Chapter 173-308 WAC
BIOSOLIDS MANAGEMENT

WAC 173-308-005 Explanation for the use of the terms "sewage sludge," "biosolids," and "septage." Repealed by 07-12-010 (Order 06-06), filed 5/24/07, effective 6/24/07.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.

173-308-010 Authority and purpose. 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 Repealed by 07-12-010 (Order 06-06), filed 5/24/07, effective 6/24/07.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.

173-308-020 Applicability. 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 Repealed by 07-12-010 (Order 06-06), filed 5/24/07, effective 6/24/07.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.

173-308-030 Relationship to other laws, regulations, and ordinances. 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. 173-308-040 Direct enforceability. 173-308-042 Appeals. 173-308-050 Delegation of authority. 173-308-055 Explanation for the use of the terms "biosolids," "sewage sludge," and "septage." 173-308-060 Biosolids not classified as solid waste. 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 Repealed by 07-12-010 (Order 06-06), filed 5/24/07, effective 6/24/07.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.

173-308-080 Definitions. 173-308-090 Requirement for a person who prepares biosolids or sewage sludge. 173-308-100 Requirement for a person who transports biosolids or sewage sludge. 173-308-110 Requirement for a person who applies biosolids.

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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. 173-308-215 Biosolids sampled on a regular basis.

173-308-220 Bulk biosolids applied to landfill. [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.

173-308-225 Bulk biosolids applied to public contact site. [Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-225, 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 Bulking biosolids applied to a public contact site. 173-308-235 Bulking biosolids applied to a land reclamation site.

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.

173-308-245 Bulk biosolids applied to a landfill. [Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-245, 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.

173-308-250 Biosolids sold or given away in a bag or other container. 173-308-255 Biosolids sold or given away in a bag or other container.


173-308-280 Requirements for facilities storing biosolids or sewage sludge. 173-308-285 Requirements for facilities storing biosolids or sewage sludge.


173-308-900 Appendix A—Procedure to determine the annual whole biosolids application rate. 173-308-90001 Appendix I—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.

(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.

WAC 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 groundwater 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.

WAC 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.]

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 173-308-041 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.]

WAC 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.]

WAC 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.]

WAC 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.]

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 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 benefi-
cially 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.


"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, 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.
"Groundwater" 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 nonearthern 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 groundwater 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.

WAC 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.

WAC 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).

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.

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 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.
WAC 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.

WAC 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.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Analytical Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arsenic</td>
<td>SW-846 Method 6010</td>
</tr>
<tr>
<td></td>
<td>SW-846 Method 6020</td>
</tr>
<tr>
<td></td>
<td>SW-846 Method 7010</td>
</tr>
<tr>
<td></td>
<td>SW-846 Method 7061</td>
</tr>
<tr>
<td>Cadmium</td>
<td>SW-846 Method 6010</td>
</tr>
<tr>
<td></td>
<td>SW-846 Method 6020</td>
</tr>
<tr>
<td></td>
<td>SW-846 Method 7000B</td>
</tr>
<tr>
<td></td>
<td>SW-846 Method 7010</td>
</tr>
<tr>
<td>Copper</td>
<td>SW-846 Method 6010</td>
</tr>
<tr>
<td></td>
<td>SW-846 Method 6020</td>
</tr>
<tr>
<td></td>
<td>SW-846 Method 7000B</td>
</tr>
<tr>
<td></td>
<td>SW-846 Method 7010</td>
</tr>
<tr>
<td>Lead</td>
<td>SW-846 Method 6010</td>
</tr>
<tr>
<td></td>
<td>SW-846 Method 6020</td>
</tr>
<tr>
<td></td>
<td>SW-846 Method 7000B</td>
</tr>
<tr>
<td></td>
<td>SW-846 Method 7010</td>
</tr>
<tr>
<td>Mercury</td>
<td>SW-846 Method 7470</td>
</tr>
<tr>
<td></td>
<td>SW-846 Method 7471</td>
</tr>
<tr>
<td>Molybdenum</td>
<td>SW-846 Method 6010</td>
</tr>
<tr>
<td></td>
<td>SW-846 Method 6020</td>
</tr>
<tr>
<td></td>
<td>SW-846 Method 7000B</td>
</tr>
<tr>
<td></td>
<td>SW-846 Method 7010</td>
</tr>
<tr>
<td>Nickel</td>
<td>SW-846 Method 6010</td>
</tr>
<tr>
<td></td>
<td>SW-846 Method 6020</td>
</tr>
<tr>
<td></td>
<td>SW-846 Method 7000B</td>
</tr>
<tr>
<td></td>
<td>SW-846 Method 7010</td>
</tr>
<tr>
<td>Selenium</td>
<td>SW-846 Method 6010</td>
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<td></td>
<td>SW-846 Method 6020</td>
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<tr>
<td></td>
<td>SW-846 Method 7010</td>
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<tr>
<td></td>
<td>SW-846 Method 7741</td>
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<tr>
<td>Zinc</td>
<td>SW-846 Method 6010</td>
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<tr>
<td></td>
<td>SW-846 Method 6020</td>
</tr>
<tr>
<td></td>
<td>SW-846 Method 7000B</td>
</tr>
<tr>
<td></td>
<td>SW-846 Method 7010</td>
</tr>
</tbody>
</table>
| Fecal Coliform | SM 9221 C or E  
                  | SM 9222 D  
                  | Appendix F, EPA/625/R-92/013  
                  | EPA 1680  
                  | EPA 1681
### WAC 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

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Analytical Method</th>
</tr>
</thead>
</table>

#### Parameter Analytical Method

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Analytical Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salmonella Bacteria</td>
<td>SM 9260 D Appendix G, EPA/625/R-92/013 EPA 1682</td>
</tr>
<tr>
<td>Helminth Ova</td>
<td>Appendix I, EPA/625/R-92/013</td>
</tr>
<tr>
<td>Enteric Viruses</td>
<td>ASTM Designation: D 4994-89 Appendix H, EPA/625/R-92/013</td>
</tr>
<tr>
<td>Total Kjeldahl Nitrogen (TKN)</td>
<td>SM Method 4500, N\textsubscript{org} B SM Method 4500, N\textsubscript{org} C</td>
</tr>
<tr>
<td>Nitrate (as N)</td>
<td>SM Method 4500-NO\textsubscript{3} E, F, or H</td>
</tr>
<tr>
<td>Nitrite (as N)</td>
<td>SM Method 4500-NO\textsubscript{2} B</td>
</tr>
<tr>
<td>Ammonia (as N)</td>
<td>SM Method 4500-NH\textsubscript{3} B + C, D, E, or G</td>
</tr>
<tr>
<td>Organic Nitrogen</td>
<td>Value calculated as TKN minus NH\textsubscript{3} - N</td>
</tr>
<tr>
<td>Total Phosphorus</td>
<td>SM Method 4500-P B + E or F</td>
</tr>
<tr>
<td>Total Solids, Fixed Solids, or Volatile Solids Reduction</td>
<td>Appendix C, EPA/625/R-92/013</td>
</tr>
<tr>
<td>Additional Volatile Solids Reduction for Anaerobically Digested Solids</td>
<td>Appendix D (1), EPA/625/R-92/013</td>
</tr>
<tr>
<td>Specific Oxygen Update Rate (SOUR)</td>
<td>SM Method 2710 B Appendix D (2), EPA/625/R-92/013</td>
</tr>
<tr>
<td>pH</td>
<td>SW-846 Method 9045D</td>
</tr>
<tr>
<td>TCLP</td>
<td>SW-846 Method 1311</td>
</tr>
<tr>
<td>Paint Filter Test</td>
<td>SW-846 Method 9095B</td>
</tr>
</tbody>
</table>

Where:


U.S. Environmental Protection Agency, Office of Research and Development, National Risk Management Research Laboratory, Center for Environmental Research Information, Cincinnati, OH 45268.

---

**Metric tons (U.S. tons) per 365-day period**

<table>
<thead>
<tr>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greater than zero but less than 290 (320)</td>
</tr>
<tr>
<td>Equal to or greater than 290 (320) but less than 1,500 (1,653)</td>
</tr>
</tbody>
</table>
(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.

WAC 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 in the bulk biosolids 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>
<thead>
<tr>
<th>POLLUTANT</th>
<th>CEILING CONCENTRATION limits per kilogram (dry weight basis)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arsenic</td>
<td>75</td>
</tr>
<tr>
<td>Cadmium</td>
<td>85</td>
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<tr>
<td>Copper</td>
<td>4300</td>
</tr>
<tr>
<td>Lead</td>
<td>840</td>
</tr>
<tr>
<td>Mercury</td>
<td>57</td>
</tr>
<tr>
<td>Molybdenum</td>
<td>75</td>
</tr>
<tr>
<td>Nickel</td>
<td>420</td>
</tr>
<tr>
<td>Selenium</td>
<td>100</td>
</tr>
<tr>
<td>Zinc</td>
<td>7500</td>
</tr>
</tbody>
</table>

[Ch. 173-308 WAC—p. 10] (5/24/07)
WAC 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.

\[
D = \frac{131,700,000}{t^{100.1400}}
\]

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 ten 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).

\[
D = \frac{50,070,000}{t^{100.1400}}
\]

Where:

- \( D \) = time in days
- \( t \) = temperature in degrees Celsius

   (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.

   (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

[Statutory Authority: Chapters 70.95J and 70.95 RCW. 07-12-010 (Order 97-30), § 173-308-160, filed 5/24/07, effective 6/24/07. Statutory Authority: Chapters 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-160, filed 5/24/07, effective 6/24/07.]

TABLE 2 - CUMULATIVE POLLUTANT LOADING RATES

<table>
<thead>
<tr>
<th>POLLUTANT</th>
<th>CUMULATIVE POLLUTANT LOADING RATE kilograms per hectare (dry weight basis)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arsenic</td>
<td>41</td>
</tr>
<tr>
<td>Cadmium</td>
<td>39</td>
</tr>
<tr>
<td>Copper</td>
<td>1500</td>
</tr>
<tr>
<td>Lead</td>
<td>300</td>
</tr>
<tr>
<td>Mercury</td>
<td>17</td>
</tr>
<tr>
<td>Nickel</td>
<td>420</td>
</tr>
<tr>
<td>Selenium</td>
<td>100</td>
</tr>
<tr>
<td>Zinc</td>
<td>2800</td>
</tr>
</tbody>
</table>

TABLE 3 - POLLUTANT CONCENTRATION LIMITS

<table>
<thead>
<tr>
<th>POLLUTANT</th>
<th>LIMIT monthly average in milligrams per kilogram (dry weight basis)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arsenic</td>
<td>41</td>
</tr>
<tr>
<td>Cadmium</td>
<td>39</td>
</tr>
<tr>
<td>Copper</td>
<td>1500</td>
</tr>
<tr>
<td>Lead</td>
<td>300</td>
</tr>
<tr>
<td>Mercury</td>
<td>17</td>
</tr>
<tr>
<td>Nickel</td>
<td>420</td>
</tr>
<tr>
<td>Selenium</td>
<td>100</td>
</tr>
<tr>
<td>Zinc</td>
<td>2800</td>
</tr>
</tbody>
</table>
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.


(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.

WAC 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 [Ch. 173-308 WAC—p. 12] (5/24/07)
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 greater than 40°C (104°F) and the average temperature of the biosolids must be greater 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.

WAC 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 groundwater contamination due to biosolids application exists, the department may require groundwater 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), § 173-308-180, filed 2/18/98, effective 3/21/98.]

WAC 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.]

WAC 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.

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(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.]

WAC 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.]

WAC 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.]

WAC 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.]

WAC 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 attrac-
tion 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 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.

WASHINGTON ADMINISTRATIVE CODE 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.

WASHINGTON ADMINISTRATIVE CODE 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

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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 groundwater 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.]

WAC 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 inert 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.

   (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.

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(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).

\[
\text{Equation (3)}
\]

\[
\text{AAR} = \frac{N}{0.0026}
\]

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).

\[
\text{Equation (4)}
\]

\[
\text{Drive length (in feet)} = \frac{\text{gallons in spreader}}{\text{spread width (in feet)}} \times 43,560 + \text{AAR}
\]

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.

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 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 groundwater, 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. 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 173-308-290 Recordkeeping. The person who prepares biosolids or sewage sludge, the person who applies nonexceptional quality biosolids to the land, and the person who applies septage to the land must keep certain records and certification statements as described in this section.

(1) A responsible official as described in WAC 173-308-310(10) must sign all certification statements required under this section.

(a) The amount applied by the preparer/preparer's agent to agricultural land.

(b) The amount applied by the preparer/preparer's agent to forest land.

(c) The amount applied by the preparer/preparer's agent to a public contact site.

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(d) The amount applied by the preparer/preparer's agent to a land reclamation site.
(e) The amount applied by the preparer/preparer's agent to a lawn or home garden.
(f) The amount sold or given away by the preparer in a bag or other container.
(g) The amount sold or given away by the preparer in bulk form (does not include that provided to the preparer's agent).
(h) The amount in a compost or blended biosolids product sold or given away by the preparer.
(i) The amount sent to a municipal solid waste landfill for disposal and the name of the landfill.
(j) The amount stored on-site.
(k) The amount transferred to another facility for further treatment and the name of the other treatment facility.
(l) The amount received from another facility and the name of the other facility.
(m) The amount transferred for incineration and the name of the incineration facility.
(n) Laboratory analysis data showing that the pollutant ceiling concentrations in WAC 173-308-160 Table 1 were met.
(o) Laboratory analysis data showing that the pollutant concentrations in WAC 173-308-160 Table 3 were met.
(p) Process monitoring and/or laboratory analysis data showing that the pathogen reduction requirements in WAC 173-308-170 were met and a description of how the requirements were met.
(q) If the vector attraction reduction requirements in WAC 173-308-180 were met, process monitoring and/or laboratory analysis data and a description of how the requirements were met.
(r) Laboratory analysis data showing the nitrogen concentration.

CERTIFICATION STATEMENT:
"I certify, under penalty of law, that the following were met (check boxes, as applicable):
☐ The pollutant ceiling concentration limits in WAC 173-308-160 Table 1
☐ The pollutant concentration limits in WAC 173-308-160 Table 3.
☐ The Class A pathogen reduction requirements in WAC 173-308-170: ☐(1), ☐(2), ☐(3), ☐(4).
☐ The Class B pathogen reduction requirements in WAC 173-308-170: ☐(5), ☐(6), ☐(7).
☐ The vector attraction reduction requirements in WAC 173-308-180: ☐(1), ☐(2), ☐(3), ☐(4), ☐(5), ☐(6).
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, vector attraction reduction requirements, and pollutant concentration limits have been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."
Signature __________________ Title ______________ Date ____________

(3) **Applicants of nonexceptional quality biosolids.** The person who applies nonexceptional quality biosolids must keep the following records, as applicable, and certification statement for five years or indefinitely where stated.

(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 number of acres in each site on which biosolids were applied.
(c) The date biosolids were applied to each site.
(d) The targeted vegetation grown on each site and its nitrogen requirement.
(e) The rate, in dry tons per acre per year, at which biosolids are applied to each site.
(f) The amount, in dry tons, of biosolids applied to each site.

(g) In addition, when biosolids with pollutants exceeding the WAC 173-308-160 Table 3 concentrations are applied, the following records must be kept indefinitely:

(i) The cumulative amount of each pollutant listed in WAC 173-308-160 Table 2 in the biosolids applied to each site.
(ii) A description of how the requirement to obtain information under WAC 173-308-160 (2)(b) was met.

(h) If the biosolids were Class B for pathogens, a description of how the site management and access restrictions in WAC 173-308-210 (5)(a) were met.

(i) If the vector attraction reduction requirements were not met prior to application, a description of how requirements in WAC 173-308-210 (5)(b) were met.

CERTIFICATION STATEMENT:
"I certify, under penalty of law, that the following were met (check boxes, as applicable):
☐ The requirement to obtain information under WAC 173-308-160 (2)(b) (required if any of the pollutant concentrations exceed those in WAC 173-308-160 Table 3).
☐ The vector attraction reduction requirement in WAC 173-308-210(4): ☐(a) or ☐(b) (required if the vector attraction reduction requirements were not met prior to application).
☐ The site management and access restrictions in WAC 173-308-210(5): ☐(a) and/or ☐(b).

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, the site management and access restrictions have been met, and the vector attraction reduction requirements have been met. I am aware that there are significant penalties for false certification including fine and imprisonment."
Signature __________________ Title ______________ Date ____________

(4) **Preparers or applicators of septage.** The person who prepares or applies septage to the land must keep the following records, as applicable, and certification statement for five years:

(a) The total number of gallons of septage managed.
(b) The total number of gallons of septage land applied.
(c) The number of gallons of septage managed in any manner other than land application (e.g., transfer to another facility).

(d) 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.

(e) The number of acres in each site on which septage is applied.

(f) The date septage is applied to each site.

(g) The targeted vegetation grown on each site and its annual nitrogen requirement.

(h) The rate, in gallons per acre per year, at which septage is applied to each site.

(i) The number of gallons of septage applied to each site.

(j) 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.

(k) A description of how the pathogen and vector attraction reduction requirements in WAC 173-308-270(3) were met.

(l) If pH stabilization was used to meet the pathogen and vector attraction reduction requirements in WAC 173-308-270(3)(a)(iii), pH measurements for each load.

(m) A description of how the applicable site management and access restriction requirements in WAC 173-308-270(4) were met.

CERTIFICATION STATEMENT:
"I certify, under penalty of law, that the following were met (check boxes, as applicable):

The pathogen and vector attraction reduction requirements in WAC 173-308-270(3): ☐(a)(i), ☐(a)(ii), or ☐(a)(iii).

The site management and access restriction requirements in ☐WAC 173-308-270(4).

This determination has been 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 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."

Signature ________________  Title _________
Date ________________

[Statutory Authority: Chapters 70.95J and 70.95 RCW. 07-12-010 (Order 06-06), § 173-308-295, filed 5/24/07, effective 6/24/07. Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-295, filed 2/18/98, effective 3/21/98.]

WAC 173-308-300 Disposal of sewage sludge in municipal solid waste landfill units and use of biosolids in municipal solid waste landfill operations. (1) When biosolids are placed in a municipal solid waste landfill unit they are considered solid waste (sewage sludge).

(2) Any landfill accepting sewage sludge for disposal must be in compliance with the requirements of chapter 173-351 WAC and 40 CFR Part 258.

(3) Sewage sludge that is disposed in a municipal solid waste landfill must meet the liquids in landfills restrictions of chapter 173-351 WAC.

(4) Sewage sludge that is disposed in a municipal solid waste landfill must not be hazardous waste as defined in chapter 173-303 WAC or 40 CFR Part 261.

(5) Daily cover. The use of sewage sludge as daily cover or as an amendment to daily cover is not a beneficial use and is considered disposal.

(6) Intermediate or final cover. The use of biosolids as a component of landfill intermediate or final cover is considered a beneficial use if the following conditions are met:

(a) The use is consistent with an approved landfill plan of operations or closure/post-closure plan.

(b) The biosolids are used for the purposes of establishing a vegetative cover.

(c) If the biosolids are nonexceptional quality, the department has approved a site specific land application plan that meets the requirements of WAC 173-308-310(8). For the purposes of this subsection, 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(8).

(7) Disposal on an emergency basis.

(a) Facilities wishing to dispose of sewage sludge in a municipal solid waste landfill on an emergency basis must meet the conditions of this subsection and those in chapter 173-351 WAC.

(b) The person proposing to dispose of sewage sludge must obtain a written determination from the local health jurisdiction where the sewage sludge is proposed for disposal that a potentially unhealthful circumstance exists under present conditions of management or would result from land application, and that other management options are unavailable or would pose a threat to human health or the environment.

(c) Upon making the determination in (b) of this subsection, the local health jurisdiction must notify the department in writing of its findings and the basis for its determination. In its notification, the local health jurisdiction must state the date on which disposal is approved to commence, any conditions, and the date after which disposal is prohibited.

(8) Disposal on a temporary basis.

(a) Any person wishing to dispose of 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 that make disposal necessary so that disposal will not become a long-term management option.

(iii) A time table for implementing the steps to be taken to correct the conditions that make disposal necessary.

(b) The person proposing to dispose must provide the department with written approval for disposal from the local health jurisdiction in the receiving jurisdiction.

(9) Disposal on a long-term basis.

(a) Any person wishing to dispose of 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 permit issued under this chapter, and the person must submit for approval to the department an evaluation of the various management options that demonstrates to the satisfaction of the department that options for beneficial use are economically feasible.

(b) The person proposing to dispose must provide the department with written approval for disposal from the local health jurisdiction in the receiving jurisdiction.

[Statutory Authority: Chapters 70.95J and 70.95 RCW. 07-12-010 (Order 06-06), § 173-308-300, filed 5/24/07, effective 6/24/07. Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-300, filed 5/24/07, effective 6/24/07.]

WAC 173-308-310 Permitting. (1) Applicable facilities—Application required. All treatment works treating domestic sewage are applicable facilities, and must apply for a permit for the final use or disposal of biosolids or sewage sludge except for certain composting toilet systems described in WAC 173-308-193 and certain composting facilities described in (a) of this subsection.

(a) Permitting exemption for some composting facilities. Facilities that compost biosolids or sewage sludge do not require permitting under this chapter if all of the following conditions are met:

(i) A permit is not otherwise required in order to comply with the Federal Clean Water Act.

(ii) The department and local health jurisdiction agree that a permit issued by the local health jurisdiction will be adequate.

(iii) The conditions of the permit issued by the local health jurisdiction meet or exceed the requirements of this chapter.

(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, stores, or applies biosolids, as a treatment works treating domestic sewage, and require the owner or operator to apply for a permit if any of the following conditions are met:

(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.

(iv) Bulk biosolids or sewage sludge 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 or facility.

(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 or sewage sludge.

(a) The department will issue, modify, revoke and reissue, and terminate general permits in accordance with the provisions of Appendix 5.

(b) The department will accept and consider applications for coverage under a general permit, modify conditions of coverage, revoke and reissue coverage, or terminate coverage under a general permit in accordance with the provisions of this section.

(c) The department will issue, modify, revoke and reissue, or terminate individual permits in accordance with the provisions of this section.

(3) Requirements to apply for coverage under a general permit or to request an individual permit.

(a) After the department has issued a general permit for the final use or disposal of biosolids or sewage sludge, all applicable facilities must apply for coverage under the general permit in accordance with subsection (4) of this section unless any of the following apply:

(i) The facility has a current individual permit issued under this chapter.

(ii) The department requires a facility to apply for an individual permit.

(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 or sewage sludge management practices that are applicable under the general permit and may also request an individual permit for any portion of its biosolids or sewage sludge 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) of this subsection to improve its practices for the final use or disposal of biosolids or sewage sludge to those that are authorized in a general permit and to apply for coverage under 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 as required under subsection (4) of this section.

(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 this subsection must submit a permit application as directed by the department.

(4) Timing of permit applications.

(a) Existing facilities seeking coverage under a general permit. Existing facilities seeking coverage under a general permit must submit an application for coverage within ninety days after issuance of the applicable general permit by the department. However, on a case-by-case basis the department’s regional biosolids coordinator may grant an extension up to a maximum of one hundred eighty days after issuance of the applicable general permit. Requests for an extension must be made in accordance with the following:

(i) Requests must be made in writing to the applicable regional biosolids coordinator.

(ii) Requests must be made within ninety days after issuance of the applicable general permit.

(b) Existing facilities requesting an individual permit. Existing facilities that wish to request an individual permit under subsection (3)(a)(iii) of this section must do so within thirty days of issuance of an applicable general permit by the department.

(c) Facilities required or approved to apply for an individual permit. Facilities that have been directed by the department to apply for an individual permit under subsection (3)(a)(ii) of this section or approved to apply for an individual permit requested under subsection (3)(a)(iii) of this section must submit a permit application within ninety days of receiving notification.

(d) Facilities that have been denied an individual permit. Facilities that are denied an individual permit must submit an application for coverage under a general permit within sixty days after being denied an individual permit.

(e) New facilities. New facilities being proposed after July 1, 2007, must submit an application for coverage under an applicable general permit or a request for an individual permit at least one hundred eighty days prior to engaging in applicable management activities.

(5) Timing of notices of intent - continuing coverage.

(a) All facilities permitted under this section must submit a notice of intent to continue coverage under a general permit or an application for a new individual permit, at least one hundred eighty days prior to the expiration date of their applicable permit.

(b) When a facility has submitted a timely and sufficient notice of intent or application as required in this subsection, an expiring permit remains in effect and enforceable until any of the following occur:

(i) The application has been denied.

(ii) A replacement permit has been issued by the department.

(iii) The department has cancelled the expired permit.

(c) Coverage under a 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.

(6) Permit application contents. All facilities must submit a complete and factually correct permit application in accordance with the schedule established in WAC 173-308-310(4) on a form or in a format specified by the department. The content requirements are listed in Appendix 1.

(7) Notices of intent contents. Facilities submitting a notice of intent to be covered under an applicable general permit must do so on a form provided by the department. The content requirements are listed in Appendix 2.

(8) Land application plans.

(a) Exemptions for exceptional quality biosolids. Land application plans are not required when exceptional quality biosolids are applied to the land, except as specified in 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 (13) 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 land application 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) Nonexceptional quality biosolids. Land application plans are required when nonexceptional quality biosolids 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 nonexceptional quality biosolids to the land must do one or both of the following:

(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.

(ii) Submit with their permit application a general land application plan, and at a later date prior to applying biosolids, a site specific land application plan for each site where biosolids will be applied to the land.

(c) Any site specific land application plans must be consistent with a facility’s general land application plan, if a general land application plan has been submitted.

(d) Site specific land application plan contents. 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. The minimum content for site specific land application plans is listed in Appendix 3.

(e) General land application plan contents. Applicants intending to apply nonexceptional quality biosolids 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. The minimum content for general land application plans is listed in Appendix 4.

(f) As individual sites are identified in accordance with the general land application plan in (e) of this subsection, facilities that seek to apply nonexceptional quality biosolids must develop and submit site specific land application plans in accordance with (d) of this subsection.

(g) Exemptions when sending biosolids to a permitted beneficial use facility. 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 land application plans for the biosolids that will be applied to the beneficial use facility if all of the following conditions are met:

(i) The beneficial use facility's permit allows it to accept biosolids from the person who prepares biosolids.

(ii) As a part of the permit application or public notice, the person who prepares the biosolids identifies the beneficial use facility(ies) to which biosolids may be provided or specifies the criteria by which beneficial use facilities may be selected at a future date or states or indicates that it maintains the option to send its biosolids or sewage sludge to any facility permitted by the department to accept it for management.

(h) All land application plans, including those authorized under provisional approval in accordance with subsection (18)(a) 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 in accordance with subsection (19) of this section.

(9) Submitting permit applications and notices of intent. Facilities must submit their permit application and notice of intent as follows:

(a) The original, in hardcopy form, to the biosolids coordinator in the regional office of the department where the facility is located.

(b) One copy, in either electronic or hardcopy form, to any other regional office of the department where the facility's biosolids or sewage sludge will be treated, stored, disposed, or applied to the land. The department encourages submittal in electronic form.

(c) One copy, in either electronic or hardcopy form, to the biosolids coordinator at the department's headquarters office. The department encourages submittal in electronic form.

(d) One copy, in either electronic or hardcopy form, to the local health jurisdiction in each county where biosolids or sewage sludge will be treated, stored, disposed, or applied to the land. The department encourages submittal in electronic form.

Local health jurisdictions that elect not to receive copies of notices of intent or permit applications may notify in writing the facility or the department that they do not wish to receive copies.

(10) Signatories to permit applications and reports.

(a) Applications. All permit applications must be signed as follows:

(i) For a corporation. By a responsible corporate officer. For the purpose of this section, a responsible corporate officer means either of the following:

(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.

(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 either of the following:

(A) The chief executive officer of the agency.

(B) A senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.

(b) Reports and other information. All reports and other information 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 the following conditions are met:

(i) The authorization is submitted to the department 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.

(c) Changes to authorization. If an authorization under (b) of this subsection is no longer accurate, a new authorization satisfying the requirements of (b) of this subsection must be submitted to the department prior to or together with any reports or other information.

(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."

(11) Public access to information. In accordance with chapter 42.17 RCW, the department must provide, upon
(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.

(12) 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.

(13) Public notice and comment period. Public notices and comment periods must minimally meet the requirements listed in this subsection.

(a) Applying for coverage under a general permit initially, proposing a significant change, or reapplying following revocation. All facilities applying for coverage under a general permit initially, facilities who propose a significant change in biosolids management practices, and those who reapply for a permit following revocation of their permit must issue public notice in the following manner:

(i) Issue one notice in a newspaper of general circulation in any county(ies) where you prepare biosolids or sewage sludge.

(ii) Issue one notice in a newspaper of general circulation in any county(ies) covered by a general land application you have submitted.

(iii) Issue one notice in a newspaper of general circulation in any county(ies) where you land apply nonexceptional quality biosolids except where this notice has been conducted by a permitted biosolids beneficial use facility.

(iv) Post notices at any site(s) where you plan to land apply nonexceptional quality biosolids except where this notice has been conducted by a permitted biosolids beneficial use facility. The site(s) must remain posted during the entire public comment period required in (a)(v) of this subsection.

(v) Provide a thirty-day public comment period following the issuance of newspaper notice and the posting of site(s).

(b) Applying for renewal of coverage under a general permit with no land application of nonexceptional quality biosolids. All facilities applying for renewal of coverage under a general permit who have previously met the public notice requirements of (a) of this subsection and who do not land apply nonexceptional quality biosolids are not required to conduct additional public notice.

(c) Applying for renewal of coverage under a general permit with land application of nonexceptional quality biosolids. All facilities applying for renewal of coverage under a general permit who have previously met the public notice requirements of (a) of this subsection and who land apply nonexceptional quality biosolids must conduct public notice in accordance with (a)(iii) and (v) of this subsection.

(d) Applying for an individual permit. Facilities applying for individual permits must conduct public notice in accordance with (a)(i) through (v) of 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.

(e) Notice when adding a new site in accordance with a general land application plan. All facilities who are proposing to add a new site or expand an existing site for the land application of nonexceptional quality biosolids in accordance with an approved general land application plan and who previously met the public notice requirements of (a) of this subsection must conduct public notice at the proposed new site or expanded area of an existing site in accordance with (a)(iv) and (v) of this subsection.

(f) All facilities not captured under one of the descriptions in (a) through (e) of this subsection must conduct public notice as directed by the department.

(g) Notice contents. All notices issued in accordance with this subsection must contain at least the following:

(i) The name and address of the facility and the name of the contact person for the facility.

(ii) The name and address of the department of ecology person responsible for the permit.

(iii) The name and address of the local health jurisdiction person responsible for the permit if the local health jurisdiction has been delegated this responsibility.

(iv) A description of the proposal.

(A) Proposals for coverage under a general permit must cite the name of the general permit.

(B) Proposals for land application plans must contain information on the location of the proposed land application sites and, if applicable, the source(s) of biosolids that may be applied.

(C) Proposals for general land application plans must provide information on how the public will be notified when specific sites are identified.

(v) A brief statement describing the applicant's biosolids or sewage sludge management practices.

(vi) A statement describing an interested person's opportunity to comment or request a public hearing or meeting on the proposal, including the last date for comments or requests and the contact person to whom comments or requests must be directed.

(A) The period for comments and requests must be at least thirty days following the posting.

(B) Comments and requests should be directed to the responsible department of ecology contact or the responsible local health jurisdiction contact if the authority is delegated.

(C) The following is an example: "Any person wishing to comment on this proposal or wishing to request a public hearing or meeting must do so in writing within thirty days of this notice. Comments should be addressed to (insert either 'the department of ecology contact listed' or 'the local health jurisdiction contact listed')."

(vii) The statement, "If you wish to be included on an interested parties list to receive notification of activities relating to this project, please notify, in writing, the (insert facility name) contact listed. (Insert facility name) will provide written confirmation by certified mail, return receipt requested, to each interested person or organization that their name has been placed on the list."
(viii) Any additional information considered necessary or proper.

(h) Notice to interested parties. Notices must be sent to all persons on a facility’s interested parties list at the same time or before notice is run in a newspaper or posted at a land application site.

(i) Notices at land application sites. Notices at land application sites must be posted at all significant site access points and at least every 1/2 mile (805 meters) around the perimeter of the site.

(j) Following the completion of public notice and comment period requirements, the facility must provide written documentation to the department certifying completion of the process in accordance with the following:

(i) When newspaper notice has been conducted, either an Affidavit of Publication must be submitted or a copy of the newspaper notice that shows the date of publication must be submitted.

(ii) When site posting has been conducted, a copy of the final notice posted and a brief description describing how site posting and notification was conducted.

(k) Notice must be given by any other method required by the department.

(14) Public hearings and meetings.

(a) The department may require an applicant to hold a public hearing or meeting when applying for a permit or for any land application plan if it finds, on the basis of requests, a significant degree of public interest or if it determines 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 (13) 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 (13) of this section.

(c) Notice of a 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 (13) 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 that has lead responsibility for the permit.

(B) Any applicable local health jurisdiction that has accepted delegation of authority for conducting public hearings.

(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 publication of the notice required in (c) of this subsection and at a time and place as can be reasonably expected to be convenient to the department and interested parties.

(f) 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.

(g) Notice of a meeting. Requirements for notice conducted for public meetings are the same as that required for public hearings unless otherwise allowed by the department.

(15) Record and response to comments received on an application or during a public hearing or meeting.

(a) The department will maintain a record of all written comments received during the public comment period in subsection (13) of this section, and of all comments properly submitted in response to a public hearing required under subsection (14) 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 a permit.

(c) The department is not obligated to consider or respond to comments or information that is received later than thirty days after the date of publication of public notice, or the date of a public hearing, whichever is later.

(16) 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 subsection 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.

(17) 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, and for every draft individual permit that the director finds is the subject of widespread public interest or raises major issues.

(i) 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.
(ii) The director must send this fact sheet to the applicant and, on request, to any other person.

(b) **Fact sheet contents.** The fact sheet must include all of the following:

(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 sewage sludge disposal, including a citation to the applicable standards for biosolids use or sewage sludge 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.

(iii) For permits that include a general land application plan, a brief description of how each of the required elements of the land application plan is addressed in the permit.

(18) **Approval of coverage - provisional approval and final coverage.**

(a) **Provisional approval.** Except for new beneficial use facilities as described in (a)(ii) of this subsection, facilities that are in compliance with this chapter, an applicable permit, and any plans submitted as part of a request to obtain a permit are provisionally approved to engage in the biosolids management activities proposed in their applications.

(i) 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, an applicable permit, and any plans submitted as part of a request to obtain a permit.

(ii) New beneficial use facilities may not obtain provisional approval.

(b) **Final coverage.** After reviewing a permit application 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.

If final approval is issued, the department will notify the applicant in writing of its decision including any additional requirements or stipulations that are imposed as a condition of approval in accordance with subsection (19) of this section.

(c) **Disapproval.** If an application for a permit is disapproved, the department will notify the applicant in writing, including an explanation of why the application was disapproved.

(d) 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 permit, or as approving final use or disposal practices that are not consistent with the provisions of this chapter or an applicable permit, or that pose a threat to human health or the environment.

(19) **Additional or more stringent requirements.**

(a) 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 or the environment from any adverse effect of a pollutant in the biosolids or to ensure compliance with this chapter.

(b) 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.

(c) The department will impose any additional or more stringent requirements in an individual permit issued to a facility, in general permits issued in accordance with Appendix 5 of this chapter, and in the issuance of final coverage under a general permit.

(d) Any additional or more stringent requirements imposed in accordance with this section are considered to be permit requirements, fully enforceable in accordance with the provisions of this chapter and the applicable permit.

(e) 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 (15)(b) of this section.

(20) **Prohibition.** The department may not issue a permit when the Regional Administrator of EPA has objected in writing under 40 CFR 123.44.

(21) **Duration of permits.**

(a) Permits are issued for fixed terms up to, but not exceeding, five years from the effective date of the permit. Final 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.

(22) **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) **Automatic transfer.** Coverage under a permit is automatically transferred from the old permittee to a new permittee on the date agreed to if all of the following conditions are met:

(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 (b)(i)(A) through (D) of this subsection at least thirty days in advance of the proposed date of transfer.

(A) The original to the biosolids coordinator in the regional office of the department where the facility is located.

(B) One copy to any other regional office of the department where the facility's biosolids or sewage sludge will be treated, stored, disposed, or applied to the land.

(C) One copy to the biosolids coordinator at the department's headquarters office.

(D) One copy to the local health jurisdiction in each county where biosolids or sewage sludge will be treated, stored, disposed, or applied to the land.

(ii) The department has not notified both permittees of any objection to the transfer, or of the intent to revoke the permit.

(5/24/07)
(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.

(23) MODIFICATION OR REVOCATION AND REISSUANCE OF PERMITS

(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 a permit and may request an updated application if necessary.

(ii) When a permit is modified, only the conditions subject to modification are reopened.

(iii) If a permit is revoked and reissued, the entire permit is reopened and subject to revision, and the 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 a permit.

(b) Causes for modification. The following are causes for modification but not revocation and reissuance of permits 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. A permit may be modified during its term for this cause only if the information was not available at the time of permit issuance that justify 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) Causes for modification or revocation and reissuance. The following are causes to modify or, alternatively, revoke and reissue a permit.

(i) Cause exists for termination under subsection (24) 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) Public notice requirements. When a permit is modified or revoked and reissued, the public notice requirements of subsection (13) of this section, and if required the public hearing requirements of subsection (14) of this section must be complied with for the reopened conditions or reissued permit.

(24) Causes for termination of permits, denying permit applications, or denying expansion of an existing permit. The following are causes for terminating a permit during its term, or for denying a permit application, or for denying an expansion of an existing permit:

(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.

(d) A change in any condition that requires either a temporary or a permanent reduction or elimination of any activity controlled by the permit.

(e) Failure by the permittee to pay a permit fee issued in accordance with WAC 173-308-320.

(25) Requirement to coordinate permitting with delegated local health jurisdictions. When a local health jurisdiction 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 jurisdiction by coordinating permitting activities so as to ensure an efficiency for local health jurisdiction involvement consistent with the terms of the delegation agreement.

WAC 173-308-320 Permit fees. (1) All facilities that are required to obtain a permit must pay an annual biosolids permit fee to the department.

(2) Biosolids permit fees are assessed on an annual basis and apply regardless of the date of issuance of a permit.

(3) Except for those facilities described in subsection (4)(h) of this section, biosolids permit fees are assessed and collected for fiscal years for wastewater treatment facilities and for calendar years for receiving-only facilities and septic management facilities. Fees are due and payable within forty-five days after the department mails a billing statement.

(a) Fees are considered delinquent if they are not received by the first invoice billing due date.

(i) If a fee is determined to be delinquent, the permittee 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.

(ii) Failure to pay a fee is a cause for termination of a permit in accordance with WAC 173-308-310(24).
(b) Upon request from the permittee, the department may at its discretion mail partial billing statements up to two times per year, in which case a facility is responsible only for the amount reflected on the current (and any past due) billing statement.

(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. All charges per residential equivalent and any maximum fees listed in this subsection will be adjusted by the annual fiscal growth factor calculated under chapter 43.135 RCW.

(a) All facilities required or requesting to obtain a permit or approval are assigned a minimum of one residential equivalent.

(b) 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 residential equivalent values determined under chapter 173-224 WAC. If no residential equivalent value is determined under chapter 173-224 WAC, the number of residences connected to the system or another appropriate criteria will be used to determine the residential equivalent value.

(c) The residential equivalent value for receiving-only facilities other than septage management facilities in (e) of this subsection is the sum of the residential equivalent values contributed from all sources, as determined by considering the portion of the current annual production of each originating source that is provided to the receiving facility.

(d) The residential equivalent value for facilities located outside of the state (e.g., those on tribal lands, other states, and other nations) who export solids into the state will be based on the portion of the current annual production of the facility that is exported into the state.

(e) For septage management facilities, each 1,250 gallons of septage received for treatment or applied to the land is equal to one residential equivalent.

(f) Equations (5) and (6), below, are used to calculate permit fees:

Equation (5)

\[ \text{Permit Fee} = (\text{REV} \times \text{Cost per RE}_{FGF}) \]

Where:

\( \text{REV} \) = residential equivalent value.
\( \text{FGF} \) = an annual fiscal growth factor expressed as a percentage, as determined under chapter 43.135 RCW.

Cost per \( \text{RE}_{FGF} \) = cost per residential equivalent in dollars including a fiscal growth factor. The cost per \( \text{RE}_{FGF} \) is obtained by multiplying the cost per residential equivalent in the preceding year by the current year's fiscal growth factor as follows in equation (6).

Equation (6)

\[ \text{Cost per RE}_{FGF} = \text{Previous year's cost per RE} \times [1 + (\text{FGF})] \]

(g) For implementation of the fiscal growth factor, the base year for all biosolids permit fees will be fiscal year 2008, ending June 30, 2008. In the base year, the FGF will be zero (0).

(h) **Review fee for new facilities.** New facilities proposed after July 1, 2007, will be required to pay a nonrefundable fee of $1,800.00 for the first residential equivalent prior to departmental review of an application package or proposal. In addition, following issuance of a permit or approval, the facility will be subject to the fees described in (i) of this subsection.

(i) A cost of $600.00 will be assigned to the first residential equivalent for all facilities. The cost per subsequent residential equivalent in the base year will be as follows:

(i) $0.00 per residential equivalent for permits issued to municipalities that own or operate incinerators that fire sewage sludge to dispose of sewage sludge generated by their own facility in a municipal solid waste landfill or through another facility on an emergency basis.

(ii) $0.051 per residential equivalent up to a maximum of $3000.00 for permits issued to receiving-only facilities.

(iii) $0.215 per residential equivalent for permits authorizing any other type of solids 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 to an incinerator from nonincinerating jurisdictions.

(C) Prolonged treatment or storage including, but not limited to, lagoon systems.

(D) Treatment or land application of septage.

(E) Disposal of sewage sludge in a municipal solid waste landfill except for facilities under (i)(i) of this subsection.

(F) Exporting biosolids or sewage sludge from facilities located outside of the state.

(iv) $0.16 per residential equivalent above 100,000.

(5) Following is a summary table showing the equations used to calculate fees for the base year.

<table>
<thead>
<tr>
<th>Facility Type</th>
<th>Fee Formula for Base Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Septage management</td>
<td>$600 + (gallons \times 1,250 \times $0.215)</td>
</tr>
<tr>
<td>Receiving-only (includes beneficial use facilities)</td>
<td>$600 + (\text{REV}_{\text{received}} \times $0.051) Maximum of $3,000</td>
</tr>
<tr>
<td>Out-of-state</td>
<td>$600 + (\text{REV}_{\text{exported}} \times $0.215)</td>
</tr>
<tr>
<td>Incineration</td>
<td>$600.00</td>
</tr>
<tr>
<td>All others (includes most wastewater treatment facilities)</td>
<td>$600 + (\text{REV}<em>{100,000} \times $0.215) + (\text{REV}</em>{100,000} \times $0.16)</td>
</tr>
<tr>
<td>New facility review fee</td>
<td>$1,800</td>
</tr>
</tbody>
</table>

Where:

\( \text{REV}_{\text{received}} \) = residential equivalent values received (based on the portion of the residential equivalent values contributed from each source).

\( \text{REV}_{\text{exported}} \) = residential equivalent values exported (based on the portion of the annual production of the facility that is exported into the state).

\( \text{REV}_{100,000} \) = residential equivalent values less than 100,000.

\( \text{REV}_{>100,000} \) = residential equivalent values greater than or equal to 100,000.

(5/24/07)

**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).

\[
\text{APLR} = C \times \text{AWBAR} \times 0.001 \quad \text{Equation (7)}
\]

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):

\[
\text{AWBAR} = \frac{\text{APLR}}{C \times 0.001} \quad \text{Equation (8)}
\]

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.
A solid waste permit has been issued for a site.

The activities conducted by the applicant that require coverage.

(3) Name, mailing address, and location of the facility for which the application is submitted.

(4) The operator's name, address, telephone number, ownership status, and status as federal, state, private, public, or other entity.

(5) The location and a description of any site(s) where biosolids or sewage sludge are treated, stored, disposed, or applied, and whether or not any permit, including a local solid waste permit has been issued for a site.

(6) Any information specifically required for a notice of intent under the applicable general permit.

WAC 173-308-90003 Appendix 3—Minimum content for a site specific land application plan. (1) Whether or not it is known or can be determined that biosolids containing pollutants in excess of the values WAC 173-308-160 Table 3 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).

(2) 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.

(3) An explanation of how agronomic rates will be determined during the life of the site, along with any currently available calculations. Whenever agronomic rates or the method used to determine agronomic rates change, an update of the agronomic rate calculations must be filed with the department.

(4) Method(s) of application.

(5) Seasonal and daily timing of biosolids applications.

(6) Provisions for conducting any sampling of soils, surface waters, or groundwater and any available data collected from the site within the last two years.

(7) The name of the county and water resource inventory area where biosolids will be applied.

(8) A description of how biosolids will be stored at the site that also addresses related offsite storage.

(9) Map(s) for the site(s) must be submitted. Maps must be of an appropriate scale to show the detail necessary for evaluation of the proposed application areas and so that a person may reasonably be able to locate the sites and any application units within a site (for example, 1:7,920 (eight inches to the mile) for detailed information with an overview map at 1:63,360 (one inch to the mile)). Minimally, maps must provide the following information:

(a) A legend.

(b) The location and means of access.

(c) Specific areas of the site where biosolids may be applied. If there is more than one site or more than one application unit within a site, a site or unit ID number should be included.

(d) The number of acres in the site or in any distinct application unit within a site.

(e) Location and extent of any wetlands on the site.

(f) A topographic relief of the application site and surrounding area.

(g) Adjacent properties and uses and their zoning classification.

(h) Any seasonal surface water bodies located on the site.

(i) Any perennial surface water bodies located on or within one-quarter mile (402 meters) of the site.

(j) The location of any wells located on or within one-quarter mile (402 meters) of the site that are listed in public records or otherwise known to the applicant, whether for domestic, irrigation, or other purposes.

(k) Buffer zones to features such as surface waters, wells, property boundaries, and roadways and the width of the buffer zones.

(l) The presence and extent of any threatened or endangered species or related critical habitat.

(m) 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.

(n) The location and size of any areas that will be used to store biosolids.

(10) If the seasonal groundwater is three feet (0.91 meters) or less below the surface, a management plan describing how you will protect groundwater. For example, you may propose to limit applications to the time of year when groundwater has receded to less than three feet (0.91 meters) below the surface.

(11) A description of how access to the site will be restricted (e.g., signs posted around the site or other approved method of access restriction).

(12) A copy of the landowner agreement required under WAC 173-308-120(6).

(13) Any additional information requested by the department that is needed to evaluate the appropriateness of the site for biosolids application.

[Statutory Authority: Chapters 70.95J and 70.95 RCW. 07-12-010 (Order 06-06), § 173-308-90003, filed 5/24/07, effective 6/24/07.]
WAC 173-308-90005 Appendix 5—Procedures for issuing general permits. When the department issues general permits, it will do so in accordance with the procedures in this section.

1) General permit coverage.
   (a) The director may issue general permits to satisfy any or all of the biosolids management requirements in chapter 70.95J RCW or other applicable state or federal biosolids management requirements.
   (b) The director may issue general permits to cover categories or subcategories of facilities within appropriate geographic areas.
   (c) General permits may be written to cover categories of treatment works treating domestic sewage that meet all of the following requirements:
      (i) Involve the same or substantially similar types of operations.
      (ii) Engage in the same types of biosolids use or sewage sludge disposal practices.
      (iii) Require the same or substantially similar operating conditions or standards for biosolids use or sewage sludge disposal.
      (iv) Require the same or substantially similar monitoring.
      (v) In the opinion of the director are more appropriately controlled under a general permit than under individual permits.

2) General permit preparation—preliminary determination.
   (a) For all general permits, the department must make a preliminary determination to develop a general permit.
      (i) Interested persons may petition the director requesting that a category of facilities be considered for the development of a general permit.
      (ii) The department must respond to such a petition within ninety days of receipt.
   (b) The department must provide public notice of all preliminary determinations to develop a general permit pursuant to subsection (5)(a) of this section.
   (c) In the event that the department determines not to develop a general permit after publishing a preliminary determination pursuant to subsection (5)(a) of this section, the department must provide public notice to that effect in the same manner as the preliminary determination public notice was provided.

3) Fact sheets.
   (a) The department must prepare a fact sheet for every draft general permit determination. Such fact sheets must summarize the following:
      (i) The legal basis of the permitting program.
      (ii) The type of facility or activity which is the subject of the general permit.
      (iii) The geographical area for which the general permit is valid.
      (iv) The criteria for which coverage under a general permit will be approved.
      (v) If available, a listing or some other means of identifying the facilities proposed to be covered under the general permit.
      (vi) The information required to be submitted as part of the application for coverage under the general permit.

   (b) The department must provide copies of general permit fact sheets to any interested person upon request.

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   (a) For all general permits, the department must make a preliminary determination to develop a general permit.
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      (iv) The criteria for which coverage under a general permit will be approved.
      (v) If available, a listing or some other means of identifying the facilities proposed to be covered under the general permit.
      (vi) The information required to be submitted as part of the application for coverage under the general permit.

   (b) The department must provide copies of general permit fact sheets to any interested person upon request.

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   (b) The department must provide public notice of all preliminary determinations to develop a general permit pursuant to subsection (5)(a) of this section.
   (c) In the event that the department determines not to develop a general permit after publishing a preliminary determination pursuant to subsection (5)(a) of this section, the department must provide public notice to that effect in the same manner as the preliminary determination public notice was provided.

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      (iv) The criteria for which coverage under a general permit will be approved.
      (v) If available, a listing or some other means of identifying the facilities proposed to be covered under the general permit.
      (vi) The information required to be submitted as part of the application for coverage under the general permit.

   (b) The department must provide copies of general permit fact sheets to any interested person upon request.

5) General permit preparation—preliminary determination.
   (a) For all general permits, the department must make a preliminary determination to develop a general permit.
      (i) Interested persons may petition the director requesting that a category of facilities be considered for the development of a general permit.
      (ii) The department must respond to such a petition within ninety days of receipt.
   (b) The department must provide public notice of all preliminary determinations to develop a general permit pursuant to subsection (5)(a) of this section.
   (c) In the event that the department determines not to develop a general permit after publishing a preliminary determination pursuant to subsection (5)(a) of this section, the department must provide public notice to that effect in the same manner as the preliminary determination public notice was provided.

6) Fact sheets.
   (a) The department must prepare a fact sheet for every draft general permit determination. Such fact sheets must summarize the following:
      (i) The legal basis of the permitting program.
      (ii) The type of facility or activity which is the subject of the general permit.
      (iii) The geographical area for which the general permit is valid.
      (iv) The criteria for which coverage under a general permit will be approved.
      (v) If available, a listing or some other means of identifying the facilities proposed to be covered under the general permit.
      (vi) The information required to be submitted as part of the application for coverage under the general permit.

   (b) The department must provide copies of general permit fact sheets to any interested person upon request.
(iii) A comparison, to the greatest extent possible, of the cost of compliance for small businesses with the cost of compliance for the largest ten percent of the facilities intended to be covered under the general permit. The economic impact analysis must use one or more of the following as a basis for comparing costs:

(A) Cost per employee.
(B) Cost per hour of labor.
(C) Cost per one hundred dollars of sales.

(d) The following compliance costs associated with a general permit must not be included in the economic impact analysis:

(i) The costs necessary to comply with chapter 173-308 WAC.
(ii) The costs associated with requirements of the general permit which result from conformity or compliance, or both, with federal law or regulations.

(5) Public notice. The department must provide public notice of all preliminary determinations to develop a general permit, all determinations not to develop a general permit after publishing such a preliminary determination, all draft general permit determinations, and the issuance of a final general permit. All public notices must be circulated in a manner designed to inform interested and potentially affected persons of the proposed general permit.

(a) Public notice for preliminary determinations. The department must provide public notice of all preliminary determinations to develop a general permit as follows:

(i) The public notice must be circulated within the geographical area of the proposed general permit. Such notice may include any or all of the following:

(A) Publishing, as a paid advertisement or legal notice, the department's preliminary determination in one or more major local newspapers throughout the area of proposed coverage.
(B) Issuance of news releases, focus sheets, or newsletters.
(C) Publication in the State Register.

(ii) The department must request comments on whether a general permit is appropriate for the proposed category of facilities or whether individual permits are necessary.

(iii) The public notice must provide an opportunity for any interested or potentially affected party to submit information on facilities proposed to be covered under a general permit including:

(A) Any documented information on the characteristics of the biosolids including quantity, quality, and any land application sites. Information may be from an individual facility or be representative of the category as a whole.
(B) Any other relevant information.

(iv) The department must add the name of any person upon request to a general permit specific mailing list to receive information and notices related to the development of the general permit.

(b) In the event that the department determines not to develop a general permit after publishing a preliminary determination pursuant to (a) of this subsection, the department must provide public notice to that effect.

(c) Public notice for draft general permits. The department must provide public notice of every draft general permit as follows:

(i) The notice must be circulated throughout the geographical area covered by the general permit. Such circulation may include any or all of the following:

(A) Posting for a period of thirty days in post offices, public libraries, and public places within the geographical area covered by the general permit.
(B) Publishing the notice as a paid advertisement, display advertisement, or legal notice, in one or more major local newspapers of general circulation serving the area covered by the general permit.
(C) Issuance of news releases, focus sheets, or newsletters.

(ii) Notice must be mailed to any person upon request, including all persons on the general permit specific mailing list established pursuant to (a)(iv) of this subsection and all known, potential permittees.

(iii) At least thirty days before the public hearing(s) required in subsection (7) of this section, the department must have the following published in the State Register:

(A) The public notice contents contained in (c)(vi) of this subsection.
(B) A reference to the relevant sections of chapter 70.95J RCW as the statutory authority for issuing the general permit.
(C) The date on which the agency intends to issue the general permit.
(D) A short explanation of the permit, its purpose, and anticipated effects.
(E) A summary of the economic impact analysis required in subsection (4) of this section.

(iv) Public comment period. The department must provide a period of not less than thirty days following the last publication of the public notice, during which time interested persons may submit their written views on a draft general permit determination. All written comments submitted during the comment period must be retained by the department and considered in the formulation of its final determination with respect to the draft general permit. The period for comment may be extended at the discretion of the department.

(v) The department must make available during the public comment period:

(A) The draft general permit.
(B) The fact sheet on the draft general permit required pursuant to subsection (3) of this section.
(C) The economic impact analysis required pursuant to subsection (4) of this section.
(D) A copy of the proposed application for coverage.
(E) The notice required pursuant to (c)(iii) of this subsection.

(vi) The contents of the draft general permit public notice must, at a minimum, summarize the following:

(A) The name, address, and phone number of the agency issuing the public notice.
(B) The type of facilities and activities which are the subject of the general permit.
(C) The geographical area for which the general permit is valid.
(D) The criteria for which coverage under a general permit will be approved.
(E) If available, a listing or some other means of generally identifying the facilities proposed to be covered under the general permit.
(F) The tentative determination to issue a general permit.

(G) The procedures for the formulation of final determinations, including the thirty-day comment period required in (c)(iv) of this subsection and any other means by which interested persons may comment upon those determinations.

(H) The date, time, and place when the public hearing(s) required in subsection (7) of this section will be held.

(i) The address and phone number of state premises at which interested persons may obtain further information.

(J) The date and time after which comments will not be considered by the department in formulating the final determination on the draft general permit.

(d) Public notice for final general permits. The department must provide public notice of the issuance of a final general permit as follows:

(i) The notice of general permit issuance must be circulated in a manner similar to that used to circulate the notice on the draft general permit in (c)(i) of this subsection and must be published in the State Register.

(ii) The notice of general permit issuance must be provided to all persons on the general permit specific mailing list established pursuant to (a)(iv) of this subsection and all known, potential permittees.

(iii) The public notice of the issuance of a general permit must contain:

(A) The name, address, and phone number of the agency issuing the public notice.

(B) The type of facilities and activities which are the subject of the general permit.

(C) The geographical area for which the general permit is valid.

(D) The criteria for which coverage under a general permit will be approved.

(E) If available, a listing or some other means of generally identifying the facilities proposed to be covered under the general permit.

(F) A summary of the application process by which eligible facilities may obtain coverage under the general permit.

(G) An explanation of any changes to the final general permit, other than editing changes, and the principal reasons for adopting the changes.

(H) A notice that the terms and conditions of the general permit may be appealed only by filing an appeal with the department within thirty days, and the process for doing so as contained in RCW 43.21B.310.

(I) The date after which the general permit will be effective. The effective date of a general permit must be no sooner than thirty days after the publication in the State Register of the public notice required pursuant to (d)(i) of this subsection.

(6) Notice to other government agencies. The department must notify other appropriate government agencies of each draft general permit determination and must provide such agencies an opportunity to submit their written views and recommendations.

(7) Public hearings.

(a) The department must hold one or more public hearings on all draft general permits. The public hearing must be held during the public comment period provided pursuant to subsection (5)(c)(iv) of this section.

(b) The date, time, and place will be at the discretion of the department provided:

(i) At least thirty days is provided between the time the public notice is published pursuant to subsection (5)(c)(i) and (iii) of this section, and the time the hearing is held.

(ii) The hearing location is within the geographical area covered by the general permit.

(c) The department must cause a record to be made of all hearings required pursuant to this section. The record may be stenographic, mechanical, or electronic.

(8) Public access to information.

(a) In accordance with chapter 42.17 RCW and its published policy describing disclosure of public records, the department must make identifiable public records relating to all general permits available to the public for inspection and copying.

(b) The department must designate a general permit coordinator for each general permit. The coordinator must:

(i) Have knowledge of the general permit being prepared.

(ii) Maintain the records associated with the development of the general permit including the general permit file required pursuant to (c) of this subsection.

(iii) Be identified as the department contact in public notices regarding the general permit.

(c) General permit development file. The department must prepare a general permit development file for each issued general permit. The general permit development file must be available for public inspection subject to the provisions of this section. The general permit development file must contain:

(i) Copies of all public notices required pursuant to subsection (5) of this section.

(ii) A copy of the fact sheet required pursuant to subsection (3) of this section and any other documents not readily available to the public which were used in developing the terms and conditions of the general permit.

(iii) A copy of the economic impact analysis required pursuant to subsection (4) of this section.

(iv) Copies of the draft and final general permits and the application for coverage.

(v) All written comments received during the public comment period required pursuant to subsection (5)(c)(iv) of this section, on the draft general permit, fact sheet, economic impact analysis, and application for coverage.

(vi) The record of public hearings produced pursuant to subsection (7)(c) of this section.

(vii) The response to comments prepared pursuant to subsection (9)(a) of this section.

(d) The department must add the name of any person, upon request, to a mailing list to receive notices of department actions associated with a general permit.

(e) The department must provide facilities for the inspection of information relating to general permits and must ensure that employees honor requests for such inspection promptly without undue requirements or restrictions. The department must do either:

(i) Ensure that a machine or device for the copying of papers and documents is available for a reasonable fee.
(ii) Otherwise provide for, or coordinate with copying facilities or services such that requests for copies of nonconfidential, identifiable public records be honored promptly.

(9) Issuance of general permits.

(a) At the close of the public comment period required pursuant to subsection (5)(c)(iv) of this section, the department must prepare a response to all relevant comments received (both written and oral) and must briefly describe any changes, other than editing changes, and the principal reasons for making the changes to the draft general permit.

(b) General permits must be deemed issued upon signing by the director or by a person delegated the authority to issue general permits pursuant to chapter 173-06 WAC.

(c) The department must provide public notice of the issuance of all final general permits pursuant to subsection (5)(d) of this section.

(d) General permits become effective thirty days after the date of publication in the State Register of the public notice required pursuant to subsection (5)(d) of this section unless a later date is specified by the department.

(10) Appeals.

(a) The terms and conditions of a general permit as they apply to the appropriate class of facilities are subject to appeal within thirty days of issuance of a general permit in accordance with chapter 43.21B RCW.

(b) The terms and conditions of a general permit, as they apply to an individual facility, are appealable, within thirty days of the effective date of coverage of that facility, in accordance with chapter 43.21B RCW. This appeal is limited to the general permit's applicability or nonapplicability to that individual facility.

(c) The appeal of general permit coverage of an individual facility does not affect any other facilities covered under the general permit. If the terms and conditions of a general permit are found to be inapplicable to any individual facility, the matter must be remanded to the department for consideration of issuance of an individual permit or permits.

(11) Modification, revocation and reissuance, and termination of general permits. A general permit may be modified, revoked and reissued, or terminated, during its term for cause including, but not limited to, the following:

(a) A change occurs in the technology or practices for control or abatement of pollutants applicable to the category of facilities covered under the general permit.

(b) New biosolids or sewage sludge guidelines or standards are promulgated pursuant to the Clean Water Act or chapter 70.95J RCW, for the category of facilities covered under the general permit.

(c) Information is obtained which indicates that cumulative effects on the environment from facilities covered under the general permit are unacceptable.

(12) Notice for determinations to modify or revoke. In the event that the director has determined to modify or revoke, in whole or in part, a general permit pursuant to subsection (11) of this section the director must notify, in writing, all facilities covered under the general permit. The notification must include:

(a) The reason(s) why the general permit is being revoked or modified.

(b) The process for appealing the determination pursuant to RCW 43.21B.310.

[Statutory Authority: Chapters 70.95J and 70.95 RCW. 07-12-010 (Order 06-06), § 173-308-90005, filed 5/24/07, effective 6/24/07.]