conditions in subsection (11)(d) of this section have been met, or additional public notice has been conducted in accordance with subsection (11) of this section;

(h) All land application plans, including those authorized under provisional approval in accordance with subsection (17) of this section, are subject to review and final approval by the department. If a land application plan is found to be insufficient, the department may either request additional information or may impose additional requirements as a condition of approval. Any additional requirements imposed under (h) of this subsection are considered to be permit requirements, fully enforceable in accordance with the provisions of this chapter and the applicable permit.

(7) **Submitting permit applications and notices of intent.** Facilities must submit copies of their permit application or notice of intent as follows:

(a) The original must be submitted to the biosolids coordinator at the headquarters office of the department of ecology, and one copy must be submitted to each regional office of the department of ecology where biosolids will be treated or applied to the land.

(b) Unless a local health department otherwise requests as provided in (b) of this subsection, one copy must be submitted to the local health department in each county where biosolids will be treated, stored, applied to the land, or disposed in a municipal solid waste landfill.

Local health departments that elect not to participate in the implementation of this chapter may notify the department in writing that they do not wish to receive copies of permit applications or land application plans.

(8) **Signatories to permit applications, notices of intent, reports, and other documents.**

(a) Applications. All permit applications must be signed as follows:

(i) For a corporation. By a responsible corporate officer. For the purpose of this chapter, a responsible corporate officer means:

(A) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy-making or decision-making functions for the corporation; or

(B) The manager of one or more manufacturing, production, or operating facilities employing more than two hundred fifty persons or having gross annual sales or expenditures exceeding twenty-five million dollars (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

(ii) For a partnership or sole proprietorship. By a general partner or the proprietor, respectively;

(iii) For a municipality, state, federal, or other public agency. By either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a federal agency includes:

(A) The chief executive officer of the agency; or

(B) A senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.

(b) All reports required by permits, and other information requested by the department must be signed by a person described in (a) of this subsection, or by a duly authorized representative of that person. A person is a duly authorized representative only if:

(i) The authorization is made in writing by a person described in (a) of this subsection;

(ii) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant

manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters; and

(iii) The written authorization is submitted to the department.

(c) Changes to authorization. If an authorization under (b) of this subsection is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of (b) of this subsection must be submitted to the department prior to or together with any reports, information, or applications to be signed by an authorized representative.

(d) Certification. Any person signing a document under (a) or (b) of this subsection must make the following certification, unless a different certification is applicable under another related section of this chapter:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

(9) **Public access to information.** In accordance with chapter 42.17 RCW, the department must provide, upon request, any information submitted as part of an application for an individual permit or for coverage under a general permit, except as provided in (a) of this subsection.

(a) In accordance with chapters 42.17, 43.21A, 70.105, and 90.52 RCW, the department must protect any information (other than information on the quality of biosolids) contained in applications as confidential upon a showing by any person that the information, if made public, would divulge methods or processes entitled to protection as trade secrets of the person.

(b) Any information accorded confidential status, whether or not contained in any application form, must be disclosed, upon request, to the regional administrator of EPA.

(10) **Recordkeeping required for permit applications.** Applicants must keep records of all information used to complete permit applications and any supplemental information submitted for a period of five years, or longer if otherwise required by this chapter, the conditions of the applicable permit, or other state or local laws;

(11) **Public notice and comment period.**

(a) All facilities that are applying for coverage under a general permit, facilities applying for renewal of coverage under a general permit that propose a significant change in biosolids management practices, and those applying for an individual permit or for renewal thereof, must issue public notice within each county where they will prepare biosolids for application to the land, and except as provided in (c) and (d) of this subsection, in each county where biosolids not meeting the criteria to be classified as exceptional quality will be applied to the land. Notice must be given as follows:

(i) The applicant must publish two notices, at intervals of at least one week, in a newspaper of general circulation in each county where biosolids are proposed to be applied to the land.

(ii) The applicant must mail a copy of the notice to any person or group that has notified the applicant in writing of an interest in the applicant's biosolids management activities.

(iii) For a period of at least thirty days, beginning not later than the last date of newspaper publication required in (a)(i) of this subsection, notice must be posted at all sites identified in the permit application where bulk biosolids that do not meet the standards to be classified as exceptional quality will be applied to the land;

(A) When newspaper notice is not required for new sites being proposed in accordance with an approved general land application plan per (c) of this subsection, the thirty-day notice period in (a)(iii) of this subsection begins when the direct mail notice requirement of (a)(ii) of this subsection has been met.

(B) It is a violation of these rules for any person to remove a sign posted in accordance with the requirements of (a)(iii) of this subsection during the public notice period.

(iv) Notice must be given by any other method required by the department.

(v) At the time of the initial notice, copies of the notice and an explanation of all places where and when the notice was or will be published or posted must be submitted to:

(A) The contact person in the regional or headquarters office of the department of ecology that has lead responsibility for the permit; and

(B) The local health department in each county where biosolids will be treated, stored, applied to the land, or disposed in a municipal solid waste landfill, unless the local health department has waived receipt of notification under subsection (7)(b) of this section.

(b) Notices under (a) of this subsection must contain the information in (b)(i) through (xi) of this subsection:

(i) The name and address of the facility seeking the permit or filing a notice of intent, and a contact person;

(ii) When the local health department has accepted delegation of responsibility under WAC 173-308-050, the address of the local health department and a contact person;

(iii) The address of the regional or headquarters office of the department of ecology that has lead responsibility for the permit, and a contact person;

(iv) A brief statement of the applicant's biosolids management practices for which a permit is sought or a notice of intent is being submitted;

(v) If coverage under a general permit is being sought, the name of the general permit or the name and location of the site if notice is being given for a site specific land application plan;

(vi) The statement: "Any person wishing to comment on this application or desiring to present their views regarding this application to the department of ecology or its delegated representative must do so in writing within thirty days of the last date of newspaper publication of this notice. Comments should be addressed to (insert the name and address of the person identified in (b)(vii) of this subsection)."

(vii) The person to whom comments should be addressed is the person in (b)(vii)(A) or (B) of this subsection, whichever is appropriate;

(A) When the application or notice of intent is for coverage under a general permit or for an individual permit, the person to whom comments should be directed is the department of ecology contact in (b)(iii) of this subsection.

(B) When the proposal is for a specific land application site, the person to whom comments should be directed is the department of ecology contact in (b)(iii) of this subsection, except where responsibility has been delegated to a local health department, in which case the recipient of comments should be the local health department contact in (b)(ii) of this subsection.

(viii) A statement specifying:

(A) Whether or not the permit application contains any information about current or proposed biosolids application sites;

(B) Whether or not the permit application contains a plan specifying how future application sites will be identified;

(C) If biosolids will be provided to any other facility, including a beneficial use facility; and

(D) How the public will be notified regarding the selection of future land application sites.

(ix) The time and place of any public hearing or meeting that will be held or the procedures to request one, and other procedures by which the public may participate in the final permit decision;

(x) The means by which an interested person or organization can have their name placed on a list to be maintained by the applicant for the purpose of future notification of biosolids management activities.

On written request of the person seeking to have their name added to the list of interested parties, all facilities maintaining a list of interested persons or organizations under (b)(x) of this subsection must provide written confirmation by certified mail, return receipt requested, to each interested person or organization that their name has been placed on the list.

(xi) Any additional information considered necessary or proper.

(c) Except as provided in (d) of this subsection, public notice for a new or expanded land application site that is being proposed in accordance with an approved general land application plan must be satisfied as follows:

(i) If site specific local approval is required to be obtained through integrated project review under the State Growth Management Act and the substantive notice requirements of (b) of this subsection are met, public notice for the purposes of this rule will be satisfied by compliance with the public notice requirements of the local integrated project review process;

(ii) Public notice conducted in accordance with the State Environmental Policy Act satisfies the public notice requirements of this rule for new or expanded land application sites if the substantive requirements of (b) of this subsection are met and the site is specifically identified in an environmental checklist that is available for public review and comment;

(iii) The public notice process for new or expanded land application sites not applicable under (c)(i) or (ii) of this subsection must meet the requirements of (a)(ii) through (v) and (b) of this subsection.

(d) Facilities that will provide biosolids to a permitted beneficial use facility must conduct public notice in accordance with this subsection as follows:

(i) Public notice must be given when applying for an individual permit or for coverage under a general permit;

(ii) Other than sites that are part of a beneficial use facility, public notice must be given for all new or expanded sites where biosolids not meeting the criteria to be classified as exceptional quality will be applied to the land;

(iii) Facilities that provide biosolids to a permitted beneficial use facility are not required to carry out public notice specific to the land application of biosolids at the beneficial use facility if:

(A) Public notice given for the beneficial use facility identified the facility providing the biosolids; or

(B) Public notice given for the beneficial use facility clearly stated that biosolids would be accepted from unknown sources, including sources outside of the county in which the beneficial use facility is located, as applicable.

(e) Facilities applying for individual permits must complete the public notice requirements in this subsection at the time they apply for a permit and at the time when a draft permit is provided for formal review by the department.

(12) **Public hearings and meetings.**

(a) The department may require an applicant to hold a public hearing or meeting when applying for coverage under a general permit, for an individual permit, or for any land application plan if it finds, on the basis of requests, a significant degree of public interest, or that a public discussion might clarify one or more aspects important to compliance with the requirements of this chapter or an applicable permit.

(b) During the public comment period provided for in subsection (11) of this section, any person may request the department to require a public hearing or meeting if none has been scheduled. Any request for a public hearing or meeting must be in writing and must state the nature of the issues proposed to be raised. The department will consider all requests that are received not later than the final comment date specified in the notice required under subsection (11)(b) of this section.

(c) Notice of hearing. If the department determines that a public hearing must be held, the applicant must give notice of a public hearing in accordance with the procedures in subsection (11)(a) and (b) of this section, except that posting of sites that are not specifically subject to the hearing is not required.

(i) The notice of hearing must contain the following information:

(A) The dates of previous public notices relating to the permit application;

(B) The date, time, and place of the hearing;

(C) A brief description of the nature and purpose of the hearing, including any rules and procedures that apply.

(ii) Copies of the notice and an explanation of all places where and when the notice was published must be submitted to:

(A) The contact person in the regional or headquarters office of the department of ecology that has lead responsibility for the permit; and

(B) Any applicable local health department that has accepted delegation of authority under WAC 173-308-050.

(d) Public hearings required under this subsection, must be held in each county where biosolids will be treated or applied to the land, unless otherwise allowed by the department.

(e) Public hearings required under this subsection must be held no sooner than thirty days after the final notice of public hearing published in accordance with subsection (11)(a)(i) of this section, and at a time and place as can be reasonably expected to be convenient to the department and interested parties.

Public hearings must be attended by a representative of the permit applicant who is authorized to respond to questions from the public and the department, and by a representative of the department.

(f) Notice conducted for public meetings is the same as that required for public hearings unless otherwise allowed by the department.

(13) **Record and response to comments received.**

(a) The department will maintain a record of all written comments received during the public comment period in subsection (11) of this section, and of all comments properly submitted in response to a public hearing required under subsection (12) of this section.

(b) The department will prepare a response to all relevant comments received, and will briefly describe any changes that resulted (other than editorial changes) to an individual permit or to an applicant's coverage under a general permit.

(c) The department is not obligated to consider or respond to comments or information that is received later than thirty days after the initial date of publication of public notice, or the date of a public hearing, whichever is later.

(14) **Additional requirements.** In addition to the requirements of this chapter, the department may impose additional requirements as part of the approval process for coverage under a general permit or as conditions of an individual permit if any of the conditions in subsection (1)(b)(i) through (iv) of this section are met.

(a) Any additional requirements imposed under this subsection are considered to be permit requirements, fully enforceable in accordance with the provisions of this chapter and the applicable permit.

(b) If known, any additional requirements must be disclosed at a public hearing if a public hearing is held, or if imposed subsequent to a public hearing, must become a part of the written record required under subsection (13)(b) of this section.

(15) **Compliance schedules.**

(a) A permit may specify a schedule leading to compliance with the federal Clean Water Act and these regulations. Any compliance schedule under this section must require compliance as soon as possible, but not later than any applicable statutory deadline under the Clean Water Act or chapter 70.95J RCW.

(b) Interim dates. If a permit establishes a compliance schedule that exceeds one year from the date of permit issuance, the schedule must set forth interim requirements and the date for their achievement. The time between interim dates must not exceed six months.

(c) Reporting. The permit must require that no later than fourteen days after each interim date and the final date of compliance, the permittee must notify the department in writing of its compliance or noncompliance with the interim or final requirements.

(16) **Fact sheet required for individual permits.**

(a) The department must prepare a fact sheet for every draft individual permit for a class I biosolids management facility, for every draft individual permit requiring permit conditions developed on a case-by-case basis to implement section 405(d)(4) of the Clean Water Act, for every draft individual permit that includes a general land application plan under subsection (6)(b)(iii) of this section, and for every draft individual permit that the director finds is the subject of widespread public interest or raises major issues. The fact sheet must briefly set forth the principal facts and the significant factual, legal, methodological, and policy questions considered in preparing the draft permit. The director must send this fact sheet to the applicant and, on request, to any other person.

(b) The fact sheet must include:

(i) A brief description of the type of facility or activity that is the subject of the draft permit;

(ii) Any calculations or other necessary explanation of the derivation of conditions for biosolids use and disposal, including a citation to the applicable standards for biosolids use or disposal and reasons why they are applicable, or in the case of conditions developed on a case-by-case basis to implement section 405 (d)(4) of the Clean Water Act, an explanation of, and the bases for the conditions; and

(iii) For permits that include a general land application plan under subsection (6)(b)(iii) of this section, a brief description of how each of the required elements of the land application plan is addressed in the permit.

(17) **Approval of coverage.** After reviewing an application for an individual permit or for coverage under a general permit, and considering other pertinent information including any testimony received during a public hearing or meeting, or written comments submitted in response to a public notice, the department may approve coverage under a general permit or issue an individual permit.

(a) If coverage under a general permit is approved or an individual permit is issued, the department will notify the applicant in writing, conveying a final copy of the issued permit including any additional requirements or stipulations that are imposed as a condition of coverage under a general permit.

(b) If an application for an individual permit or for coverage under a general permit is disapproved, the department will notify the applicant in writing, including an explanation of why coverage was disapproved.

(c) On and after the effective date of this chapter, if there are no significant changes to biosolids management practices at an existing site, a facility may continue to apply biosolids to sites that were permitted by the local health department before the effective date of this chapter, in accordance with the requirements of the local health department, the applicable general permit, and this chapter, unless the department objects in writing.

(i) Facilities applicable under (c) of this subsection that have submitted a notice of intent to be covered or have been notified that they are covered under a general permit, and those that have applied for coverage under a general permit, are provisionally approved for coverage under an applicable general permit to apply biosolids to existing sites as permitted by the local health department and in accordance with the requirements of the applicable general permit and this chapter.

(ii) A beneficial use facility may not obtain provisional approval for coverage under a general permit, but may obtain provisional approval for existing land application sites after being permitted as a beneficial use facility.

(d) Except for provisionally approved facilities under this subitem (d), a facility may not engage in new biosolids management practices or implement significant changes to biosolids management practices at existing sites, or apply biosolids to new or expanded sites until all applicable requirements of this section including those for public notice, and public hearings or meetings, have been satisfied.

Facilities that have submitted a notice of intent or that have been notified of coverage under a general permit, or that have applied for coverage under a general permit, are provisionally approved for coverage under an applicable general permit to apply biosolids to sites consistent with the applicable requirements of this chapter and the applicable general permit and as approved by the local health department, if the public notice requirements under subsection (11) of this section have been fulfilled, and no request for a public hearing has been made or the department has denied the request, and all comments received have been resolved to the satisfaction of the local health department;

(e) Facilities with provisional approval are subject to further review and permitting requirements at a later date, and are subject at all times to all applicable conditions of this chapter and the applicable general permit.

(f) In no case may a lack of action by the department be construed as relieving an applicant of the obligation to comply with any of the provisions of this chapter or an applicable general permit, or as approving final use or disposal practices that are not consistent with the provisions of this chapter or an applicable general permit, or that pose a threat to human health or the environment.

(18) **Prohibition.** The department may not issue a permit when the Regional Administrator of EPA has objected in writing under 40 CFR 123.44.

(19) **Duration of permits.**

(a) Permits are issued for fixed terms, up to but not exceeding five years from the effective date of the permit.

(i) Coverage under a general permit may be issued for a period up to the remaining term of issuance for the permit.

(b) The term of a permit may not be extended by modification beyond five years.

(20) **Transfer of permit coverage.**

(a) Except as provided in (b) of this subsection, a permit may be transferred by the permittee to a new owner operator only if the permit has been modified or revoked and reissued to identify the new permittee and incorporate other requirements as may be necessary to assure compliance with the requirements of this chapter.

(b) Coverage under a permit is automatically transferred from the old permittee to a new permittee, on the date agreed to, if:

(i) A written, signed agreement, between the old and new permittees containing a specific date for transfer of permit responsibility, coverage, and liability is submitted in accordance with the requirements of subsection (7) of this section at least thirty days in advance of the proposed date of transfer; and

(ii) The department has not notified both permittees of any objection to the transfer, or of the intent to revoke coverage under the general permit.

(c) No condition or requirement of a permit or this chapter may be waived by the transfer of permit coverage from one party to another.

(21) **Modification or revocation and reissuance of individual permits and modification of conditions of coverage under a general permit.**

(a) When the department receives any information (for example, upon inspection of a facility, receipt of information submitted by the permittee as required in the permit, receipt of a request for modification or revocation and reissuance, or upon a review of the permit file), the department may determine whether or not one or more of the causes listed in (b) or (c) of this subsection for modification or revocation and reissuance, or both, exist.

(i) If cause for modification or revocation and reissuance, or both, exists, the department may modify or revoke and reissue an individual permit, or modify conditions of coverage or revoke and reissue coverage under a general permit, and may request an updated application if necessary.

(ii) When an individual permit or conditions for coverage under a general permit is/are modified, only the conditions subject to modification are reopened.

(iii) If an individual permit or authorization for coverage under a general permit is revoked and reissued, the entire individual permit or consideration of coverage under a general permit is reopened and subject to revision, and the individual permit or coverage under the general permit may be reissued for a new term.

(iv) If cause does not exist under this section, the department may not modify or revoke and reissue an individual permit or conditions of coverage under a general permit.

(b) Causes for modification. The following are causes for modification but not revocation and reissuance of individual permits or authorization of coverage under a general permit except when the permittee requests or agrees.

(i) Alterations. There are material and substantial alterations or additions to the permitted facility or activity that occurred after permit issuance that justify the application of permit conditions that are different from or absent in the existing permit.

(ii) Information. The department has received new information. Individual permits or authorization of coverage under a general permit may be modified during their terms for this cause only if the information was not available at the time of permit issuance (other than revised regulations, guidance, or test methods) and would have justified the application of different permit conditions at the time of issuance.

(iii) New regulations. New regulations have been adopted or the standards or regulations on which the permit was based have been changed by adoption of amended standards or regulations or by judicial decision after the permit was issued.

(iv) Compliance schedules. The department determines good cause exists for modification of a compliance schedule, such as an act of God, strike, flood, or materials shortage or other events over which the permittee has little or no control and for which there is no reasonable available remedy. However, in no case may a compliance schedule be modified to extend beyond an applicable Clean Water Act statutory deadline.

(v) Land application plans. When required by a permit condition to incorporate a general land application plan for beneficial use of biosolids, to revise a general land application plan, or to add a general land application plan.

(c) The following are causes to modify or alternatively, revoke and reissue, an individual permit or the conditions for coverage under a general permit.

(i) Cause exists for termination under subsection (22) of this section and the department determines that modification or revocation and reissuance is appropriate.

(ii) The department has received notification of a proposed transfer of the permit.

(d) When an individual permit or coverage under a general permit is modified or revoked and reissued, the public notice requirements of subsection (11) of this section, and if required the public hearing requirements of subsection (12) of this section must be complied with for the reopened conditions or reissued permit.

(22) **Termination of permits.** The following are causes for terminating an individual permit or coverage under a general permit during its term, or for denying a permit renewal application:

(a) Noncompliance by the permittee with any condition of the permit;

(b) The permittee's failure in the application or during the permit issuance process to disclose fully all relevant facts, or the permittee's misrepresentation of any relevant facts at any time;

(c) A determination that the permitted activity endangers human health or the environment and can only be regulated to acceptable levels by permit modification or termination; or

(d) A change in any condition that requires either a temporary or a permanent reduction or elimination of any activity controlled by the permit.

(23) **Enforcement.** Any violation of this chapter or any permit issued under this chapter, may be subject to the enforcement provisions of applicable law, including chapters 70.95 and 70.95J RCW.

(24) **Appeals.** Any person aggrieved by a decision of the department made in accordance with provisions of this chapter may appeal that decision only as provided by applicable law, including chapters 43.21B RCW and 34.05 RCW.

(25) **Requirement to coordinate permitting with delegated local health departments.** When a local health department has received delegation to administer any portion of, or to carry out any activity required under this chapter, all facilities subject to permitting under this chapter must cooperate with the department and the local health department by coordinating permitting activities so as to assure an opportunity for local health department involvement consistent with the terms of the delegation agreement.

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-310, filed 2/18/98, effective 3/21/98.]

WAC 173-308-320 Permit fees. (1) All facilities that are required to obtain a permit under this section must pay an annual biosolids permit fee to the department of ecology.

(2) Biosolids permit fees are assessed prospectively on an annual basis and apply regardless of the date of issuance of a permit.

(3) Biosolids permit fees are assessed and collected for fiscal years and are due and payable within forty-five days after the department mails a billing statement.

(a) Failure to pay a permit fee is cause for denial of coverage under a permit or revocation of existing coverage. Fees are considered delinquent if they are not received by the first invoice billing due date. Permit holders will be notified by certified letter and have thirty days to bring their account up-to-date before further action is taken by the department.

(b) The department may at its discretion mail partial billing statements two or more times per year, in which case a facility is responsible only for the amount reflected on the current (and any past due) billing statement.

(c) Receiving-only facilities, centralized septage treatment facilities, and persons who apply septage to the land that determine a residential equivalent value under subsection (4)(b) or (c) of this section may submit periodic payments as provided in (c)(i), (ii), and (iii) of this subsection, based on the actual level of service, provided that they submit a letter to the department indicating their intent to do so.

(i) Facilities under (c) of this subsection must submit a quarterly payment and statement of actual service level within ten days of the end of each quarter (not later than the 10th day of March, June, September, and December of each year), except as provided in (c)(ii) or (iii) of this subsection.

(ii) Facilities under (c) of this subsection that estimate and provide a level of service less than three hundred residential equivalents per year are subject to a fee of $0.00 per residential equivalent and are not required to submit periodic payments, but must submit a statement of actual service level at least once per year.

(iii) Facilities under (c) of this subsection that calculate an annual residential equivalent value equal to or greater than three hundred residential equivalents per year may withhold a payment for any quarter where the total amount due is less than fifty dollars, provided a statement of the actual service level is submitted and that all accounts are brought up-to-date by July 10th of each year.

(4) The permit fee schedule is based on the number of residences or residential equivalents (residential equivalent value) contributing to a permittee's biosolids management system, and incorporates the annual fiscal growth factor calculated under chapter 43.135 RCW.

(a) For facilities with NPDES permits issued under chapter 173-220 WAC or state waste discharge permits issued under chapter 173-216 WAC, the department will use resi-

dential equivalent values determined under chapter 173-224 WAC.

(b) The residential equivalent value for receiving-only facilities other than septage facilities in (c) of this subsection is the sum of the fraction of residential equivalent values contributed from all sources, as determined by considering the portion of the current annual biosolids production of each originating source that is provided to the receiving facility.

A receiving-only facility must determine an estimated residential equivalent value based on projected capacity as detailed in the permit application submitted under WAC 173-308-310 and the method described in (b) of this subsection.

(c) For centralized septage treatment facilities and persons who apply septage to the land, 1,250 gallons of septage received for treatment or applied to the land is equal to one residential equivalent as shown in Equation (4).

$$REV = \frac{\text{Gallons of septage received or applied to the land}}{\text{1,250 Gallons per Residental Equivalent}} \quad \text{Equation (4)}$$

A centralized septage treatment facility and a person who applies septage to the land must determine an estimated residential equivalent value based on projected capacity as detailed in the permit application submitted under WAC 173-308-310 and the method described in (c) of this subsection.

(d) Equation (5) below is used to calculate permit fees:

$$\text{Permit Fee} = (REV \times \text{Cost per } RE_{FGF}) \text{ where:} \quad \text{Equation (5)}$$

(i) REV= residential equivalent value.

(ii) FGF= An annual fiscal growth factor expressed as a percentage, as determined under chapter 43.135 RCW.

(iii) Cost per RE_{FGF}= cost per residential equivalent in dollars including a fiscal growth factor. The cost per RE_{FGF} is obtained by multiplying the cost per residential equivalent in the preceding year by the current year's fiscal growth factor as follows in (6):

$$\text{Cost per } RE_{FGF} = \text{Previous year's cost per RE} \times [1 + (FGF)] \quad \text{Equation (6)}$$

For implementation of the fiscal growth factor, the base year for all biosolids permit fees will be fiscal year 1998, ending June 30, 1998. In the base year, the FGF will be zero.

(e) Unless a lower cost is specified in a permit, the cost per residential equivalent in the base year will be as follows:

(i) $0.00 per residential equivalent for any permit for any facility with a total residential equivalent value of less than 300, including those that would otherwise fall under (e)(ii) through (v) of this subsection.

(ii) $0.015 per residential equivalent for a permit authorizing municipalities that own or operate incinerators that fire municipal sewage sludge to dispose of municipal sewage sludge generated by their own facility in a municipal solid waste landfill or through another facility on an emergency basis.

(iii) $.20 per residential equivalent for permits authorizing disposal in a municipal solid waste landfill, except for facilities under (e)(ii) of this subsection.

(iv) $0.04 per residential equivalent for permits issued to receiving-only facilities as defined in WAC 173-308-080.

(v) $0.162 per residential equivalent for permits authorizing any other type of biosolids management activity, including but not limited to the following:

(A) Direct beneficial use by a treatment works treating domestic sewage;

(B) Transfer from one facility to another facility, including delivery of biosolids to an incinerator from nonincinerating jurisdictions;

(C) Prolonged treatment or storage, including lagoon systems;

(D) Treatment or land application of septage.

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-320, filed 2/18/98, effective 3/21/98.]

WAC 173-308-900 Appendix A—Procedure to determine the annual whole biosolids application rate. When biosolids are sold or given away in a bag or other container for application to the land, and any of the pollutant concentration limits in Table 3 of WAC 173-308-160 are exceeded, the mathematical product of the concentration in the biosolids of each pollutant listed in Table 4 of WAC 173-308-160 and the annual whole biosolids application rate (AWBAR) must not cause the annual pollutant loading rate for the pollutant in Table 4 of WAC 173-308-160 to be exceeded. This appendix contains the procedure used to determine an AWBAR that does not cause the annual pollutant loading rates in Table 4 of WAC 173-308-160 to be exceeded. The relationship between the annual pollutant loading rate (APLR) for a pollutant and the annual whole biosolids application rate (AWBAR) is shown in equation (7).

$$APLR = C * AWBAR * 0.001 \quad \text{Equation (7)}$$

Where:

APLR = Annual pollutant loading rate in kilograms per hectare per 365 day period.

C = Pollutant concentration in milligrams, per kilogram of total solids (dry weight basis).

AWBAR = Annual whole biosolids application rate in metric tons per hectare per 365 day period (dry weight basis).

0.001 = A conversion factor.

To determine the AWBAR, equation (7) is rearranged into equation (8):

$$AWBAR = \frac{APLR}{C * 0.001} \quad \text{Equation (8)}$$

The procedure used to determine the AWBAR is presented below.

Procedure:

1. Analyze a sample of the biosolids to determine the concentration for each of the pollutants listed in Table 4 of WAC 173-308-160.

2. Using the pollutant concentrations from Step 1 and the APLRs from Table 4 of WAC 173-308-160, calculate an AWBAR for each pollutant using equation (8).

3. The correct AWBAR is the lowest AWBAR calculated in Step 2.

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-900, filed 2/18/98, effective 3/21/98.]

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Biosolids management

Chapter Listing

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173-308-180	Vector attraction reduction.
173-308-190	Protecting waters of the state -- Agronomic rate requirement.
173-308-191	Protection of endangered or threatened species.
173-308-192	Exemptions for research.
173-308-193	Management and exemptions for septage from composting toilets.
173-308-200	Exemptions based on the exceptional quality of biosolids.
173-308-205	Significantly remove manufactured inerts.
173-308-210	Bulk biosolids applied to agricultural land, forest land, a public contact site, or a land reclamation site.
173-308-250	Bulk biosolids applied to a lawn or home garden.
173-308-260	Biosolids sold or given away in a bag or other container.
173-308-270	Septage applied to the land.
173-308-275	Contents of signs for land application sites.
173-308-280	Requirements for facilities storing biosolids or sewage sludge.
173-308-290	Recordkeeping.
173-308-295	Annual reports.

173-308-300 Disposal of sewage sludge in municipal solid waste landfill units and use of biosolids in municipal solid waste landfill operations.

173-308-310 Permitting.

173-308-320 Permit fees.

173-308-900 Appendix A -- Procedure to determine the annual whole biosolids application rate.

173-308-90001 Appendix 1 -- Minimum content for a permit application.

173-308-90002 Appendix 2 -- Minimum content for a notice of intent to be covered under a general permit.

173-308-90003 Appendix 3 -- Minimum content for a site specific land application plan.

173-308-90004 Appendix 4 -- Minimum content for a general land application plan.

173-308-90005 Appendix 5 -- Procedures for issuing general permits.

DISPOSITIONS OF SECTIONS FORMERLY CODIFIED IN THIS CHAPTER

173-308-070 Use of term, "biosolids" -- Explanation. [Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-070, filed 2/18/98, effective 3/21/98.] Repealed by 07-12-010 (Order 06-06), filed 5/24/07, effective 6/24/07. Statutory Authority: Chapters 70.95J and 70.95 RCW.

173-308-220 Bulk biosolids applied to forestland. [Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-220, filed 2/18/98, effective 3/21/98.] Repealed by 07-12-010 (Order 06-06), filed 5/24/07, effective 6/24/07. Statutory Authority: Chapters 70.95J and 70.95 RCW.

173-308-230 Bulk biosolids applied to a public contact site. [Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-230, filed 2/18/98, effective 3/21/98.] Repealed by 07-12-010 (Order 06-06), filed 5/24/07, effective 6/24/07. Statutory Authority: Chapters 70.95J and 70.95 RCW.

173-308-240 Bulk biosolids applied to a land reclamation site. [Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-240, filed 2/18/98, effective 3/21/98.] Repealed by 07-12-010 (Order 06-06), filed 5/24/07, effective 6/24/07. Statutory Authority: Chapters 70.95J and 70.95 RCW.

173-308-005
Explanation for the use of the terms "sewage sludge," "biosolids," and "septage."

(1) Sewage sludge is the solid, semisolid, or liquid residue generated during the treatment of domestic sewage in a treatment works. Biosolids are produced by treating sewage sludge to meet certain quality standards that allow it to be applied to the land for beneficial use. Septage is a class of biosolids that comes from septic tanks and similar systems receiving domestic wastes.

(a) Sewage sludge. Unless the context requires otherwise, "sewage sludge" is the term used in this chapter to refer to the residual material produced by a treatment works treating domestic sewage that does not meet the standards to be classified as biosolids or that is being disposed in a municipal solid waste landfill.

(b) Biosolids. Unless the context requires otherwise, "biosolids" is the term used in this chapter to refer to sewage sludge or septage that has been or is being treated to meet standards so that it can be applied to the land.

(c) Septage. Unless the context requires otherwise, "septage" is the term used in this chapter to refer to septage that is or will be managed as septage.

(2) The following sections apply only to biosolids or septage managed as biosolids originating from sewage sludge: WAC 173-308-150, 173-308-160, 173-308-170, 173-308-180, 173-308-200, 173-308-210, 173-308-250, and 173-308-260.

(3) WAC 173-308-270 addresses the management requirements for septage.

(4) Unless the context requires otherwise, all other sections apply to all biosolids, including septage.

[Statutory Authority: Chapters 70.95J and 70.95 RCW. 07-12-010 (Order 06-06), § 173-308-005, filed 5/24/07, effective 6/24/07.]

173-308-010
Authority and purpose.

(1) **Authority.** This chapter is adopted under the authority of chapters 70.95J and 70.95 RCW.

(2) **Purpose.** The purpose of this chapter is to protect human health and the environment when biosolids are managed.

(a) This chapter encourages the maximum beneficial use of biosolids and is intended to conform to all applicable federal rules adopted under the Federal Clean Water Act as it existed on February 4, 1987.

(b) This chapter establishes permitting requirements for treatment works treating domestic sewage that engage in applicable biosolids treatment or management practices, including any person, site, or facility that has been designated as a treatment works treating domestic sewage.

(c) This chapter establishes standards for the treatment, quality, and management of sewage sludge and septage that are directly enforceable and that allow these materials to be classified and managed as biosolids.

(d) This chapter establishes requirements, standards, management practices, and monitoring, recordkeeping and reporting requirements that are applicable when biosolids are applied to the land and when sewage sludge is disposed in a municipal solid waste landfill unit as defined in chapter 173-351 WAC.

(e) This chapter establishes fees for permits issued to treatment works treating domestic sewage.

[Statutory Authority: Chapters 70.95J and 70.95 RCW. 07-12-010 (Order 06-06), § 173-308-010, filed 5/24/07, effective 6/24/07. Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-010, filed 2/18/98, effective 3/21/98.]

173-308-020
Applicability.

(1) These rules apply to all treatment works treating domestic sewage as defined by this chapter. In addition, these rules apply to, but are not limited to, the following:

(a) A person who prepares biosolids or sewage sludge.

(b) A person who stores biosolids or sewage sludge.

(c) A person who applies biosolids to the land.

(d) Biosolids that are applied to the land.

(e) The land where biosolids are applied.

(f) The owner and lease-holder of land where biosolids are applied.

(g) A person who disposes of sewage sludge in a municipal solid waste landfill.

(h) Sewage sludge that is disposed of in a municipal solid waste landfill.

(i) Biosolids or sewage sludge generated at an industrial facility during the treatment of only domestic sewage.

(j) A person who transfers biosolids or sewage sludge from one facility to another.

(k) A person who transports biosolids or sewage sludge.

(l) Mixtures of biosolids and other materials including, but not limited to, solid wastes.

(2) This chapter does not apply to the following sewage sludge and biosolids management facilities and practices:

(a) The firing of biosolids or sewage sludge in an incinerator.

(b) The placing or disposal of sewage sludge in facilities other than municipal solid waste landfills (e.g., the placement of sewage sludge at a surface disposal site).

(3) Except as provided in (g) of this subsection, the following solid wastes are not regulated under this chapter:

(a) Sludge generated at an industrial facility during the treatment of industrial wastewater, including when such a facility combines their industrial wastewater with their domestic sewage.

(b) Sewage sludge determined to be hazardous in accordance with chapter 70.105 RCW or rules adopted thereunder.

(c) Sewage sludge with a concentration of polychlorinated biphenyls (PCBs) equal to or greater than 50 milligrams per kilogram of total solids (dry weight basis).

(d) Ash generated during the firing of sewage sludge or biosolids in an incinerator.

(e) Grit or screenings generated during preliminary treatment of domestic sewage in a treatment works.

(f) Sludge generated during the treatment of either surface water or ground water used for drinking water.

(g) Commercial or industrial septage or a mixture of domestic septage and commercial or industrial septage except as allowed in accordance with this subsection.

(i) Grease trap wastes from restaurants and similar food service facilities may be mixed with domestic septage up to twenty-five percent by volume.

(ii) On a case-by-case basis, on request of a septage management facility or at the department's discretion, the department may designate other commercial or industrial septage as septage that is "domestic in quality" and require the septage to be managed in accordance with the provisions of this chapter.

(iii) At no time may the combined total of grease trap wastes and other commercial or industrial septage mixed with domestic septage exceed twenty-five percent by volume.

[Statutory Authority: Chapters 70.95J and 70.95 RCW. 07-12-010 (Order 06-06), § 173-308-020, filed 5/24/07, effective 6/24/07. Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-020, filed 2/18/98, effective 3/21/98.]

173-308-030
Relationship to other laws, regulations, and ordinances.

In addition to the requirements of this chapter, other laws, regulations, and ordinances may also apply to biosolids or sewage sludge. These include, but are not limited to, the following:

(1) Commercial fertilizers are subject to regulation by the Washington state department of agriculture. Biosolids meeting the definition of a commercial fertilizer must comply with chapter 15.54 RCW and chapter 16-200 WAC.

(2) Except as required in WAC 173-308-100, the transportation of biosolids or sewage sludge is subject to regulation by the Washington state utilities and transportation commission under Title 81 RCW.

(3) Facilities required to obtain permits under WAC 173-308-310 must comply with the requirements in chapter 43.21C RCW and the State Environmental Policy Act (SEPA) rules adopted under chapter 197-11 WAC. Public notice and hearing requirements under SEPA may be coordinated with the similar requirements of this chapter.

(4) Biosolids facilities and sites where biosolids are applied to the land must comply with the requirements of chapter 90.48 RCW and chapters 173-200 and 173-201A WAC.

(5) Facilities and sites where biosolids are applied to the land or sewage sludge is disposed must comply with the federal biosolids rule, 40 CFR Part 503.

(6) Facilities and sites where biosolids are applied to the land must comply with other applicable federal, state and local laws, regulations, and ordinances, including zoning and land use requirements.

(7) The enforcement of other laws, regulations, and ordinances is the responsibility of the agency with jurisdiction.

[Statutory Authority: Chapters 70.95J and 70.95 RCW. 07-12-010 (Order 06-06), § 173-308-030, filed 5/24/07, effective 6/24/07. Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-030, filed 2/18/98, effective 3/21/98.]

173-308-040
Direct enforceability.

All persons and facilities subject to the requirements of this chapter must comply with these rules on the effective date of the applicable regulation, regardless of whether or not a permit has been issued under WAC 173-308-310.

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-040, filed 2/18/98, effective 3/21/98.]

173-308-041
Enforcement.

Any violation of this chapter or any permit issued under this chapter may be subject to the enforcement provisions of applicable law including, but not limited to, chapters 70.95 and 70.95J RCW.

[Statutory Authority: Chapters 70.95J and 70.95 RCW. 07-12-010 (Order 06-06), § 173-308-041, filed 5/24/07, effective 6/24/07.]

173-308-042
Appeals.

Any person aggrieved by a decision of the department made in accordance with provisions of this chapter may appeal that decision only as provided by applicable law including, but not limited to, chapters 43.21B and 34.05 RCW.

[Statutory Authority: Chapters 70.95J and 70.95 RCW. 07-12-010 (Order 06-06), § 173-308-042, filed 5/24/07, effective 6/24/07.]

173-308-050
Delegation of authority.

Upon the request of a local health jurisdiction, the department may delegate authority to implement and assist in the administration of appropriate portions of this chapter.

Delegation must be consistent with any applicable state-EPA agreement regarding delegation of federal biosolids program authority.

(1) **Method of delegation.**

(a) Delegation will be accomplished through an instrument of mutual consent that is acceptable to both the department and the local health jurisdiction seeking delegation.

(b) The department may revoke part or all of a delegation of authority under this section if it finds that a local health jurisdiction has failed to adequately carry out any portion of a delegated responsibility.

(2) **Contents of delegation agreements.**

(a) At a minimum, delegation agreements must specify the authorities and responsibilities that are being delegated to a local health jurisdiction.

(b) Other authorities and responsibilities are assumed to be retained by the department.

(c) All delegation agreements must have a termination date that is no more than five years from the date signed.

[Statutory Authority: Chapters 70.95J and 70.95 RCW. 07-12-010 (Order 06-06), § 173-308-050, filed 5/24/07, effective 6/24/07. Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-050, filed 2/18/98, effective 3/21/98.]

173-308-060
Biosolids not classified as solid waste.

(1) The state of Washington recognizes biosolids as a valuable commodity.

(2) Biosolids are not solid waste and are not subject to regulation under solid waste laws.

(3) Sewage sludge or septage that fails to meet standards for classification as biosolids is a solid waste,

and may not be applied to the land.

(4) Sewage sludge or septage that will be disposed in a landfill is a solid waste.

[Statutory Authority: Chapters 70.95J and 70.95 RCW. 07-12-010 (Order 06-06), § 173-308-060, filed 5/24/07, effective 6/24/07. Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-060, filed 2/18/98, effective 3/21/98.]

173-308-080
Definitions.

Unless the department determines that the context of the rule requires otherwise, the following definitions are applicable for the purposes of this chapter.

"Administrator" means the Administrator of the United States Environmental Protection Agency, or an authorized representative.

"Aerobic digestion" is the biochemical decomposition of organic matter in biosolids into carbon dioxide and water by microorganisms in the presence of air. Aerobic digestion does not include composting.

"Agricultural land" is land on which a food crop, feed crop, or fiber crop is grown. This includes range land and land used as pasture.

"Agronomic rate" is the biosolids application rate that provides the amount of nitrogen necessary for the optimum growth of targeted vegetation, and that will not result in the violation of applicable standards or requirements for the protection of ground or surface water as established under chapter 90.48 RCW and related rules including chapters 173-200 and 173-201A WAC.

"Anaerobic digestion" is the biochemical decomposition of organic matter in biosolids into methane gas and carbon dioxide by microorganisms in the absence of air. Anaerobic digestion does not include composting.

"Apply biosolids or biosolids applied to the land" means the land application of biosolids for the purpose of beneficial use.

"Beneficial use facility" means a receiving-only facility consisting of a site or sites where biosolids from other treatment works treating domestic sewage are applied to the land for beneficial use, which has been permitted as a treatment works treating domestic sewage in accordance with the provisions of WAC 173-308-310, and that has been designated as a beneficial use facility through the permitting process.

"Beneficial use of biosolids" means the application of biosolids to the land for the purposes of improving soil characteristics including tilth, fertility, and stability to enhance the growth of vegetation consistent with protecting human health and the environment.

"Biosolids" means municipal sewage sludge that is a primarily organic, semisolid product resulting from the wastewater treatment process, that can be beneficially recycled and meets all applicable requirements under this chapter. Biosolids includes a material derived from biosolids, and septic tank sludge, also known as septage, that can be beneficially recycled and meets all applicable requirements under this chapter. For the purposes of this rule, semisolid products include biosolids or products derived from biosolids ranging in character from mostly liquid to fully dried solids.

"Biosolids sold or given away in a bag or other container" means biosolids sold or given away to the general public in a bag or other container holding less than 1 metric ton (1.1 U.S. tons).

"Bulk biosolids" means biosolids that are not sold or given away in a bag or other container for application to the land.

"Ceiling concentration" means the maximum concentration of a pollutant in any biosolids sample, beyond which level the biosolids would be classified as sewage sludge not suitable for application to the land. Ceiling concentrations are established in Table 1 of WAC 173-308-160.

"Class I biosolids management facility" is any publicly owned treatment works (POTW), as defined in 40 CFR 501.2, required to have an approved pretreatment program under 40 CFR 403.8(a) (including any POTW located in a state that has elected to assume local program responsibilities under 40 CFR 403.10(e)), and any treatment works treating domestic sewage, as defined in 40 CFR 122.2, classified as a Class I biosolids management facility by the EPA Regional Administrator, or in the case of approved state programs, the Regional Administrator in conjunction with the state director, because of the potential for its biosolids use or disposal practice to affect public health and the environment adversely.

"Clean Water Act" or **"CWA"** means the Clean Water Act or Federal Clean Water Act (FCWA) (formerly referred to as either the Federal Water Pollution Act or the Federal Water Pollution Control Act Amendments of 1972), Public Law 92-500, as amended by Public Law 95-217, Public Law 95-576, Public Law 96-483, Public Law 97-117, and Public Law 100-4.

"Composting" means the biological degradation of organic material under controlled conditions designed to promote aerobic decomposition. This does not include the treatment of sewage sludge in a digester at a wastewater treatment plant.

"Cumulative pollutant loading rate" is the maximum amount of a pollutant that can be applied to an area of land from biosolids that exceed the pollutant concentration limits established in Table 3 of WAC 173-308-160.

"Density of microorganisms" is the number of microorganisms per unit mass of total solids (dry weight) in the biosolids.

"Department" means the Washington state department of ecology and, within the scope of its delegation, a local health jurisdiction that has been delegated authority under WAC 173-308-050.

"Director" means the director of the department of ecology or his or her authorized representative.

"Disposal on an emergency basis" means a period up to but not exceeding one year. Generally, emergency situations requiring the use of disposal facilities will normally occur as a result of inclement weather conditions at a beneficial use site, contractual or technical difficulties in the treatment, transportation, or application of the biosolids, or as a result of short term economic or administrative barriers, any and all of which are expected to be resolved within a period of one year.

"Disposal on a long-term basis" means to adopt disposal as a preferred method of management for at least five years, or for an indefinite period of time with no expectation for pursuing other management alternatives.

"Disposal on a temporary basis" means a period of more than one but less than five years. Generally, situations requiring the temporary use of disposal facilities will normally occur as a result of deficiencies in the wastewater or biosolids treatment process, or economic, administrative, or contractual constraints which cannot be resolved in less than one year.

"Domestic sewage" is waste and wastewater from humans or household operations that is discharged to or otherwise enters a treatment works.

"Dry weight basis" means calculated on the basis of having been dried at 105°C (221°F) until reaching a constant mass (i.e., essentially one hundred percent solids content).

"EPA" means the United States Environmental Protection Agency.

"Exceptional quality biosolids" means biosolids that meet the pollutant concentration limits in Table 3 of WAC 173-308-160, **and** at least one of the Class A pathogen reduction requirements in WAC 173-308-170, **and** at least one of the vector attraction reduction requirements in WAC 173-308-180.

"Facility" means a treatment works treating domestic sewage as defined in this chapter, unless the context of the rule requires otherwise. For the purposes of this chapter a facility is considered to be new if it

has not been previously approved for the treatment, storage, use, or disposal of biosolids or sewage sludge.

"Feed crops" are crops produced primarily for consumption by animals.

"Fiber crops" are crops such as flax and cotton including, but not limited to, those whose parts or by-products may be consumed by humans or used in the production or preparation of food for human consumption.

"Food crops" are crops consumed by humans. These include, but are not limited to, fruits, vegetables, grains, and tobacco.

"Forest" is an area of land that is managed for the production of timber or other forest products, or for benefits such as recreation and watershed protection, and that is or will be dominated by trees under the current system of management. For the purposes of this rule, other areas of land that are not regulated as agricultural land, public contact sites, land reclamation sites, or lawns or home gardens are considered forest land.

"General permit" means a permit issued by the department in accordance with the procedures established in this chapter, to be effective in a designated geographical area, that authorizes the application of biosolids to the land or the disposal of sewage sludge in a municipal solid waste landfill, under which multiple treatment works treating domestic sewage may apply for coverage.

"Geometric mean" means the antilogarithm of the arithmetic average of the logarithms of the sample values, or the nth root of the product of n sample values.

"Ground water" means water in a saturated zone or stratum beneath the surface of land or below a surface water body.

"Health jurisdiction" or **"local health jurisdiction"** means city, county, city-county, or district public health jurisdiction as defined in chapters 70.05, 70.08, and 70.46 RCW.

"Individual permit" means a permit issued by the department to a single treatment works treating domestic sewage in accordance with WAC 173-308-310, which authorizes the management of biosolids or sewage sludge.

"Industrial septage" or **"commercial septage"** is the contents from septic tanks or similar systems that receive wastewater generated in a commercial or industrial process. This definition includes, but is not limited to, grease trap wastes generated at restaurants and similar food service facilities.

"Industrial wastewater" or **"commercial wastewater"** is wastewater generated in a commercial or industrial process.

"Land application" is the application of biosolids to the land surface by means such as spreading or spraying, the injection of biosolids below the land surface, or the incorporation of biosolids into the soil, for the purpose of beneficial use.

"Land with a low potential for public exposure" is land that the public uses infrequently. This includes, but is not limited to, agricultural land, forest, and a reclamation site located in an unpopulated area (e.g., a strip mine located in a rural area).

"Land with a high potential for public exposure" is land that the public uses frequently. This includes, but is not limited to, a public contact site and a reclamation site located in a populated area (e.g., a construction site located in a city).

"Local health jurisdiction" see definition of health jurisdiction.

"Manufactured inerts" means wastes such as plastic, metals, ceramics and other manufactured items that remain relatively unchanged during wastewater or biosolids treatment processes.

"Monthly average" is the arithmetic mean of all measurements taken during the month.

"Municipal sewage sludge" means sewage sludge generated from a publicly owned treatment works.

For the purposes of this chapter, sewage sludge generated from the treatment of only domestic sewage in a privately owned or industrial treatment facility is considered municipal sewage sludge.

"Municipality" means a city, town, borough, county, parish, district, association, or other public body (including an inter-municipal agency of two or more of the foregoing entities) created by or under state law, or a designated and approved management agency under section 208 of the Clean Water Act, as amended. The definition includes a special district created under state law, such as a water district, sewer district, sanitary district, utility district, drainage district, or similar entity, or an integrated waste management facility as defined in section 201(e) of the Clean Water Act, as amended, that has as one of its principal responsibilities the treatment, transport, use, or disposal of biosolids.

"Nonexceptional quality biosolids" means biosolids that do not meet the criteria of "exceptional quality biosolids" as defined in this section.

"Other container" is either an open or closed receptacle. This includes, but is not limited to, a bucket, a box, a carton, and a vehicle or trailer with a load capacity of one metric ton (1.1 U.S. tons) or less.

"Owner" means any person with ownership interest in a site or facility, or who exercises control over a site or facility, but does not include a person who, without participating in management of the site or facility, holds indicia of ownership primarily to protect the person's security interest.

"Pasture" is land on which animals feed directly on feed crops such as legumes, grasses, grain stubble, or stover.

"Pathogenic organisms" are disease causing organisms. These include, but are not limited to, certain bacteria, protozoa, viruses, and viable helminth ova.

"Permit" means an authorization, license, or equivalent control document issued by the director to implement the requirements of this chapter. Unless the context requires differently, the use of the term in this chapter refers to individual permits, general permits, and coverage under general permits.

"Person" is an individual, association, partnership, corporation, municipality, state or federal agency, or an agent or employee thereof.

"Person who prepares biosolids" is either the person who generates biosolids during the treatment of domestic sewage in a treatment works or the person who derives a material from biosolids.

"pH" means the logarithm of the reciprocal of the hydrogen ion concentration.

"Place sewage sludge" or **"sewage sludge placed"** means to dispose of sewage sludge.

"Pollutant" is an organic substance, an inorganic substance, a combination of organic and inorganic substances, or a pathogenic organism that, after discharge and upon exposure, ingestion, inhalation, or assimilation into an organism either directly from the environment or indirectly by ingestion through the food chain, could, on the basis of information available to the Administrator of EPA, cause death, disease, behavioral abnormalities, cancer, genetic mutations, physiological malfunctions (including malfunction in reproduction), or physical deformations in either organisms or offspring of the organisms.

"Pollutant limit" is a numerical value that describes the amount of a pollutant allowed per unit amount of biosolids (e.g., milligrams per kilogram of total solids), the amount of a pollutant that can be applied to a unit area of land (e.g., kilograms per hectare), the volume of a material that can be applied to a unit area of land (e.g., gallons per acre), or the number of pathogens or indicator organisms per unit of biosolids. Pollutant limits are established in Tables 1 - 3 of WAC 173-308-160, in 173-308-170, and in 173-308-270.

"Public contact site" is land with a high potential for contact by the public. This includes, but is not limited to, public parks, ball fields, cemeteries, plant nurseries, turf farms, and golf courses.

"Publicly owned treatment works" means a treatment works treating domestic sewage that is owned by a municipality, the state of Washington, or the federal government.

"Range land" is generally open, uncultivated land dominated by herbaceous or shrubby vegetation that may be used for grazing or browsing, either by wildlife or livestock.

"Receiving-only facility" means a treatment works treating domestic sewage that only receives sewage sludge or biosolids from other sources for further treatment and/or application to the land, and which does not generate any biosolids from the treatment of domestic sewage.

"Reclamation site" is drastically disturbed land that is reclaimed using biosolids. This includes, but is not limited to, strip mines and construction sites.

"Regional administrator" means the Regional Administrator of Region 10 of the Environmental Protection Agency or his/her authorized representative.

"Residential equivalent value" means the number of residential equivalents determined for a facility under chapter 173-224 WAC or a value similarly obtained under WAC 173-308-320.

"Restrict public access" means to minimize access of nonessential personnel to land where biosolids are applied, through the use of natural or artificial barriers, signs, remoteness, or other means.

"Saturated zone" means the zone below the water table in which all interstices are filled with water.

"Septage" or **"domestic septage"** is liquid or solid material removed from septic tanks, cess pools, portable toilets, type III marine sanitation devices, vault toilets, pit toilets, RV holding tanks, or similar systems that receive only domestic sewage. Septage may also include commercial or industrial septage mixed with domestic septage if approved in accordance with the provisions in WAC 173-308-020 (3)(g).

"Septage managed as biosolids originating from sewage sludge" means septage managed as if it had originated from a sewage treatment process at a wastewater treatment facility including, but not limited to, meeting the sampling requirements in WAC 173-308-140, the monitoring requirements in WAC 173-308-150, the pollutant limits in WAC 173-308-160, the pathogen reduction requirements in WAC 173-308-170, and the vector attraction reduction requirements in this chapter.

"Septage management facility" means a person who applies septage to the land or one that treats septage for application to the land.

"Sewage sludge" is solid, semisolid, or liquid residue generated during the treatment of domestic sewage in a treatment works. Sewage sludge includes, but is not limited to, domestic septage; scum or solids removed in primary, secondary, or advanced wastewater treatment processes; and a material derived from sewage sludge. Sewage sludge does not include ash generated during the firing of sewage sludge in a sewage sludge incinerator or grit and screenings generated during preliminary treatment of domestic sewage in a treatment works.

"Significant change in biosolids management practices" means, but is not limited to, the following: A change in the quality of biosolids that are applied to the land, either from class A to class B for pathogens, or from Table 3 to Table 1 of WAC 173-308-160 for pollutant limits; the addition of a new area to which biosolids will be applied which was not previously disclosed during a required public notice process; for class B biosolids only, a change from nonfood crops to food crops, a change from crops where the harvestable portions do not contact the biosolids/soil mixture to crops where the harvestable portions contact the biosolids/soil mixture, or a change in site classification from land with a low potential for public exposure to land with a high potential for public exposure; or any change or deletion of a requirement established in an approved land application plan or established as a condition of coverage under a permit that would result in a decrease in buffer size, site monitoring, or facility reporting requirements, which was not otherwise provided for in the permit or plan approval process.

"Site" means all areas of land, including buffer areas, which are identified in the scope of an approved site specific land application plan. A site is considered to be new or expanded when biosolids are applied to an area not approved in a site specific land application plan or that was not previously disclosed during a required public notice process.

"Specific oxygen uptake rate (SOUR)" is the mass of oxygen consumed per unit time per unit mass of total solids (dry weight basis) in the biosolids.

"State" means the state of Washington.

"Store or storage of biosolids or sewage sludge" is the placing of biosolids or sewage sludge on land or in surface impoundments or other containment devices in which the biosolids or sewage sludge remain for two years or less, except where a greater time period has been approved by the department. This does not include the placing of biosolids or sewage sludge on land or in surface impoundments or other containment devices for treatment or disposal.

"Stover" is the nongrain, above-ground part of a grain crop, often corn or sorghum.

"Surface impoundment" means a facility or part of a facility which is a natural topographic depression, man-made excavation, or diked area formed primarily of earthen materials (although it may be lined with man-made materials), and which is designed to hold an accumulation of liquids or sludges. The term includes holding, storage, settling, and aeration pits, ponds, or lagoons, but does not include injection wells.

"Surface waters of the state" means surface waters of the state as defined in WAC 173-201A-020.

"Tank" means a stationary device designed to contain an accumulation of liquid or semisolid materials and which is constructed primarily of nonearthen materials to provide structural support.

"Temporary, small-scale storage" is the storage of biosolids or sewage sludge for no more than thirty days in a tank holding no more than 10,000 gallons with a total on-site maximum volume of no more than 20,000 gallons.

"Total solids" are the materials in biosolids that remain as residue when the biosolids are dried at 103 to 105°C (217.4 to 221°F).

"Treat or treatment of biosolids" is the preparation of biosolids for final use or disposal. This includes, but is not limited to, thickening, stabilization, and dewatering of biosolids. This does not include storage of biosolids.

"Treatment works" is either a federally owned, publicly owned, or privately owned device or system used to treat (including recycle and reclaim) either domestic sewage or a combination of domestic sewage and industrial waste of a liquid nature.

"Treatment works treating domestic sewage" means a publicly owned treatment works or any other sewage sludge or wastewater treatment devices or systems, regardless of ownership, used in the storage, treatment, recycling, and reclamation of municipal or domestic sewage or sewage sludge, including land dedicated for the disposal of sewage sludge. Treatment works treating domestic sewage also includes beneficial use facilities and septage management facilities as defined in this section, and a person, site, or facility designated as a treatment works treating domestic sewage in accordance with WAC 173-308-310 (1)(b). This definition does not include septic tanks or similar devices or temporary, small-scale storage as defined in this section.

"Unstabilized solids" are organic materials in biosolids that have not been treated in either an aerobic or anaerobic treatment process.

"Vector attraction" is the primarily odorous characteristic of biosolids that attracts rodents, flies, mosquitoes, or other organisms capable of transporting infectious agents.

"Volatile solids" is the amount of the total solids in biosolids that are lost when the biosolids are combusted at 550°C (1,022°F) in the presence of excess air.

"Waters of the state" means waters of the state as defined in RCW 90.48.020.

"Wetlands" means those areas that are inundated or saturated by surface water or ground water at a frequency and duration to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

[Statutory Authority: Chapters 70.95J and 70.95 RCW. 07-12-010 (Order 06-06), § 173-308-080, filed 5/24/07, effective 6/24/07. Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-080, filed 2/18/98, effective 3/21/98.]

173-308-090
Requirement for a person who prepares biosolids or sewage sludge.

Any person who prepares biosolids or sewage sludge must ensure that the applicable requirements in this chapter and any applicable permit issued under this chapter are met when the biosolids are managed.

[Statutory Authority: Chapters 70.95J and 70.95 RCW. 07-12-010 (Order 06-06), § 173-308-090, filed 5/24/07, effective 6/24/07. Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-090, filed 2/18/98, effective 3/21/98.]

173-308-100
Requirement for a person who transports biosolids or sewage sludge.

This section applies to facilities required to obtain a permit under this chapter who transport their biosolids or sewage sludge or contract for the transportation of their biosolids or sewage sludge.

(1) Any person who transports biosolids or sewage sludge must ensure that the transportation vehicle is properly cleaned prior to use of the vehicle for the transportation of food crops, feed crops, or fiber crops.

(2) **Spill prevention/response plan.** Facilities must submit a spill prevention/response plan to the department which describes how they will attempt to prevent and respond to any spillage of biosolids or sewage sludge during transportation. The plan must include a list of contact names and numbers, an explanation of how and when they would be contacted, what their role is, and how a spill would be cleaned up. For those who contract for the transportation of their biosolids or sewage sludge, a contractor's plan is sufficient if the minimal requirements are met.

(3) The transportation of biosolids or sewage sludge is otherwise subject to regulation by the Washington state utilities and transportation commission under Title 81 RCW and WAC 173-308-030(2).

[Statutory Authority: Chapters 70.95J and 70.95 RCW. 07-12-010 (Order 06-06), § 173-308-100, filed 5/24/07, effective 6/24/07. Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-100, filed 2/18/98, effective 3/21/98.]

173-308-110
Requirement for a person who applies biosolids.

A person may not apply biosolids to the land except in accordance with applicable requirements of this chapter and any applicable permit issued under this chapter.

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-110, filed 2/18/98, effective 3/21/98.]

173-308-120
Requirement to obtain and provide information.

(1) It is a violation of the provisions of this chapter for any person to falsify a certification or statement that is required by these rules or to make any required certification or statement under false pretense.

(2) Any person who applies biosolids to the land must obtain information needed to comply with the requirements of this chapter.

(3) The person who prepares biosolids must provide the person who applies biosolids to the land with notice and necessary information to comply with the requirements of this chapter, including sufficient information on the concentration and types of nutrients in the biosolids needed to determine an agronomic rate for the crop under management.

(4) When a person who prepares biosolids provides the biosolids to another person who further prepares the biosolids, the person who provides the biosolids must provide the person who receives the biosolids notice and necessary information to comply with the requirements of this chapter.

(5) The person who applies bulk biosolids to the land must provide the owner or lease holder of the land on which the bulk biosolids are applied notice and necessary information to comply with the requirements of this chapter.

(6) The person who applies nonexceptional quality bulk biosolids to the land must obtain written approval of the landowner prior to applying biosolids to the land for the first time.

(7) All persons required to keep and maintain records under any provision of this chapter must provide access to those records during normal business hours to a representative of the department, a local health jurisdiction, or the United States EPA, and to the owner, lessor, lessee or other person with a legal management interest in the land on which the biosolids are applied, at the location where the records are kept.

(8) Any facility, including a beneficial use facility, must immediately notify all sources from which it receives biosolids, if at any time it becomes unsuitable for the purpose of receiving biosolids from those other sources.

[Statutory Authority: Chapters 70.95J and 70.95 RCW. 07-12-010 (Order 06-06), § 173-308-120, filed 5/24/07, effective 6/24/07. Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-120, filed 2/18/98, effective 3/21/98.]

173-308-130
Requirements for treatment works located outside of the jurisdiction of the department.

When bulk biosolids or sewage sludge or biosolids in a bag or other container originating from treatment works located on tribal lands, in other states, or in other nations are exported into the state, the requirements of this section must be met.

(1) Bulk biosolids or sewage sludge from a treatment works seeking its own management program within the state must meet the following requirements:

(a) The exporting facility must apply for a permit in accordance with the requirements in WAC 173-308-310 and receive final coverage under a general permit or receive an individual permit prior to exporting biosolids or sewage sludge into the state.

(b) The exporting facility must pay a fee as determined by the criteria specified in WAC 173-308-320.

(2) Bulk biosolids or sewage sludge from a treatment works seeking to transfer its biosolids or sewage sludge to a facility within the state for management or further treatment must meet the following

requirements:

(a) The exporting facility must receive written approval from the department prior to exporting biosolids or sewage sludge for the first time.

(b) There must be no sustainable objection to the approval required in (a) of this subsection from the EPA or the local health jurisdiction(s) in the county(s) where the material will be received.

(c) The biosolids or sewage sludge must be exported to a facility with a current permit issued by the department that allows it to accept biosolids or sewage sludge from other facilities.

(d) The receiving facility must maintain any applicable records and certification statements required in WAC 173-308-290 on the biosolids or sewage sludge from the exporting facility and provide such records to the department upon request and in its annual biosolids report.

(e) The exporting facility must pay a fee as determined by the criteria specified in WAC 173-308-320.

(3) Biosolids in a bag or other container must meet the following requirements:

(a) The exporting facility must receive written approval from the department prior to exporting biosolids for the first time.

(b) The biosolids must meet the requirements in WAC 173-308-260.

(4) The exporting facility must be in compliance with any other federal, state, provincial, or local biosolids or sewage sludge laws, regulations, and ordinances.

(5) All other applicable requirements of this chapter must be met.

[Statutory Authority: Chapters 70.95J and 70.95 RCW. 07-12-010 (Order 06-06), § 173-308-130, filed 5/24/07, effective 6/24/07. Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-130, filed 2/18/98, effective 3/21/98.]

173-308-140
Biosolids sampling and analytical methods.

(1) **Sampling.** Samples that are collected and analyzed must be representative of the biosolids that are applied to the land.

(2) **Analytical methods.**

(a) The most current version of the publications listed in this subsection are incorporated by reference. These publications are available for review during normal working hours at the Washington State Department of Ecology headquarters located at 300 Desmond Drive in Olympia, Washington. Copies may be obtained from the standard producer or publisher.

(b) Unless otherwise stipulated by the department, the following methods (or methods in 40 CFR Part 136 or 40 CFR Part 503) must be used to analyze samples of biosolids or sewage sludge.

ANALYTICAL METHODS

Parameter	Analytical Method
Arsenic	SW-846 Method 6010
	SW-846 Method 6020
	SW-846 Method 7010

	SW-846 Method 7061
Cadmium	SW-846 Method 6010
	SW-846 Method 6020
	SW-846 Method 7000B
	SW-846 Method 7010
Copper	SW-846 Method 6010
	SW-846 Method 6020
	SW-846 Method 7000B
	SW-846 Method 7010
Lead	SW-846 Method 6010
	SW-846 Method 6020
	SW-846 Method 7000B
	SW-846 Method 7010
Mercury	SW-846 Method 7470
	SW-846 Method 7471
Molybdenum	SW-846 Method 6010
	SW-846 Method 6020
	SW-846 Method 7000B
	SW-846 Method 7010
Nickel	SW-846 Method 6010
	SW-846 Method 6020
	SW-846 Method 7000B
	SW-846 Method 7010
Selenium	SW-846 Method 6010
	SW-846 Method 6020
	SW-846 Method 7010
	SW-846 Method 7741
Zinc	SW-846 Method 6010
	SW-846 Method 6020
	SW-846 Method 7000B
	SW-846 Method 7010
Fecal Coliform	SM 9221 C or E
	SM 9222 D
	Appendix F, EPA/625/R-92/013
	EPA 1680
	EPA 1681
Salmonella Bacteria	SM 9260 D
	Appendix G, EPA/625/R-92/013
	EPA 1682
Helminth Ova	Appendix I, EPA/625/R-92/013
Enteric Viruses	ASTM Designation: D 4994-89
	Appendix H, EPA/625/R-92/013
Total Kjeldahl Nitrogen (TKN)	SM Method 4500, N_{org} B

	SM Method 4500, N_{org} C
Nitrate (as N)	SM Method 4500-NO_3 E, F, or H
Nitrite (as N)	SM Method 4500-NO_2 B
Ammonia (as N)	SM Method 4500-NH_3 B C, D, E, or G
Organic Nitrogen	Value calculated as TKN minus NH_3-N
Total Phosphorus	SM Method 4500-P B E or F
Total Solids, Fixed Solids, or Volatile Solids	SM Method 2540 G
Volatile Solids Reduction	Appendix C, EPA/625/R-92/013
Additional Volatile Solids Reduction for Anaerobically Digested Solids	Appendix D (1), EPA/625/R-92/013
Additional Volatile Solids Reduction for Aerobically Digested Solids	Appendix D (3), EPA/625/R-92/013
Specific Oxygen Update Rate	SM Method 2710 B
(SOUR)	Appendix D (2), EPA/625/R-92/013
pH	SW-846 Method 9045D
TCLP	SW-846 Method 1311
Paint Filter Test	SW-846 Method 9095B

Where:

ASTM = "*Standard Practice for Recovery of Viruses From Wastewater Sludges,*" Annual Book of ASTM Standards: Section 11-Water and Environmental Technology, ASTM, 1916 Race Street, Philadelphia, PA 19103-1187.

EPA/625/R-92/013 = "*Environmental Regulations and Technology, Control of Pathogens and Vector Attraction in Sewage Sludge (Including Domestic Septage) Under 40 CFR Part 503,*" U.S. Environmental Protection Agency, Office of Research and Development, National Risk Management Research Laboratory, Center for Environmental Research Information, Cincinnati, OH 45268.

EPA 1680 = USEPA. Method 1680: Fecal Coliforms in Sewage Sludge (Biosolids) by Multiple-Tube Fermentation Using Lauryl-Tryptose Broth (LTB) and EC Medium. U.S. Environmental Protection Agency, Office of Water, Washington, DC EPA-821-R-06-012.

EPA 1681 = USEPA. Method 1681: Fecal Coliforms in Sewage Sludge (Biosolids) by

		Multiple-Tube Fermentation using A-1 Medium. U.S. Environmental Protection Agency, Office of Water, Washington, DC EPA-821-R-06-013.
EPA 1682	=	USEPA. Method 1682: *Salmonella* in Sewage Sludge (Biosolids) by Modified Semisolid Rappaport-Vassiliadis (MSRV) Medium. U.S. Environmental Protection Agency, Office of Water, Washington, DC EPA-821-R-06-014.
SM	=	"*Standard Methods for the Examination of Water and Wastewater,*" American Public Health Association, 1015 15th Street NW, Washington, DC 20005.
SW-846	=	"*Test Methods for Evaluating Solid Waste, Physical/Chemical Methods,*" EPA publication SW-846. Available from the National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161.

[Statutory Authority: Chapters 70.95J and 70.95 RCW. 07-12-010 (Order 06-06), § 173-308-140, filed 5/24/07, effective 6/24/07. Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-140, filed 2/18/98, effective 3/21/98.]

173-308-150
Frequency of biosolids monitoring.

(1) The frequency of monitoring required by this section is based on the dry weight tonnage of bulk biosolids applied to the land per three hundred sixty-five-day period or the dry weight tonnage of biosolids received per three hundred sixty-five-day period by a person who prepares biosolids that are sold or given away for application to the land.

(2) The person who prepares biosolids is responsible for ensuring that monitoring is carried out in accordance with the requirements of this chapter and any applicable permit.

(3) The minimum frequency of monitoring listed below applies to the pollutants listed in Tables 1, 2, and 3 of WAC 173-308-160, the pathogen density requirements in WAC 173-308-170, and the vector attraction reduction requirements in WAC 173-308-180.

MINIMUM FREQUENCY OF MONITORING

Metric tons (U.S. tons) per 365-day period	Frequency
Greater than zero but less than 290 (320)	once per year
Equal to or greater than 290 (320) but less than 1,500 (1,653)	once per quarter (4 times per year)
Equal to or greater than 1,500 (1,653) but less than 15,000 (16,535)	once per 60 days (6 times per year)
Equal to or greater than	once per month (12 times per

15,000 (16,535) year)

(4) Treatment works treating domestic sewage that transfer biosolids or sewage sludge for further treatment to another facility are not required to monitor for pollutant concentrations, pathogen reduction, or vector attraction reduction unless specifically required to do so in a permit issued by the department.

(5) After the biosolids have been monitored for two years at the frequency in this section, the person who prepares the biosolids may request the department to reduce the frequency of monitoring for pollutant concentrations. The frequency of monitoring must not be less than once per year when biosolids are applied to the land.

[Statutory Authority: Chapters 70.95J and 70.95 RCW. 07-12-010 (Order 06-06), § 173-308-150, filed 5/24/07, effective 6/24/07. Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-150, filed 2/18/98, effective 3/21/98.]

173-308-160
Biosolids pollutant limits.

This section sets pollutant concentration limits and cumulative pollutant loading rate limits for biosolids that are applied to the land.

(1) **Table 1.** Table 1 of this section sets the maximum allowable concentration (ceiling limit) of pollutants in biosolids that are applied to the land. Sewage sludge that contains any pollutant listed in Table 1 of this section at a concentration greater than the allowable ceiling limit is not biosolids, is a solid waste, and may not be applied to the land.

(2) **Table 2.** Table 2 of this section sets the maximum quantities of pollutants that may be added to an area of land, also referred to as the cumulative pollutant loading rate. The cumulative pollutant loading rates in Table 2 apply when the concentration of any pollutant in biosolids that are applied to the land exceeds the allowable pollutant concentration limit in Table 3 of this section.

(a) A person may not apply bulk biosolids subject to the cumulative pollutant loading rates in Table 2 of this section to a land application site, if any of those rates have been reached on the site.

(b) Before bulk biosolids subject to the cumulative pollutant loading rates in Table 2 of this section are applied to the land, the person who proposes to apply the bulk biosolids must contact the local health jurisdiction and the department to determine whether bulk biosolids subject to the cumulative pollutant loading rates were applied to the site before the effective date of this chapter.

(i) If bulk biosolids subject to the cumulative pollutant loading rates in Table 2 of this section have been applied to the site since July 20, 1993, and the cumulative amount of each pollutant applied to the site since that date is known, in addition to any amount subtracted in (b)(iii) of this subsection, the amount previously applied must be subtracted from the cumulative pollutant loading rate for each pollutant, to determine the remaining amount of pollutant that may be applied to the site.

(ii) If bulk biosolids subject to the cumulative pollutant loading rates in Table 2 of this section have been applied to the site since July 20, 1993, and the cumulative amount of each pollutant applied to the site in the bulk biosolids since that date is not known, additional biosolids subject to the cumulative pollutant loading rates in Table 2 of this section may not be applied to the site.

(iii) If bulk biosolids were applied to the site prior to July 20, 1993, and the cumulative amount of each pollutant applied to the site prior to that date can be determined, in addition to any amount subtracted in (b)(i) of this subsection, the amount applied must be subtracted from the cumulative pollutant loading rate for each pollutant, to determine the remaining amount of pollutant that may be applied to the site.

(iv) If bulk biosolids subject to the cumulative pollutant loading rates in Table 2 of this section have not

been applied to the site, the cumulative amount of each pollutant listed in Table 2 of this section may be applied to the site.

(v) Any person who applies bulk biosolids to the land, which are subject to the cumulative pollutant loading rates in Table 2 of this section, must provide written notice prior to the initial application of bulk biosolids to the land. Notice must be submitted to the department, and to any local health jurisdiction in whose jurisdiction the biosolids will be applied. The department and the local health jurisdiction must retain and provide access to the notice. The notice must include the following:

(A) The location of each site, either by street address, the latitude and longitude of the approximate center, or the section, township and range of each quarter section, **and** a map(s) with the application area(s) clearly shown.

(B) The name, address, telephone number, and National Pollutant Discharge Elimination System (NPDES) or state waste discharge permit number and state biosolids permit number (if applicable) of the person who prepared the biosolids and also of the person who applies (if applicable) the bulk biosolids.

(3) **Table 3.** Table 3 of this section sets a lower pollutant concentration threshold which, when achieved, relieves the person who prepares biosolids and the person who applies biosolids, from certain requirements related to recordkeeping, reporting, and labeling.

TABLE 1 - CEILING CONCENTRATION LIMITS

POLLUTANT	CEILING CONCENTRATION milligrams per kilogram (dry weight basis)
Arsenic	75
Cadmium	85
Copper	4300
Lead	840
Mercury	57
Molybdenum	75
Nickel	420
Selenium	100
Zinc	7500

TABLE 2 - CUMULATIVE POLLUTANT LOADING RATES

POLLUTANT	CUMULATIVE POLLUTANT LOADING RATE kilograms per hectare (dry weight basis)
Arsenic	41
Cadmium	39
Copper	1500
Lead	300
Mercury	17
Nickel	420
Selenium	100
Zinc	2800

TABLE 3 - POLLUTANT CONCENTRATION LIMITS

POLLUTANT	LIMIT monthly average in milligrams per kilogram (dry weight basis)
Arsenic	41

Cadmium	39
Copper	1500
Lead	300
Mercury	17
Nickel	420
Selenium	100
Zinc	2800

[Statutory Authority: Chapters 70.95J and 70.95 RCW. 07-12-010 (Order 06-06), § 173-308-160, filed 5/24/07, effective 6/24/07. Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-160, filed 2/18/98, effective 3/21/98.]

173-308-170
Pathogen reduction.

This section contains the requirements for biosolids to be classified either Class A or Class B with respect to pathogens.

The Class A pathogen reduction requirements must be met at the same time or before the vector attraction reduction requirements in WAC 173-308-180 (1), (2), or (3).

(1) **Class A - Alternative 1: Time and Temperature.**

(a) ***Fecal coliform or Salmonella sp. bacteria density.*** The density of fecal coliform in the biosolids must be less than 1000 Most Probable Number per gram of total solids (dry weight basis) or the density of *Salmonella* sp. bacteria in the biosolids must be less than three Most Probable Number per four grams of total solids (dry weight basis) at the time the biosolids are used, at the time the biosolids are prepared for sale or give away in a bag or other container for application to the land, or at the time the biosolids or material derived from biosolids is prepared to meet the requirements for exemption in WAC 173-308-200, and one of the requirements in (b) through (e) of this subsection must be met.

(b) When the percent solids of the biosolids is seven percent or higher, the temperature of the biosolids must be 50°C (122°F) or higher, the time period must be twenty minutes or longer, and the temperature and time period must be determined using equation (1), except when small particles of biosolids are heated by either warmed gases or an immiscible liquid.

Equation (1)

$$D = \frac{131{,}700{,}000}{10^{0.1400t}}$$

Where:

D = time in days

t = temperature in degrees Celsius

(c) When the percent solids of the biosolids is seven percent or higher and small particles of biosolids are heated by either warmed gases or an immiscible liquid, the temperature of the biosolids must be 50°C (122°F) or higher, the time period must be fifteen seconds or longer, and the temperature and time period must be determined using equation (1).

(d) When the percent solids of the biosolids is less than seven percent and the time period is at least fifteen seconds, but less than thirty minutes, the temperature and time period must be determined using equation (1).

(e) When the percent solids of the biosolids is less than seven percent, the temperature of the biosolids is 50°C (122°F) or higher, and the time period is thirty minutes or longer, the temperature and time period must be determined using equation (2).

Equation (2)

$$D = \frac{50{,}070{,}000}{10^{0.1400t}}$$

Where:

D = time in days

t = temperature in degrees Celsius

(2) **Class A - Alternative 2: pH, Time, Temperature, and Percent Solids.**

(a) ***Fecal coliform or Salmonella sp. bacteria density.*** The density of fecal coliform in the biosolids must be less than 1000 Most Probable Number per gram of total solids (dry weight basis) or the density of *Salmonella* sp. bacteria in the biosolids must be less than three Most Probable Number per four grams of total solids (dry weight basis) at the time the biosolids are used, at the time the biosolids are prepared for sale or give away in a bag or other container for application to the land, or at the time the biosolids or material derived from biosolids is prepared to meet the requirements for exemption in WAC 173-308-200, and the requirements in (b) of this subsection must be met.

(b) The pH of the biosolids that are used must be raised to above twelve and remain above twelve for seventy-two hours.

(i) The temperature of the biosolids must be above 52°C (126°F) for twelve hours or longer during the period that the pH of the biosolids is above twelve.

(ii) At the end of the seventy-two-hour period during which the pH of the biosolids is above twelve, the biosolids must be air dried to achieve a percent solids in the biosolids greater than fifty percent.

(3) **Class A - Alternative 3: Processes to Further Reduce Pathogens.**

(a) ***Fecal coliform or Salmonella sp. bacteria density.*** The density of fecal coliform in the biosolids must be less than 1000 Most Probable Number per gram of total solids (dry weight basis) or the density of *Salmonella* sp. bacteria in the biosolids must be less than three Most Probable Number per four grams of total solids (dry weight basis) at the time the biosolids are used, at the time the biosolids are prepared for sale or give away in a bag or other container for application to the land, or at the time the biosolids or material derived from biosolids is prepared to meet the requirements for exemption in WAC 173-308-200, and one of the requirements in (b)(i) through (vii) of this subsection must be met.

(b) ***Processes to further reduce pathogens.*** The biosolids must be treated in one of the processes to further reduce pathogens described in this subsection.

(i) *Composting.*

(A) Using either the within-vessel composting method or the static aerated pile composting method, the temperature of the biosolids must be maintained at 55°C (131°F) or higher for three days.

(B) Using the windrow composting method, the temperature of the biosolids must be maintained at 55°C (131°F) or higher for fifteen days or longer. During the period when the compost is maintained at 55°C (131°F) or higher, there must be a minimum of five turnings of the windrow.

(ii) *Heat drying.* Biosolids must be dried by direct or indirect contact with hot gases to reduce the moisture content of the biosolids to ten percent or less and one of the following requirements must be met.

(A) The temperature of the biosolids particles must exceed 80°C (176°F).

(B) The wet bulb temperature of the gas in contact with the biosolids as the biosolids leave the dryer

must exceed 80°C (176°F).

(iii) *Heat treatment.* Liquid biosolids must be heated to a temperature of 180°C (356°F) or higher for thirty minutes.

(iv) *Thermophilic aerobic digestion.* Liquid biosolids must be agitated with air or oxygen to maintain aerobic conditions and the mean cell residence time of the biosolids must be at least ten days at 55 to 60°C (131 to 140°F).

(v) *Beta ray irradiation.* Biosolids must be irradiated with beta rays from an accelerator at dosages of at least 1.0 megarad at room temperature (ca. 20°C (68°F)).

(vi) *Gamma ray irradiation.* Biosolids must be irradiated with gamma rays from certain isotopes, such as Cobalt 60 and Cesium 137, at room temperature (ca. 20°C (68°F)).

(vii) *Pasteurization.* The temperature of the biosolids must be maintained at 70°C (158°F) or higher for thirty minutes or longer.

(4) **Class A - Alternative 4: Equivalent Process to Further Reduce Pathogens.**

(a) ***Fecal coliform or Salmonella sp. bacteria density.*** The density of fecal coliform in the biosolids must be less than 1000 Most Probable Number per gram of total solids (dry weight basis) or the density of *Salmonella* sp. bacteria in the biosolids must be less than three Most Probable Number per four grams of total solids (dry weight basis) at the time the biosolids are used, at the time the biosolids are prepared for sale or give away in a bag or other container for application to the land, or at the time the biosolids or material derived from biosolids is prepared to meet the requirements for exemption in WAC 173-308-200, and the requirements in (b) of this subsection must be met.

(b) The biosolids must be treated in a process that is equivalent to a process to further reduce pathogens. Pathogen equivalency for biosolids applied to land under jurisdiction of the state of Washington will be determined by the department or by the EPA with the approval and concurrence of the department.

(5) **Class B - Alternative 1: Testing.** A minimum of seven samples of the biosolids must be collected at the time the biosolids are used, and the geometric mean of the density of fecal coliform of the samples must be less than 2,000,000 Most Probable Number per gram of total solids (dry weight basis) or 2,000,000 Colony Forming Units per gram of total solids (dry weight basis).

(6) **Class B - Alternative 2: Process to Significantly Reduce Pathogens.** The biosolids must be treated in one of the processes to significantly reduce pathogens described in (a) through (e) of this subsection.

(a) ***Aerobic digestion.*** The biosolids must be agitated with air or oxygen to maintain aerobic conditions for a specific mean cell residence time at a specific temperature. Values for the mean cell residence time and temperature must be between forty days at 20°C (68°F) and sixty days at 15°C (59°F).

(b) ***Air drying.*** The biosolids must be dried on sand beds or on paved or unpaved basins. The biosolids must dry for a minimum of three months. During two of the three months, the ambient average daily temperature must be above 0°C (32°F). During the air drying period, no additional material may be added.

(c) ***Anaerobic digestion.*** The biosolids must be treated in the absence of air for a specific mean cell residence time at a specific temperature. Values for the mean cell residence time and temperature must be between fifteen days at 35 to 55°C (95 to 131°F) and sixty days at 20°C (68°F).

(d) ***Composting.*** Using the within-vessel, static aerated pile, or windrow composting methods, the temperature of the biosolids must be raised to 40°C (104°F) or higher and remain at 40°C (104°F) or higher for five days. For four hours during the five days, the temperature in the compost pile must exceed 55°C (131°F).

(e) ***Lime stabilization.*** Sufficient lime must be added to the biosolids to raise the pH of the biosolids to twelve after two hours of contact.

(7) **Class B - Alternative 3: Equivalent Process to Significantly Reduce Pathogens.** The biosolids

must be treated in a process that is equivalent to a process to significantly reduce pathogens. Pathogen equivalency for biosolids applied to land under jurisdiction of the state of Washington will be determined by the department or by the EPA with the approval and concurrence of the department.

[Statutory Authority: Chapters 70.95J and 70.95 RCW. 07-12-010 (Order 06-06), § 173-308-170, filed 5/24/07, effective 6/24/07. Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-170, filed 2/18/98, effective 3/21/98.]

173-308-180
Vector attraction reduction.

When vector attraction reduction is accomplished prior to application of biosolids to the land, the requirements in one of subsections (1) through (6) of this section must be met.

The vector attraction reduction requirements in subsection (1), (2), or (3) of this section must be met at the same time or after the Class A pathogen requirements in WAC 173-308-170.

(1) **Alternative 1: Volatile Solids Reduction.** The mass of volatile solids in the biosolids must be reduced by a minimum of thirty-eight percent.

(a) ***Bench-scale test for anaerobically digested solids.*** When the thirty-eight percent volatile solids reduction requirement in this subsection cannot be met for anaerobically digested biosolids, vector attraction reduction can be demonstrated by digesting a portion of the previously digested biosolids anaerobically in the laboratory in a bench-scale unit for forty additional days at a temperature between 30 and 37°C (86 and 98.6°F). After the forty-day period, the vector attraction reduction requirement is met if the volatile solids in the biosolids at the beginning of that period are reduced by less than seventeen percent.

(b) ***Bench-scale test for aerobically digested solids.*** When the thirty-eight percent volatile solids reduction requirement in this subsection cannot be met for aerobically digested biosolids, vector attraction reduction can be demonstrated by digesting a portion of the previously digested biosolids that has a percent solids of two percent or less aerobically in the laboratory in a bench-scale unit for thirty additional days at 20°C (68°F). After the thirty-day period, the vector attraction reduction requirement is met if the volatile solids in the biosolids at the beginning of that period are reduced by less than fifteen percent.

(2) **Alternative 2: Specific Oxygen Uptake Rate (SOUR).** The specific oxygen uptake rate (SOUR) for biosolids treated in an aerobic process must be less than or equal to 1.5 milligrams of oxygen per hour per gram of total solids (dry weight basis) at a temperature of 20°C (68°F).

(3) **Alternative 3: Aerobic Process.** The biosolids must be treated in an aerobic process for fourteen days or longer. During that time, the temperature of the biosolids must be higher than 40°C (104°F) and the average temperature of the biosolids must be higher than 45°C (113°F).

(4) **Alternative 4: pH Adjustment.** The pH of the biosolids must be raised to twelve or higher by alkali addition and, without the addition of more alkali, must remain at twelve or higher for two hours and then at 11.5 or higher for an additional twenty-two hours.

(5) **Alternative 5: Percent Solids for Stabilized Solids.** For biosolids that do not contain unstabilized solids generated in a primary wastewater treatment process, the percent solids must be equal to or greater than seventy-five percent based on the moisture content and total solids prior to mixing with other materials.

(6) **Alternative 6: Percent Solids for Unstabilized Solids.** For biosolids that contain unstabilized solids generated in a primary wastewater treatment process, the percent solids must be equal to or greater than ninety percent based on the moisture content and total solids prior to mixing with other materials.

[Statutory Authority: Chapters 70.95J and 70.95 RCW. 07-12-010 (Order 06-06), § 173-308-180, filed 5/24/07, effective 6/24/07. Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-180, filed 2/18/98, effective 3/21/98.]

173-308-190
Protecting waters of the state — Agronomic rate requirement.

(1) Biosolids must be applied to the land in a manner approved by the department and at agronomic rates, except when approved by the department for land reclamation sites in accordance with subsection (3) of this section or for research purposes when approved by the department in accordance with WAC 173-308-192 or in a site-specific land application plan developed under WAC 173-308-310(8).

(2) Agronomic rate determinations must take into account nitrogen supplied from other sources such as manures, cover crops, and commercial fertilizers as well as biosolids.

(3) Biosolids applied to land reclamation sites may be applied in excess of agronomic rates if approved by the department in a site specific land application plan developed under WAC 173-308-310(8).

(4) The person who prepares exceptional quality biosolids that are sold or given away to another person must provide sufficient information to allow the person who receives the biosolids to determine an agronomic rate of application.

(5) The person who applies exceptional quality biosolids to the land is responsible for compliance with the agronomic rate requirement in this section.

(6) When the potential for ground water contamination due to biosolids application exists, the department may require ground water monitoring or other conditions in accordance with the provisions of chapter 173-200 WAC. If it is determined that an enforcement criterion may be violated, an evaluation must be conducted to demonstrate compliance with the provisions of chapter 173-200 WAC.

[Statutory Authority: Chapters 70.95J and 70.95 RCW. 07-12-010 (Order 06-06), § 173-308-190, filed 5/24/07, effective 6/24/07. Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-190, filed 2/18/98, effective 3/21/98.]

173-308-191
Protection of endangered or threatened species.

Biosolids may not be applied to the land if they are likely to adversely affect a threatened or endangered species or its critical habitat as listed under Title 232 WAC or section 4 of the Endangered Species Act.

[Statutory Authority: Chapters 70.95J and 70.95 RCW. 07-12-010 (Order 06-06), § 173-308-191, filed 5/24/07, effective 6/24/07.]

173-308-192
Exemptions for research.

For the purposes of furthering necessary research, the land application of nonexceptional quality biosolids is exempt from the agronomic rate requirements in WAC 173-308-190 or 173-308-270, the reporting requirements in WAC 173-308-295, and the permitting requirements in WAC 173-308-310 if all of the following requirements are met:

(1) A research proposal must be submitted containing, at a minimum, the following:

(a) A description of the nature of the project, what may be learned, the anticipated benefits, provisions for progress reports, provisions for peer review, and provisions for providing a final report to the department.

(b) A discussion of any potential adverse impacts of application rates in excess of agronomic rates, along with potential mitigation or response to adverse effects if observed.

(c) An explanation for the sizing of the research plot(s) that will receive biosolids. Plot size must not exceed the minimum area required to support the goals of the research.

(2) The generator of the biosolids must report the dry tons of biosolids land applied in the research project in their annual biosolids report required under WAC 173-308-295.

(3) The department must approve, in writing, the research proposal required in subsection (1) of this section.

(4) There must be no sustainable objections to the approval required in subsection (3) of this section from the EPA or the local health jurisdiction(s) in the county(s) where the biosolids will be managed.

(5) All other applicable requirements of this chapter must be met.

(6) All other local, state, and federal regulatory requirements must be met.

[Statutory Authority: Chapters 70.95J and 70.95 RCW. 07-12-010 (Order 06-06), § 173-308-192, filed 5/24/07, effective 6/24/07.]

173-308-193
Management and exemptions for septage from composting toilets.

(1) The residual solids from composting toilet systems (also known as "waterless toilets") that receive only domestic waste are considered to be septage.

(2) Septage from composting toilet systems must either be sent to a permitted facility for further treatment, or it must be managed in accordance with the requirements in WAC 173-308-270 and other applicable sections of this chapter.

(3) Unless a permit is otherwise required by the department, persons who land apply septage from composting toilet systems and sites where the septage is applied are exempt from the reporting requirements in WAC 173-308-295 and the permitting requirements in WAC 173-308-310.

(4) All other applicable requirements of this chapter must be met.

(5) All other local, state, and federal regulatory requirements must be met.

[Statutory Authority: Chapters 70.95J and 70.95 RCW. 07-12-010 (Order 06-06), § 173-308-193, filed 5/24/07, effective 6/24/07.]

173-308-200
Exemptions based on the exceptional quality of biosolids.

The person who prepares and the person who applies biosolids that meet the exceptional quality standards are exempt from the following requirements:

(1) The requirement in WAC 173-308-120(6) for obtaining prior written approval of the landowner.

(2) The site management and access restrictions in WAC 173-308-210(5) except where, on a case-by-case basis, the director applies any or all restrictions after determining that the requirements are necessary to protect public health and the environment from any adverse effect that may occur from a pollutant in the bulk biosolids.

(3) The recordkeeping and certification requirements in WAC 173-308-290(3).

(4) The requirement in WAC 173-308-300 (6)(c) for submittal of a land application plan when used as a component of intermediate or final cover at a municipal solid waste landfill.

(5) The land application plan requirements of WAC 173-308-310(8), except as provided in WAC 173-308-310 (8)(a)(ii) or (iii).

[Statutory Authority: Chapters 70.95J and 70.95 RCW. 07-12-010 (Order 06-06), § 173-308-200, filed 5/24/07, effective 6/24/07. Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-200, filed 2/18/98, effective 3/21/98.]

173-308-205
Significantly remove manufactured inerts.

(1) Except for sewage sludge approved for long-term disposal in accordance with WAC 173-308-300(9), all biosolids (including septage) or sewage sludge must be treated by a process such as physical screening or another method to significantly remove manufactured inerts prior to final disposition. Meeting this requirement may occur at any point in the wastewater treatment or biosolids manufacturing process.

(2) **Options for meeting the requirement.** Meeting the requirement in subsection (1) of this section can be accomplished by either of the following:

(a) Screening through a bar screen with a maximum aperture of 3/8 inch (0.95 cm).

(b) Obtaining approval from the department for an alternative method that achieves a removal rate similar to or greater than that achieved by the screening standard in (a) of this subsection.

(3) **Timing for meeting the requirement.** The requirement in subsection (1) of this section must be met by July 1, 2012, or at the time of final disposition if the material will not be managed prior to July 1, 2012.

(4) Regardless of the date that the requirement in subsection (1) of this section is met, biosolids (including septage) that are land applied or sold/given away in a bag or other container must contain less than one percent by volume recognizable manufactured inerts.

[Statutory Authority: Chapters 70.95J and 70.95 RCW. 07-12-010 (Order 06-06), § 173-308-205, filed 5/24/07, effective 6/24/07.]

173-308-210
Bulk biosolids applied to agricultural land, forest land, a public contact site, or a land reclamation site.

(1) Bulk biosolids applied to agricultural land, forest land, a public contact site, or a land reclamation site must meet the requirements for a significant reduction in manufactured inerts in WAC 173-308-205.

(2) **Pollutant concentrations.**

(a) The concentration of a pollutant in bulk biosolids that are applied to agricultural land, forest land, a public contact site, or a land reclamation site may not exceed the allowable ceiling limit in Table 1 of WAC 173-308-160.

(b) If the concentration of a pollutant in bulk biosolids that are applied to agricultural land, forest land, a public contact site, or a land reclamation site exceeds the pollutant concentration limits in Table 3 of WAC 173-308-160, then the total cumulative loading rate for each pollutant may not exceed the limit in Table 2 of WAC 173-308-160, and the requirements in WAC 173-308-160(2) must be met.

(3) **Pathogens.** Bulk biosolids that are applied to agricultural land, forest land, a public contact site, or a land reclamation site must be Class A for pathogens, or they must be Class B for pathogens and the site management and access restrictions in subsection (5) of this section must be met.

(4) **Vector attraction reduction.** Bulk biosolids that are applied to agricultural land, forest land, a public contact site, or a land reclamation site must meet one of the vector attraction reduction requirements in WAC 173-308-180 (1) through (6) before they are applied to the land, or the requirements of (a) or (b) of this subsection must be met.

(a) ***Injection.*** The biosolids must be injected below the surface of the land and the following requirements must be met, as applicable.

(i) No significant amount of the biosolids may be present on the land surface within one hour after the biosolids are injected.

(ii) When the biosolids are Class A for pathogens, the biosolids must be injected below the land surface within eight hours after being discharged from the pathogen treatment process.

(b) ***Incorporation.*** Biosolids must be incorporated into the soil within six hours after application to the land. When biosolids that are incorporated into the soil are Class A with respect to pathogens, the biosolids must be applied to the land within eight hours after being discharged from the pathogen treatment process.

(5) **Site management and access restrictions.**

(a) ***Class B biosolids.*** The site management and access restrictions in (a) and (b) of this subsection are applicable to biosolids that are Class B for pathogens.

(i) Food crops, feed crops, and fiber crops must not be harvested for a minimum of thirty days after the last application of biosolids.

(ii) Food crops with harvested parts that touch the biosolids/soil mixture and are totally above the land surface must not be harvested for a minimum of fourteen months after the last application of biosolids.

(iii) Food crops with harvested parts below the surface of the land must not be harvested for a minimum of twenty months after the last application of biosolids when the biosolids remain on the land surface for four months or longer prior to incorporation into the soil.

(iv) Food crops with harvested parts below the surface of the land must not be harvested for thirty-eight months after application of biosolids when the biosolids remain on the land surface for less than four months prior to incorporation into the soil.

(v) Livestock must not be allowed to graze on the land for a minimum of thirty days after the last application of biosolids.

(vi) Turf grown on land where biosolids are applied must not be harvested for a minimum of one year after the last application of the biosolids unless otherwise specified by the department.

(vii) Public access to land with a high potential for public exposure must be restricted for a minimum of

173-308-260
Biosolids sold or given away in a bag or other container.

(1) Biosolids sold or given away in a bag or other container must meet the requirements for a significant reduction in manufactured inerts in WAC 173-308-205.

(2) Biosolids sold or given away in a bag or other container must meet the exceptional quality standards.

(3) **Label or information sheet required.** Any person who prepares biosolids that are sold or given away in a bag or other container in the state of Washington, must comply with the requirements of this subsection when the biosolids product is prepared or derived from nonexceptional quality biosolids.

(a) A label must be affixed to the bag or other container in which biosolids are sold or given away, or an information sheet must be provided to the person who receives biosolids that are sold or given away in a bag or other container. The label or information sheet must contain the following information:

(i) The name, address, and phone number of the person who prepared the biosolids.

(ii) A statement or information indicating that the product complies with applicable regulations for biosolids or that the product has been prepared to meet standards that make it safe for its intended use when used in accordance with the directions provided by the manufacturer.

(iii) A statement or information that encourages proper use of the product and protection of public health and the environment. This may include information on product storage, hygiene, and protection of surface or ground water resources.

(iv) Agronomic rates for typical applications or guidance on how to determine the agronomic rate of application.

(v) A statement or information indicating that the product contains or is derived from biosolids.

(vi) Unless registered as a fertilizer by the Washington state department of agriculture, a disclaimer stating that the product is not a commercial fertilizer and that all nutrient claims are estimates or averages and not guaranteed.

(b) Any person who prepares biosolids that are sold or distributed outside the jurisdiction of the state of Washington must comply with the requirements in 40 CFR Part 503.14(e), as applicable.

[Statutory Authority: Chapters 70.95J and 70.95 RCW. 07-12-010 (Order 06-06), § 173-308-260, filed 5/24/07, effective 6/24/07. Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-260, filed 2/18/98, effective 3/21/98.]

173-308-270
Septage applied to the land.

This section contains the requirements for the land application of septage as defined in WAC 173-308-080.

This section does not apply to "septage managed as biosolids originating from sewage sludge" as defined in WAC 173-308-080. Facilities who seek to manage their septage as biosolids must meet all of the requirements applicable to the particular classification of biosolids into which it falls.

(1) Septage applied to the land must meet the requirements for a significant reduction in manufactured inerts in WAC 173-308-205.

(2) Septage may not be applied to a public contact site, a lawn, or a home garden.

(3) **Pathogen reduction and vector attraction reduction.**

one year after the last application of biosolids.

(viii) Public access to land with a low potential for public exposure must be restricted for a minimum of thirty days after the last application of biosolids.

(ix) Biosolids must not be applied to the land within one hundred feet (30.5 meters) of a well unless otherwise approved in a permit issued in accordance with the requirements of this chapter.

(x) During the time when access is restricted, signs must be posted around the application site at all significant points of access and at least every 1/2 mile (805 meters) around the perimeter of the site. Unless the department has approved the substitution of "no trespassing" signs for informational signs, signs must contain at least the following:

(A) The name and address or phone number of the generator and if different, the person who applies.

(B) The names, addresses, and phone numbers of the regulatory and permitting authorities.

(C) The material that is being applied (biosolids or a more detailed description).

(D) Notice that access is restricted, and if desired, the date after which access is no longer restricted.

(E) If applicable, a notice on limitations regarding the harvest of edible plants from the site.

It is a violation of these rules for any person to remove a sign posted in accordance with the requirements of this subsection during the period when access is restricted.

(b) ***Nonexceptional quality biosolids.*** The following site management restrictions are applicable to nonexceptional quality biosolids when they are applied to agricultural land, forest land, a public contact site, or a land reclamation site:

(i) Bulk biosolids may not be applied to land that is thirty-three feet (10 meters) or less from surface waters of the state, unless otherwise specified by the department.

(ii) Bulk biosolids may not be applied to the land so that they enter a wetland or waters of the state, unless approved in a permit issued by the department or by EPA with the approval of the department.

[Statutory Authority: Chapters 70.95J and 70.95 RCW. 07-12-010 (Order 06-06), § 173-308-210, filed 5/24/07, effective 6/24/07. Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-210, filed 2/18/98, effective 3/21/98.]

173-308-250
Bulk biosolids applied to a lawn or home garden.

(1) Bulk biosolids applied to a lawn or home garden must meet the requirements for a significant reduction in manufactured inerts in WAC 173-308-205.

(2) Bulk biosolids that are applied to a lawn or home garden must meet the exceptional quality standards.

[Statutory Authority: Chapters 70.95J and 70.95 RCW. 07-12-010 (Order 06-06), § 173-308-250, filed 5/24/07, effective 6/24/07. Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-250, filed 2/18/98, effective 3/21/98.]

(a) For loads of septage that are composed of at least seventy-five percent by volume of septage from households, one of the following requirements must be met:

(i) The septage must be injected below the surface of the land and no significant amount of septage may be present on the land surface within one hour after the septage is injected.

(ii) Septage must be incorporated into the soil within six hours after application to the land.

(iii) The pH of the septage must be raised to twelve or higher and must remain at twelve or higher for a minimum of thirty minutes.

(A) A minimum of two tests for pH must be conducted for each load applied to the land.

(B) The first test must occur after a pH of twelve or higher has been attained.

(C) The second test must occur no less than thirty minutes after the first test to show that a pH of twelve or higher has been retained.

(D) If the pH has dropped below twelve when the second test is conducted, the stabilization process must be restarted.

(b) For loads of septage not composed of at least seventy-five percent by volume of septage from households, the requirements in (a)(iii) of this subsection must be met.

(4) **Site management and access restrictions.** All of the following site management and access restrictions are applicable when septage is applied to the land:

(a) Food crops, feed crops, and fiber crops must not be harvested for thirty days after the application of septage.

(b) Food crops with harvested parts that touch the septage/soil mixture and are totally above the land surface must not be harvested for a minimum of fourteen months after the last application of septage.

(c) Food crops with harvested parts below the surface of the land must not be harvested for a minimum of twenty months after the last application of septage when the septage remains on the land surface for four months or longer prior to incorporation into the soil.

(d) Food crops with harvested parts below the surface of the land must not be harvested for a minimum of thirty-eight months after the last application of septage when the septage remains on the land surface for less than four months prior to incorporation into the soil.

(e) Septage must not be applied to land that is one hundred feet (30.5 meters) or less from surface waters of the state, unless otherwise specified by the department.

(f) Septage must not be applied to the land so that it enters a wetland or waters of the state, unless approved in a permit issued by the department, or by EPA with the approval of the department.

(g) Septage must not be applied to the land within one hundred feet (30.5 meters) of a well unless approved in a permit issued by the department.

(h) Domestic animals must not be allowed to graze on the land for a minimum of thirty days after the last application of septage.

(i) Public access to land with a high potential for public exposure must be restricted for a minimum of one year after the last application of septage.

(j) Public access to land with a low potential for public exposure must be restricted for a minimum of thirty days after the last application of septage.

(k) During the time when access is restricted, signs must be posted around the application site at all significant points of access and at least every 1/2 mile (805 meters) around the perimeter of the site. Unless

the department has approved the substitution of "no trespassing" signs for informational signs, signs must contain at least the following:

(i) The name and address or phone number of the generator and if different, the person who applies.

(ii) The names, addresses, and phone numbers of the regulatory and permitting authorities.

(iii) The material that is being applied (septage or a more detailed description).

(iv) Notice that access is restricted, and if desired, the date after which access is no longer restricted.

(v) If applicable, a notice on limitations regarding the harvest of edible plants from the site.

It is a violation of these rules for any person to remove a sign posted in accordance with the requirements of this subsection during the period when access is restricted.

(5) **Application rates.**

(a) Septage that is applied to the land must be applied at a rate not exceeding the rate determined by equation (3).

(b) At its discretion, the department may require the use of a different approach for calculating application rates based on the mixture ratios and site specific criteria, but at no time may the rate exceed that calculated by equation (3).

Equation (3)

$$AAR = \frac{N}{0.0026}$$

Where:

AAR = Annual application rate in gallons per acre per 365-day period.

N = Amount of nitrogen in pounds per acre per 365-day period needed by the crop or vegetation grown on the land (*subtract any nitrogen supplied by other sources - for example, commercial fertilizers or manures*).

(6) **Spreader drive length.** To determine the distance (in feet) over which a load of liquid septage should be spread to meet the application rate, use equation (4).

Equation (4)

Drive length (in feet) = gallons in spreader ÷ spread width (in feet) x 43,560 ÷ AAR

Where:

AAR = Annual application rate in gallons per acre per 365-day period.

(7) **Monitoring.**

(a) Samples of septage that are collected and analyzed must be representative of the septage that is applied to the land.

(b) When septage is applied to the land and pH adjustment as described in subsection (3)(a)(iii) of this section is used to meet the pathogen and vector attraction reduction requirements, each container of septage that is applied to the land must be monitored to determine compliance with the pH requirements.

[Statutory Authority: Chapters 70.95J and 70.95 RCW. 07-12-010 (Order 06-06), § 173-308-270, filed 5/24/07, effective 6/24/07. Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-270, filed 2/18/98, effective 3/21/98.]

173-308-275
Contents of signs for land application sites.

(1) When signs are required for the purpose of restricting access, they must contain at least the following information:

(a) The name and address or phone number of the generator and if different, the person who applies;

(b) The names, addresses, and phone numbers of the regulatory and permitting authorities;

(c) The material that is being applied (biosolids or a more detailed description);

(d) Notice that access is restricted, and if desired, the date after which access is no longer restricted; and

(e) If applicable, a notice on limitations regarding the harvest of edible plants from the site.

(2) With the consent of the department, "no trespassing" signs may be substituted for the informational signs required under subsection (1) of this section.

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-275, filed 2/18/98, effective 3/21/98.]

173-308-280
Requirements for facilities storing biosolids or sewage sludge.

(1) Facilities storing biosolids or sewage sludge under a local, state, or federal water pollution control permit or another environmental permit and facilities conducting temporary, small-scale storage as defined in WAC 173-308-080 are exempt from this section if the department determines that the standards in subsection (3) of this section are being met.

(2) Facilities other than those in subsection (1) of this section storing biosolids or sewage sludge must do so in accordance with the provisions of a permit issued under this chapter.

(3) Biosolids or sewage sludge may not be stored in a manner that would be likely to result in the contamination of ground water, surface water, air, or land under current conditions or in the case of fire or flood.

(4) Facilities existing on July 1, 2007, storing liquid biosolids or sewage sludge in surface impoundments must meet the requirements for the design, construction, and operation of surface impoundments in chapter 173-304 WAC or the standards in chapter 173-350 WAC.

(5) After July 1, 2007, new facilities proposing to store biosolids or sewage sludge in surface impoundments, facilities that are proposing a new surface impoundment, and facilities that are proposing to upgrade existing surface impoundments must meet the requirements for the design, construction, and operation of surface impoundments in chapter 173-350 WAC.

[Statutory Authority: Chapters 70.95J and 70.95 RCW. 07-12-010 (Order 06-06), § 173-308-280, filed 5/24/07, effective 6/24/07.