Chapter 173-350 WAC
SOLID WASTE HANDLING STANDARDS

WAC

173-350-010	Purpose.
173-350-020	Applicability.
173-350-025	Owner responsibilities for solid waste.
173-350-030	Effective dates.
173-350-040	Performance standards.
173-350-100	Definitions.
173-350-200	Beneficial use permit exemptions.
173-350-210	Recycling.
173-350-220	Composting facilities.
173-350-225	Other organic material handling activities.
173-350-230	Land application.
173-350-240	Energy recovery and incineration facilities.
173-350-250	Anaerobic digesters.
173-350-300	On-site storage, collection and transportation standards.
173-350-310	Intermediate solid waste handling facilities.
173-350-320	Piles used for storage or treatment.
173-350-330	Surface impoundments and tanks.
173-350-350	Waste tire storage and transportation.
173-350-360	Moderate risk waste handling.
173-350-400	Limited purpose landfills.
173-350-410	Inert waste landfills.
173-350-490	Other methods of solid waste handling.
173-350-500	Groundwater monitoring.
173-350-600	Financial assurance requirements.
173-350-700	Permits and local ordinances.
173-350-710	Permit application and issuance.
173-350-715	General permit application requirements.
173-350-900	Remedial action.
173-350-990	Criteria for inert waste.

WAC 173-350-010 Purpose. This chapter is adopted under the authority of chapter 70.95 RCW, Solid waste management—Reduction and recycling, to protect public health, to prevent land, air, and water pollution, and conserve the state's natural, economic, and energy resources by:

(1) Setting minimum functional performance standards for the proper handling and disposal of solid waste originating from residences, commercial, agricultural and industrial operations and other sources;

(2) Identifying those functions necessary to assure effective solid waste handling programs at both the state and local level;

(3) Following the priorities for the management of solid waste as set by the legislature in chapter 70.95 RCW, Solid waste management—Reduction and recycling.

(4) Describing the responsibility of persons, municipalities, regional agencies, state and local government related to solid waste;

(5) Requiring solid waste handling facilities to be located, designed, constructed, operated and closed in accordance with this chapter;

(6) Promoting regulatory consistency by establishing statewide minimum standards for solid waste handling; and

(7) Encouraging the development and operation of waste recycling facilities and activities needed to accomplish the management priority of waste recycling.

[Statutory Authority: Chapter 70.95 RCW. WSR 03-03-043 (Order 99-24), § 173-350-010, filed 1/10/03, effective 2/10/03.]

WAC 173-350-020 Applicability. This chapter applies to facilities and activities that manage solid wastes as that term is defined in WAC 173-350-100. This chapter does not apply to the following:

(1) Overburden from mining operations intended for return to the mine;

(2) Wood waste used for ornamental, animal bedding, mulch and plant bedding, or road building purposes;

(3) Wood waste directly resulting from the harvesting of timber left at the point of generation and subject to chapter 76.09 RCW, Forest practices;

(4) Land application of manures and crop residues at agronomic rates;

(5) Agricultural composting when all agricultural wastes are generated, processed, and applied on-farm at agronomic rates in accordance with accepted agricultural practices. This categorical exemption does not apply to producers subject to RCW 70.95.306, composting of bovine and equine carcasses;

(6) Mushroom substrate production when materials that are not solid waste (such as processed chicken manure) are used in the production;

(7) Home composting as defined in WAC 173-350-100;

(8) Single-family residences and single-family farms whose year round occupants engage in solid waste disposal regulated under WAC 173-351-700(4);

(9) Clean soils and clean dredged material as defined in WAC 173-350-100;

(10) Dredged material as defined in 40 C.F.R. 232.2 that is subject to:

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

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

(c) In the case of U.S. Army Corps of Engineers civil works projects, the administrative equivalent of the permits referred to in (a) and (b) of this subsection, as provided for in U.S. Army Corps of Engineers regulations, including, for example, 33 C.F.R. 336.1, 336.2, and 337.6;

(11) Biosolids that are managed under chapter 173-308 WAC, Biosolids management;

(12) Domestic septage taken to a sewage treatment plant permitted under chapter 90.48 RCW, Water pollution control;

(13) Liquid wastes, the discharge or potential discharge of which, is regulated under federal, state or local water pollution permits;

(14) Domestic wastewater facilities and industrial wastewater facilities otherwise regulated by federal, state, or local water pollution permits;

(15) Dangerous wastes fully regulated under chapter 70.105 RCW, Hazardous waste management, and chapter 173-303 WAC, Dangerous waste regulations;

(16) Special incinerator ash regulated under chapter 173-306 WAC, Special incinerator ash management standards;

(17) PCB wastes regulated under 40 C.F.R. Part 761, Polychlorinated Biphenyls (PCBs) Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions, except for:

(a) PCB household waste; and

(b) PCB bulk product wastes identified in 40 C.F.R. Part 761.62 (b)(1) that are disposed of in limited purpose landfills;

(18) Radioactive wastes, defined by chapter 246-220 WAC, Radiation protection—General provisions, and chapter 246-232 WAC, Radioactive protection—Licensing applicability;

(19) Landfilling of municipal solid waste regulated under chapter 173-351 WAC, Criteria for municipal solid waste landfills;

(20) Drop boxes used solely for collecting recyclable materials;

(21) Intermodal facilities as defined in WAC 173-350-100; and

(22) Solid waste handling facilities that have engaged in closure and closed before the effective date of this chapter.

[Statutory Authority: RCW 70.95.020(3), 70.95.060(1), 70.95.260(6), 70.95.305, 70.95.330. WSR 13-08-016 (Order 10-06), § 173-350-020, filed 3/25/13, effective 4/25/13. Statutory Authority: Chapter 70.95 RCW. WSR 03-03-043 (Order 99-24), § 173-350-020, filed 1/10/03, effective 2/10/03.]

WAC 173-350-025 Owner responsibilities for solid waste. The owner, operator, or occupant of any premise, business establishment, or industry shall be responsible for the satisfactory and legal arrangement for the solid waste handling of all solid waste generated or accumulated by them on the property.

[Statutory Authority: Chapter 70.95 RCW. WSR 03-03-043 (Order 99-24), § 173-350-025, filed 1/10/03, effective 2/10/03.]

WAC 173-350-030 Effective dates. (1) *Effective dates.* These standards apply to all facilities, except existing facilities, when updated or new sections in this chapter become effective.

(2) *Effective dates - Existing facilities*.

(a) The owner or operator of existing facilities must:

(i) Meet all applicable operating, environmental monitoring, closure and post-closure planning, and financial assurance requirements of this chapter by June 30, 2014; and

(ii) Meet all applicable performance and design requirements, other than location or setback requirements, by December 31, 2014.

(b) These standards apply to all new solid waste handling units at existing facilities upon the effective date of this chapter.

(c) If, as determined by the jurisdictional health department, significant changes to the operation, design, capacity, performance, or monitoring of a facility are needed to meet updated or new sections of this chapter, the owner or operator of existing facilities must initiate the permit modification process outlined in WAC 173-350-710(4) by December 31, 2013. If a permit modification is necessary, every application for a permit modification must describe the date and methods for altering an existing facility to meet (a)(i) and (ii) of this subsection.

(d) The jurisdictional health department must determine if a new permit application is required based on the extent of the changes needed to bring the facility into compliance.

(e) All facilities must close in compliance with applicable requirements of this chapter.

[Statutory Authority: RCW 70.95.020(3), 70.95.060(1), 70.95.260(6), 70.95.305, 70.95.330. WSR 13-08-016 (Order 10-06), § 173-350-030, filed 3/25/13, effective 4/25/13. Statutory Authority: Chapter 70.95 RCW. WSR 03-03-043 (Order 99-24), § 173-350-030, filed 1/10/03, effective 2/10/03.]

WAC 173-350-040 Performance standards. The owner or operator of all solid waste facilities subject to this chapter shall:

(1) Design, construct, operate, and close all facilities in a manner that does not pose a threat to human health or the environment;

(2) Comply with chapter 90.48 RCW, Water pollution control and implementing regulations, including chapter 173-200 WAC, Water quality standards for groundwaters of the state of Washington;

(3) Conform to the approved local comprehensive solid waste management plan prepared in accordance with chapter 70.95 RCW, Solid waste management—Reduction and recycling, and/or the local hazardous waste management plan prepared in accordance with chapter 70.105 RCW, Hazardous waste management;

(4) Not cause any violation of emission standards or ambient air quality standards at the property boundary of any facility and comply with chapter 70.94 RCW, Washington Clean Air Act; and

(5) Comply with all other applicable local, state, and federal laws and regulations.

[Statutory Authority: Chapter 70.95 RCW. WSR 03-03-043 (Order 99-24), § 173-350-040, filed 1/10/03, effective 2/10/03.]

WAC 173-350-100 Definitions. When used in this chapter, the following terms have the meanings given below.

"Active area" means that portion of a facility where solid waste recycling, reuse, treatment, storage, or disposal operations are being, are proposed to be, or have been conducted. Setbacks must not be considered part of the active area of a facility.

"Aerobic decomposition" means decomposition of organic materials primarily by aerobic microbes under controlled conditions.

"Agricultural composting" means composting of agricultural waste as an integral component of a system designed to improve soil health and recycle agricultural wastes. Agricultural composting is conducted on lands used for farming.

"Agricultural wastes" means wastes on farms resulting from the raising or growing of plants and animals including, but not limited to, crop residue, manure from herbivores and nonherbivores, animal bedding, and carcasses of dead animals.

"Agronomic rates" means the application rate (dry weight basis) that will provide the amount of nitrogen or other critical nutrient required for optimum growth of vegetation, and that will not result in the violation of applicable

standards or requirements for the protection of ground or surface water as established under chapter 90.48 RCW, Water pollution control and related rules including chapter 173-200 WAC, Water quality standards for groundwaters of the state of Washington, and chapter 173-201A WAC, Water quality standards for surface waters of the state of Washington.

"Air quality standard" means a standard set for maximum allowable contamination in ambient air as set forth in chapter 173-400 WAC, General regulations for air pollution sources.

"Anaerobic digester" means a vessel that processes organic material into biogas and digestate through microbial decomposition under anaerobic (low oxygen) conditions.

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

"Beneficial use" means the use of solid waste as an ingredient in a manufacturing process, or as an effective substitute for natural or commercial products, in a manner that does not pose a threat to human health or the environment. Avoidance of processing or disposal cost alone does not constitute beneficial use.

"Biofilter" means a bed or layer of material that supports beneficial microorganisms, typically a mixture of compost and wood chips, designed to filter and treat air emissions. A biofilter adsorbs and then biologically degrades odorous compounds.

"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 chapter 173-308 WAC, Biosolids management. Biosolids includes a material derived from biosolids and septic tank sludge, also known as septage, that can be beneficially recycled and meets all applicable requirements under chapter 173-308 WAC, Biosolids management.

"Buffer" means a permanently vegetated strip adjacent to an application area, the purpose of which is to filter runoff or overspray from the application area and protect an adjacent area.

"Bulking agent" means an ingredient used to improve structure and porosity, or to lower moisture content, primarily in composting. Bulking agents improve convective air flow and reduce settling and compaction. Bulking agents may include, but are not limited to, wood waste, straw, and other high-carbon materials.

"Cab cards" means a license carried in a vehicle that authorizes that vehicle to legally pick up waste tires and haul to a permitted, licensed facility or an exempt facility for deposit.

"Capacity" means the maximum amount of material that can be contained on-site at any one time. Capacity is identified by the conditions of exemption, the permit, or the plan of operations as approved by the jurisdictional health department or the department. All material includes, but is not limited to, incoming waste, feedstocks, bulking agents, stockpiled wastes, active composting, curing piles, composted materials, and sorted recyclable materials on-site.

"Captive insurance companies" means companies that are wholly owned subsidiaries controlled by the parent company and established to insure the parent company or its other subsidiaries.

"Channel migration zone" means the lateral extent of likely movement of a stream or river channel along a stream reach.

"Clean soils and clean dredged material" means soils and dredged material which are not dangerous wastes, contaminated soils, or contaminated dredged material as defined in this section.

"Closure" means those actions taken by the owner or operator of a solid waste handling facility to cease disposal operations or other solid waste handling activities, to ensure that all such facilities are closed in conformance with applicable regulations at the time of such closures and to prepare the site for the post-closure period.

"Closure plan" means a written plan developed by an owner or operator of a facility detailing how a facility is to close at the end of its active life.

"Composted material" means organic solid waste that has undergone biological degradation and transformation under controlled conditions designed to promote aerobic decomposition at a solid waste facility in compliance with the requirements of this chapter. Composting is a form of organic material recycling. Natural decay of organic solid waste under uncontrolled conditions does not result in composted material.

"Composting" means the biological degradation and transformation of organic solid waste under controlled conditions designed to promote aerobic decomposition. Natural decay of organic solid waste under uncontrolled conditions is not composting.

"Conditionally exempt small quantity generator (CESQG)" means a dangerous waste generator whose dangerous wastes are not subject to regulation under chapter 70.105 RCW, Hazardous waste management, solely because the waste is generated or accumulated in quantities below the threshold for regulation and meets the conditions prescribed in WAC 173-303-070 (8)(b).

"Conditionally exempt small quantity generator (CESQG) waste" means dangerous waste generated by a conditionally exempt small quantity generator.

"Container" means a portable device used for the collection, storage, and/or transportation of solid waste including, but not limited to, reusable containers, disposable containers, and detachable containers.

"Contaminant" means any chemical, physical, biological, or radiological substance that does not occur naturally in the environment or that occurs at concentrations greater than natural background levels.

"Contaminate" means the release of solid waste, leachate, or gases emitted by solid waste, such that contaminants enter the environment at concentrations that pose a threat to human health or the environment, or cause a violation of any applicable environmental regulation.

"Contaminated dredged material" means dredged material resulting from the dredging of surface waters of the state where contaminants are present in the dredged material at concentrations not suitable for open water disposal and the

dredged material is not dangerous waste and is not regulated by section 404 of the Federal Clean Water Act (P.L. 95-217).

"Contaminated soils" means soils removed during the cleanup of a hazardous waste site, or a dangerous waste facility closure, corrective actions or other clean-up activities and which contain harmful substances but are not designated dangerous wastes.

"Controlled conditions" means the conditions in which facilities must be operated to meet the performance standards of WAC 173-350-040 and the applicable handling standards of this chapter. Controlled conditions at compost facilities may include, but are not limited to, controlling odors, run-on and runoff, moisture levels, pH levels, carbon to nitrogen ratios, temperatures, oxygen levels, particle sizes, and free air space.

"Corrosion expert" means a person certified by the National Association of Corrosion Engineers (NACE) or a registered professional engineer who has certification or licensing that includes education and experience in corrosion control.

"Crop residues" means vegetative material leftover from the harvesting of crops, including leftover pieces or whole fruits or vegetables, crop leaves and stems. Crop residue does not include food processing waste.

"Dangerous wastes" means any solid waste designated as dangerous waste by the department under chapter 173-303 WAC, Dangerous waste regulations.

"Department" means the Washington state department of ecology.

"Detachable containers" means reusable containers that are mechanically loaded or handled, such as a dumpster or drop box.

"Digestate" means both solid and liquid substances that remain following anaerobic digestion of organic material in an anaerobic digester.

"Disposable containers" means containers that are used once to handle solid waste, such as plastic bags, cardboard boxes and paper bags.

"Disposal" or **"deposition"** means the discharge, deposit, injection, dumping, leaking, or placing of any solid waste into or on any land or water.

"Domestic septage" means Class I, II or III domestic septage as defined in chapter 173-308 WAC, Biosolids management.

"Domestic wastewater facility" means all structures, equipment, or processes required to collect, carry away, treat, reclaim, or dispose of domestic wastewater together with such industrial waste as may be present.

"Drop box facility" means a facility used for the placement of a detachable container including the area adjacent for necessary entrance and exit roads, unloading and turn-around areas. Drop box facilities normally serve the general public with loose loads and receive waste from off-site.

"Energy recovery" means the recovery of energy in a useable form from mass burning or refuse-derived fuel incineration, pyrolysis or any other means of using the heat of combustion of solid waste that involves high temperature (above twelve hundred degrees Fahrenheit) processing.

"Existing facility" means a facility which is owned or leased, and in operation, or for which facility construction has begun, on or before the effective date of this chapter and the owner or operator has obtained permits or approvals necessary under federal, state and local statutes, regulations and ordinances.

"Facility" means all contiguous land (including buffers and setbacks) and structures, other appurtenances, and improvements on the land used for solid waste handling.

"Facility construction" means the continuous on-site physical act of constructing solid waste handling unit(s) or when the owner or operator of a facility has entered into contractual obligations for physical construction of the facility that cannot be canceled or modified without substantial financial loss.

"Facility structures" means constructed infrastructure such as buildings, sheds, utility lines, and piping on the facility.

"Feedstock" means a source separated waste material used as a component of composting, manufacturing, or as part of an industrial process.

"Food processing waste" means a source-separated organic material that is generated by a food processing facility licensed to process food by the United States Department of Agriculture, the United States Food and Drug Administration, the Washington state department of agriculture, or other applicable regulatory agency. Food processing wastes may include, but are not limited to, sludge from food processing water treatment plants, culls, DAF (dissolved air flotation from a food processing facility), pomace, and paunch manure, not intended for animal or human consumption.

"Garbage" means putrescible solid wastes.

"Groundwater" means that part of the subsurface water that is in the zone of saturation.

"Holocene fault" means a plane along which earthen material on one side has been displaced with respect to that on the other side and has occurred in the most recent epoch of the Quaternary period extending from the end of the Pleistocene to the present.

"Home composting" means composting of on-site generated wastes, and incidental materials beneficial to the composting process, by the owner or person in control of a single-family residence, or for a dwelling that houses two to five families, such as a duplex or clustered dwellings.

"Household hazardous wastes" means any waste which exhibits any of the properties of dangerous wastes that is exempt from regulation under chapter 70.105 RCW, Hazardous waste management, solely because the waste is generated by households. Household hazardous waste can also include other solid waste identified in the local hazardous waste management plan prepared pursuant to chapter 70.105 RCW, Hazardous waste management.

"Hydrostratigraphic unit" means any water-bearing geologic unit or units hydraulically connected or grouped together on the basis of similar hydraulic conductivity which can be reasonably monitored; several geologic formations or part of a geologic formation may be grouped into a single hydrostratigraphic unit; perched sand lenses may be considered a hydrostratigraphic unit or part of a hydrostratigraphic unit, for example.

"Incineration" means reducing the volume of solid wastes by use of an enclosed device using controlled flame combustion.

"Incompatible waste" means a waste that is unsuitable for mixing with another waste or material because the mixture might produce excessive heat or pressure, fire or explosion, violent reaction, toxic dust, fumes, mists, or gases, or flammable fumes or gases.

"Industrial solid wastes" means solid waste generated from manufacturing operations, food processing, or other industrial processes.

"Industrial wastewater facility" means all structures, equipment, or processes required to collect, carry away, treat, reclaim, or dispose of industrial wastewater.

"Inert waste" means solid wastes that meet the criteria for inert waste in WAC 173-350-990.

"Inert waste landfill" means a landfill that receives only inert wastes.

"Intermediate solid waste handling facility" means any intermediate use or processing site engaged in solid waste handling which is not the final site of disposal. This includes material recovery facilities, transfer stations, drop boxes, baling and compaction sites.

"Intermodal facility" means any facility operated for the purpose of transporting closed containers of waste and the containers are not opened for further treatment, processing or consolidation of the waste.

"Jurisdictional health department" means city, county, city-county or district public health department.

"Land application site" means a contiguous area of land under the same ownership or operational control on which solid wastes are beneficially utilized for their agronomic or soil-amending capability.

"Land reclamation" means using solid waste to restore drastically disturbed lands including, but not limited to, construction sites and surface mines. Using solid waste as a component of fill is not land reclamation.

"Landfill" means a disposal facility or part of a facility at which solid waste is permanently placed in or on land including facilities that use solid waste as a component of fill.

"Leachate" means water or other liquid within a solid waste handling unit that has been contaminated by dissolved or suspended materials due to contact with solid waste or gases.

"Limited moderate risk waste" means waste batteries, waste oil, and waste antifreeze generated from households.

"Limited moderate risk waste facility" means a facility that collects, stores, and consolidates only limited moderate risk waste.

"Limited purpose landfill" means a landfill which is not regulated or permitted by other state or federal environmental regulations that receives solid wastes limited by type or source. Limited purpose landfills include, but are not limited to, landfills that receive segregated industrial solid waste, construction, demolition and landclearing debris, wood waste, ash (other than special incinerator ash), and dredged material. Limited purpose landfills do not include inert waste landfills, municipal solid waste landfills regulated under chapter 173-351 WAC, Criteria for municipal solid waste landfills, landfills disposing of special incinerator ash regulated under chapter 173-306 WAC, Special incinerator ash management standards, landfills regulated under chapter 173-303 WAC, Dangerous waste regulations, or chemical waste landfills used for the disposal of polychlorinated biphenyls (PCBs) regulated under Title 40 C.F.R. Part 761, Polychlorinated Biphenyls (PCBs) Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions.

"Liquid" means a substance that flows readily and assumes the form of its container but retains its independent volume.

"Liquid waste" means any solid waste which is deemed to contain free liquids as determined by the Paint Filter Liquids Test, Method 9095, in "*Test Methods for Evaluating Solid Waste, Physical/Chemical Methods,*" EPA Publication SW-846.

"Lithified earth material" means all rock, including all naturally occurring and naturally formed aggregates or masses of minerals or small particles of older rock that formed by crystallization of magma or by induration of loose sediments. This term does not include man-made materials, such as fill, concrete or asphalt, or unconsolidated earth materials, soil or regolith lying at or near the earth's surface.

"Local fire control agency" means a public or private agency or corporation providing fire protection such as a local fire department, the department of natural resources or the United States Forest Service.

"Lower explosive limits" means the lowest percentage by volume of a mixture of explosive gases that will propagate a flame in air at twenty-five degrees centigrade and atmospheric pressure.

"Manufactured organics" means source separated solid wastes, such as nonplastic coated paper plates, cups, compostable bags, and other items designed to decompose through composting, anaerobic digestion, or through other organic materials recycling processes. Manufactured organics do not include physical contaminants such as plastics and coated paper products that will not readily decompose under typical composting conditions, or wood derived fuel or wood waste as defined in this section.

"Manure and bedding" means manure (feces) and bedding from herbivorous animals such as horses, cows, sheep, and goats.

"Material recovery facility" means any facility that collects, compacts, repackages, sorts, or processes for transport source separated solid waste for the purpose of recycling.

"Mobile systems and collection events" means activities conducted at a temporary location to collect moderate risk waste.

"Moderate risk waste (MRW)" means solid waste that is limited to conditionally exempt small quantity generator (CESQG) waste and household hazardous waste (HHW) as defined in this chapter.

"MRW facility" means a solid waste handling unit that is used to collect, treat, recycle, exchange, store, consolidate, and/or transfer moderate risk waste. This does not include mobile systems and collection events or limited MRW facilities that meet the applicable terms and conditions of WAC 173-350-360 (2) or (3).

"Municipal solid waste (MSW)" means a subset of solid waste which includes unsegregated garbage, refuse and similar solid waste material discarded from residential, commercial, institutional and industrial sources and community activities, including residue after recyclables have been separated. Solid waste that has been segregated by source and

characteristic may qualify for management as a non-MSW solid waste, at a facility designed and operated to address the waste's characteristics and potential environmental impacts. The term MSW does not include:

■ Dangerous wastes other than wastes excluded from the requirements of chapter 173-303 WAC, Dangerous waste regulations, in WAC 173-303-071 such as household hazardous wastes;

■ Any solid waste, including contaminated soil and debris, resulting from response action taken under section 104 or 106 of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (42 U.S.C. 9601), chapter 70.105D RCW, Hazardous waste cleanup—Model Toxics Control Act, chapter 173-340 WAC, the Model Toxics Control Act cleanup regulation or a remedial action taken under those rules; nor

■ Mixed or segregated recyclable material that has been source-separated from garbage, refuse and similar solid waste. The residual from source separated recyclables is MSW.

"Natural background" means the concentration of chemical, physical, biological, or radiological substances consistently present in the environment that has not been influenced by regional or localized human activities. Metals at concentrations naturally occurring in bedrock, sediments and soils due solely to the geologic processes that formed the materials are natural background. In addition, low concentrations of other persistent substances due solely to the global use or formation of these substances are natural background.

"New solid waste handling unit" means a solid waste handling unit that begins operation or facility construction, and significant modifications to existing solid waste handling units, after the effective date of this chapter.

"Nuisance odor" means any odor which is found offensive or may unreasonably interfere with any person's health, comfort, or enjoyment beyond the property boundary of a facility.

"On-farm" means activities taking place on any agricultural land under the control of the same entity including parcels that are not geographically contiguous but managed by the same entity for agricultural production.

"One hundred-year flood plain" means any land area that is subject to one percent or greater chance of flooding in any given year from any source.

"Open burning" means the burning of solid waste materials in an open fire or an outdoor container without providing for the control of combustion or the control of emissions from the combustion.

"Organic feedstocks" means source separated organic materials including bulking agents suitable for vermicomposting, composting, anaerobic digestion, and other processes that transform organic materials into usable or marketable materials.

"Organic materials" means any solid waste that is a biological substance of plant or animal origin capable of microbial degradation. Organic materials include, but are not limited to, manure, yard debris, food waste, food processing wastes, wood waste, and garden wastes.

"Other conversion technologies" means processes that transform organic feedstocks into useable or marketable materials, but does not include composting, vermicomposting, or anaerobic digestion.

"Overburden" means the earth, rock, soil, and topsoil that lie above mineral deposits.

"Permeability" means the ease with which a porous material allows liquid or gaseous fluids to flow through it. For water, this is usually expressed in units of centimeters per second and termed hydraulic conductivity.

"Permit" means an authorization issued by the jurisdictional health department which allows a person to perform solid waste activities at a specific location and which includes specific conditions for such facility operations.

"Person" means an individual, firm, association, copartnership, political subdivision, government agency, municipality, industry, public or private corporation, or any other entity whatever.

"Physical contaminants" as they relate to incoming feedstocks and compost quality means inorganic and organic constituents that are not readily decomposed during the composting process including, but not limited to, plastics, glass, textiles, rubber, leather, metal, ceramics, polystyrene, and wood pieces containing paint, laminates, bonding agents or chemical preservatives such as creosote, pentachlorophenol, or copper-chrome-arsenate.

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

"Plan of operation" means the written plan developed by an owner or operator of a facility detailing how a facility is to be operated during its active life.

"Point of compliance" means a point established in the groundwater by the jurisdictional health department as near a possible source of release as technically, hydrogeologically and geographically feasible.

"Post-closure" means the requirements placed upon disposal facilities after closure to ensure their environmental safety for at least a twenty-year period or until the site becomes stabilized (i.e., little or no settlement, gas production, or leachate generation).

"Post-closure plan" means a written plan developed by an owner or operator of a facility detailing how a facility is to meet the post-closure requirements for the facility.

"Post-consumer food waste" means source separated organic materials originally intended for human consumption including, but not limited to, vegetables, fruits, grains, meats and dairy products resulting from serving food. Post-consumer food waste is typically collected from cafeterias, homes, and restaurants.

"Preconsumer animal-based wastes" means source separated organic materials from animals such as meat, fat, dairy, or eggs that are a result of food preparation for human consumption or are products that did not reach the intended consumer. Preconsumer animal-based wastes are typically collected from food processing facilities and grocery stores.

"Preconsumer vegetative waste" means source separated organic materials from vegetables, such as pits, peels, and pomace from human food preparation, or vegetable products that did not reach the consumer. Preconsumer vegetative wastes are typically collected from food processing facilities and grocery stores.

"Premises" means a tract or parcel of land with or without habitable buildings.

"Private facility" means a privately owned facility maintained on private property solely for the purpose of managing waste generated by the entity owning the site.

"Processing" means an operation to convert a material into a useful product or to prepare it for reuse, recycling, or disposal.

"Product take-back center" means a retail outlet or distributor that accepts household hazardous waste of comparable types as the products offered for sale or distributed at that outlet.

"Public facility" means a publicly or privately owned facility that accepts solid waste generated by other persons;

"Putrescible waste" means solid waste which contains material capable of being readily decomposed by microorganisms and which is likely to produce offensive odors.

"Pyrolysis" means the process in which solid wastes are heated in an enclosed device in the absence of oxygen to vaporization, producing a hydrocarbon-rich gas capable of being burned for recovery of energy.

"Recyclable materials" means those solid wastes that are separated for recycling or reuse, including, but not limited to, papers, metals, and glass, that are identified as recyclable material pursuant to a local comprehensive solid waste plan.

"Recycling" means transforming or remanufacturing waste materials into usable or marketable materials for use other than landfill disposal or incineration. Recycling does not include collection, compacting, repackaging, and sorting for the purpose of transport.

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

"Reserved" means a section having no requirements and which is set aside for future possible rule making as a note to the regulated community.

"Reusable containers" means containers that are used more than once to handle solid waste, such as garbage cans.

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

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

"Scavenging" means the removal of materials at a disposal facility, or intermediate solid waste-handling facility, without the approval of the owner or operator and the jurisdictional health department.

"Seismic impact zone" means an area with a ten percent or greater probability that the maximum horizontal acceleration in lithified earth material, expressed as a percentage of the earth's gravitational pull, will exceed 0.10g in two hundred fifty years.

"Setback" means that part of a facility that lies between the active area and the property boundary.

"Sewage sludge" means 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.

"Soil amendment" means any substance that is intended to improve the physical characteristics of soil, except composted material, commercial fertilizers, agricultural liming agents, unmanipulated animal manures, unmanipulated vegetable manures, food wastes, food processing wastes, and materials exempted by rule of the department, such as biosolids as defined in chapter 70.95J RCW, Municipal sewage sludge—Biosolids and wastewater, as regulated in chapter 90.48 RCW, Water pollution control.

"Solid waste" or **"wastes"** means all putrescible and nonputrescible solid and semisolid wastes including, but not limited to, garbage, rubbish, ashes, industrial wastes, swill, sewage sludge, demolition and construction wastes, abandoned vehicles or parts thereof, contaminated soils and contaminated dredged material, and recyclable materials.

"Solid waste handling" means the management, storage, collection, transportation, treatment, use, processing or final disposal of solid wastes, including the recovery and recycling of materials from solid wastes, the recovery of energy resources from such wastes or the conversion of the energy in such wastes to more useful forms or combinations thereof.

"Solid waste handling unit" means discrete areas of land, sealed surfaces, liner systems, excavations, facility structures, or other appurtenances within a facility used for solid waste handling.

"Source separation" means the separation of different kinds of solid waste at the place where the waste originates.

"Specified risk material" means the skull, brain, trigeminal ganglia (nerves attached to brain and close to the skull exterior), eyes, spinal cord, distal ileum (a part of the small intestine), and the dorsal root ganglia (nerves attached to the spinal cord and close to the vertebral column) of cattle aged thirty months or older.

"Storage" means the holding of solid waste materials for a temporary period.

"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 water" means all lakes, rivers, ponds, wetlands, streams, inland waters, salt waters and all other surface water and surface water courses within the jurisdiction of the state of Washington.

"Tank" means a stationary device designed to contain an accumulation of liquid or semisolid materials meeting the definition of solid waste or leachate, and which is constructed primarily of nonearthen materials to provide structural support.

"Throughput" means the amount of incoming feedstocks in tons or cubic yards that a solid waste facility processes in a given amount of time, such as a calendar year. Throughput is identified by the conditions of exemption, the permit, or the plan of operations as approved by the jurisdictional health department or the department.

"Transfer station" means a permanent, fixed, supplemental collection and transportation facility, used by persons and route collection vehicles to deposit collected solid waste

from off-site into a larger transfer vehicle for transport to a solid waste handling facility.

"Treatment" means the physical, chemical, or biological processing of solid waste to make such solid wastes safer for storage or disposal, amenable for recycling or energy recovery, or reduced in volume.

"Twenty-five-year storm" means a storm of twenty-four hours duration and of such intensity that it has a four percent probability of being equaled or exceeded each year.

"Universal wastes" means universal wastes as defined in chapter 173-303 WAC, Dangerous waste regulations. Universal wastes include, but may not be limited to, dangerous waste batteries, mercury-containing thermostats, and universal waste lamps generated by fully regulated dangerous waste generators or CESQGs.

"Unstable area" means a location that is susceptible to forces capable of impairing the integrity of the facility's liners, monitoring system or structural components. Unstable areas can include poor foundation conditions and areas susceptible to mass movements.

"Vadose zone" means that portion of a geologic formation in which soil pores contain some water, the pressure of that water is less than atmospheric pressure, and the formation occurs above the zone of saturation.

"Vector" means a living animal, including, but not limited to, insects, rodents, and birds, which is capable of transmitting an infectious disease from one organism to another.

"Vermicomposting" means the controlled and managed process by which live worms convert organic residues into dark, fertile, granular excrement.

"Waste tires" means any tires that are no longer suitable for their original intended purpose because of wear, damage or defect. Used tires, which were originally intended for use on public highways that are considered unsafe in accordance with RCW 46.37.425, are waste tires. Waste tires also include quantities of used tires that may be suitable for their original intended purpose when mixed with tires considered unsafe per RCW 46.37.425.

"Wetlands" means those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and 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.

"Wood derived fuel" means wood pieces or particles used as a fuel for energy recovery, which contain paint, bonding agents, or creosote. Wood derived fuel does not include wood pieces or particles coated with paint that contains lead or mercury, or wood treated with other chemical preservatives such as pentachlorophenol, copper naphthenate, or copper-chrome-arsenate.

"Wood waste" means solid waste consisting of wood pieces or particles generated as a by-product or waste from the manufacturing of wood products, construction, demolition, handling and storage of raw materials, trees and stumps. This includes, but is not limited to, sawdust, chips, shavings, bark, pulp, hogged fuel, and log sort yard waste, but does not include wood pieces or particles containing paint, laminates, bonding agents or chemical preservatives such as creosote, pentachlorophenol, or copper-chrome-arsenate.

"Yard debris" means plant material commonly created in the course of maintaining yards and gardens and through horticulture, gardening, landscaping or similar activities. Yard debris includes, but is not limited to, grass clippings, leaves, branches, brush, weeds, flowers, roots, windfall fruit, and vegetable garden debris.

"Zone of saturation" means that part of a geologic formation in which soil pores are filled with water and the pressure of that water is equal to or greater than atmospheric pressure.

[Statutory Authority: RCW 70.95.020(3), 70.95.060(1), 70.95.260(6), 70.95.305, 70.95.330. WSR 13-08-016 (Order 10-06), § 173-350-100, filed 3/25/13, effective 4/25/13. Statutory Authority: Chapter 70.95 RCW. WSR 05-11-033 (Order 04-12), § 173-350-100, filed 5/10/05, effective 6/10/05; WSR 03-03-043 (Order 99-24), § 173-350-100, filed 1/10/03, effective 2/10/03.]

WAC 173-350-200 Beneficial use permit exemptions. (1) *Beneficial use permit exemption - Applicability*. Any person may apply to the department for exemption from the permitting requirements of this chapter for beneficial use of solid waste. Applications for permit exemptions shall be prepared and submitted in accordance with the requirements of subsections (3) and (4) of this section. Upon the department's approval of an application for permit exemption, all approved beneficial use of solid waste shall be conducted in accordance with the terms and conditions for approval, as well as those general terms and conditions prescribed in subsection (2) of this section.

(2) *Beneficial use permit exemption - General terms and conditions*.

(a) The following general terms and conditions apply to all permit exempt beneficial uses of solid waste. All persons beneficially using solid waste approved for permit exemption in accordance with this section shall:

(i) Conduct the beneficial use in a manner that does not present a threat to human health or the environment;

(ii) Ensure that the material is not a dangerous waste regulated under chapter 173-303 WAC, Dangerous waste regulations;

(iii) Not dilute a waste, or the residual from treatment of a waste, as a substitute for treatment or disposal;

(iv) Comply with all applicable federal, state, and local rules, regulations, requirements and codes, and local land use requirements;

(v) Immediately notify the department and the jurisdictional health department of any accidental release(s) of contaminants to the environment;

(vi) Separate wastes intended for beneficial use from wastes that are destined for disposal, prior to entering the location where the beneficial use will occur;

(vii) Manage the waste in a manner that controls vector attraction;

(viii) Ensure that solid waste being stored prior to being beneficially used is managed in accordance with the requirements of all applicable sections of this chapter;

(ix) Allow the department or the jurisdictional health department, at any reasonable time, to inspect the location where a permit exempt solid waste is stored or used to ensure compliance with applicable terms and conditions of this section; and

(x) Prepare and submit a copy of an annual report to the department by April 1st on forms supplied by the department. The annual report shall detail the activities of the exemption holder during the previous calendar year and shall include the following information:

(A) The permit exemption number applicable to the beneficial use activity;

(B) The name, address, and telephone number of the exemption holder;

(C) The amount of solid waste beneficially used;

(D) A certification that the nature of the waste and the operating practices have been in compliance with the terms and conditions of this section and the beneficial use permit exemption during the calendar year; and

(E) Any additional information that may be specified by the department under the beneficial use permit exemption.

(b) In addition to the general terms and conditions established in (a) of this subsection, solid wastes applied to the land for agronomic value or soil amending capability under a beneficial use permit exemption shall:

(i) Meet the metals standards required by the Washington state department of agriculture (WSDA) for registered commercial fertilizers by following the procedures of WAC 16-200-7062 through 16-200-7064, Feeds, fertilizers, and livestock remedies;

(ii) Be applied at an application rate and in a manner that ensures protection of groundwater and surface water. At a minimum, the application rate shall take into account the concentration of available nutrients and micronutrients in the soil amendment, other solid waste applied to the land, residual nutrients at the application site(s), additional sources of nutrients, pollutant loading rates, soil and waste pH, soil type, crop type and vertical separation from groundwater; and

(iii) Not be stored at an application site during periods when precipitation or wind will cause migration from the storage area, unless the site is specifically designed to accommodate storage during these periods. The quantity stored at an application site shall not exceed the maximum needed to meet the annual needs of the site based on the approved application rate. When a soil amendment is stored at an application site it shall not contain liquid waste unless the requirements of WAC 173-350-330 are met.

(c) The department may require a person operating under any exemption issued under this section to meet additional or more stringent requirements for protection of human health and the environment, or to ensure compliance with other applicable regulations:

(i) At the time the department approves an application for a beneficial use permit exemption; or

(ii) When new information becomes available that warrants additional protections, but in the opinion of the department does not necessitate revocation of the beneficial use permit exemption.

(d) The department shall notify in writing the exempted party and all jurisdictional health departments of any additional or more stringent requirements.

(3) *Beneficial use permit exemption - Initial application procedure*. Any person(s) interested in obtaining a statewide exemption from solid waste permitting requirements for the beneficial use of a solid waste must demonstrate to the satisfaction of the department that the proposed use does not present a threat to human health and the environment. Applications shall be submitted to the department on a form supplied by the department. All application attachments and other submittals must be on paper no larger than 11 inch x 17 inch. The application shall at a minimum contain the following:

(a) The name(s), address(es) and phone number(s) of the waste generator(s);

(b) The name(s), address(es) and phone number(s) of the applicant. If the applicant is a broker or other third party the uniform business identifier number shall also be included;

(c) A list of all product(s) made by the waste generator(s);

(d) A list of all feedstocks used to manufacture the product(s);

(e) A description of the solid waste and the proposed beneficial use;

(f) A description of how the waste will be transported or distributed for the proposed beneficial use;

(g) A description of other materials that contribute or potentially contribute contaminants/pollutants to the waste to be beneficially used;

(h) A schematic and text summary of the waste generator(s) operations, including all points where wastes are generated, treated or stored;

(i) A description of how terms and conditions of subsection (2)(a) of this section will be met;

(j) A State Environmental Policy Act checklist;

(k) If the beneficial use is proposed as a soil amendment, or for other solid wastes beneficially applied to the land, a description of how the terms and conditions of subsection (2)(b) of this section will be met; and

(l) Any additional information deemed necessary by the department.

(4) *Beneficial use permit exemption - Secondary application procedure*. Beneficial use permit exemptions, approved by the department in accordance with the procedures of subsection (5) of this section, are granted solely to the original applicant(s). Any person, other than the original applicant(s), interested in beneficially using solid waste pursuant to the terms and conditions of an existing permit exemption shall apply to the department by following the procedures described in subsection (3) of this section.

(5) *Beneficial use permit exemption - Determination, revocation, and appeals*.

(a) The department shall review every application for completeness. Once an application is determined to be complete, the department shall:

(i) Notify the applicant that the application has been determined to be complete.

(ii) Forward a copy of the complete application and supporting documentation to all jurisdictional health departments for review and comment. Within forty-five calendar days, the jurisdictional health departments shall forward their comments and any other information that they deem relevant to the department.

(iii) The department shall develop and maintain a register of all complete applications it receives for beneficial use exemptions. The register shall include information regarding the proposed beneficial use and process for submitting comments. The department shall maintain a list of interested parties and forward the register to those parties. The department

may provide the register and application information in an electronic form upon request by an interested party.

(b) Once a determination is made by the department that an application is complete and the public review process has begun, any changes to the application or submittal of additional information by the applicant shall result in a withdrawal of the completeness determination by the department and termination of the public review process. The department shall resume review of the amended application in accordance with the procedures of (a) of this subsection.

(c) After completion of the comment period, the department shall review comments, technical information from agency and other publications, standards published in regulations, and other information deemed relevant by the department to render a decision.

(d) Every complete application shall be approved or disapproved by the department in writing within ninety days after receipt. Exemptions shall be granted by the department only to those beneficial uses of solid waste that the department determines do not present a threat to human health or the environment.

(e) Upon approval of the application by the department, the beneficial use of the solid waste by the original applicant is exempt from solid waste handling permitting for use anywhere in the state consistent with the terms and conditions of the approval.

(f) The department may require a person operating under any exemption covered by this section to apply to the jurisdictional health department for a solid waste handling permit under the applicable section of this chapter if:

(i) The exemption holder fails to comply with the terms and conditions of this section and the approval; or

(ii) The department determines that the exemption was obtained by misrepresenting or omitting any information that potentially could have affected the issuance or terms and conditions of an exemption; or

(iii) New information not previously considered or available as part of the application demonstrates to the department that management of the waste under a beneficial use permit exemption may present a threat to human health or the environment.

(g) The department shall provide written notification to the exempted party and all jurisdictional health departments of any requirement to apply for a permit under this chapter. A person that is required by the department to apply for permit coverage shall immediately cease beneficial use activities until all necessary solid waste handling permits are issued.

(h) The terms and conditions of subsection (2)(a)(viii) of this section shall remain in effect until the solid waste handling permit process has been completed.

(i) Any person that violates the terms and conditions of a beneficial use permit exemption issued under this section may be subject to the civil penalty provisions of RCW 70.95.315.

(j) Appeals of the department's decision to issue or deny or revoke a beneficial use permit exemption shall be made to the pollution control hearings board by filing with the hearings board a notice of appeal within thirty days of the decision of the department. The board's review of the decision shall be made in accordance with chapter 43.21B RCW, Environmental hearing office—Pollution control hearings board, and any subsequent appeal of a decision of the board shall be made in accordance with RCW 43.21B.180.

Persons that may appeal are:

(i) For waste derived soil amendments any aggrieved party may appeal.

(ii) For all other beneficial uses of solid waste any jurisdictional health department or the applicant may appeal.

(6) *Beneficial use permit exemption - Solid waste exempt from permitting by rule*. Reserved.

Note: RCW 70.95.300 contains provisions that **allow** the department to exempt from permitting certain beneficial uses of solid waste by rule. The statute also requires the department to develop an application and approval process by which a person could apply for a beneficial use permit exemption. At this time the department has chosen to limit rule making to development of the required application and approval process, and hold a section in reserve for future development of a list of approved beneficial uses.

[Statutory Authority: Chapter 70.95 RCW. WSR 03-03-043 (Order 99-24), § 173-350-200, filed 1/10/03, effective 2/10/03.]

WAC 173-350-210 Recycling. (1) *Recycling - Applicability*. These standards apply to recycling solid waste. These standards do not apply to:

(a) Storage, treatment or recycling of solid waste in piles which are subject to WAC 173-350-320;

(b) Storage or recycling of solid waste in surface impoundments which are subject to WAC 173-350-330;

(c) Composting facilities subject to WAC 173-350-220;

(d) Solid waste that is beneficially used on the land that is subject to WAC 173-350-230;

(e) Storage of waste tires prior to recycling which is subject to WAC 173-350-350;

(f) Storage of moderate risk waste prior to recycling which is subject to WAC 173-350-360;

(g) Energy recovery or incineration of solid waste which is subject to WAC 173-350-240;

(h) Intermediate solid waste handling facilities subject to WAC 173-350-310.

(2) *Recycling - Permit exemption and notification*.

(a) In accordance with RCW 70.95.305, recycling of solid waste is subject solely to the requirements of (b) of this subsection and is exempt from solid waste handling permitting. Any person engaged in recycling that does not comply with the terms and conditions of (b) of this subsection is required to obtain a permit from the jurisdictional health department in accordance with the requirements of WAC 173-350-490. In addition, violations of the terms and conditions of (b) of this subsection may be subject to the penalty provisions of RCW 70.95.315.

(b) Recycling shall be conducted in conformance with the following terms and conditions in order to maintain permit exempt status:

(i) Meet the performance standards of WAC 173-350-040;

(ii) Accept only source separated solid waste for the purpose of recycling;

(iii) Allow inspections by the department or jurisdictional health department at reasonable times;

(iv) Notify the department and jurisdictional health department, thirty days prior to operation, or ninety days

from the effective date of the rule for existing recycling operations, of the intent to conduct recycling in accordance with this section. Notification shall be in writing, and shall include:

(A) Contact information for the person conducting the recycling activity;

(B) A general description of the recycling activity;

(C) A description of the types of solid waste being recycled; and

(D) An explanation of the recycling processes and methods;

(v) Prepare and submit an annual report to the department and the jurisdictional health department by April 1st on forms supplied by the department. The annual report shall detail recycling activities during the previous calendar year and shall include the following information:

(A) Name and address of the recycling operation;

(B) Calendar year covered by the report;

(C) Annual quantities and types of waste received, recycled and disposed, in tons, for purposes of determining progress towards achieving the goals of waste reduction, waste recycling, and treatment in accordance with RCW 70.95.010(4); and

(D) Any additional information required by written notification of the department.

[Statutory Authority: Chapter 70.95 RCW. WSR 03-03-043 (Order 99-24), § 173-350-210, filed 1/10/03, effective 2/10/03.]

WAC 173-350-220 Composting facilities. (1) *Composting facilities - Applicability*.

(a) This section applies to all facilities that treat solid waste by composting. This section does not apply to:

(i) Methods of managing organic materials that are excluded from the solid waste handling standards in WAC 173-350-020;

(ii) Composting used as a treatment for contaminated soils regulated under WAC 173-350-320;

(iii) Anaerobic digesters regulated under WAC 173-350-250, or treatment of other liquid or solid wastes in digesters regulated under WAC 173-350-330;

(iv) Composting of bovine and equine carcasses for producers subject to RCW 70.95.306. Producers that fail to meet the conditions of RCW 70.95.306 will be required to obtain a solid waste handling permit from the jurisdictional health department and must comply with all other conditions of this chapter; and

(v) Composting biosolids when managed under chapter 173-308 WAC, Biosolids management.

(b) Conditionally exempt facilities composting materials and volumes in Table 220-A must meet the conditions listed in Table 220-A, and (c) of this subsection to be conditionally exempt from solid waste handling permitting. Feedstocks not listed in Table 220-A must be approved by the department and jurisdictional health department. For the purposes of this subsection, "material on-site at any one time" includes feedstocks, active composting, curing piles, and composted materials. An owner or operator that does not comply with the terms and conditions of Table 220-A and (c) of this subsection is required to obtain a permit from the jurisdictional health department and must comply with all other applicable requirements of this chapter. Violations of the terms and conditions of Table 220-A and (c) of this subsection may be subject to the penalty provisions of RCW 70.95.315.

Table 220-A Terms and Conditions for Solid Waste Permit Exemptions

	Organic Materials	Volume	Specific Requirements for Activity or Operation
(1)	All organic feedstocks	No more than 5,000 gallons or 25 cubic yards of material on-site at any one time.	No notification, reporting or testing requirements.
(2)	All organic feedstocks	Greater than 25 but no more than 250 cubic yards of material on-site at any one time, not to exceed 1,000 cubic yards in a calendar year.	(a) Thirty days prior to operation, facilities must submit a notification of intent to operate as a conditionally exempt facility to the jurisdictional health department and the department. Notice of intent must be submitted on a form provided by the department; (b) Facilities that distribute composted material off-site must meet the following conditions: (i) Manage the operation to reduce pathogens to meet limits set by Table 220-B; (ii) Conduct compost analysis according to the requirements of Table 220-B. Compost testing frequency is based on volume of compost produced annually as required by subsection (4)(a)(x)(B) of this section; and

	Organic Materials	Volume	Specific Requirements for Activity or Operation
			(iii) Submit annual reports and results of composted material analysis to the department and the jurisdictional health department by April 1st of each calendar year. Annual reports must be submitted on forms provided by the department.
(3)	Yard debris Crop residues Manure and bedding Bulking agents	Greater than 25 but no more than 500 cubic yards of material on-site at any one time, not to exceed 2,500 cubic yards processed in a calendar year.	(a) Thirty days prior to operation, facilities must submit a notification of intent to operate as a conditionally exempt facility to the jurisdictional health department and the department. Notice of intent must be submitted on a form provided by the department. (b) Facilities that distribute composted materials off-site must meet the following conditions: (i) Manage the operation to reduce pathogens to meet limits set by Table 220-B; (ii) Conduct compost analysis according to the requirements of Table 220-B. Compost testing frequency is based on volume of compost produced annually as required by subsection (4)(a)(x)(B) of this section; and (iii) Submit annual reports and results of composted material analysis to the department and the jurisdictional health department by April 1st of each calendar year. Annual reports must be submitted on forms provided by the department.
(4)	Agricultural wastes Yard debris Bulking agents	Greater than 25 but no more than 1,000 cubic yards of agricultural wastes and bulking agents on-farm at any one time, and up to 50% of organic materials on-farm can be yard debris.	Agricultural farms managing more than 25 cubic yards of imported yard debris on-site at any one time or composting only agricultural wastes but that distribute off-site must meet the following conditions: (a) Thirty days prior to operation, facilities must submit a notification of intent to operate as a conditionally exempt facility to the jurisdictional health department and the department. Notification must be submitted on a form provided by the department; (b) If agricultural farm is only managing agricultural waste and not distributing composted material off farm, then notification in (4)(a) of this table is not required; (c) Facilities that distribute composted material off-site must meet the following conditions: (i) Manage operation to reduce pathogens to meet limits set by Table 220-B of this section;

	Organic Materials	Volume	Specific Requirements for Activity or Operation
			(ii) Conduct compost analysis according to the requirements of Table 220-B. Compost testing frequency is based on volume of compost produced annually as required by subsection (4)(a)(x)(B) of this section; and (iii) Submit annual reports and results of composted material analysis to the department and the jurisdictional health department by April 1st of each calendar year. Annual reports must be submitted on forms provided by the department.
(5)	Agricultural wastes Manure and bedding from zoos Bulking agents	Greater than 25 cubic yards with no upper limits when only agricultural wastes, manure and bedding from zoos, and bulking agents are processed on-farm, or on-site for zoos.	Agricultural farms that distribute composted material off-farm, or off-site for zoos, must meet the following conditions: (a) Thirty days prior to operation, facilities must submit a notification of intent to operate as a conditionally exempt facility to the jurisdictional health department and the department. Notification must be submitted on a form provided by the department; (b) For composting at a dairy, composting must occur as part of an updated dairy nutrient management plan as required by chapter 90.64 RCW, Dairy Nutrient Management Act; (c) For composting at a farm other than a dairy, composting must occur as part of an updated farm management plan written in conjunction with a conservation district, a qualified engineer, or other agricultural professional able to certify that the plan meets applicable conservation practice standards in the USDA *Washington Field Office Technical Guide*, Code 317, produced by the Natural Resources Conservation Service; (d) Facilities that distribute composted material off-site must meet the following conditions: (i) Manage the operation to reduce pathogens to meet limits set by Table 220-B of this section; (ii) Conduct compost analysis according to the requirements of Table 220-B. Compost testing frequency is based on volume of compost produced annually as required by subsection (4)(a)(x)(B) of this section; and

	Organic Materials	Volume	Specific Requirements for Activity or Operation
			(iii) Submit annual reports and results of composted material analysis to the department and the jurisdictional health department by April 1st of each calendar year. Annual reports must be submitted on forms provided by the department.

(c) Composting operations managing the types and volumes of materials identified in Table 220-A must meet the following terms and conditions to maintain their exempt status:

(i) Comply with the performance standards of WAC 173-350-040;

(ii) Manage the operation to prevent the migration of agricultural pests identified by local horticultural pest and disease control boards, as applicable;

(iii) Control nuisance odors to prevent migration beyond property boundaries;

(iv) Manage the operation to prevent attraction of flies, rodents, and other vectors;

(v) Allow the department or the jurisdictional health department to inspect the site at reasonable times.

(2) *Composting facilities - Location standards (permit requirements)*. There are no specific location standards for composting facilities subject to this chapter; however, composting facilities must meet the requirements of other federal, state, or local laws and regulations that apply under WAC 173-350-040(5).

Note: When considering compost facility location, please review the U.S. Department of Transportation Federal Aviation Advisory Circular. No. 150/5200-33B 2007.

(3) *Composting facilities - Design standards (permit requirements)*. Composting facilities must be designed and constructed to meet the requirements of this subsection.

(a) Composting facilities must be designed and constructed such that:

(i) The facility can be operated to meet the performance standard requirements in WAC 173-350-040; and

(ii) The facility can be operated to promote controlled, aerobic decomposition. This requirement is intended to ensure that compost facility designers take into account porosity, nutrient balance, pile oxygen, pile moisture, pile temperature, and retention time of composting when designing a facility. It is not intended to mandate forced aeration or any other specific composting technology.

(b) The owner or operator of a composting facility must prepare and provide to the jurisdictional health department engineering reports, engineering plans, and engineering specifications that address the design standards of this subsection. The engineering documents must be prepared by an engineer licensed in the state of Washington, and must include:

(i) An engineering report that presents the design basis and calculations for the engineered features of the facility including, but not limited to: Pad, impoundments, storm water management features, leachate management features, and aeration and emission control features as required by the permitting air authority where applicable. The engineering report must demonstrate that the proposed design will meet the performance standards of this chapter;

(ii) Scale drawings of the facility including the location and size of feedstock and composted material storage areas, compost processing areas, fixed equipment, buildings, storm water management features where applicable, access roads, traffic patterns, and other constructed areas and buildings integral to facility operation;

(iii) Design specifications for the engineered features of the facility including, but not limited to, pads, storm water management features, leachate management features, and aeration and emission management features as required by a permitting air authority where applicable; and

(iv) A construction quality assurance plan that describes monitoring, testing, and documentation procedures that will be performed during construction of the facility to ensure the facility is constructed in accordance with the approved design.

(c) When operations require public access, all-weather roads must be provided from the highway or roads to and within the compost facility and must be designed and maintained to prevent traffic congestion, traffic hazards, dust, and noise pollution.

(d) Compost facilities must manage storm water and leachate to meet the standards of this section and of any and all federal, state, and local water and air quality permits.

(e) Composting facilities must minimize the production of leachate and runoff by designing storm water management features such as run-on prevention systems, which may include covered areas (roofs), diversion swales, ditches, or other features designed to divert storm water from areas of feedstock preparation, active composting, and curing.

(i) Composting facilities must manage any leachate generated at the facility by providing leachate management features. The leachate management features include, but are not limited to, leachate collection, conveyance, and storage structures, or treatment systems. Leachate must be collected from areas of feedstock storage and preparation, active composting, and curing, and be conveyed to a leachate storage structure or treatment system. Any discharges to ground that result in contaminants migrating to groundwater require a waste discharge permit under chapter 90.48 RCW, Water pollution control, prior to discharge. Discharges to ground that result in degradation of groundwater quality are prohibited under chapter 90.48 RCW, Water pollution control. Any discharge to sanitary sewer requires additional permitting by the local delegated authority or department;

(ii) Storm water and leachate collection and conveyance structures must be designed based on the volume of water resulting from a twenty-five-year storm event as defined in WAC 173-350-100;

(iii) Leachate storage structures such as ponds or tanks must be of adequate capacity to store the normal maximum volume of leachate generated by the facility. The normal maximum volume will be established based on the following conditions:

(A) Facility design;

(B) Normal climatic precipitation and evaporation data for the location of the facility;

(C) Monthly leachate reuse or removal; and

(D) A factor of safety to accommodate variability of actual conditions from normal conditions.

(iv) Leachate holding ponds and tanks must be designed according to the following:

(A) Leachate ponds at registered dairies must meet Natural Resources Conservation Service standards for a waste storage facility in the 2001 (revised June 2011) *Washington Field Office Technical Guide* (Code 313).

(B) Leachate ponds at composting facilities other than registered dairies must be designed to meet the following requirements:

(I) Have a liner consisting of a minimum 30-mil thickness geomembrane on a subgrade that provides sufficient bearing capacity to support the liner and the contents of the pond. A liner constructed with a high density polyethylene geomembrane must be at least 60-mil thick to allow for proper welding. The jurisdictional health department may approve the use of an alternative liner design if the owner or operator can demonstrate during the permitting process that the proposed design will prevent migration of solid waste constituents or leachate into the ground or surface waters at least as effectively as the liners described in this subsection;

(II) Have dikes and slopes designed to maintain their structural integrity under conditions of a leaking liner and capable of withstanding erosion from wave action, overfilling, or precipitation;

(III) Have freeboard (distance between the liquid level and the top of the pond) equal to or greater than eighteen inches to avoid overtopping from wave action, overfilling, or precipitation. The jurisdictional health department may reduce the freeboard requirement provided that other engineering controls are in place that prevent overtopping. These engineering controls must be specified during the permitting process; and

(IV) Leachate ponds that have the potential to impound more than ten-acre feet (three million two hundred fifty-nine thousand gallons) of liquid measured from the top of the dike and which would be released by a failure of the containment dike must be reviewed and approved by the dam safety section of the department.

(C) Tanks used to store leachate must meet design standards in WAC 173-350-330 (3)(b).

(f) Incoming feedstocks, active composting, and curing materials must be placed on pads that prevent contamination of soil or groundwater underlying or adjacent to the pads. Pads must meet the following requirements:

(i) All pads must be curbed or graded in a manner to prevent ponding, to control run-on and runoff, and to separately collect and convey all storm water and leachate to separate storage or holding systems. Storm water that is combined with leachate must be managed as leachate in accordance with this section;

(ii) All pads must be constructed on subgrades that provide sufficient bearing capacity to support the weight of the pad, the materials placed on them, and the equipment used in handling the materials;

(iii) The entire surface area of the pad must be designed to maintain its structural and hydraulic integrity against loads resulting from any machinery used for feedstock and compost handling activities, and from surface wear or damage caused by feedstock and compost handling, or by active composting at the facility;

(iv) The pad may be constructed of materials such as concrete (with sealed joints), asphaltic concrete, or soil cement that prevents subsurface soil and groundwater contamination;

(v) The jurisdictional health department may allow pads for compost facilities to be designed and constructed with materials other than those listed in (f)(iv) of this subsection, provided the applicant demonstrates in the engineering report to the jurisdictional health department's and the department's satisfaction that the alternative pad provides sufficient protection to meet the performance standards of this section and of WAC 173-350-040.

(4) *Composting facilities - Operating standards (permit requirements)*. The owner or operator of a composting facility must:

(a) Operate the facility to:

(i) Control air contaminants such as dust and nuisance odors to prevent other contaminants from migrating beyond property boundaries in accordance with WAC 173-350-040(4);

(ii) Prevent the attraction of vectors;

(iii) Prevent the migration of agricultural pests identified by local pest and disease control boards, as applicable;

(iv) Ensure access to the facility is restricted when the facility is closed;

(v) Ensure that only feedstocks identified in the approved plan of operation are accepted at the facility;

(vi) Ensure the facility operates under the supervision and control of a properly trained individual(s) during all hours of operation:

(A) Facility supervisors responsible for daily operation must receive training, or be able to document prior training, in the basics of composting within the first year of supervising the facility. Training must consist of classroom and hands-on course work and conclude with a certificate of completion that must be kept on-site at all times. Appropriate compost training can be obtained through organizations such as the Washington organic recycling council, the Solid Waste Association of North America, the U.S. Composting Council, or other training as approved by the jurisdictional health department.

(B) Ensure facility employees are trained in appropriate facility operations, maintenance procedures, and safety and emergency procedures according to individual job duties and according to an approved plan of operation. A trained supervisor may provide appropriate training to employees responsible for daily operations.

(vii) Implement and document pathogen reduction activities. Documentation must include compost pile temperatures representative of the composting materials, and notation of turnings as appropriate, based on the composting method

used. Pathogen reduction activities must at a minimum include the following:

(A) In vessel composting - The temperature of the active compost pile must be maintained at fifty-five degrees Celsius (one hundred thirty-one degrees Fahrenheit) or higher for three consecutive days (seventy-two hours); or

(B) Aerated static pile must have a cover such as a synthetic material or a layer of finished compost to ensure that pathogen reduction temperatures are reached and vectors are controlled - The temperature of the active compost pile must be maintained at fifty-five degrees Celsius (one hundred thirty-one degrees Fahrenheit) or higher for three consecutive days (seventy-two hours); or

(C) Windrow composting - The temperature of the active compost pile must be maintained at fifty-five degrees Celsius (one hundred thirty-one degrees Fahrenheit) or higher for fifteen days or longer. During the period when the compost is maintained at fifty-five degrees Celsius (one hundred thirty-one degrees Fahrenheit) or higher, there must be a minimum of five turnings of the windrow; or

(D) An alternative method of composting that can be demonstrated by the owner or operator to achieve an equivalent reduction of human pathogens.

(viii) Monitor the composting process according to the plan of operation submitted during the permitting process. Monitoring must include inspection of incoming loads of feedstocks and pathogen reduction requirements of (a)(vii) of this subsection;

(ix) Collect composted material samples for analysis that are representative of the pile. Use a sampling method such as described in the U.S. Composting Council 2002 Test Methods for the Examination of Composting and Compost, Method 02.01-A through E; and

(x) Analyze composted material for metals and other testing parameters listed in Table 220-B.

(A) The jurisdictional health department may require additional tests for metals and contaminants;

(B) Testing frequency is based on amount of composted material produced. A representative sample of composted material must be tested for every 5,000 cubic yards produced, or every three hundred sixty-five days, whichever is more frequent. The jurisdictional health department may modify the frequency of testing based on historical data for a particular facility;

(C) Composted material meeting the conditions of subsection (4)(a)(x) and (g) of this section can be stored off of a pad.

Table 220-B Testing Parameters

Metals and other testing parameters	Limit (mg/kg dry weight), unless otherwise specified
Arsenic	≤ 20 ppm
Cadmium	≤ 10 ppm
Copper	≤ 750 ppm
Lead	≤ 150 ppm
Mercury	≤ 8 ppm
Molybdenum	≤ 9 ppm
Nickel	≤ 210 ppm
Selenium	≤ 18 ppm
Zinc	≤ 1400 ppm
Physical contaminants[1]	≤ 1 percent by weight total, not to exceed .25 percent film plastic by weight
Sharps	0
pH	5 - 10 (range)
Biological stability[2]	Moderately unstable to very stable
Fecal coliform[3]	< 1,000 Most Probable Number per gram of total solids (dry weight)
OR	
Salmonella	< 3 Most Probable Number per 4 grams of total solids (dry weight)

[1]A label or information sheet must be provided with compost that exceeds .1% by weight of film plastic. See WAC 173-350-220 (4)(f)(iii)(D)(I).

[2]Tests for biological stability must be done as outlined in the United States Composting Council Test Methods for the Examination of Composting and Compost unless otherwise approved by the jurisdictional health department.

[3]Test for either fecal coliform or salmonella.

Note: Biosolids composters regulated under this chapter must communicate with the jurisdictional health department to determine if different testing parameters and testing frequencies are required.

(b) Inspect the facility to prevent malfunctions and deterioration, operator errors and discharges that may cause or lead to the release of waste to the environment or a threat to human health. Inspections must be conducted at least weekly, unless an alternate schedule is approved by the jurisdictional health department as part of the permitting process.

(c) For compost facilities with leachate holding ponds, conduct regular liner inspections at least once every five years, unless an alternate schedule is approved by the jurisdictional health department as part of the permitting process. The frequency of inspections must be specified in the operations plan and must be based on the type of liner, expected service life of the material, and the site-specific service conditions:

(i) Inspect the liner for degradation and ruptures of the liner material and for failure of any seams or joints in the liner material. If the maximum wetted extent of the liner geomembrane cannot be directly inspected visually, then the liner must be tested for leaks by electrical leak detection survey methods. If leaks, degradation, or ruptures of the liner material are detected, the liner must be repaired; and

(ii) The jurisdictional health department must be given sufficient notice and have the opportunity to be present during liner inspections. An inspection record must be kept at the facility or other convenient location if permanent office facilities are not on-site, for at least five years from the date of inspection. Inspection records must be available to the jurisdictional health department upon request.

(d) Maintain operating records of the following:

(i) Daily temperatures representative of compost piles;

(ii) Additional process monitoring data as prescribed in the plan of operation;

(iii) Results of analyses for composted materials as required in (a)(x) of this subsection and Table 220-B; and

(iv) Facility inspection reports must be maintained in the operating record. Significant deviations from the plan of operation must be noted in the operating record. Records must be kept for a minimum of five years and must be available upon request by the jurisdictional health department.

(e) Prepare and submit a copy of an annual report to the jurisdictional health department and the department by April 1st of each calendar year on forms provided by the department. The annual report must detail the facility's activities during the previous calendar year and must include the following information:

(i) Name and address of the facility;

(ii) Calendar year covered by the report;

(iii) Annual quantity and type of feedstocks received and compost produced, in cubic yards or tons;

(iv) Annual quantity of composted material sold or distributed, in cubic yards or tons;

(v) Annual summary of laboratory analysis of composted material; and

(vi) Any additional information required by the jurisdictional health department as a condition of the permit.

(f) Develop, keep, and follow a plan of operation approved as part of the permitting process. The plan of operation must convey to site personnel the concept of operation intended by the designer. The plan of operation must be kept on-site and be available for inspection at the request of the jurisdictional health department. If necessary, the plan must be modified with the approval, or at the direction of the jurisdictional health department. Each plan of operation must include the following:

(i) List of feedstocks to be composted, including a general description of the source of feedstocks. Feedstocks must be approved by the department or jurisdictional health department;

(ii) A plan to control air contaminants such as dust and nuisance odors to prevent contaminants from migrating beyond property boundaries in accordance with WAC 173-350-040(4), including:

(A) A description of how staff will document and respond to nuisance odor complaints should they arise. The plan must include date and time of complaints, weather conditions, and operations at the facility at the time of the complaint, and a summary of actions taken;

(B) A description of facility and operational features to prevent nuisance odors beyond the facility's property boundary, as determined by the jurisdictional health department, the department, or the air authority. The description must address the receiving, composting, curing, and storage areas of the facility;

(C) A description of facility maintenance activities that encompass nuisance odor prevention and control, such as acquiring critical odor control backup equipment in the event of a breakdown, a schedule for purging aeration lines and changing biofilter media as appropriate, and a schedule for cleaning leachate ponds or leachate storage tanks as appropriate; and

(D) A description of how feedstocks with high moisture or the potential for high odors will be managed to reduce nuisance odors upon receipt, and through the composting process.

(iii) A description of how wastes and organic materials including incoming feedstocks, composting, curing, and composted materials are to be handled on-site during the facility's active life, including:

(A) Maximum capacity in cubic yards for all materials on-site at any one time. The jurisdictional health department may require cumulative capacity for materials or separate capacities for incoming feedstocks, composting, curing, and composted materials, or any combination;

(B) Throughput in tons or cubic yards of solid waste feedstocks processed in a given amount of time. The jurisdictional health department may require monthly or annual throughput;

(C) Procedures and criteria for ensuring that only the feedstocks described will be accepted. This includes a plan for rejecting feedstocks contaminated with greater than five percent physical contaminants by volume, or a plan to accept and separate contaminated loads from noncontaminated loads, and reduce physical contaminants to an acceptable level prior to composting;

(D) Procedure to reduce physical contaminants in composted material to meet testing parameters in Table 220-B. Grinding to reduce the size of physical contaminants does not meet the requirements of this section;

(I) Compost facilities must provide a label or information sheet to purchasers of compost that exceeds .1% film plastic by weight but does not exceed .25% film plastic by weight. The label or information sheet must include the statement in subsection (4)(f)(iii)(D)(II) of this section, or equivalent language approved by jurisdictional health department or the department.

(II) "This compost does not meet Department of Ecology standards for film plastic content for unrestricted use. This compost may only be used in locations where a means of removing or containing the film plastic on site is put in place promptly after use. Acceptable controls include removal from the site, incorporation, planting, covering with soil or another media, or containment in a compost sock or similar device. This product may not be used adjacent to regulated waters of the state (e.g., wetlands, streams, lakes) or in environmentally sensitive areas."

(E) Procedures for handling unacceptable wastes;

(F) A discussion on types and amounts of feedstocks including basic calculations showing that the facility will be able to achieve an acceptable mix of materials for efficient decomposition;

(G) Material flow plan describing general procedures to manage all materials on-site from incoming feedstock to composted material;

(H) A description of equipment, including equipment to add water to compost as necessary;

(I) Compost process monitoring plan, including compost mix (carbon to nitrogen ratio), temperature, moisture, and porosity;

(J) Pathogen reduction plan;

(K) Representative sampling and analysis plan for the composted material such as described in the 2002 U.S. Composting Council Test Methods for the Examination of Composting and Compost Method 02.01-A through E;

(L) Leachate management plan, including monthly precipitation and evaporation data, and if applicable, monthly leachate reuse or removal; and

(M) Storm water management plan.

(iv) A description of how equipment, structures, and other systems are to be inspected and maintained, including the frequency of inspections and inspection logs;

(v) A description of how facility staff will receive appropriate training in the operation of the facility, including how they will be trained to identify nuisance odors and how to correct them;

(vi) A community relations plan describing how the owner or operator will document and manage complaints;

(vii) Safety, fire, and emergency plans;

(viii) Forms for recordkeeping of daily volumes or weights of incoming feedstocks by type, outgoing composted material, and process monitoring results; and

(ix) Other details to demonstrate that the facility will be operated in accordance with this subsection and as required by the jurisdictional health department.

(g) Manage composted material piles that have met the testing parameters in Table 220-B in the following manner:

(i) Comply with the performance standards of WAC 173-350-040; and

(ii) Minimize and control runoff from composted material piles through the use of covers, diversion swales, berms, ditches, or other features designed to prevent runoff and divert storm water from compost material; and

(iii) Minimize odor by maintaining porosity of composted material piles and managing moisture levels in composted material piles, not to exceed sixty percent moisture.

(5) *Composting facilities - Groundwater monitoring requirements (permit requirements)*. There are no specific groundwater monitoring requirements for composting facilities subject to this chapter; however, composting facilities must meet the requirements of other federal, state, or local laws and regulations that apply under WAC 173-350-040(5).

(6) *Composting facilities - Closure requirements (permit requirements)*. The owner or operator of a composting facility must:

(a) Notify the jurisdictional health department sixty days in advance of closure. At closure, the facility owner or operator is financially responsible for the removal of all solid waste, including but not limited to, raw or partially composted feedstocks, composted material and leachate from the facility. The materials must be sent to another facility that complies with the applicable regulations for handling the waste.

(b) Develop, keep, and follow a closure plan approved by the jurisdictional health department as part of the permitting process. At a minimum, the closure plan must include methods of removing solid waste, leachate, and other organic materials from the facility. For planning purposes, assume that the facility is at full, permitted capacity at the time of closure.

(7) *Composting facilities - Financial assurance requirements (permit requirements)*. There are no specific financial assurance requirements for composting facilities subject to this chapter; however, composting facilities must meet the requirements of other federal, state, or local laws and regulations that apply under WAC 173-350-040(5).

(8) *Composting facilities - Permit application contents (permit requirements)*. The owner or operator of a composting facility must obtain a solid waste permit from the jurisdictional health department. All applications for permits must be submitted in accordance with the procedures established in WAC 173-350-710. In addition to the requirements of WAC 173-350-710 and 173-350-715, each application for a permit must contain:

(a) Engineering reports, plans, and specifications that address the design standards of subsection (3) of this section;

(b) A plan of operation meeting the requirements of subsection (4) of this section; and

(c) A closure plan meeting the requirements of subsection (6) of this section.

(9) *Composting facilities - Construction records (permit requirements)*. Within thirty days of completing construction, the owner or operator of a composting facility must provide copies of the construction record drawings for engineered facilities at the site and a report documenting facility construction, including the results of observations and testing carried out as part of the construction quality assurance plan, to the jurisdictional health department and the department. Facilities must not begin operating until the jurisdictional health department has determined that the construction was completed in accordance with the approved engineering report, plans, and specifications and has approved the construction documentation in writing. The jurisdictional health department has thirty days after receiving complete construction records to provide its determination.

(10) *Composting facilities - Designation of composted materials (permit requirements)*. When used on-site or distributed off-site, composted materials meeting the testing parameters of Table 220-B are no longer subject to this chapter. Composted materials that do not meet these requirements are solid waste and subject to management under chapter 70.95 RCW, Solid waste management—Reduction and recycling.

[Statutory Authority: RCW 70.95.020(3), 70.95.060(1), 70.95.260(6), 70.95.305, 70.95.330. WSR 13-08-016 (Order 10-06), § 173-350-220, filed 3/25/13, effective 4/25/13. Statutory Authority: Chapter 70.95 RCW. WSR 03-03-043 (Order 99-24), § 173-350-220, filed 1/10/03, effective 2/10/03.]

WAC 173-350-225 Other organic material handling activities. (1) In accordance with RCW 70.95.305, activities identified in this section are exempt from solid waste handling permitting when in compliance with the terms and conditions of this section. Any person engaged in the activities in this section that does not comply with the terms and conditions of this section is required to obtain a permit from the jurisdictional health department in accordance with the requirements of WAC 173-350-490. In addition, violations of the terms and conditions of this subsection may be subject to the penalty provisions of RCW 70.95.315.

Table 225-A Terms and Conditions for Solid Waste Permit Exemptions

	Organic Materials	Volume	Specific Requirements for Activity or Operation
(1)	All organic feedstocks	No more than 5,000 gallons or 25 cubic yards of material on-site at any one time.	No notification, reporting or testing requirements.
(2)	All organic feedstocks	Greater than 25 but no more than 250 cubic yards of material generated on- or off-site, or up to 1,000 cubic yards of material generated on-site at any one time.	Exemption applies to vermicomposting only. Vermicomposting facilities managing more than 25 cubic yards of any organic material must meet the following conditions: (a) Thirty days prior to operation, facilities must submit a notification of intent to operate as a conditionally exempt facility to the jurisdictional health department and the department. Notice of intent must be submitted on a form provided by the department. (b) Facilities that distribute material off-site must submit annual reports to the department and the jurisdictional health department by April 1st of each calendar year. Annual reports must be submitted on forms provided by the department.
(3)	Preconsumer vegetative food waste Yard debris Crop residues Manure and bedding Bulking agents	Greater than 25 but no more than 1,000 cubic yards of material on-site at any one time.	Exemption applies to vermicomposting only. Vermicomposting facilities managing more than 25 cubic yards of only the listed feedstocks must meet the following conditions: (a) Thirty days prior to operation, facilities must submit a notification of intent to operate as a conditionally exempt facility to the jurisdictional health department and the department. Notice of intent must be submitted on a form provided by the department. (b) Facilities that distribute material off-site must submit annual reports to the department and the jurisdictional health department by April 1st of each calendar year. Annual reports must be submitted on forms provided by the department.
(4)	All organic feedstocks	Greater than 5,000 but no more than 50,000 gallons of liquid or semi-solid material on-site at any one time; or Greater than 25 but no more than 250 cubic yards of nonliquid material on-site at any one time.	Other conversion technologies managing more than 5,000 gallons liquid or semi-solid or 25 cubic yards of nonliquid material must meet the following conditions: (a) Thirty days prior to operation, facilities must submit a notification of intent to operate as a conditionally exempt facility to the jurisdictional health department and the department. Notification must be submitted on a form provided by the department. (b) Facilities that distribute material off-site must meet the following conditions:

	Organic Materials	Volume	Specific Requirements for Activity or Operation
			(i) Sample and test material every 1 million gallons or 5,000 cubic yards or once per year, whichever is more frequent, to demonstrate it meets compost quality standards of WAC 173-350-220(4) (Table 220-B) before it is distributed for off-site use; or (ii) Ensure material meets the conditions for a commercial fertilizer as applicable in chapter 15.54 RCW; or (iii) Send material to a compliant permitted or conditionally exempt compost facility for further treatment to meet compost quality standards; or (iv) Land apply material in accordance with WAC 173-350-230, Land application; or (v) Use material in accordance with WAC 173-350-200, Beneficial use permit exemption; or (vi) Process or manage material in an alternate manner approved by the department or the jurisdictional health department. (c) Submit annual reports to the department and the jurisdictional health department by April 1st of each calendar year. Annual reports must be submitted on forms provided by the department.

(2) Facilities managing under the rules and volumes of material described in Table 225-A above are conditionally exempt facilities when they meet the following conditions:

(a) Comply with the performance standards, WAC 173-350-040;

(b) Allow inspections by the department and/or jurisdictional health department at reasonable times to verify compliance with the conditions specified in this subsection;

(c) Manage the operation to prevent attraction of flies, rodents, and other vectors;

(d) Control nuisance odors to prevent migration beyond property boundaries; and

(e) Manage the operation to prevent the migration of agricultural pests identified by local horticultural pest and disease control boards, as applicable.

[Statutory Authority: RCW 70.95.020(3), 70.95.060(1), 70.95.260(6), 70.95.305, 70.95.330. WSR 13-08-016 (Order 10-06), § 173-350-225, filed 3/25/13, effective 4/25/13.]

WAC 173-350-230 Land application. (1) *Land application - Applicability*. This section applies to solid waste that is beneficially used on the land for its agronomic value, or soil-amending capability, including land reclamation. This section does not apply to:

(a) The application of commercial fertilizers registered with the Washington state department of agriculture as provided in RCW 15.54.325, and which are applied in accordance with the standards established in RCW 15.54.800(3);

(b) Biosolids regulated under chapter 173-308 WAC, Biosolids management;

(c) Composted materials no longer considered solid waste under WAC 173-350-220(10);

(d) Dangerous waste regulated under chapter 173-303 WAC Dangerous waste regulations;

(e) Waste derived soil amendments exempted from permitting under WAC 173-350-200; and

(f) Solid waste used to improve the engineering characteristics of soil.

(2) *Land application - Location standards*. There are no specific location standards for land application of solid waste subject to this chapter; however, land application sites must meet the requirements provided under WAC 173-350-040(5).

(3) *Land application - Design standards*. There are no specific design standards for land application of solid waste subject to this chapter; however, land application sites must meet the requirements provided under WAC 173-350-040(5).

(4) *Land application - Operating standards*. The owner or operator of a land application site shall operate the site in compliance with the performance standards of WAC 173-350-040. The jurisdictional health department shall determine the need for environmental monitoring to ensure com-

pliance with the performance standards. In addition the owner or operator shall:

(a) Operate the site to ensure that:

(i) For waste stored in piles on the site:

(A) Contamination of groundwater, surface water, air and land during storage and in case of fire or flood is prevented;

(B) The potential for combustion within the pile and the potential for combustion from other sources is minimized;

(C) The duration of on-site waste storage is limited to one year, or less if the jurisdictional health department believes it is necessary to prevent the contamination of groundwater, surface water, air and land; and

(D) The amount of material on site does not exceed the amount that could potentially be applied to the site during a one-year period in accordance with the plan of operations;

(ii) For storage of liquid waste or semisolid waste in surface impoundments or tanks, the requirements of WAC 173-350-330 are met;

(iii) Land application occurs at a predictable application rate determined as follows:

(A) For agricultural applications, solid waste shall be applied to the land at a rate that does not exceed the agronomic rate. The agronomic rate should be based on Washington State University cooperative extension service fertilizer guidelines or other appropriate guidance accepted by the jurisdictional health department;

(B) For the purposes of land reclamation or other soil amending activities, the application rate may be designed to achieve a soil organic matter content or other soil physical characteristic and promote long-term soil productivity, with consideration of the carbon-to-nitrogen ratio to control nutrient leaching; and

(C) For liquid wastes, the application rate shall also be based on soil permeability and infiltration rate.

(b) Maintain daily operating records of the amount and type of waste applied to the land, the crop and any additional nutrient inputs. Significant deviations from the plan of operation shall be noted in the operating record. Records shall be kept for a minimum of five years and shall be available upon request by the jurisdictional health department;

(c) Prepare and submit a copy of an annual report to the jurisdictional health department and the department by April 1st on forms supplied by the department. The annual report shall detail the activities during the previous calendar year and shall include the following information:

(i) Site address or legal description;

(ii) Calendar year covered by the report;

(iii) Annual quantity and type of waste received from each source;

(iv) For each crop grown: The acreage used, the amount, type and source of each waste applied, the crop, and any additional nutrient inputs to the land, such as manure, biosolids, or commercial fertilizer;

(v) Quantity and type of any waste remaining in storage as of December 31st of the reporting year;

(vi) Any additional waste characterization information required to be obtained as a condition of the permit, and a summary report of that data;

(vii) Any environmental monitoring data required to be obtained as a condition of the permit, and a summary report of that data; and

(viii) Any additional information required by the jurisdictional health department as a condition of the permit;

(d) Develop, keep, and abide by a plan of operation approved as part of the permitting process. The plan shall describe the facility's operation. The plan of operation shall be available for inspection at the request of the jurisdictional health department. If necessary, the plan shall be modified with the approval, or at the direction of the jurisdictional health department. Each plan of operation shall include the following:

(i) A description of the types of solid wastes to be handled at the site;

(ii) A description of how wastes are to be handled on-site during the life of the site including:

(A) How wastes will be delivered to the site and meet any local agency notification requirements;

(B) A description of the process, system and equipment that will be used to apply the waste to the land that explains:

(I) How the equipment and system will be calibrated to deliver waste at the agronomic rate;

(II) Whether the waste will be allowed to remain on the surface of the land, will be tilled into the soil, or will be injected into the soil at the time of application;

(III) When the waste will be applied to the land relative to crop and livestock management practices; and

(IV) Any proposed restrictions on application related to climatic factors including typical precipitation, twenty-five-year storm events as defined in WAC 173-350-100, temperature, and wind, or site conditions including frozen soils and seasonal high groundwater;

(C) A description of how the waste will be managed at all points during storage and application to control attraction to disease vectors and to mitigate nuisance odor impacts;

(iii) A spill response plan including the names and phone numbers of all contacts to be notified in the event of a spill and how the spill will be cleaned up;

(iv) If the seasonal high groundwater is three feet or less below the surface, a management plan describing how groundwater will be protected;

(v) A waste monitoring plan providing analytical results representative of the waste being applied to the land, over time, taking into account the rate of production of the waste, timing of delivery, and storage;

(vi) The forms used to record volumes, weights and waste application data;

(vii) Other such details to demonstrate that the facility will be operated in accordance with this subsection and as required by the jurisdictional health department.

(5) *Land application - Groundwater monitoring requirements*. There are no specific groundwater monitoring requirements for land application sites subject to this chapter; however, land application sites must meet the requirements provided under WAC 173-350-040(5).

(6) *Land application - Closure requirements*. The owner or operator of all land application sites shall notify the jurisdictional health department sixty days in advance of closure. All land application sites shall be closed by applying all materials in storage in accordance with the permit, or by

removing those materials to a facility that conforms to the applicable regulations for handling the waste.

(7) *Land application - Financial assurance requirements*. There are no specific financial assurance requirements for land application sites subject to this chapter; however, land application sites must meet the requirements provided under WAC 173-350-040(5).

(8) *Land application - Permit application contents*.

(a) The owner or operator of land application sites subject to this section shall obtain a solid waste permit from the jurisdictional health department. All applications for permits shall be submitted in accordance with the procedures established in WAC 173-350-710. In addition to the requirements of WAC 173-350-710 and 173-350-715, each application for a permit shall contain:

(i) Contact information, including name, contact person, mailing address, phone, fax, e-mail for:

(A) Any person who generates waste that will be applied to the site;

(B) The person who is applying for a permit (the permit holder);

(C) The person who prepares the permit application; and

(D) The person who owns the site where the waste will be applied.

(ii) Statement of intended use. The permit application shall contain a clear explanation of the benefit to be obtained from land application of the material. Avoidance of disposal is not adequate justification for land application of solid waste.

(iii) An analysis of the waste which includes:

(A) A description of the material to be applied to the land;

(B) A description of the processes by which the material is generated and treated including all processed feedstocks;

(C) Any pseudonyms or trade names for the material;

(D) A discussion of the potential for the material to generate nuisance odors or to attract disease vectors, including any complaints regarding nuisance odors associated with this material;

(E) An analysis of pollutant concentrations of the following reported on a dry weight basis:

(I) Total arsenic;

(II) Total barium;

(III) Total cadmium;

(IV) Total chromium;

(V) Total copper;

(VI) Total lead;

(VII) Total mercury;

(VIII) Total molybdenum;

(IX) Total nickel;

(X) Total selenium;

(XI) Total zinc.

(F) An analysis of nutrients at a minimum to include total Kjeldahl nitrogen, total nitrate-nitrogen, total ammonia- and ammonium-nitrogen, total phosphorus, and extractable potassium, reported on a dry weight basis;

(G) An analysis of physical/chemical parameters to include at a minimum: Total solids, total volatile solids, pH, electrical conductivity, total organic carbon;

(H) A discussion of any pathogens known or suspected to be associated with this material, including those which can cause disease in plants, animals, or humans;

(I) The concentration of fecal coliform bacteria expressed as CFU or MPN per gram of dry solid material; and

(J) Any additional analysis required by the jurisdictional health department. The jurisdictional health department may reduce the analytical requirements of this section. Methods of analysis are to be determined by the jurisdictional health department.

(iv) A comprehensive site characterization including:

(A) A description of current practices and a brief description of past practices on the application site, including application of wastes, soil amendments, manures, biosolids, liming agents, and other fertilization practices, livestock usage, irrigation practices, and crop history. Also indicate whether any management plan has been prepared for the site such as a farm, forest, or nutrient management plan. Discuss any potential changes to management practices at the site;

(B) A description of the climate at the application site including typical precipitation, precipitation of a twenty-five-year storm, as defined in WAC 173-350-100, temperatures, and seasonal variations;

(C) A brief discussion of the potential for run-on and runoff, and typical depths to seasonal high groundwater;

(D) An analysis of soil nutrients including residual nitrate in the upper two feet of soil in one foot increments;

(E) A site map showing property boundaries and ownership of adjacent properties with the application areas clearly shown, and with the latitude and longitude of the approximate center of each land application site;

(F) A topographic relief map of the site extending one quarter beyond the site boundaries at a scale of 1:24,000 or other scale if specified by the jurisdictional health department;

(G) Show the following information on either of the maps provided or on additional maps if needed:

(I) Location of the site by street address, if applicable;

(II) The zoning classification of the site;

(III) The means of access to the site;

(IV) The size of the site in acres, and if applicable, the size of individual fields, units, and application areas;

(V) The location and size of any areas which will be used to store the waste;

(VI) Adjacent properties, uses, and their zoning classifications;

(VII) Delineation of wetlands on the site;

(VIII) Any portion of the site that falls within a wellhead protection area;

(IX) Any seasonal surface water bodies located on the site or perennial surface water bodies within one-quarter mile of the site;

(X) The location of all wells within one-quarter mile of the boundary of the application area which are listed in public records or otherwise known, whether for domestic, irrigation, or other purposes;

(XI) Any setback or buffer to surface water, property boundaries, or other feature, if proposed;

(XII) The location of any critical areas or habitat identified under the Endangered Species Act, local growth man-

agement plans, habitat conservation plans, conservation reserve program, or local shoreline master program;

(XIII) A copy of the Natural Resources Conservation Service soil survey map from the most recent edition of the soil survey that includes the distribution of soil types with an overlay of the site boundaries; and

(XIV) A description of the soil type(s), textural classes, and soil depths present on the site as determined by the most recent edition of the Natural Resources Conservation Service soil survey or from actual field measurements.

(v) A plan of operation meeting the requirements of subsection (4) of this section.

(b) Two or more areas of land under the same ownership or operational control which are not contiguous may be considered as one site for the purposes of permitting, if in the opinion of the jurisdictional health department the areas are sufficiently proximate and management practices are sufficiently similar that viewing them as one proposal would expedite the permit process without compromising the public interest. A jurisdictional health department may also require separate permits for a contiguous area of land if it finds that the character of a proposed site or management practices across the site are sufficiently different that the permit process and public interest would be best served by a more focused approach.

[Statutory Authority: Chapter 70.95 RCW. WSR 03-03-043 (Order 99-24), § 173-350-230, filed 1/10/03, effective 2/10/03.]

WAC 173-350-240 Energy recovery and incineration facilities. (1) *Energy recovery and incineration facilities - Applicability*.

(a) These standards apply to all facilities designed to burn more than twelve tons of solid waste or refuse-derived fuel per day.

(b) These standards do not apply to facilities that burn gases recovered at a landfill or solid waste digesters.

(c) In accordance with RCW 70.95.305, the combustion of wood waste, wood derived fuel, and wastewater treatment sludge generated from the manufacturing of wood pulp or paper, for the purpose of energy recovery is subject solely to the requirements of (d)(i) through (iv) of this subsection and is exempt from solid waste handling permitting. An owner or operator that does not comply with the terms and conditions of (d)(i) through (iv) of this subsection is required to obtain a permit from the jurisdictional health department and shall comply with all other applicable requirements of this chapter. In addition, violations of the terms and conditions of (d)(i) through (iv) of this subsection may be subject to the penalty provisions of RCW 70.95.315.

(d) Owners and operators of all categorically exempt energy recovery facilities shall:

(i) Comply with the performance standards of WAC 173-350-040;

(ii) Ensure that only fuels approved in writing by the agency with jurisdiction over the facility for air quality regulation are combusted;

(iii) Allow department and jurisdictional health department representatives to inspect the facility at reasonable times for the purpose of determining compliance with this chapter; and

(iv) Ensure that wastewater treatment sludge generated from the manufacturing of wood pulp or paper is combusted only in energy recovery units at the facility from which it originates.

(2) *Energy recovery and incineration facilities - Location standards*. There are no specific location standards for energy recovery or incineration facilities subject to this chapter; however, energy recovery and incineration facilities must meet the requirements provided under WAC 173-350-040(5).

(3) *Energy recovery and incineration facilities - Design standards*. There are no specific design standards for energy recovery or incineration facilities subject to this chapter; however, energy recovery and incineration facilities must meet the requirements provided under WAC 173-350-040(5).

(4) *Energy recovery and incineration facilities - Operating standards*. The owner or operator of an energy recovery or incineration facility shall:

(a) Operate the facility to:

(i) Confine solid wastes prior to and after processing to specifically designed piles, surface impoundments, tanks or containers meeting the applicable standards of this chapter. Storage of wastes other than in the specifically designed storage compartments is prohibited. Equipment and space shall be provided in the storage and charging areas, and elsewhere as needed, to allow periodic cleaning as required to maintain the plant in a sanitary and clean condition;

(ii) Handle solid wastes, including combustion residues, in a manner that complies with this chapter;

(iii) Provide recyclable material collection at all facilities that accept municipal solid waste from the general public, self-haul residential, or commercial waste generators; and

(iv) Ensure that dangerous waste is not disposed, treated, stored or otherwise handled, unless the requirements of chapter 173-303 WAC, Dangerous waste regulations, are met.

(b) Inspect the facility to prevent malfunctions and deterioration, operator errors and discharges that may lead to the release of wastes to the environment or cause a threat to human health. The owner or operator shall conduct these inspections as needed, but at least weekly, unless an alternate schedule is approved by the jurisdictional health department as part of the permitting process.

(c) Maintain daily operating records on the weights and types of wastes received, and number of vehicles delivering waste to the facility. Facility inspection reports shall be maintained in the operating record. Significant deviations from the plan of operation shall also be noted on the operating record. Records shall be maintained for a minimum of five years and shall be available upon request by the jurisdictional health department.

(d) Prepare and submit a copy of an annual report to the jurisdictional health department and the department by April 1st of each year on forms supplied by the department. The annual report shall detail the facility's activities during the previous calendar year and shall include the following information:

(i) Name and address of the facility;

(ii) Calendar year covered by the report;

(iii) Annual quantity of each type of solid waste received and incinerated, in tons if available;

(iv) Annual quantity, type and destination of solid waste bypassed, in tons;

(v) Annual quantity of ash disposed and disposal location, in tons; and

(vi) Any additional information required by the jurisdictional health department as a condition of the permit.

(e) Develop, keep and abide by a plan of operation approved as part of the permitting process. The plan shall describe the facility's operation and shall convey to site operating personnel the concept of operation intended by the designer. The plan of operation shall be available for inspection at the request of the jurisdictional health department. If necessary, the plan shall be modified with the approval, or at the direction of the jurisdictional health department. Each plan of operation shall include the following:

(i) A description of the types of solid wastes to be handled at the facility;

(ii) How solid wastes are to be handled on-site during the facility's active life, including alternative storage, and/or disposal plans for all situations that would result in overfilling of the storage facility;

(iii) A description of how equipment, structures and other systems, including leachate collection and gas collection equipment, are to be inspected and maintained, including the frequency of inspection and inspection logs;

(iv) Safety, fire and emergency plans including:

(A) Actions to take if there is a fire or explosion;

(B) Actions to take if leaks are detected;

(C) Remedial action programs to be implemented in case of a release of hazardous substances to the environment;

(D) Actions to take for other releases (e.g., failure of runoff containment system);

(v) Forms used to record volumes or weights;

(vi) Other such details to demonstrate that the facility will be operated in accordance with this chapter and as required by the jurisdictional health department.

(5) *Energy recovery and incineration facilities - Groundwater monitoring requirements*. There are no specific groundwater monitoring requirements for energy recovery and incineration facilities subject to this chapter; however, energy recovery and incineration facilities must meet the requirements provided under WAC 173-350-040(5).

(6) *Energy recovery and incineration facilities - Closure requirements*. The owner or operator of an energy recovery or incineration facility shall:

(a) Notify the jurisdictional health department one hundred eighty days in advance of closure. At the time of closure all solid waste shall be removed to a facility that conforms with the applicable regulations for handling the waste.

(b) Develop, keep and abide by a closure plan approved by the jurisdictional health department as part of the permitting process. At a minimum, the closure plan shall include the methods of removing waste.

(7) *Energy recovery and incineration facilities - Environmental impact statement required*. In accordance with RCW 70.95.700, no solid waste energy recovery or incineration facility shall be operated prior to the completion of an environmental impact statement containing the considerations required under RCW 43.21C.030 (2)(c) and prepared pursuant to the procedures of chapter 43.21C RCW, State Environmental Policy Act.

(8) *Energy recovery and incineration facilities - Financial assurance requirements*. There are no specific financial assurance requirements for energy recovery facilities and incineration facilities subject to this chapter; however, energy recovery and incineration facilities must meet the requirements provided under WAC 173-350-040(5).

(9) *Energy recovery and incineration facilities - Permit application contents*. The owner or operator of an energy recovery or incineration facility shall obtain a solid waste permit from the jurisdictional health department. All applications for permits shall be in accordance with the procedures established in WAC 173-350-710. In addition to the requirements of WAC 173-350-710 and 173-350-715, each permit application shall contain:

(a) Preliminary engineering reports/plans and specifications that address:

(i) The design of the storage and handling facilities on-site for incoming waste as well as fly ash, bottom ash and any other wastes produced by air or water pollution controls; and

(ii) The design of the incinerator or thermal treater, including charging or feeding systems, combustion air systems, combustion or reaction chambers, including heat recovery systems, ash handling systems, and air pollution and water pollution control systems. Instrumentation and monitoring systems design shall also be included.

(b) A plan of operation that addresses the requirements of subsection (4) of this section; and

(c) A closure plan meeting the requirements of subsection (6) of this section.

[Statutory Authority: Chapter 70.95 RCW. WSR 03-03-043 (Order 99-24), § 173-350-240, filed 1/10/03, effective 2/10/03.]

WAC 173-350-250 Anaerobic digesters. (1) *Anaerobic digesters - Applicability.* This section applies to all facilities that treat solid waste by anaerobic digestion, except (a), (b), and (c) of this subsection:

(a) Storage or treatment of solid or liquid wastes in surface impoundments or tanks regulated under WAC 173-350-330;

(b) Anaerobic digesters regulated in accordance with chapter 90.48 RCW, Water pollution control; and

(c) Anaerobic digesters regulated in accordance with chapter 173-308 WAC, Biosolids management.

(2) *Anaerobic digester - Permit exemptions.* In accordance with RCW 70.95.305, anaerobic digester facilities processing the types and volumes of materials identified in Table 250-A are subject solely to the requirements of Table 250-A and (b) of this subsection and are exempt from solid waste handling permitting. Feedstocks not listed in Table 250-A must be approved by the department. Violations of the terms and conditions of Table 250-A and (b) of this subsection may be subject to penalty provisions of RCW 70.95.315.

(a) An owner or operator that does not comply with the terms and conditions of Table 250-A and (b) of this subsection must:

• Obtain a solid waste handling permit from the jurisdictional health department; and

• Comply with all applicable requirements of this chapter.

Violations of the terms and conditions of Table 250-A and (b) of this subsection may be subject to the penalty provisions of RCW 70.95.315.

Table 250-A Terms and Conditions for Exemptions

	Organic Materials	Volume	Specific Requirements for Activity or Operation
(1)	All organic feedstocks	No more than 5,000 gallons or 25 cubic yards of material on-site at any one time.	No notification, reporting or testing requirements.
(2)	All organic feedstocks	Greater than 5,000 but no more than 50,000 gallons of liquid or semi-solid material on-site at any one time; or Greater than 25 but no more than 250 cubic yards of non-liquid material on-site at any one time.	For facilities managing more than 5,000 gallons or 25 cubic yards on-site at any one time, and if organic materials are received from or distributed off-site, the owner or operator must: (a) Thirty days prior to operation, facilities must submit a notification of intent to operate as a conditionally exempt facility to the jurisdictional health department and the department. Notice of intent must be submitted on a form provided by the department. (b) Facilities that distribute digestate (solids, semi-solids or liquids) off-site must meet the following conditions: (i) Sample and test digestate solids every 5,000 cubic yards or once per year, whichever is more frequent, to demonstrate it meets compost quality standards of WAC 173-350-220(4) (Table 220-B) before it is distributed for off-site use; or (ii) Ensure digestate liquids or nonseparated digestate meets the conditions for a commercial fertilizer as applicable in chapter 15.54 RCW; or (iii) Send digestate to a compliant permitted or conditionally exempt compost facility for further treatment to meet compost quality standards; or (iv) Land apply digestate in accordance with WAC 173-350-230, Land application; or (v) Use digestate in accordance with WAC 173-350-200, Beneficial use permit exemptions; or (vi) Process or manage digestate in an alternate manner approved by the department or the jurisdictional health department; (vii) Submit annual reports and results of digestate analysis (if applicable) to the department and the jurisdictional health department by April 1st of each calendar year. Annual reports must be submitted on forms provided by the department.
(3)	Livestock manure; may include livestock manure that is imported, which means originating off of the farm or site where the anaerobic digester is being operated; and Organic feedstocks except materials collected from municipal, commercial or residential solid waste collection programs. All imported organic materials must be preconsumer.	No limits when livestock manure is at least 50% of total feedstocks volume, and imported, non-manure organic feedstocks are not greater than 30% of total feedstock volume.	(a) Thirty days prior to operation, facilities managing imported organic feedstocks must submit a notification of intent to operate as a conditionally exempt facility to the jurisdictional health department and the department. Notice of intent must be submitted on a form provided by the department. (b) All organic materials must be received and stored in a structure(s) that: (i) Complies with the Natural Resources Conservation Service's Practice Standard Code 313 in effect as of July 26, 2009, or other approved storage construction standard approved by the department or the jurisdictional health department; (ii) Is certified by a representative of the Natural Resources Conservation Service to be effective at protecting surface and groundwater; or

	Organic Materials	Volume	Specific Requirements for Activity or Operation
			(iii) Meets applicable construction industry standards adopted by the American Concrete Institute or the American Institute of Steel Construction in effect as of July 26, 2009; and (iv) Prevents migration of nuisance odors beyond property boundaries and minimizes attraction of flies, rodents, and other vectors.
	If imported organic feedstocks are likely to contain animal by-products, they must be previously source separated at a facility licensed to process food by the United States Department of Agriculture, the United States Food and Drug Administration, the Washington state department of agriculture, or other applicable regulatory agency.		(c) The anaerobic digester must be designed and operated in accordance with standards in the Natural Resources Conservation Service's Conservation Practice Standard, Code 366, in effect as of July 26, 2009. (d) All imported organic feedstocks must be fed into the anaerobic digester within 36 hours. (e) Digestate must be managed in accordance with a dairy nutrient management plan under chapter 90.64 RCW, that includes elements addressing management and use of digestate. Digestate that is managed in accordance with the dairy nutrient management plan under chapter 90.64 RCW is no longer a solid waste when those plans include elements addressing management and use of digestate.
	If imported organic feedstocks contain bovine processing waste, they must be derived from animals approved by the United States Department of Agriculture Food Safety and Inspection Service and not contain any specified risk material. Imported organic feedstocks cannot contain sheep carcasses or sheep processing waste.		(f) Facilities that distribute digestate (solids, semi-solids or liquids) off-site other than under a nutrient management plan must meet the following conditions: (i) Digestate must meet compost quality standards of WAC 173-350-220 for pathogens, stability, nutrient testing, metals and other testing before it is distributed for off-site use; or (ii) Be sent to an off-site permitted compost facility for further treatment to meet compost quality standards; or (iii) Be processed or managed in an alternate manner approved by the department; and facilities must: Submit annual reports and results of digestate analysis (if applicable) to the department and the jurisdictional health department by April 1st of each calendar year. Annual reports must be submitted on forms provided by the department.

(b) The owner or operator of an anaerobic digester in compliance with all of the conditions of Table 250-A must also meet all of the following conditions in order to maintain exempt status:

(i) Comply with the performance standards of WAC 173-350-040;

(ii) Allow inspections by the department and/or jurisdictional health department at reasonable times to verify compliance with the conditions specified in this subsection;

(iii) Manage the operation to prevent the attraction of flies, rodents, and other vectors; and

(iv) Manage the operation to prevent the migration of agricultural pests identified by local horticultural pest and disease control boards, as applicable.

(3) *Anaerobic digester - Location standards (permit requirements)*. There are no specific location standards for anaerobic digesters subject to this chapter; however, anaerobic digesters must meet the requirements of other federal, state, or local laws and regulations that apply under WAC 173-350-040(5).

Note: When considering anaerobic digestion facility location, please review the U.S. Department of Transportation Federal Aviation Advisory Circular No. 150/5200-33B. 2007.

(4) *Anaerobic digester - Design standards (permit requirements)*. Anaerobic digesters must be designed such that the facility can be operated to meet the performance standard requirements in WAC 173-350-040. The owner or operator of an anaerobic digester facility must:

(a) Prepare and provide to the jurisdictional health department engineering reports, plans, specifications, and a construction quality assurance plan that address the standards of this subsection. The reports, plans, and specifications must be prepared by an engineer licensed in the state of Washington and must include:

(i) An engineering report that presents the design basis and calculations for the engineered features of the facility including, but not limited to, pads, impoundments, leachate management features (if applicable), digestate management features, storm water management features, and anaerobic digester features. The engineering report must demonstrate

that the proposed design will meet the performance standards of this chapter;

(ii) Scale drawings of the facility including the location and size of feedstock storage areas, fixed equipment, buildings, leachate management features (if applicable), digestate management features, storm water management features, access road and other constructed areas, and buildings integral to facility operation;

(iii) Design specifications for the engineered features of the facility including, but not limited to, pads, storm water management features, leachate management features (if applicable), digestate management features, and an anaerobic digester design that demonstrates all structures, containers, tanks, and/or surface impoundments will meet the requirements of this section, and of any federal, state, or local water and air quality permits; and

(iv) A construction quality assurance plan that describes monitoring, testing and documentation procedures that must be performed during construction of the facility to ensure the facility is constructed in accordance with the approved design.

(b) Provide all weather roads from the public highway to and within the facility when operations require public access. Roads must be designed and maintained to prevent traffic congestion, traffic hazards, dust and noise pollution.

(c) Design waste receiving areas, digesters, digestate management features, storm water, and leachate management features (if applicable), to prevent contamination of air, soil, surface water, and groundwater.

(i) Feedstock, leachate (if applicable), and digestate receiving and storage areas must either be in tanks or surface impoundments meeting the requirements of this section, or be on pads to prevent contamination of air, soil, surface water, and groundwater underlying or adjacent to receiving and storage areas;

(ii) Pads must meet the following requirements:

(A) All pads must be curbed or graded in a manner to prevent ponding, control run-on and runoff, and separately collect and convey all storm water and leachate to separate storage or holding systems. Storm water that is combined with leachate must be treated as leachate in accordance with this section;

(B) All pads must be constructed on subgrades that provide sufficient bearing capacity to support the weight of the pad, the materials placed on them, and the equipment used in handling the materials;

(C) The entire surface area of the pad must be designed to maintain its structural and hydraulic integrity against loads resulting from feedstock and digestate storage, machinery used for feedstock handling, and against surface wear or damage caused by feedstock and digestate handling and storage;

(D) The pad may be constructed of materials such as concrete (with sealed joints) or asphaltic concrete that prevents subsurface soil and groundwater contamination; and

(E) The jurisdictional health department may allow pads to be designed and constructed with materials other than those listed in (c)(ii)(D) of this subsection, provided the applicant demonstrates in the engineering report to the jurisdictional health department's satisfaction that the alternative pad provides sufficient protection to meet the performance standards of this section and of WAC 173-350-040.

(iii) The anaerobic digester design must comply with one of the following three conditions:

(A) Design criteria in the Natural Resources Conservation Service's Washington Conservation Practice Standard, Anaerobic Digester Code 366 in effect October 2010, or other effective date as specified by the department; or

(B) Surface impoundment and tank design standards, WAC 173-350-330(3); or

(C) Other engineered design that the owner or operator can demonstrate complies with the conditions of WAC 173-350-040 to the jurisdictional health department's and the department's satisfaction. Written consent from the jurisdictional health department and the department constitutes approval.

(iv) Storm water management features must divert storm water from feedstock receiving and storage areas, and from digestate collection and storage areas. Features may include, but are not limited to, run-on prevention systems, berms, diversion swales, ditches, and other features;

(v) Leachate management features may include, but are not limited to, runoff prevention systems, leachate collection, conveyance, storage structures, and treatment systems;

(vi) Leachate (if applicable) must be contained or collected. Any discharges to ground that result in contaminants migrating to groundwater require a waste discharge permit under chapter 90.48 RCW, Water pollution control, prior to discharge. Discharges to ground that result in degradation of groundwater quality are prohibited under chapter 90.48 RCW, Water pollution control. Any discharge to sanitary sewer requires additional permitting by the local delegated authority or department;

(vii) Leachate ponds or tanks, or digestate liquid storage in ponds or tanks must meet one of the following conditions:

(A) Ponds must meet Natural Resources Conservation Service Standard for a waste storage facility in the 2001 *Washington Field Office Technical Guide 313* (revised June 2011); or

(B) Ponds must have a liner consisting of a minimum 30-mil thickness geomembrane on a subgrade that provides sufficient bearing capacity to support the liner and the contents of the pond. A liner constructed with a high density polyethylene geomembrane must be at least 60-mil thick to allow for proper welding; and

(I) Have dikes and slopes designed to maintain their structural integrity under conditions of a leaking liner and capable of withstanding erosion from wave action, overfilling, or precipitation; and

(II) Have freeboard (distance between the liquid level and the top of the pond) equal to or greater than eighteen inches to avoid overtopping from wave action, overfilling, or precipitation. The jurisdictional health department may reduce the freeboard requirement provided that other engineering controls are in place that prevent overtopping. These engineering controls must be specified during the permitting process; or

(C) The jurisdictional health department may approve the use of an alternative liner design if the owner or operator can demonstrate during the permitting process that the proposed design will prevent migration of solid waste constitu-

ents or leachate into the ground or surface waters at least as effectively as the liners described in this subsection; or

(D) Tanks used to store leachate or digestate liquid must meet design standards in WAC 173-350-330 (3)(b).

(viii) Leachate ponds and digestate liquid storage that have the potential to impound more than 10-acre feet (three million two hundred fifty-nine thousand gallons) of liquid measured from the top of the dike and that would be released by a failure of the containment dike must be reviewed and approved by the department's dam safety section.

(5) *Anaerobic digester - Operating standards (permit requirements).* The owner or operator of an anaerobic digester must operate in compliance with the performance standards of WAC 173-350-040 or Natural Resource Conservation Service Practice Standard Code 366 as applicable, and:

(a) Operate the facility to:

(i) Control air contaminants, such as dust and nuisance odors, to prevent these and other contaminants from migrating beyond property boundaries;

(ii) Prevent the attraction of vectors;

(iii) Prevent the migration of agricultural pests identified by the local horticultural pest and disease control boards as applicable;

(iv) Confine organic materials prior to and after processing to specifically designated areas, meeting the applicable standards of this section;

(v) Ensure that dangerous waste is not accepted, treated, or stored;

(vi) Ensure the facility operates under the supervision and control of a properly trained individual during hours of operation when facility staffing is required;

(vii) Ensure facility employees are trained in appropriate facility operations, maintenance procedures, and safety and emergency procedures according to individual job duties and according to an approved plan of operation; and

(viii) Restrict access to the facility when the facility is closed.

(b) Inspect the facility to prevent malfunctions and deterioration, operator errors, and discharges that may lead to the release of wastes to the environment or cause a threat to human health. The owner or operator must conduct these inspections as needed, but at least weekly, unless an alternate schedule is approved by the jurisdictional health department as part of the permitting process.

(c) Maintain operating records of the following:

(i) Process monitoring data as described in the plan of operation;

(ii) The quantity in gallons or cubic yards, and types of feedstocks received;

(iii) Results of analysis for digestate that is sold or distributed, according to subsection (5)(e) of this section; and

(iv) Facility inspection reports. Significant deviations from the plan of operation must be noted in the operating record. Records must be kept for a minimum of five years and must be available upon request by the jurisdictional health department.

(d) Prepare and submit a copy of an annual report to the jurisdictional health department and the department by April 1st of each calendar year for activities during the previous calendar year. Annual reports must be submitted on forms provided by the department and must include:

(i) Annual quantity and type of feedstocks received;

(ii) Annual quantity of digestate distributed if applicable;

(iii) Annual summary of digestate analysis as applicable, if digestate is distributed off-site; and

(iv) Any additional information required by the department or the jurisdictional health department.

(e) If distributing digestate (solids, semi-solids, or liquids) off-site, produce and manage the product so that it does not harm human health or the environment; and:

(i) Test representative samples of digestate solids every 5,000 cubic yards to demonstrate it meets compost quality standards in WAC 173-350-220(4) (Table 220-B). An alternate testing frequency may be required or approved by the jurisdictional health department; or

(ii) Ensure digestate meets the conditions for a commercial fertilizer as applicable in chapter 15.54 RCW; or

(iii) Send digestate to a permitted compost facility for further processing; or

(iv) Land apply digestate in accordance with WAC 173-350-230, Land application; or

(v) Use digestate in accordance with WAC 173-350-200, Beneficial use permit exemption; or

(vi) Apply digestate on agricultural lands at agronomic rates in accordance with a dairy nutrient management plan or a nutrient management plan; or

(vii) Manage digestate in an alternate manner as approved by the jurisdictional health department and the department.

(f) Develop, keep, and abide by a plan of operation approved as part of the permitting process. The plan must describe the facility's operation and must convey to site operating personnel the concept of operation intended by the facility designer. The plan of operation must be kept on-site and available for inspection at the request of the jurisdictional health department. When necessary, the plan must be modified with the approval, or at the direction of the jurisdictional health department. Each plan of operation must include the following:

(i) A description of the types of feedstocks to be handled at the facility. Feedstocks must be approved by the department or jurisdictional health department;

(ii) Procedures for ensuring that only feedstocks described will be accepted;

(iii) Procedures for handling unacceptable wastes;

(iv) A plan for processing digestate to meet the requirements of (e) of this subsection, if distributing digestate off-site;

(v) A nutrient management plan for agricultural lands and farm lands (as described in RCW 84.34.020) if using digestate on-site;

(vi) A description of how facility staff will be appropriately trained;

(vii) A calculation of monthly capacity based on maximum volume (cubic yards or gallons) of all materials on-site at any one time. All materials on-site include feedstocks, digesting materials and digestate;

(viii) A material flow plan describing general procedures to manage all materials on-site. All materials on-site include incoming feedstock, digesting materials, and digestate;

(ix) An odor management plan including, but not limited to, the following components:

(A) Methods for treating emissions to reduce odors, if any;

(B) A community relations plan to address odor issues should they arise; and

(C) A description of facility and operational improvements that could be made, if nuisance odors are identified beyond the facility's property boundary, as determined by the jurisdictional health department, the department, or the permitting air authority. The description of operational improvements must address feedstock receiving, processing, and digestate storage areas of the facility.

(x) A description of how equipment, structures, and other systems will be inspected and maintained, including frequency of inspection and inspection logs. This description must include, but is not limited to:

(A) The groundwater monitoring system, if required;

(B) The overfilling prevention equipment, including details of filling and emptying techniques;

(C) The liners of surface impoundments and tanks, tank piping, and secondary containment, as applicable.

(xi) Safety, fire, and emergency plans including a spill prevention/response plan;

(xii) The forms used to record volumes (in cubic yards or gallons) of accepted feedstocks; and

(xiii) Other such details to demonstrate that the facility is operated in accordance with this chapter and as required by the jurisdictional health department.

(6) *Anaerobic digester - Groundwater monitoring requirements (permit requirements).* There are no specific groundwater monitoring requirements for anaerobic digestion facilities subject to this chapter; however, anaerobic digestion facilities must meet the requirements of other federal, state, or local laws and regulations that apply under WAC 173-350-040(5).

(7) *Anaerobic digester - Closure requirements.* The owner or operator of an anaerobic digester facility must:

(a) Develop, keep, and follow a closure plan approved by the jurisdictional health department as part of the permitting process. At a minimum, the closure plan must include removing all organic materials, including digestate, from the facility. For planning purposes, assume the facility is at full permitted capacity when it is closed;

(b) Notify the jurisdictional health department sixty days in advance of closure. At closure, the facility is financially responsible for the removal of all organic materials including, but not limited to, raw or partially digested feedstocks, and digestate from the facility. The materials must be sent to another facility that complies with the applicable regulations for handling the waste.

(8) *Anaerobic digester - Financial assurance requirements (permit requirements).* There are no specific financial assurance requirements for anaerobic digestion facilities subject to this chapter; however, anaerobic digestion facilities must meet the requirements of other federal, state, or local laws and regulations that apply under WAC 173-350-040(5).

(9) *Anaerobic digester - Permit application contents (permit requirements).* The owner or operator of an anaerobic digestion facility not exempt under subsection (2) of this section must obtain a solid waste permit from the jurisdictional health department. All applications for permits must be in accordance with the procedures established in WAC 173-350-710. In addition to the requirements of WAC 173-350-710 and 173-350-715, each permit application must contain:

(a) Engineering reports, plans, and specifications that address the design standards of subsection (4) of this section;

(b) A plan of operation that addresses the requirements of subsection (5) of this section; and

(c) A closure plan meeting the requirements of subsection (7) of this section.

(10) *Anaerobic digester - Construction records (permit requirements).* Facilities must not start operation until the jurisdictional health department has determined that the construction was completed in accordance with the approved engineering report, plans, and specifications and has approved the construction documentation in writing and issued a permit. Within thirty days of completing construction, the owner or operator of an anaerobic digestion facility must provide the following materials to the jurisdictional health department and the department:

(a) Copies of the construction record drawings for engineered facilities at the site; and

(b) A report documenting facility construction, including the results of observations and testing carried out as part of the construction quality assurance plan.

[Statutory Authority: RCW 70.95.020(3), 70.95.060(1), 70.95.260(6), 70.95.305, 70.95.330. WSR 13-08-016 (Order 10-06), § 173-350-250, filed 3/25/13, effective 4/25/13.]

WAC 173-350-300 On-site storage, collection and transportation standards. (1) *On-site storage, collection and transportation standards - Applicability.* This section is applicable to the temporary storage of solid waste in a container at a premises, business establishment, or industry and the collecting and transporting of the solid waste.

(2) *On-site storage.*

(a) The owner or occupant of any premises, business establishment, or industry shall be responsible for the safe and sanitary storage of all containerized solid wastes accumulated at those premises.

(b) The owner, operator, or occupant of any premises, business establishment, or industry shall store solid wastes in containers that meet the following requirements:

(i) Disposable containers shall be sufficiently strong to allow lifting without breakage and shall be thirty-two gallons in capacity or less where manual handling is practiced;

(ii) Reusable containers, except for detachable containers, shall be:

(A) Rigid and durable;

(B) Corrosion resistant;

(C) Nonabsorbent and water tight;

(D) Rodent-proof and easily cleanable;

(E) Equipped with a close-fitting cover;

(F) Suitable for handling with no sharp edges or other hazardous conditions; and

(G) Equal to or less than thirty-two gallons in volume where manual handling is practiced;

(iii) Detachable containers shall be durable, corrosion-resistant, nonabsorbent, nonleaking and have either a solid cover or screen cover to prevent littering.

(3) *Collection and transportation standards*.

(a) All persons collecting or transporting solid waste shall avoid littering at the loading point, during transport and during proper unloading of the solid waste.

(b) Vehicles or containers used for the collection and transportation of solid waste shall be tightly covered or screened where littering may occur, durable and of easily cleanable construction. Where garbage is being collected or transported, containers shall be cleaned as necessary to prevent nuisance odors and insect breeding and shall be maintained in good repair.

(c) Vehicles or containers used for the collection and transportation of any solid waste shall be loaded and moved in such manner that the containers will not fail, and the contents will not spill or leak. Where such spillage or leakage does occur the waste shall be picked up immediately by the collector or transporter and returned to the vehicle or container and the area properly cleaned.

(d) All persons commercially collecting or transporting solid waste shall inspect collection and transportation vehicles at least monthly. Inspection records shall be maintained at the facility normally used to park such vehicles or such other location that maintenance records are kept. Such records shall be kept for a period of at least two years, and be made available upon the request of the jurisdictional health department.

[Statutory Authority: Chapter 70.95 RCW. WSR 03-03-043 (Order 99-24), § 173-350-300, filed 1/10/03, effective 2/10/03.]

WAC 173-350-310 Intermediate solid waste handling facilities. (1) *Intermediate solid waste handling facilities - Applicability*. This section is applicable to any facility engaged in solid waste handling that provides intermediate storage and/or processing prior to transport for final disposal. This includes, but is not limited to, material recovery facilities, transfer stations, baling and compaction sites, and drop box facilities. This section is not applicable to:

(a) Storage, treatment or recycling of solid waste in piles which are subject to WAC 173-350-320;

(b) Storage or recycling of solid waste in surface impoundments which are subject to WAC 173-350-330;

(c) Composting facilities subject to WAC 173-350-220;

(d) Recycling which is subject to WAC 173-350-210;

(e) Storage of waste tires which is subject to WAC 173-350-350;

(f) Storage of moderate risk waste prior to recycling which is subject to WAC 173-350-360;

(g) Energy recovery or incineration of solid waste which is subject to WAC 173-350-240; and

(h) Drop boxes placed at the point of waste generation which is subject to WAC 173-350-300.

(2) *Materials recovery facilities - Permit exemption and notification.*

(a) In accordance with RCW 70.95.305, material recovery facilities managed in accordance with the terms and conditions of (b) of this subsection are exempt from solid waste handling permitting. An owner or operator that does not comply with the terms and conditions of (b) of this subsection is required to obtain a permit from the jurisdictional health department as an intermediate solid waste handling facility and shall comply with the requirements of WAC 173-350-310. In addition, violations of the terms and conditions of (b) of this subsection may be subject to the penalty provisions of RCW 70.95.315.

(b) Material recovery facilities shall be managed according to the following terms and conditions to maintain their exempt status:

(i) Meet the performance standards of WAC 173-350-040;

(ii) Accept only source separated recyclable materials and dispose of an incidental and accidental residual not to exceed five percent of the total waste received, by weight per year, or ten percent by weight per load;

(iii) Allow inspections by the department or jurisdictional health department at reasonable times;

(iv) Notify the department and jurisdictional health department, thirty days prior to operation, or ninety days from the effective date of the rule for existing facilities, of the intent to operate a material recovery facility in accordance with this section. Notification shall be in writing, and shall include:

(A) Contact information for facility owner or operator;

(B) A general description of the facility; and

(C) A description of the types of recyclable materials managed at the facility;

(v) Prepare and submit an annual report to the department and the jurisdictional health department by April 1st on forms supplied by the department. The annual report shall detail facility activities during the previous calendar year and shall include the following information:

(A) Name and address of the facility;

(B) Calendar year covered by the report;

(C) Annual quantities and types of waste received, recycled and disposed, in tons, for purposes of determining progress towards achieving the goals of waste reduction, waste recycling, and treatment in accordance with RCW 70.95.010(4); and

(D) Any additional information required by written notification of the department.

(3) *Intermediate solid waste handling facilities - Location standards*. There are no specific location standards for intermediate solid waste handling facilities subject to this chapter; however, intermediate solid waste handling facilities must meet the requirements provided under WAC 173-350-040(5).

(4) *Intermediate solid waste handling facilities - Design standards*. The owner or operator of all intermediate solid waste handling facilities shall prepare engineering reports/plans and specifications to address the following design standards:

(a) Material recovery facilities, transfer stations, baling and compaction sites shall:

(i) Control public access, and prevent unauthorized vehicular traffic and illegal dumping of waste;

(ii) Be sturdy and constructed of easily cleanable materials;

(iii) Provide effective means to control rodents, insects, birds and other vectors;

(iv) Provide effective means to control litter;

(v) Provide protection of the tipping floor from wind, rain or snow;

(vi) Provide pollution control measures to protect surface and groundwaters, including runoff collection and discharge designed to handle a twenty-five-year storm as defined in WAC 173-350-100, and equipment cleaning and washdown water;

(vii) Provide pollution control measures to protect air quality; and

(viii) Provide all-weather surfaces for vehicular traffic.

(b) Drop boxes shall be constructed of durable watertight materials with a lid or screen on top that prevents the loss of materials during transport and access by rats and other vectors, and control litter.

(5) *Intermediate solid waste handling facilities - Operating standards*. The owner or operator of an intermediate solid waste handling facility shall:

(a) Operate the facility to:

(i) For material recovery facilities transfer stations, bailing and compaction sites:

(A) Be protective of human health and the environment;

(B) Prohibit the disposal of dangerous waste and other unacceptable waste;

(C) Control rodents, insects, and other vectors;

(D) Control litter;

(E) Prohibit scavenging;

(F) Prohibit open burning;

(G) Control dust;

(H) For putrescible waste, control nuisance odors;

(I) Provide attendant(s) on-site during hours of operation;

(J) Have a sign that identifies the facility and shows at least the name of the site, and, if applicable, hours during which the site is open for public use, what materials the facility does not accept and other necessary information posted at the site entrance; and

(K) Have communication capabilities to immediately summon fire, police, or emergency service personnel in the event of an emergency.

(ii) For drop box facilities:

(A) Be serviced as often as necessary to ensure adequate dumping capacity at all times. Storage of waste outside the drop boxes is prohibited;

(B) Be protective of human health and the environment;

(C) Control rodents, insects, and other vectors;

(D) Control litter;

(E) Prohibit scavenging;

(F) Control dust;

(G) For putrescible waste, control nuisance odors; and

(H) Have a sign that identifies the facility and shows at least the name of the site, and, if applicable, hours during which the site is open for public use, what materials the facility does not accept and other necessary information posted at the site entrance;

(b) Inspect and maintain the facility to prevent deterioration or the release of wastes to the environment that could pose a threat to human health. Inspection shall be as needed, but at least weekly, unless an alternate schedule is approved by the jurisdictional health department as part of the permitting process;

(c) Maintain daily operating records on the weights and types of wastes received or removed from the facility. Facility inspection reports shall be maintained in the operating record. Significant deviations from the plan of operation shall be noted in the operating record. Records shall be kept for a minimum of five years and shall be available upon request by the jurisdictional health department;

(d) Prepare and submit a copy of an annual report to the jurisdictional health department and the department by April 1st on forms supplied by the department. The annual report shall detail the facility's activities during the previous calendar year and shall include the following information:

(i) Name and address of the facility;

(ii) Calendar year covered by the report;

(iii) Annual quantity of each type of solid waste handled by the facility, in tons;

(iv) Destination of waste transported from the facility for processing or disposal; and

(v) Any additional information required by the jurisdictional health department as a condition of the permit.

(e) Develop, keep and abide by a plan of operation approved as part of the permitting process. The plan shall describe the facility's operation and shall convey to site operating personnel the concept of operation intended by the designer. The plan of operation shall be available for inspection at the request of the jurisdictional health department. If necessary, the plan shall be modified with the approval, or at the direction of the jurisdictional health department. Each plan of operation shall include the following:

(i) A description of the types of solid wastes to be handled at the facility;

(ii) A description of how solid wastes are to be handled on-site during the facility's life, including maximum facility capacity, methods of adding or removing waste from the facility and equipment used;

(iii) A description of the procedures used to ensure that dangerous waste and other unacceptable waste are not accepted at the facility;

(iv) Safety and emergency plans;

(v) A description of how equipment, structures and other systems are to be inspected and maintained, including the frequency of inspection and inspection logs;

(vi) For putrescible wastes, an odor management plan describing the actions to be taken to control nuisance odors;

(vii) The forms used to record volumes or weights; and

(viii) Other such details to demonstrate that the facility will be operated in accordance with this subsection and as required by the jurisdictional health department.

(6) *Intermediate solid waste handling facilities - Groundwater monitoring requirements*. There are no specific groundwater monitoring requirements for intermediate solid waste handling facilities subject to this chapter; however, intermediate solid waste handling facilities must meet the requirements provided under WAC 173-350-040(5).

(7) *Intermediate solid waste handling facilities - Closure requirements*. The owner or operator of an intermediate solid waste handling facility shall:

(a) Notify the jurisdictional health department one hundred eighty days in advance of closure. All waste shall be removed to a facility that conforms with the applicable regulations for handling the waste.

(b) Develop, keep and abide by a closure plan approved by the jurisdictional health department as part of the permit-

ting process. At a minimum, the closure plan shall include the methods of removing waste.

(8) *Intermediate solid waste handling facilities - Financial assurance*. There are no specific financial assurance requirements for intermediate solid waste handling facilities subject to this chapter; however, intermediate solid waste handling facilities must meet the requirements provided under WAC 173-350-040(5).

(9) *Intermediate solid waste handling facilities - Permit application contents*. The owner or operator of an intermediate solid waste handling facility shall obtain a solid waste permit from the jurisdictional health department. All applications for permits shall be submitted in accordance with the procedures established in WAC 173-350-710. In addition to the requirements of WAC 173-350-710 and 173-350-715, each application for a permit shall contain:

(a) For material recovery facilities, transfer stations, baling and compaction sites:

(i) Engineering reports/plans and specifications that address the design standards of subsection (4)(a) of this section;

(ii) A plan of operation meeting the applicable requirements of subsection (5) of this section;

(iii) A closure plan meeting the requirements of subsection (7) of this section;

(b) For drop boxes:

(i) Engineering reports/plans and specifications that address the design standards of subsection (4)(b) of this section;

(ii) A plan of operation meeting the applicable requirements of subsection (5) of this section; and

(iii) A closure plan meeting the requirements of subsection (7) of this section.

[Statutory Authority: Chapter 70.95 RCW. WSR 03-03-043 (Order 99-24), § 173-350-310, filed 1/10/03, effective 2/10/03.]

WAC 173-350-320 Piles used for storage or treatment. (1) *Piles used for storage or treatment - Applicability*.

(a) This section is applicable to solid waste stored or treated in piles where putrescible waste piles that do not contain municipal solid waste are in place for more than three weeks, nonputrescible waste and contaminated soils and dredged material piles are in place for more than three months and municipal solid waste piles are in place for more than three days. This section is not applicable to:

(i) Waste piles located at composting facilities subject to WAC 173-350-220 that are an integral part of the facility's operation;

(ii) Piles of nonputrescible waste stored in enclosed buildings provided that no liquids or liquid waste are added to the pile; and

(iii) Piles of waste tires or used tires subject to WAC 173-350-350.

(b) In accordance with RCW 70.95.305, storage piles of wood waste used for fuel or as a raw material, wood derived fuel, and agricultural wastes on farms, are subject solely to the requirements of (c)(i) through (iii) of this subsection and are exempt from solid waste handling permitting. An owner or operator that does not comply with the terms and conditions of (c)(i) through (iii) of this subsection is required to obtain a permit from the jurisdictional health department and shall comply with all other applicable requirements of this chapter. In addition, violations of the terms and conditions of (c)(i) through (iii) of this subsection may be subject to the penalty provisions of RCW 70.95.315.

(c) Owners and operators of all storage piles that are categorically exempt from solid waste handling permitting in accordance with (b) of this subsection shall:

(i) Ensure that at least fifty percent of the material stored in the pile is used within one year and all material is used within three years;

(ii) Comply with the performance standards of WAC 173-350-040; and

(iii) Allow department and jurisdictional health department representatives to inspect the waste pile at reasonable times for the purpose of determining compliance with this chapter.

(d) In accordance with RCW 70.95.305, the storage of inert waste in piles is subject solely to the requirements of (e)(i) through (vi) of this subsection and are exempt from solid waste handling permitting. The storage of inert waste in piles at a facility with a total volume of two hundred fifty cubic yards or less is subject solely to the requirements of (e)(iv) of this subsection. An owner or operator that does not comply with the terms and conditions of (e)(i) through (vi) of this subsection is required to obtain a permit from the jurisdictional health department and shall comply with all other applicable requirements of this chapter. In addition, violations of the terms and conditions of (e)(i) through (vi) may be subject to the penalty provisions of RCW 70.95.315.

(e) Owners and operators of all storage piles that are categorically exempt from solid waste handling permitting in accordance with (d) of this subsection shall:

(i) Implement and abide by a procedure that is capable of detecting and preventing noninert wastes from being accepted or mixed with inert waste;

(ii) Ensure that at least fifty percent of the material stored in the pile is used within one year and all the material is used within three years;

(iii) Control public access and unauthorized vehicular traffic to prevent illegal dumping of wastes;

(iv) Comply with the performance standards of WAC 173-350-040;

(v) Allow department and jurisdictional health department representatives to inspect the waste pile at reasonable times for the purpose of determining compliance with this chapter; and

(vi) Notify the department and jurisdictional health department thirty days prior to commencing operations of the intent to store inert waste in accordance with this section. Notification shall be in writing, and shall include:

(A) Contact information for the owner or operator;

(B) A general description and location of the facility; and

(C) A description of the inert waste handled at the facility.

(2) *Piles used for storage or treatment - Location standards*. There are no specific location standards for piles subject to this chapter; however, waste piles must meet the requirements provided under WAC 173-350-040(5).

(3) *Piles used for storage or treatment - Design standards*.

(a) The owner or operator of piles used for storage or treatment shall prepare engineering reports/plans and specifications, including a construction quality assurance plan, to address the design standards of this subsection. The maximum waste capacity, elevation and boundaries of the waste pile shall be provided. Piles shall be designed and constructed to:

(i) Control public access;

(ii) Comply with the uniform fire code as implemented through the local fire control agency;

(iii) Minimize vector harborage to the extent practicable; and

(iv) Provide all-weather approach roads and exits.

(b) In addition to the requirements of (a) of this subsection, the owner or operator of piles of putrescible waste, contaminated soils or dredged material or waste determined by the jurisdictional health department to be likely to produce leachate posing a threat to human health or the environment shall prepare engineering reports/plans and specifications of the surface on which the pile(s) will be placed including an analysis of the surface under the stresses expected during operations, and the design of the surface water management systems including run-on prevention and runoff conveyance, storage, and treatment. The piles shall be designed and constructed to:

(i) Place waste on a sealed surface, such as concrete or asphaltic concrete, to prevent soil and groundwater contamination. The surface shall be durable enough to withstand material handling practices. The jurisdictional health department may approve other types of surfaces, such as engineered soil, if the applicant can demonstrate that the proposed surface will prevent soil and groundwater contamination; and

(ii) Control run-on and runoff from a twenty-five-year storm, as defined in WAC 173-350-100.

(4) *Piles used for storage or treatment - Operating standards*. The owner or operator of piles used for storage or treatment shall:

(a) Operate the facility to:

(i) Control fugitive dust;

(ii) Control access to the pile;

(iii) Ensure that nonpermitted waste is not accepted at the facility;

(iv) Control vector harborage and implement vector control as necessary;

(v) Ensure that waste piles capable of attracting birds do not pose an aircraft safety hazard; and

(vi) For piles of putrescible waste and contaminated soils or dredged material, control nuisance odors.

(b) Inspect and maintain the facility to prevent malfunctions, deterioration, operator errors and discharges that may cause or lead to the release of wastes to the environment or a threat to human health. Inspections shall include the engineered surface on which the piles are placed, and the leachate and stormwater control systems. Inspections shall be as needed, but at least weekly, to ensure it is meeting the operational standards, unless an alternate schedule is approved by the jurisdictional health department as part of the permitting process;

(c) Maintain daily operating records on the weights and the types of waste received or removed from the facility. Facility inspection reports shall be maintained in the operating record. Significant deviations from the plan of operation shall be noted in the operating record. Records shall be kept for a minimum of five years and shall be available upon request by the jurisdictional health department;

(d) Shall prepare and submit a copy of an annual report to the jurisdictional health department and the department by April 1st on forms supplied by the department. The annual report shall detail the facility's activities during the previous calendar year and shall include the following information:

(i) Name and address of the facility;

(ii) Calendar year covered by the report;

(iii) Annual quantity and type of solid waste handled by the facility, including amounts received, amounts removed and the amount of waste remaining at the facility at year's end, in tons; and

(iv) Any additional information required by the jurisdictional health department as a condition of the permit.

(e) Develop, keep and abide by a plan of operation approved as part of the permitting process. The plan shall describe the facility's operation and shall convey to the site operating personnel that concept of operation intended by the designer. The plan of operation shall be available for inspection at the request of the jurisdictional health department. If necessary, the plan shall be modified with the approval, or at the direction of the jurisdictional health department. Each plan of operation shall include the following:

(i) A description of the types of solid waste to be handled at the facility;

(ii) A description of how solid wastes are to be handled on-site during the facility's life including:

(A) The maximum amount of waste to be stored or treated in pile(s) at the facility;

(B) Methods of adding and removing waste from the pile and equipment used;

(iii) A description of how equipment, structures and other systems are to be inspected and maintained, including the frequency of inspection and inspection logs;

(iv) Safety and emergency plans;

(v) Forms to record weights or volumes; and

(vi) Other such details to demonstrate that the facility will be operated in accordance with this subsection and as required by the jurisdictional health department.

(f) Operate the facility in conformance with the following operating standards when storing or treating contaminated soils or dredged material:

(i) Ensure that all soils and dredged material are sufficiently characterized:

(A) Prior to storage or treatment so that contaminants not identified, or at concentrations greater than those provided in the approved plan of operation are not accepted or handled at the facility; and

(B) Prior to removal to an offsite location so that all soils and dredged material that are not clean soils or dredged material are delivered to a facility that meets the requirements of chapter 70.95 RCW, Solid waste management—Reduction and recycling;

(ii) In addition to the daily operating records in (c) of this subsection, a record of the source of contaminated soils and

dredged material received at the facility, contaminants and concentrations contained, and any documentation used to characterize soils and dredged material. Records shall be maintained of end uses, including the location of final placement, for any soils or dredged material removed from the facility that contain residual contaminants;

(iii) In addition to the elements in (e) of this subsection, the plan of operation shall include:

(A) A description of contaminants and concentrations in soils and dredged material that will be handled at the facility;

(B) A sampling and analysis plan and other procedures used to characterize soils and dredged material; and

(C) Forms used to record the source of contaminated soils or dredged material, contaminant concentrations and other documentation used to characterize soils and dredged material, and end uses and the location of final placement for any soils or dredged material removed from the facility that contain residual contaminants;

(iv) Treatment of contaminated soils and dredged materials shall be performed using a process that reduces or eliminates contaminants and harmful characteristics. Contaminated soils and dredged materials shall not be diluted to meet treatment goals or as a substitute for disposal, except for incidental dilution of minor contaminants.

(5) *Piles used for storage or treatment - Groundwater monitoring requirements*. There are no specific groundwater monitoring requirements for piles used for storage and treatment subject to this chapter; however, waste piles must meet the requirements provided under WAC 173-350-040(5).

(6) *Piles used for storage or treatment - Closure requirements*. The owner or operator of piles used for storage or treatment shall:

(a) Notify the jurisdictional health department sixty days in advance of closure. All waste shall be removed from the pile at closure to a facility that conforms with the applicable regulations for handling the waste.

(b) Develop, keep and abide by a closure plan approved by the jurisdictional health department as part of the permitting process. As a minimum, the closure plan shall include the methods of removing waste.

(7) *Piles used for storage or treatment - Financial assurance requirements*. There are no specific financial assurance requirements for piles used for storage or treatment subject to this regulation chapter; however, waste piles must meet the requirements provided under WAC 173-350-040(5).

(8) *Piles used for storage or treatment - Permit application contents*. The owner or operator of piles used for storage or treatment shall obtain a permit from the jurisdictional health department.

All applications for permits shall be submitted in accordance with the procedures established in WAC 173-350-710. In addition to the requirements of WAC 173-350-710 and 173-350-715, each application for a permit shall contain:

(a) The design of fire control features;

(b) Engineering reports/plans and specifications that address the design standards of subsection (3) of this section;

(c) A plan of operation meeting the requirements of subsection (4) of this section; and

(d) A closure plan meeting the requirements of subsection (6) of this section.

(9) *Piles used for storage or treatment - Construction records*. The owner or operator of piles used for storage or treatment shall provide copies of the construction record drawings for engineered facilities at the site and a report documenting facility construction, including the results of observations and testing carried out as part of the construction quality assurance plan, to the jurisdictional health department and the department. Facilities shall not commence operation until the jurisdictional health department has determined that the construction was completed in accordance with the approved engineering report/plans and specifications and has approved the construction documentation in writing.

[Statutory Authority: Chapter 70.95 RCW. WSR 03-03-043 (Order 99-24), § 173-350-320, filed 1/10/03, effective 2/10/03.]

WAC 173-350-330 Surface impoundments and tanks. (1) Surface impoundments and tanks - Applicability.

(a) These standards are applicable to:

(i) Surface impoundments holding solid waste associated with solid waste facilities including, but not limited to, leachate lagoons associated with landfills permitted under this chapter and chapter 173-351 WAC, Criteria for municipal solid waste landfills, and surface impoundments associated with recycling, and piles used for storage or treatment;

(ii) Above or below ground tanks with a capacity greater than one thousand gallons holding solid waste associated with solid waste handling facilities used to store or treat liquid or semisolid wastes or leachate associated with solid waste handling facilities.

(b) These standards are not applicable to:

(i) Surface impoundments or tanks whose facilities are regulated under local, state or federal water pollution control permits;

(ii) Leachate holding ponds at compost facilities regulated under WAC 173-350-220;

(iii) Septic tanks receiving only domestic sewage from facilities at the site;

(iv) Agricultural waste managed according to a farm management plan written in conjunction with the local conservation district;

(v) Underground storage tanks subject to chapter 173-360 WAC, Underground storage tanks; and

(vi) Tanks used to store moderate risk waste subject to WAC 173-350-360.

(2) *Surface impoundments and tanks - Location standards*.

Surface impoundments and tanks shall not be located in unstable areas unless the owner or operator demonstrates that engineering measures have been incorporated in the facility's design to ensure that the integrity of the liners, monitoring system and structural components will not be disrupted. The owner or operator shall place the demonstration in the application for a permit.

(3) *Surface impoundments and tanks - Design standards*.

(a) The owner or operator of a surface impoundment shall prepare engineering reports/plans and specifications, including a construction quality assurance plan, to address the design standards of this subsection. In determining pond capacity, volume calculations shall be based on the facility design, monthly water balance, and precipitation data. All

surface impoundments shall be designed and constructed to meet the following requirements:

(i) Have a liner consisting of a minimum 30-mil thickness geomembrane overlying a structurally stable foundation to support the liners and the contents of the impoundment. (HDPE geomembranes used as primary liners or leak detection liners shall be at least 60-mil thick to allow for proper welding.) The jurisdictional health department may approve the use of alternative designs if the owner or operator can demonstrate during the permitting process that the proposed design will prevent migration of solid waste constituents or leachate into the ground or surface waters at least as effectively as the liners described in this subsection.

(ii) Have a groundwater monitoring system which complies with the requirements of WAC 173-350-500 or a leak detection layer. If a leak detection layer is used, it shall consist of an appropriate drainage layer underlain by a geomembrane of at least 30-mil thickness.

(iii) Have embankments and slopes designed to maintain structural integrity under conditions of a leaking liner and capable of withstanding erosion from wave action, overfilling, or precipitation.

(iv) Have freeboard equal to or greater than eighteen inches to provide protection against wave action, overfilling, or precipitation. During the permitting process the jurisdictional health department may reduce the freeboard requirement provided that other specified engineering controls are in place which prevent overtopping.

(v) When constructed with a single geomembrane liner, the liner shall be tested using an electrical leak location evaluation capable of detecting a hole 3 millimeters in its longest dimension or other equivalent postconstruction test method prior to being placed in service. Results of the test shall be submitted with the construction record drawings.

(vi) Surface impoundments that have the potential to impound more than ten-acre feet (three million two hundred fifty-nine thousand gallons) of liquid measured from the top of the embankment and which would be released by a failure of the containment embankment shall be reviewed and approved by the dam safety section of the department.

(vii) No surface impoundment liner shall be constructed such that the bottom of the lowest component is less than five feet (one and one-half meters) above the seasonal high level of groundwater unless the owner or operator can demonstrate during the permitting procedure that the proposed design will not be affected by contact with groundwater. All surface impoundment liners shall be constructed such that the bottom of the lowest component is above the seasonal high level of groundwater. For the purpose of this section, groundwater includes any water-bearing unit which is horizontally and vertically extensive, hydraulically recharged, and volumetrically significant.

(b) The owner or operator of a tank used to store or treat liquid or semisolid wastes meeting the definition of solid waste or leachate, shall prepare engineering reports/plans and specifications, including a construction quality assurance plan, to address the following design standards:

(i) Tanks and ancillary equipment shall be tested for tightness using a method acceptable to the jurisdictional health department prior to being covered, enclosed or placed in use. If a tank is found not to be tight, all repairs necessary to remedy the leak(s) in the system shall be performed and verified to the satisfaction of the jurisdictional health department prior to the tank being covered or placed in use.

(ii) Below ground tanks and other tanks where all or portions of the tank are not readily visible shall be designed to resist buoyant forces in areas of high groundwater and shall either be:

(A) Retested for tightness at a minimum of once every two years; or

(B) Equipped with a leak detection system capable of detecting a release from the tank;

(iii) For tanks or components in which the external shell of a metal tank or any metal component will be in contact with the soil or water, a determination shall be made by a corrosion expert of the type and degree of external corrosion protection that is needed to ensure the integrity of the tank during its operating life. This determination shall be included with design information submitted with the permit application;

(iv) Above ground tanks shall be equipped with secondary containment constructed of, or lined with, materials compatible with the waste being stored and capable of containing the volume of the largest tank within its boundary plus the precipitation from the twenty-five-year storm event as defined in WAC 173-350-100;

(v) Areas used to load or unload tanks shall be designed to contain spills, drippage and accidental releases during loading and unloading of vessels;

(vi) Tanks and piping shall be protected from impact by vehicles or equipment through use of curbing, grade separation, bollards or other appropriate means;

(vii) Tanks shall be structurally suited for the proposed use; and

(viii) Tanks, valves, fittings and ancillary piping shall be protected from failure caused by freezing.

(4) *Surface impoundments and tanks - Operating standards*. The owner or operator of a surface impoundment or tank shall:

(a) Operate the facility to:

(i) Prevent overfilling of surface impoundments or tanks and maintain required freeboard;

(ii) Control access to the site;

(iii) Control nuisance odors for wastes or liquids with the potential to create nuisance odors; and

(iv) Control birds at impoundments storing wastes capable of attracting birds.

(b) Inspect surface impoundments, tanks and associated piping, pumps and hoses as needed, but at least weekly, to ensure they are meeting the operational standards, unless an alternate schedule is approved by the jurisdictional health department as part of the permitting process. In addition, surface impoundments shall have regular liner inspections. Their frequency and methods of inspection shall be specified in the plan of operation and shall be based on the type of liner, expected service life of the material, and the site-specific service conditions. The inspections shall be conducted at least once every five years, unless an alternate schedule is approved by the jurisdictional health department as part of the permitting process. The jurisdictional health department shall be given sufficient notice and have the opportunity to be present during liner inspections.

(c) Maintain daily operating records on the quantity and the types of waste removed from the surface impoundment or tank. Facility inspection reports shall be maintained in the operating record. Significant deviations from the plan of operation shall be noted in the operating record. Records shall be kept for a minimum of five years and shall be available for inspection upon request by the jurisdictional health department.

(d) Shall prepare and submit a copy of an annual report to the jurisdictional health department and the department by April 1st. The annual report shall detail the facility's activities during the previous calendar year and shall include the following information:

(i) Name and address of the facility;

(ii) Calendar year covered by the report;

(iii) Results of groundwater monitoring in accordance with WAC 173-350-500;

(iv) Results of leak detection system monitoring, if applicable; and

(v) Any additional information required by the jurisdictional health department as a condition of the permit.

(e) Develop, keep and abide by a plan of operation approved as part of the permitting process. The plan shall describe the facility's operation and shall convey to site operating personnel the concept of operation intended by the designer. The plan of operation shall be available for inspection at the request of the jurisdictional health department. If necessary, the plan shall be modified with the approval, or at the direction of the jurisdictional health department. Each plan of operation shall include the following:

(i) A description of the types of solid waste to be handled at the facility;

(ii) A description of how wastes are handled on-site during the facility's active life;

(iii) A description of how equipment, structures and other systems are to be inspected and maintained, including the frequency of inspection and inspection logs. This description shall include:

(A) The groundwater monitoring system, if required;

(B) The overfilling prevention equipment, including details of filling and emptying techniques;

(C) The liners and embankments, tank piping and secondary containment;

(D) Safety and emergency plans;

(E) The forms used to record weights and volumes; and

(F) Other such details to demonstrate that the facility will be operated in accordance with this subsection and as required by the jurisdictional health department.

(5) *Surface impoundments and tanks - Groundwater monitoring requirements*.

(a) Surface impoundments not equipped with a leak detection layer are subject to the groundwater monitoring requirements of WAC 173-350-500.

(b) Surface impoundments equipped with a leak detection layer and tanks are not subject to the groundwater monitoring requirements of this chapter; however, surface impoundments must meet the requirements provided under WAC 173-350-040(5).

(6) *Surface impoundments and tanks - Closure requirements*. The owner or operator of a surface impoundment or tank shall:

(a) Notify the jurisdictional health department sixty days in advance of closure. All waste from the surface impoundment or tank shall be removed to a facility that conforms with the applicable regulations for handling the waste.

(b) Develop, keep and abide by a closure plan approved by the jurisdictional health department as part of the permitting process. At a minimum, the closure plan shall include the methods of removing waste.

(7) *Surface impoundments and tanks - Financial assurance requirements*. There are no specific financial assurance requirements for surface impoundments or tanks subject to this chapter; however, surface impoundments and tanks must meet the requirements provided under WAC 173-350-040(5).

(8) *Surface impoundments and tanks - Permit application contents*.

(a) The owner or operator of a surface impoundment or tank shall obtain a solid waste permit from the jurisdictional health department. All applications for permits shall be submitted in accordance with the procedures established in WAC 173-350-710. In addition to the requirements of WAC 173-350-710 and 173-350-715, each application for a permit shall contain:

(i) Engineering reports/plans and specifications that address the design standards of subsection (3) of this section;

(ii) A plan of operation meeting the requirements of subsection (4) of this section;

(iii) For surface impoundments not equipped with a leak detection layer, hydrogeologic reports and plans that address the requirements of subsection (5) of this section;

(iv) A closure plan meeting the requirements of subsection (6) of this section.

(9) *Surface impoundments and tanks - Construction records*. The owner or operator of a surface impoundment or tank shall provide copies of the construction record drawings for engineered facilities at the site and a report documenting facility construction, including the results of observations and testing carried out as part of the construction quality assurance plan, to the jurisdictional health department and the department. Facilities shall not commence operation until the jurisdictional health department has determined that the construction was completed in accordance with the approved engineering report/plans and specifications and has approved the construction documentation in writing.

[Statutory Authority: Chapter 70.95 RCW. WSR 03-03-043 (Order 99-24), § 173-350-330, filed 1/10/03, effective 2/10/03.]

WAC 173-350-350 Waste tire storage and transportation. (1) *Waste tire storage and transportation - Applicability*. This section is applicable to all:

(a) Facilities that store waste tires in quantities of greater than eight hundred automobile tires or the combined weight equivalent of sixteen thousand pounds of all types of waste tires. This section is not applicable to the storage of waste tires in an enclosed building or in mobile containers used to transport waste tires.

(b) Persons engaged in the business of transporting waste tires except for:

(i) Any person transporting five tires or less;

(ii) Any person transporting used tires back to a retail outlet for repair or exchange;

(iii) Any waste hauler regulated by chapter 81.77 RCW, Solid waste collection companies;

(iv) The United States, the state of Washington or any local government, or contractors hired by these entities, when involved in the cleanup of illegal waste tire piles; and

(v) Tire retailers associated with retreading facilities who use company-owned vehicles to transport waste tires for the purposes of retreading or recycling.

(2) *Waste tire storage and transportation - Transportation prohibitions and enforcement*.

(a) No person shall enter into a contract for transportation of waste tires with an unlicensed waste tire transporter.

(b) Waste tires shall only be delivered to a facility that has obtained the required permits or licenses for storage, processing, or disposal of waste tires.

(c) Any person subject to this section who transports or stores waste tires without a valid waste tire carrier license or waste tire storage license issued by the Washington state department of licensing shall be subject to the penalty provisions of RCW 70.95.560.

(3) *Waste tire storage and transportation - Carrier license requirements*.

(a) All persons subject to this section engaged in the business of transporting waste tires are required to obtain a waste tire carrier license from the Washington state department of licensing.

(b) Application forms for a waste tire carrier license will be available at unified business identifier service centers located throughout the state. Unified business identifier service locations include:

(i) The field offices of the department of revenue and the department of labor and industries;

(ii) The tax offices of employment security;

(iii) The Olympia office of the secretary of state; and

(iv) The business license service office of the Washington state department of licensing.

(c) An application for a waste tire carrier license and a cab card for one vehicle shall include a two hundred fifty dollar application fee, fifty dollars of which shall be nonrefundable. Each additional vehicle cab card to be used by the licensee requires an additional fifty dollar fee. The application shall include:

(i) A performance bond in the sum of ten thousand dollars in favor of the state of Washington; or

(ii) In lieu of the bond, an applicant may submit other financial assurance acceptable to the department.

(d) The refundable portion of application fees may be returned to the applicant if the application is withdrawn before the department has approved or denied the application.

(e) A waste tire carrier license shall be valid for one year from the date of approval.

(4) *Waste tire storage and transportation - Location standards*. There are no specific location standards for waste tire storage sites subject to this chapter; however, waste tire storage sites must meet the requirements provided under WAC 173-350-040(5).

(5) *Waste tire storage and transportation - Design standards*. The owner or operator of a waste tire storage area shall prepare engineering reports/plans and specifications to address the design standards of this subsection. The maximum number of tires to be stored on site and the individual pile locations and sized shall be provided. The facility shall be designed so that:

(a) The size of any individual pile of waste tires shall be limited to:

(i) A maximum area of five thousand square feet;

(ii) A maximum volume of fifty thousand cubic feet; and

(iii) A maximum height of ten feet;

(b) A clear space of at least forty feet between each pile of waste tires shall be provided. The clear space shall not contain flammable or combustible material or vegetation;

(c) Tire storage shall not be located within ten feet of any property line or building and shall not exceed six feet in height within twenty feet of any property line or building; and

(d) Public access shall be limited.

(6) *Waste tire storage and transportation - Operating standards*. The owner or operator of a waste tire storage facility shall:

(a) Operate the facility to:

(i) Have communication capabilities to immediately summon fire, police, or other emergency service personnel in the event of an emergency;

(ii) Control public access in a manner sufficient to prevent arson, unauthorized vehicular traffic and illegal dumping of wastes;

(iii) Manage waste tires in such a way that it is protected from any material or conditions which may cause them to ignite;

(iv) Limit the total quantity of waste tires stored on-site at any time to the amount permitted by the jurisdictional health department;

(v) Provide on-site fire control equipment sufficient to extinguish any fire reasonably possible from one individual pile of waste tires. Fire control equipment may include, but is not limited to:

(A) Automatic sprinkler protection;

(B) Fire hydrants, hoses and ancillary equipment;

(C) Portable fire extinguishers; and

(D) Material-handling equipment capable of moving tires during firefighting operations;

(vi) Provide vector control; and

(vii) Issue written receipts upon receiving loads of waste tires;

(b) Inspect and maintain the facility to prevent malfunctions, deterioration, operator errors and discharges that may lead to the release of wastes to the environment or cause a threat to human health. Inspections shall be as needed, but at least weekly, to ensure it is meeting the operational standards, unless an alternate schedule is approved by the jurisdictional health department as part of the permitting process;

(c) Maintain daily operating records including:

(i) The numbers of tires received and removed from the site. Quantities may be measured by:

(A) Actual number of tires; or

(B) Weight, provided the operator documents the approximate number of tires included in each load; or

(C) Volume in cubic yards, provided the operator documents the approximate number of tires included in each load;

(ii) Facility inspection reports;

(iii) Significant deviations from the plan of operation;

(iv) Records shall be kept for a minimum of five years and shall be available upon request by the jurisdictional health department;

(d) Prepare and submit a copy of an annual report to the jurisdictional health department and the department by April 1st on forms supplied by the department. The annual report shall detail the facility activities during the previous calendar year and shall include the following information:

(i) Name and address of the facility;

(ii) Calendar year covered by the report;

(iii) Annual quantity of tires, in tons;

(iv) Annual quantity of tires removed from the facility and end use, in tons;

(v) Total tons of tires remaining at the facility at year's end;

(vi) Applicable financial assurance reviews and audit findings in accordance with WAC 173-350-600; and

(vii) Any additional information required by the jurisdictional health department as a condition of the permit;

(e) Develop, keep and abide by a plan of operation approved as part of the permitting process. The plan shall describe the facility's operation and shall convey to site operating personnel the concept of operation intended by the designer. The plan of operation shall be available for inspection at the request of the jurisdictional health department. If necessary, the plan shall be modified with the approval, or at the direction of the jurisdictional health department. Each plan of operation shall include the following:

(i) A description of how waste tires are to be handled onsite during the active life including:

(A) Transportation and routine storage; and

(B) Procedures for ensuring that all waste tires received by the facility have been transported in accordance with this section;

(ii) A description of how equipment, structures and other systems are to be inspected and maintained, including the frequency of inspection and inspection logs;

(iii) Safety, fire and emergency plans addressing the following:

(A) Procedures for the use of communications equipment to immediately report emergencies to the fire department, police, or emergency service personnel;

(B) A list of all emergency equipment at the facility including the location and a brief description of its capabilities;

(C) Procedures for firefighting and the operation of fire control equipment;

(D) Employee training and emergency duty assignments;

(E) Procedures for and frequency of fire drills;

(iv) The forms used to record weights and volumes; and

(v) Other such details to demonstrate that the facility will be operated in accordance with this subsection and as required by the jurisdictional health department.

(7) *Waste tire storage and transportation - Groundwater monitoring requirements*. There are no specific groundwater monitoring requirements for waste tire storage sites; however, waste tire storage sites must meet the requirements provided under WAC 173-350-040(5).

(8) *Waste tire storage and transportation - Closure requirements*. The owner or operator of a facility that stores waste tires shall:

(a) Notify the jurisdictional health department, and where applicable the financial assurance instrument provider, one hundred eighty days in advance of closure;

(b) Commence implementation of the closure plan, in part or whole, within thirty days after receipt of the final waste tires;

(c) Provide certification that the site has been closed in accordance with the approved closure plan to the jurisdictional health department; and

(d) Develop, keep and abide by a closure plan approved by the jurisdictional health department as part of the permitting process. At a minimum the closure plan shall include:

(i) Projected time intervals that identify when partial closure is to be implemented, and identify closure cost estimates and projected fund withdrawal intervals for the associated closure costs, from the approved financial assurance instrument; and

(ii) Methods of waste tire removal.

(e) The jurisdictional health department shall notify the owner or operator, the department and the financial assurance instrument provider, of the date when the jurisdictional health department has verified that the facility has been closed in accordance with the specifications of the approved closure plan.

(9) *Waste tire storage and transportation - Financial assurance requirements*.

(a) The owner or operator shall establish a financial assurance mechanism in accordance with WAC 173-350-600 for closure in accordance with the approved closure plan. The funds shall be sufficient for hiring a third party to remove the maximum number of tires permitted to be stored at the facility and deliver the tires to a facility permitted to accept the tires.

(b) Nothing in this section shall prohibit the application of funds from an existing bond as required under RCW 70.95.555, to the total amount required for financial assurance, provided the bond can be used for the activities described in (a) of this subsection.

(c) No owner or operator shall commence or continue operations at the site until a financial assurance instrument has been provided for closure activities in conformance with WAC 173-350-600.

(10) *Waste tire storage and transportation - Solid waste permit requirements*. The owner or operator shall obtain a solid waste permit from the jurisdictional health department. All applications for permits shall be in accordance with the procedures established in WAC 173-350-710. In addition to the requirements of WAC 173-350-710 and 173-350-715, each application for a permit shall contain:

(a) Engineering reports/plans and specifications that address the design standards of subsection (5) of this section;

(b) A plan of operation addressing the requirements of subsection (6) of this section;

(c) A closure plan meeting the requirements of subsection (8) of this section; and

(d) Documentation as needed to meet the financial assurance requirements of subsection (9) of this section.

(11) *Waste tire storage and transportation - Storage site license requirements*.

(a) In order to obtain a waste tire storage license, the facility owner or operator shall first obtain a solid waste han-

dling permit for the storage of waste tires from the jurisdictional health department.

(b) Application forms for a waste tire storage site owner license are available at unified business identifier service locations located throughout the state. Unified business identifier service locations include:

(i) The field offices of the department of revenue and the department of labor and industries;

(ii) The tax offices of employment security;

(iii) The Olympia office of the secretary of state; and

(iv) The business license service office of the Washington state department of licensing.

(c) An application for a waste tire storage site owner license shall include a two hundred fifty dollar application fee for each facility, fifty dollars of which shall be nonrefundable. The refundable portion of application fees may be returned to the applicant under the following conditions:

(i) The department determines that a solid waste permit would meet the substantive requirements of RCW 70.95.555 and determines that a license is not required; or

(ii) The applicant withdraws the application before the department has approved or denied the application.

(d) A waste tire storage site license shall be valid for one year from the date of approval.

[Statutory Authority: Chapter 70.95 RCW. WSR 03-03-043 (Order 99-24), § 173-350-350, filed 1/10/03, effective 2/10/03.]

WAC 173-350-360 Moderate risk waste handling. (1) *Moderate risk waste handling - Applicability*.

(a) This section is applicable to:

(i) Any facility that accepts segregated solid waste categorized as moderate risk waste (MRW), as defined in WAC 173-350-100;

(ii) Persons transporting MRW using only a bill of lading (MRW that is not shipped using a uniform hazardous waste manifest) who store MRW for more than ten days at a single location; and

(iii) Mobile systems and collection events.

(b) This section is not applicable to:

(i) Persons transporting MRW managed in accordance with the requirements for shipments of manifested dangerous waste under WAC 173-303-240;

(ii) Universal waste regulated under chapter 173-303 WAC; and

(iii) Conditionally exempt small quantity generators managing their own wastes in compliance with the performance standards of WAC 173-350-040 and 173-303-070 (8)(b).

(2) *Mobile systems and collection events*. In accordance with RCW 70.95.305, the operation of mobile systems and collection events are subject solely to the requirements of (a) through (n) of this subsection and are exempt from solid waste handling permitting. An owner or operator that does not comply with the terms and conditions of this subsection is required to obtain a permit from the jurisdictional health department and shall comply with the applicable requirements for a moderate risk waste handling facility. In addition, violations of the terms and conditions of this subsection may be subject to the penalty provisions of RCW 70.95.315. Owners and operators of mobile systems and collection events shall:

(a) Notify the department and the jurisdictional health department of the intent to operate a mobile system or collection event at least thirty days prior to commencing operations. The notification shall include a description of the types and quantities of MRW to be handled;

(b) Manage mobile systems or collection events in compliance with the performance standards of WAC 173-350-040;

(c) Record the weights or gallons of each type of MRW collected, number of households and conditionally exempt small quantity generators served, and type of final disposition (e.g., reuse, recycled, treatment, energy recovery, or disposal). Records shall be maintained for a period of five years and will be made available to the department or jurisdictional health department on request;

(d) Ensure that the MRW at a mobile system or collection event is handled in a manner that:

(i) Prevents a spill or release of hazardous substances to the environment;

(ii) Prevents exposure of the public to hazardous substances; and

(iii) Results in delivery to a facility that meets the performance standards of WAC 173-350-040;

(e) Ensure that incompatible wastes are not allowed to come into contact with each other;

(f) Ensure that containers holding MRW remain closed except when adding or removing waste in order to prevent a release of MRW through evaporation or spillage if overturned;

(g) Ensure that containers holding MRW have legible labels and markings that identify the waste type;

(h) Ensure that containers holding MRW are maintained in good condition (e.g., no severe rusting or apparent structural defects);

(i) Ensure that personnel are familiar with the chemical nature of the materials and the appropriate mitigating action necessary in the event of fire, leak or spill;

(j) Control public access and prevent unauthorized entry;

(k) Prepare and submit a copy of an annual report to the department and the jurisdictional health department by April 1st on forms supplied by the department. The annual report shall detail the collection activities during the previous calendar year and shall include the following information:

(i) Name of owner or operator, and locations of all collection sites;

(ii) Calendar year covered by the report;

(iii) Annual quantity and type of MRW, in pounds or gallons by waste type;

(iv) Number of households and CESQGs served;

(v) Type of final disposition (e.g., reuse, recycled, treatment, energy recovery, or disposal); and

(vi) Any additional information required by written notification of the department;

(l) Allow inspections by the department or the jurisdictional health department at reasonable times;

(m) Notify the department and the jurisdictional health department of any failure to comply with the terms and conditions of this subsection within twenty-four hours; and

(n) Mobile collection systems using truck or trailers with concealed construction, permanently attached to a chassis may require a commercial coach insignia if subject to chapter

296-150C WAC, administered by the department of labor and industries.

(3) *Limited MRW facilities and product take-back centers*. In accordance with RCW 70.95.305, the operation of limited MRW facilities is subject solely to the requirements of (a) through (i) of this subsection and is exempt from solid waste handling permitting. Product take-back centers are only subject to (b), (e) and (f) of this subsection. An owner or operator that does not comply with the terms and conditions of this subsection is required to obtain a permit from the jurisdictional health department and shall comply with the applicable requirements for an MRW facility. In addition, violations of the terms and conditions of this subsection may be subject to the penalty provisions of RCW 70.95.315. Owners and operators of limited MRW facilities shall:

(a) Notify the department and the jurisdictional health department within thirty days prior to operation of the intent to operate a limited MRW facility with a description of the type and quantity of MRW to be handled;

(b) Ensure waste at a limited MRW facility or product take-back center is handled in a manner that:

(i) Prevents a spill or release of hazardous substances to the environment;

(ii) Prevents exposure of the public to hazardous substances; and

(iii) Results in delivery to a facility that meets the performance standards of WAC 173-350-040;

(c) Ensure that containers and tanks holding MRW are maintained in good condition (e.g., no severe rusting or apparent structural defects);

(d) Provide secondary containment for containers and tanks capable of storing fifty-five gallons or more of liquid MRW;

(e) Ensure the facility meets the performance standards of WAC 173-350-040;

(f) Notify the department and the jurisdictional health department of any failure to comply with the terms and conditions of this subsection within twenty-four hours of knowledge of an incident;

(g) Allow inspections by the department and jurisdictional health department at reasonable times;

(h) Maintain records of the amount and type of MRW received, and the final disposition of the MRW by amount and type; and

(i) Prepare and submit a copy of an annual report to the jurisdictional health department and the department by April 1st on forms supplied by the department. The annual report shall cover the facility's activities during the previous calendar year and shall include the following information:

(A) Name and address of the facility;

(B) Calendar year covered by the report;

(C) Annual quantity and type of MRW, in pounds or gallons by waste type;

(D) Number of households and CESQGs served;

(E) Type of final disposition (e.g., reuse, recycled, treatment, energy recovery, or disposal); and

(F) Any additional information required by written notification of the department.

(4) *Moderate risk waste facilities - Location standards*. There are no specific location standards for moderate risk waste facilities subject to this chapter; however, moderate risk waste facilities must meet the requirements provided under WAC 173-350-040(5).

(5) *Moderate risk waste facilities - Design standards*.

(a) The owner or operator of a moderate risk waste facility shall prepare engineering reports/plans and specifications, including a construction quality assurance plan, to address the following design standards. Each MRW facility shall:

(i) Be surrounded by a fence, walls, or natural features and provided with a lockable door or gate to control public and animal access;

(ii) Be constructed of materials that are chemically compatible with the MRW handled;

(iii) Provide secondary containment to capture and contain releases and spills, and facilitate timely cleanup in areas where MRW is handled. All secondary containment shall:

(A) Have sufficient capacity to:

(I) Contain ten percent of volume of all containers or tanks holding liquid or the total volume of the largest container holding liquids in the area, whichever is greater;

(II) Provide additional capacity to hold the precipitation from a twenty-five-year storm as defined in WAC 173-350-100, in uncovered areas; and

(III) Provide additional capacity to hold twenty minutes of flow from an automatic fire suppression system, where such a suppression system exists;

(B) Be segregated for incompatible wastes; and

(C) Have a base underlying the containers which is free of cracks or gaps and is sufficiently impervious to contain leaks, spills, accumulated precipitation, or fire suppression materials until the collected material is detected and removed. The base shall be sloped or the containment system shall otherwise be designed and operated to drain and remove liquids resulting from leaks, spills, precipitation, or fire suppression unless the containers are elevated or are otherwise protected from contact with accumulated liquids;

(iv) Be accessible by all-weather roads;

(v) Prevent run-on and control runoff from a twenty-five-year storm, as defined in WAC 173-350-100;

(vi) Provide a sign at the site entrance that identifies the facility and shows at least the name of the site, and if applicable, hours during which the site is open for public use, and acceptable materials;

(vii) Provide sufficient ventilation to remove toxic vapors and dust from the breathing zone of workers and prevent the accumulation of flammable or combustible gases or fumes that could present a threat of fire or explosion;

(viii) Be constructed with explosion-proof electrical wiring, fixtures, lights, motors, switches and other electrical components as required by local fire code or the department of labor and industries;

(ix) Provide electrical grounding in areas where flammable and combustible liquids are consolidated to allow for bonding to consolidation equipment; and

(x) Provide protection of the MRW handling areas from wind, rain or snow.

(b) The owner or operator of a tank used to store or treat MRW shall prepare engineering reports/plans and specifications, including a construction quality assurance plan, to address the following design standards:

(i) Tanks and ancillary equipment shall be tested for tightness using a method acceptable to the jurisdictional

health department prior to being covered, enclosed or placed in use. If a tank is found not to be tight, all repairs necessary to remedy the leak(s) in the system shall be performed and verified to the satisfaction of the jurisdictional health department prior to the tank being covered or placed in use;

(ii) Below ground tanks shall be designed to resist buoyant forces in areas of high groundwater and shall either be:

(A) Retested for tightness at a minimum of once every two years; or

(B) Equipped with a leak detection system capable of detecting a release from the tank;

(iii) For tanks or components in which the external shell of a metal tank or any metal component will be in contact with the soil or water, a determination shall be made by a corrosion expert of the type and degree of external corrosion protection that is needed to ensure the integrity of the tank during its operating life. This determination shall be included with design information submitted with the permit application;

(iv) Areas used to load or unload tanks shall be designed to contain spills, drippage and accidental releases during loading and unloading of vessels;

(v) Tanks and piping shall be protected from impact by vehicles or equipment through use of curbing, grade separation, bollards or other appropriate means;

(vi) Tanks shall be structurally suited for the proposed use; and

(vii) Tanks, valves, fittings and ancillary piping shall be protected from failure caused by freezing.

(c) Prefabricated structures with concealed construction shall meet the requirements of chapter 296-150F WAC, Factory-built housing and commercial structures, administered by the department of labor and industries.

(6) *Moderate risk waste facilities - Operating standards*. The owner or operator of a MRW facility shall:

(a) Manage MRW handling activities and facilities so that:

(i) Each storage area is marked with signs to clearly show the type of MRW to be stored in that area;

(ii) Incompatible MRW and materials shall not be mixed together or allowed to come into contact with each other;

(iii) MRW shall be compatible with the containment system;

(iv) Containers or tanks are closed except when adding or removing MRW in order to prevent a release of MRW through evaporation or spillage if overturned;

(v) All containers or tanks have visible and legible labels or markings that identify the MRW type and are visible for inspection;

(vi) Containers of MRW shall be stored in a manner that allows for easy access and inspection. Drums containing MRW shall have at least one side with a minimum of thirty inches clear aisle space;

(vii) Containers holding MRW are maintained in good condition including, but not limited to, no severe rusting or apparent structural defects;

(viii) Uniform hazardous waste manifests are prepared and used at the point where possession of the MRW is given to a commercial registered dangerous waste transporter for shipments of MRW destined for out-of-state locations. This shall be completed in accordance with WAC 173-303-180;

(ix) Public access is restricted to areas identified in the plan of operation and unauthorized entry is prevented;

(x) Communication capabilities are provided to summon fire, police, or emergency service personnel;

(xi) Flammable or explosive gases do not exceed ten percent of the lower explosive limit in the area where MRW is handled. An explosive gas monitoring program shall be implemented to ensure that this standard is achieved;

(xii) MRW is delivered to a facility that meets the performance standards of WAC 173-350-040;

(xiii) Personnel responsible for routine inspections and operations are familiar with the chemical nature of the materials and the appropriate mitigating action necessary in the event of fire, leak or spill; and

(xiv) The jurisdictional health department and the department are notified of any spills or discharges of MRW to the environment.

(b) Ensure that routine and annual inspections are conducted as follows:

(i) Routine inspections shall be conducted at least weekly or once each operating day, whichever is more frequent, unless an alternate schedule is approved by the jurisdictional health department as part of the permitting process. Routine inspections shall be performed for:

(A) Operating hazards;

(B) Presence of operable safety equipment;

(C) Container integrity; and

(D) General facility condition;

(ii) Annual inspections shall be conducted to determine the condition of:

(A) Secondary containment systems including all readily accessible below floor space, sumps, and tanks for deterioration and evidence of containment failure; and

(B) All ventilation and flammable vapor monitoring systems.

(c) Maintain daily operating records of the weights or gallons of each type of MRW collected and the number of households and CESQGs served. Facility inspection reports shall be maintained in the operating record, including at least the date and time of the inspection, the name and signature of the inspector, a notation of observations made, and the date and nature of any needed repairs or remedial action. Significant deviations from the plan of operation shall be noted in the operating record. Records shall be kept for a minimum of five years and shall be available for inspection at the request of the jurisdictional health department.

(d) Prepare and submit a copy of an annual report to the jurisdictional health department and the department by April 1st on forms supplied by the department. The annual report shall detail the facility's activities during the previous calendar year and must include the following information:

(i) Name and address of the facility and locations of all collection sites;

(ii) Calendar year covered by the report;

(iii) Annual quantity and type of MRW, in pounds or gallons;

(iv) Number of households and CESQGs served;

(v) Type of final disposition (e.g., reuse, recycled, treatment, energy recovery, or disposal) by type of MRW;

(vi) Applicable financial assurance reviews and audit findings in accordance with WAC 173-350-600; and

(vii) Any additional information required by the jurisdictional health department as a condition of the permit.

(e) Develop, keep and abide by a plan of operation approved as part of the permitting process. The plan shall describe the facility's operation and shall convey to site operating personnel the concept of operation intended by the designer. The plan of operation shall be available for inspection at the request of the jurisdictional health department. If necessary, the plan shall be modified with the approval, or at the direction of the jurisdictional health department. Each plan of operation shall include the following:

(i) A description of the types of solid wastes to be handled at the facility;

(ii) A description of how MRW will be handled on-site during the active life of the facility including:

(A) Methods for managing and/or identifying unknown wastes;

(B) Procedures for managing wastes that arrive in corroded or leaking containers or when MRW is left at the gate when the facility is unattended;

(C) Protocol for sorting, processing and packaging MRW;

(D) Procedures to protect containers of MRW susceptible to damage from weather and temperature extremes;

(E) Maximum quantities of MRW to be safely stored in each area at any time;

(F) Waste acceptance protocol to preclude and redirect fully regulated dangerous waste and any unacceptable waste types, such as explosives and/or radioactives; and

(G) For facilities that offer material exchanges, a procedure for determining what MRW is suitable for exchange and how the materials exchange will be operated;

(iii) A description of how equipment, structures and other systems are to be inspected and maintained, including the frequency of inspection and inspection logs;

(iv) Safety and emergency plans including:

(A) A list of all on-site emergency equipment with its capability, purpose, and training requirements;

(B) A description of actions to take if leaks in containers, tanks, or containment structures are suspected or detected and for other releases (e.g., failure of runoff containment system, gases generated due to chemical reactions or rapid volatilization);

(v) The forms used to record weights and volumes; and

(vi) Other such details to demonstrate that the facility will be operated in accordance with this subsection and as required by the jurisdictional health department.

(7) *Moderate risk waste facilities - Groundwater monitoring requirements*. There are no specific groundwater monitoring requirements for MRW facilities subject to this chapter; however, moderate risk waste facilities must meet the requirements provided under WAC 173-350-040(5).

(8) *Moderate risk waste facilities - Closure requirements*. The owner or operator of a moderate risk waste facility shall:

(a) Notify the jurisdictional health department, and where applicable, the financial assurance instrument provider, no later than one hundred eighty days prior to the projected date of the final receipt of MRW, of the intent to implement the closure plan in part or whole. The facility shall close in a manner that:

(i) Minimizes the need for further maintenance;

(ii) Removes all MRW and ensures delivery of the MRW to a facility that conforms with the applicable regulations for handling the waste;

(iii) Decontaminates all areas where MRW has been handled, including, but not limited to, secondary containment, buildings, tanks, equipment, and property; and

(iv) Prepares the facility for remedial measures after closure, if required.

(b) Commence closure activities in part or whole within thirty days following the receipt of the final volume of MRW. Waste shall not be accepted for disposal or for use in closure.

(c) At facility closure completion, in part or whole, submit the following to the jurisdictional health department:

(i) Certification by the owner or operator, and a professional engineer licensed in the state of Washington that the site has been closed in accordance with the approved closure plan; and

(ii) A closure report signed by the facility owner or operator and the certifying engineer that describes:

(A) Actions taken to determine if there has been a release to the environment; and

(B) The results of all inspections conducted as part of the closure procedure.

(d) Keep and abide by a closure plan approved by the jurisdictional health department as part of the permitting process. At a minimum, the closure plan shall include:

(i) A description of the activities and procedures that will be used to ensure compliance with this subsection;

(ii) An estimate of the maximum volume of MRW on-site at any time during the active life of the facility; and

(iii) Closure cost estimates and projected fund withdrawal intervals from the financial assurance instrument, if such an instrument is required by subsection (9) of this section.

(e) The jurisdictional health department shall notify the owner or operator, the department and the financial assurance instrument provider, of the date when the jurisdictional health department has verified that the facility has been closed in accordance with the specifications of the approved closure plan.

(9) *Moderate risk waste facilities - Financial assurance requirements*.

(a) The owner or operator of any fixed moderate risk waste facility that stores more than nine thousand gallons of MRW on-site, excluding used oil, is required to establish financial assurance in accordance with WAC 173-350-600.

(b) Proof of financial assurance shall be provided to the jurisdictional health department prior to the acceptance of any MRW. The financial assurance instrument shall provide sufficient funds to guarantee that all closure requirements are met. In the event that hazardous substances are released to the environment and site remediation is necessary, additional financial assurance shall be provided in order that site remediation can be accomplished.

(c) Nothing in this section shall prevent an owner or operator from including the cost of MRW facility financial assurance in an instrument established for a colocated permitted solid waste facility so long as there are adequate funds available for both closure activities and the instrument identifies the commitment of funds for both activities.

(10) *Moderate risk waste facilities - Permit application contents*. The owner or operator of a MRW facility shall obtain a solid waste permit from the jurisdictional health department. All applications for permits shall be submitted in accordance with the requirements established in WAC 173-350-710. In addition to the requirements of WAC 173-350-710 and 173-350-715, each application for a permit shall contain:

(a) Engineering reports/plans and specifications that address the design standards of subsection (5) of this section;

(b) A plan of operation meeting the requirements of subsection (6) of this section;

(c) A closure plan meeting the requirements of subsection (8) of this section; and

(d) Documentation as needed to meet the financial assurance requirements of subsection (9) of this section.

(11) *Moderate risk waste facilities - Construction records*. The owner or operator of a moderate risk waste facility shall provide copies of the construction record drawings for engineered facilities at the site and a report documenting facility construction, including the results of observations and testing carried out as part of the construction quality assurance plan, to the jurisdictional health department and the department. Facilities shall not commence operation until the jurisdictional health department has determined that the construction was completed in accordance with the approved engineering report/plans and specifications and has approved the construction documentation in writing.

[Statutory Authority: Chapter 70.95 RCW. WSR 03-03-043 (Order 99-24), § 173-350-360, filed 1/10/03, effective 2/10/03.]

WAC 173-350-400 Limited purpose landfills. (1) *Limited purpose landfills - Applicability*. These standards apply to all landfills except:

(a) Municipal solid waste landfills regulated under chapter 173-351 WAC, Criteria for municipal solid waste landfills;

(b) Inert waste landfills regulated under WAC 173-350-410;

(c) Special incinerator ash landfills regulated under chapter 173-306 WAC, Special incinerator ash management standards;

(d) Dangerous waste landfills regulated under chapter 173-303 WAC, Dangerous waste regulations; and

(e) Chemical waste landfills used for the disposal of polychlorinated biphenyls (PCBs) regulated under Title 40 C.F.R. Part 761, Polychlorinated Biphenyls (PCBs) Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions.

(2) *Limited purpose landfills - Location standards*. All limited purpose landfills shall be located to meet the following requirements:

(a) No landfill shall be located over a Holocene fault, in subsidence areas, or on or adjacent to an unstable slope or other geologic features which could compromise the structural integrity of the facility.

(b) No landfill's active area shall be located closer than one thousand feet to a down-gradient drinking water supply well, unless the owner or operator can demonstrate that a minimum of ninety days will occur between the time that a contaminant is detected and the time the contaminant can reach the nearest down-gradient drinking water supply well. Such demonstrations shall be prepared by a licensed professional in accordance with the requirements of chapter 18.220 RCW and shall be included in the permit application. The demonstration shall be based on the details of the sampling and analysis plan and the hydrogeologic properties of the hydrostratigraphic unit.

(c) No landfill's active area shall be located in a channel migration zone as defined in WAC 173-350-100 or within two hundred feet measured horizontally, of a stream, lake, pond, river, or saltwater body, nor in any wetland nor any public land that is being used by a public water system for watershed control for municipal drinking water purposes in accordance with WAC 248-54-660(4). All facilities shall conform to location restrictions established in local shoreline management plans adopted pursuant to chapter 90.58 RCW.

(d) No landfill shall be located within ten thousand feet of any airport runway currently used by turbojet aircraft or five thousand feet of any airport runway currently used by only piston-type aircraft unless the federal aviation administration grants a waiver. This requirement is only applicable where such landfill is used for disposing of wastes where a bird hazard to aircraft would be created.

(e) All landfills shall comply with the location standards specified in RCW 70.95.060.

(3) *Limited purpose landfills - Design standards*.

(a) This section applies to landfills with considerable variations in waste types, site conditions, and operational controls. All landfills shall be designed and constructed to meet the design standards of this subsection, the performance standards of WAC 173-350-040, and shall be appropriate for and compatible with the waste, the site, and the operation. The owner or operator of a limited purpose landfill shall prepare engineering reports/plans and specifications, including a construction quality assurance plan, to address the design standards of this subsection. An owner or operator shall be able to demonstrate during the permitting process that the design of a proposed landfill will mitigate threats to human health and the environment. When evaluating a landfill design, the jurisdictional health department shall consider the following factors:

(i) Waste characterization;

(ii) Soil conditions;

(iii) Hydrogeologic conditions;

(iv) Hydraulic conditions;

(v) Contaminant fate and transport;

(vi) Topography;

(vii) Climate;

(viii) Seismic conditions;

(ix) The total capacity of the facility and each landfill unit;

(x) Anticipated leachate characteristics and quantity;

(xi) Operational controls; and

(xii) Environmental monitoring systems.

(b) Liner system design.

(i) Liner system performance standard. Limited purpose landfills shall be constructed in accordance with a design that:

(A) Will prevent the contamination of the hydrostratigraphic units identified in the hydrogeologic assessment of

the facility at the relevant point of compliance as specified during the permitting process; and

(B) Controls methane and other explosive gases generated by the facility to ensure they do not exceed:

(I) Twenty-five percent of the lower explosive limit for the gases in facility structures (excluding the gas control or recovery system components);

(II) The lower explosive limit in soil gases or in ambient air for the gases at the property boundary or beyond; and

(III) One hundred parts per million by volume of hydrocarbons (expressed as methane) in offsite structures.

(ii) The jurisdictional health department may allow a limited purpose landfill to be designed and constructed without a liner system if the owner or operator can demonstrate during the permitting process that:

(A) The contaminant levels in the waste and leachate are unlikely to pose an adverse impact to the environment; and

(B) The ability of natural soils to provide a barrier or reduce the concentration of contaminants provides sufficient protection to meet the performance standards of WAC 173-350-040; and

(C) Explosive gases generated by the facility will not exceed:

(I) Twenty-five percent of the lower explosive limit for the gases in facility structures (excluding the gas control or recovery system components);

(II) The lower explosive limit in soil gases or in ambient air for the gases at the property boundary or beyond; and

(III) One hundred parts per million by volume of hydrocarbons (expressed as methane) in offsite structures.

(iii) Liner separation from groundwater. No landfill liner system shall be constructed such that the bottom of the lowest component is less than ten feet (three meters) above the seasonal high level of groundwater, unless a hydraulic gradient control system has been installed which prevents groundwater from contacting the liner. For the purpose of this section, groundwater includes any water-bearing unit which is horizontally and vertically extensive, hydraulically recharged, and volumetrically significant as to harm or endanger the integrity of the liner at any time.

(iv) Hydraulic gradient control system performance standard. When a hydraulic gradient control system is to be incorporated into a landfill design, a demonstration shall be made during the permit process that the hydraulic gradient control system can be installed to control groundwater fluctuations and maintain separation between the controlled seasonal high level of groundwater in the identified water-bearing unit and the bottom of the lowest liner system component. The hydraulic gradient control system shall not have negative impacts on waters of the state or impede the capability to collect samples representative of the quality of groundwater at the relevant point of compliance. The demonstration shall include:

(A) A discussion in the geologic and hydrogeologic site characterization showing the effects from subsoil settlement, changes in surrounding land uses, climatic trends or other impacts affecting groundwater levels during the active life, closure and post-closure periods of the landfill;

(B) A discussion showing potential impacts of the gradient control operation to existing quality and quantity of groundwater or surface waters. This discussion shall include potential impacts to water users and instream flow and levels of surface waters in direct hydrologic contact or continuity with the hydraulic gradient control system. Any currently available ground or surface water quality data for hydrostratigraphic units, springs, or surface waters in direct hydrologic contact or continuity with the hydraulic gradient control system shall be included;

(C) Conceptual engineering drawings of the proposed landfill and a discussion as to how the hydraulic gradient control system will protect or impact the structural integrity and performance of the liner system;

(D) Preliminary engineering drawings of the hydraulic gradient control system;

(E) Design specifications for the proposed ground and surface water monitoring systems; and

(F) A discussion of the potential impacts from the gradient control system on the capability of collecting groundwater samples that will represent the quality of groundwater passing the relevant point of compliance.

(v) Presumptive liner design. Limited purpose landfills designed and constructed with the following composite liner are presumed to meet the performance standard of (b)(i) of this subsection. An alternative liner system design shall be used when the nature of the waste, the disposal facility, or other factors are incompatible with the presumptive liner. The presumptive liner design consists of the following two components:

(A) A lower component consisting of at least a two-foot layer of compacted soil with a hydraulic conductivity of no more than 1×10^{-7} cm/sec.

(B) An upper component consisting of a high-density polyethylene (HDPE) geomembrane with a minimum of 60-mil thickness. The geomembrane shall be installed in direct and uniform contact with the lower component.

(c) Leachate collection and control system design. Except as provided in (b)(ii) of this section, limited purpose landfills shall be constructed in accordance with a design that:

(i) Provides for collection and removal of leachate generated in the landfill;

(ii) Is capable of maintaining less than a one-foot head of leachate over the liner system and less than a two-foot head in leachate sump areas;

(iii) Includes a monitoring system capable of collecting representative samples of leachate generated in the landfill; and

(iv) Provides for leachate storage, treatment, or pretreatment to meet the requirements for permitted discharge under chapter 90.48 RCW, Water pollution control, and the Federal Clean Water Act.

(d) Run-on/runoff control system design. Limited purpose landfills shall be constructed in accordance with a design that:

(i) Will prevent flow onto the active portion of the landfill during the peak discharge from a twenty-five-year storm, as defined in WAC 173-350-100;

(ii) Will prevent unpermitted discharges from the active portion of the landfill resulting from a twenty-five-year storm, as defined in WAC 173-350-100; and

(iii) When located in a one hundred-year flood plain, the entrance and exit roads, and landfill practices do not restrict

the flow of the base flood, reduce the temporary water storage capacity of the flood plain or result in washout of solid waste, to pose a hazard to human life, wildlife, land or water resources.

(e) Final closure system design.

(i) Final closure performance standard. Limited purpose landfills shall be closed in accordance with a design that:

(A) Prevents exposure of waste;

(B) Minimizes infiltration (at a minimum, the design will prevent the generation of significant quantities of leachate to eliminate the need for leachate removal by the end of the post-closure period);

(C) Prevents erosion from wind and water;

(D) Is capable of sustaining native vegetation;

(E) Addresses anticipated settlement, with a goal of achieving no less than two to five percent slope after settlement;

(F) Provides sufficient stability and mechanical strength and addresses potential freeze-thaw and desiccation;

(G) Provides for the management of run-on and runoff, preventing erosion or otherwise damaging the closure cover;

(H) Minimizes the need for post-closure maintenance;

(I) Provides for collection and removal of methane and other gases generated in the landfill. Landfill gas shall be purified for sale, used for its energy value, or flared when the quantity and quality of landfill gases will support combustion. Landfill gases may be vented when they will not support combustion. The collection and removal system shall include a monitoring system capable of collecting representative samples of gases generated in the landfill; and

(J) Meets the requirements of regulations, permits and policies administered by the jurisdictional air pollution control authority or the department under chapter 70.94 RCW, Washington Clean Air Act and Section 110 of the Federal Clean Air Act.

(ii) Presumptive final closure cover. Limited purpose landfills designed and constructed with the following closure cover are presumed to meet the performance standards in (e)(i)(A) through (D) of this subsection. An alternative final closure cover shall be used when the nature of the waste, the disposal facility or other factors are incompatible with the presumptive final closure cover system. The presumptive final closure cover consists of the following components:

(A) An antierosion layer consisting of a minimum of two feet (60 cm) of earthen material of which at least twelve inches (30 cm) of the uppermost layer is capable of sustaining native vegetation, seeded with grass or other shallow rooted vegetation; and

(B) A geomembrane with a minimum of 30-mil (.76 mm) thickness, or a greater thickness that is commensurate with the ability to join the geomembrane material and site characteristics such as slope, overlaying a competent foundation.

(f) Water balance and groundwater contaminant fate and transport modeling. Any modeling performed for evaluating a landfill design shall meet the following performance standards:

(i) All water balance analysis shall be performed using:

(A) The Hydrologic Evaluation of Landfill Performance (HELP) Model; or

(B) Alternate methods approved by the jurisdictional health department. Alternate methods shall have supporting documentation establishing its ability to accurately represent the water balance within the landfill unit.

(ii) Any groundwater and contaminant fate and transport modeling shall be conducted by a licensed professional in accordance with the requirements of chapter 18.220 RCW and meet the following performance standards:

(A) The model shall have supporting documentation that establishes the ability of those methods to represent groundwater flow and contaminant transport under the conditions at the site;

(B) The model shall be calibrated against site-specific field data;

(C) A sensitivity analysis shall be conducted to measure the model's response to changes in the values assigned to major parameters, specific tolerances, and numerically assigned space and time discretizations;

(D) The value of the model's parameters requiring site-specific data shall be based upon actual field or laboratory measurements; and

(E) The values of the model's parameters that do not require site-specific data shall be supported by laboratory test results or equivalent methods documenting the validity of the chosen parameter values.

(g) Seismic impact zones. Limited purpose landfills located in seismic impact zones shall be designed and constructed so that all containment structures, including liners, leachate collection systems, surface water control systems, gas management, and closure cover systems are able to resist the maximum horizontal acceleration in lithified earth materials for the site.

(h) The owner or operator of limited purpose landfills located in an unstable area shall demonstrate that engineering measures have been incorporated into the landfill's design to ensure that the integrity of the structural components of the landfill will not be disrupted. The owner or operator shall place the demonstration in the application for a permit. The owner or operator shall consider the following factors, at a minimum, when determining whether an area is unstable:

(i) On-site or local soil conditions that may result in significant differential settling;

(ii) On-site or local geologic or geomorphologic features; and

(iii) On-site or local human-made features or events (both surface and subsurface).

(i) Limited purpose landfills shall be designed to provide a setback of at least one hundred feet between the active area and the property boundary. The setback shall be increased if necessary to:

(i) Control nuisance odors, dust, and litter;

(ii) Provide a space for the placement of monitoring wells, gas probes, run-on/runoff controls, and other design elements; or

(iii) Provide sufficient area to allow proper operation of the landfill and access to environmental monitoring systems and facility structures.

(4) *Limited purpose landfills - Operating standards*. The owner or operator of a limited purpose landfill shall:

(a) Operate the facility to:

(i) Control public access and prevent unauthorized vehicular traffic, illegal dumping of wastes, and keep animals out by using artificial barriers, natural barriers, or both, as appropriate to protect human health and the environment. A lockable gate shall be required at each entry to the landfill;

(ii) Provide approach and exit roads of all-weather construction, with traffic separation and traffic control on-site, and at the site entrance;

(iii) Ensure that no liquid waste or liquids are placed in disposal facilities;

(iv) Provide on-site fire protection as determined by the local and state fire control jurisdiction. Landfills disposing of wastes that can support combustion shall have a method to control subsurface fires;

(v) Ensure that at least two landfill personnel are on-site with one person at the active face when the site is open to the public for disposal facilities with a permitted capacity of greater than fifty thousand cubic yards per year;

(vi) Provide communication between employees working at the landfill and management offices, on-site and off-site, sufficient to handle emergencies;

(vii) Control fugitive dust;

(viii) Perform no open burning unless permitted by the jurisdictional air pollution control agency or the department under chapter 70.94 RCW, Washington Clean Air Act;

(ix) Collect scattered litter as necessary to prevent vector harborage, a fire hazard, aesthetic impacts, or adversely affect wildlife or its habitat;

(x) Prohibit scavenging;

(xi) Ensure that reserve operational equipment shall be available to maintain and meet these standards; and

(xii) Ensure that operations do not endanger any containment or monitoring structures such as liners, leachate collection systems, surface water control systems, gas management, cover systems and monitoring wells.

(b) Operate the facility in compliance with the following operating standards unless a demonstration can be made during the permitting process that due to the nature, source of the waste, or quality of the leachate generated, these standards are not necessary for the protection of human health or the environment:

(i) Implement a program at the facility for detecting and preventing the disposal of dangerous waste fully regulated under chapter 173-303 WAC, municipal solid waste and other prohibited wastes. This program shall include, at a minimum:

(A) Random inspections of incoming loads unless the owner or operator takes other steps (for example, instituting source controls restricting the type of waste received) to ensure that incoming loads do not contain prohibited wastes. Random inspections shall include:

(I) Discharging a random waste load onto a suitable surface, or portion of the tipping area. A suitable surface shall be chosen to avoid interference with operations, so that sorted waste can be distinguished from other loads of uninspected waste, to avoid litter, and to contain runoff;

(II) The contents of the load shall be visually inspected prior to actual disposal of the waste. The facility owner or operator shall return prohibited waste to the hauler, arrange for disposal of prohibited wastes at a facility permitted to manage those wastes, or take other measures to prevent disposal of the prohibited waste at the facility;

(B) Maintaining records of inspections, or the results of other procedures if appropriate;

(C) Training facility personnel to recognize regulated dangerous waste, prohibited polychlorinated biphenyls (PCB) wastes and other prohibited wastes; and

(D) Immediate notification of the department and the jurisdictional health department if a regulated dangerous waste or prohibited PCB waste is discovered at the facility.

(ii) Thoroughly compact the solid waste before succeeding layers are added except for the first lift over a liner.

(iii) Cover disposed waste to control disease vectors, fires, nuisance odors, blowing litter, and scavenging. Putrescible waste shall be covered at the end of each operating day, or at more frequent intervals if necessary. The jurisdictional health department may grant a temporary waiver, not to exceed three months, from the requirement of this subsection if the owner or operator demonstrates that there are extreme seasonal climatic conditions that make meeting such requirements impractical. Materials used for cover shall be:

(A) At least six inches (15 cm) of earthen material, such as soils; or

(B) Alternative materials or an alternative thickness other than at least six inches (15 cm) of earthen material as approved by the jurisdictional health department when the owner or operator demonstrates that the alternative material or thickness will control vectors, fires, nuisance odors, blowing litter, scavenging, provide adequate access for heavy vehicles, and will not adversely affect gas or leachate composition and controls.

(iv) Prevent or control on-site populations of disease vectors using techniques appropriate for the protection of human health and the environment; and

(v) Implement a program at the facility to control and monitor explosive gases and to respond to the detection of explosive gases in a manner that ensures protection of human health. This program shall include, at a minimum:

(A) Ensure that explosive gases generated by the facility do not exceed:

(I) Twenty-five percent of the lower explosive limit for the gases in facility structures (excluding the gas control or recovery system components);

(II) The lower explosive limit in soil gases or in ambient air for the gases at the property boundary or beyond; and

(III) One hundred parts per million by volume of hydrocarbons (expressed as methane) in offsite structures;

(B) A routine explosive gas-monitoring program to ensure that all standards are met. The minimum frequency for monitoring is quarterly. The type and frequency of monitoring shall be determined based on the following factors:

(I) Soil conditions;

(II) The hydrogeologic conditions surrounding the facility;

(III) The hydraulic conditions surrounding the facility; and

(IV) The location of facility structures and property boundaries;

(C) If explosive gas levels exceed those of this subsection take all necessary steps to ensure protection of human health including:

(I) Notifying the jurisdictional health department;

(II) Monitoring offsite structures;

(III) Monitoring explosive gas levels daily, unless otherwise authorized by the jurisdictional health department;

(IV) Evacuation of buildings affected by landfill gas until determined to be safe for occupancy;

(V) Within seven calendar days of the explosive gas levels detection, placing in the operating record the explosive gas levels detected and a description of the steps taken to protect human health and provide written notification to the jurisdictional health department; and

(VI) Within sixty days of the explosive gas levels detection, implementing a remediation plan for the explosive gas releases, describing the nature and extent of the problem and the remedy. This shall be sent to the jurisdictional health department for approval as an amendment to the plan of operation. A copy of the remediation plan shall be placed in the operating record;

(D) Construction and decommissioning of all gas monitoring and extraction wells in a manner that protects groundwater and meets the requirements of chapter 173-160 WAC, Minimum standards for construction and maintenance of wells;

(c) Inspect and maintain the facility to prevent malfunctions and deterioration, operator errors, and discharges that may cause or lead to the release of wastes to the environment or cause a threat to human health. The inspections shall be at least weekly, unless an alternate schedule is approved by the jurisdictional health department as part of the permitting process. The owner or operator shall keep an inspection report or summary including at least the date and time of inspection, the printed name and the signature of the inspector, a notation of observations made, and the date and nature of any repairs or corrective actions;

(d) Maintain daily operating records on the weights (or volumes), number of vehicles entering and the types of wastes received. Facility inspection reports shall be maintained in the operating record. Significant deviations from the plan of operation shall be noted on the operating record. Records shall be maintained for a minimum of five years and shall be available upon request by the jurisdictional health department;

(e) Prepare and submit a copy of an annual report to the jurisdictional health department and the department by April 1st of each year. The annual report shall cover landfill activities during the previous calendar year and shall include the following information:

(i) Name and address of the facility;

(ii) Calendar year covered by the report;

(iii) Annual quantity and type of waste accepted in tons or cubic yards with an estimate of density in pounds per cubic yard;

(iv) Results of groundwater monitoring in accordance with WAC 173-350-500;

(v) Applicable financial assurance reviews and audit findings in accordance with WAC 173-350-600; and

(vi) Any additional information required by the jurisdictional health department as a condition of the permit;

(f) Develop, keep, and abide by a plan of operation approved as part of the permitting process. The plan shall describe the operation of the facility and shall convey to site operating personnel the concept of operation intended by the designer. The plan of operation shall be available for inspection at the request of the jurisdictional health department. If necessary, the plan shall be modified with the approval, or at the direction of the jurisdictional health department. Each plan of operation shall contain:

(i) A description of the types of solid waste to be handled at the facility;

(ii) A description of how solid wastes are to be handled on-site during its active life including:

(A) The acceptance criteria that will be applied to the waste;

(B) Procedures for ensuring only the waste described will be accepted;

(C) Procedures for handling unacceptable wastes; and

(D) Unloading and staging areas, transportation, routine filling, compaction, grading, cover or other vector controls, and housekeeping;

(iii) A description of how equipment, structures and other systems, including leachate collection, gas collection, run-on/runoff controls, and hydraulic gradient control systems, are to be inspected and maintained, including the frequency of inspection and inspection logs;

(iv) Safety and emergency plans including;

(A) Procedures for fire (including subsurface fires) prevention, a description of fire protection equipment available on-site and actions to take if there is a fire or explosion;

(B) Actions to take if leaks are detected or for other releases, such as failure of runoff containment system, if such systems are required;

(v) The forms for recording weights and volumes; and

(vi) Other such details to demonstrate that the landfill will be operated in accordance with this subsection and as required by the jurisdictional health department.

(5) *Limited purpose landfills - Groundwater monitoring requirements*. Limited purpose landfills are subject to the groundwater monitoring requirements of WAC 173-350-500.

(6) *Limited purpose landfills - Closure requirements*. The following closure requirements apply in full to facilities with limited purpose landfills:

(a) The owner or operator shall notify the jurisdictional health department, and where applicable, the financial assurance instrument provider, one hundred eighty days in advance of closure of the facility, or any portion thereof. The facility, or any portion thereof, shall close in a manner that:

(i) Minimizes the need for further maintenance;

(ii) Controls, minimizes, or eliminates threats to human health and the environment from post-closure escape of solid waste constituents, leachate, landfill gases, contaminated runoff, or waste decomposition products to the ground, groundwater, surface water, and the atmosphere; and

(iii) Prepares the facility, or any portion thereof, for the post-closure period.

(b) The owner or operator shall commence implementation of the closure plan in part or whole within thirty days after receipt of the final volume of waste and/or attaining the final landfill elevation at part of or at the entire landfill as

identified in the approved facility closure plan unless otherwise specified in the closure plan.

(c) The owner or operator shall not accept waste, including inert wastes, for disposal or for use in closure except as identified in the closure plan approved by the jurisdictional health department.

(d) The owner or operator shall develop, keep, and abide by a closure plan approved by the jurisdictional health department as part of the permitting process. At a minimum, the closure plan shall include the following information:

(i) A description of the final closure cover, designed in accordance with subsection (3)(e) of this section, the methods and procedures to be used to install the closure cover, sources of borrow materials for the closure cover, and a schedule or description of the time required for completing closure activities;

(ii) Projected time intervals at which sequential partial closure and final closure are to be implemented;

(iii) A description of the activities and procedures that will be used to ensure compliance with (a) through (g) of this subsection; and

(iv) Identify closure cost estimates and projected fund withdrawal intervals for the associated closure costs, from the approved financial assurance instrument.

(e) The owner or operator shall submit final engineering closure plans, in accordance with the approved closure plan and all approved amendments, for review, comment, and approval by the jurisdictional health department.

(f) When landfill closure is completed in part or whole, the owner or operator shall submit the following to the jurisdictional health department:

(i) Landfill closure plan sheets signed by a professional engineer registered in the state of Washington and modified as necessary to represent as-built changes to final closure construction for the landfill, or a portion thereof, as approved in the closure plan; and

(ii) Certification by the owner or operator, and a professional engineer registered in the state of Washington, that the landfill, or a portion thereof has been closed in accordance with the approved closure plan.

(g) The owner or operator shall record maps and a statement of fact concerning the location of the disposal facility as part of the deed with the county auditor not later than three months after closure.

(h) The jurisdictional health department shall notify the owner or operator, the department, and the financial assurance instrument provider, of the date when the jurisdictional health department has verified that the facility, or a portion thereof, has been closed in accordance with the specifications of the approved closure plan and the closure requirements of this section, at which time the post-closure period shall commence.

(7) *Limited purpose landfills - Post-closure requirements*. The following post-closure requirements apply in full to facilities with limited purpose landfills:

(a) The owner or operator shall provide post-closure activities to allow for continued facility maintenance and monitoring of air, land, and water for a period of twenty years, or as long as necessary for the landfill to stabilize and to protect human health and the environment. For disposal facilities, post-closure care includes at least the following:

(i) Maintaining the integrity and effectiveness of any final closure cover, including making repairs to the closure cover as necessary to correct the effects of settlement, subsidence, erosion, or other events, maintaining the vegetative cover, and preventing run-on and runoff from eroding or otherwise damaging the final closure cover;

(ii) General maintenance of the facility and facility structures for their intended use;

(iii) Monitoring groundwater, surface water, leachate, or other waters in accordance with the requirements of WAC 173-350-500 and the approved monitoring plan, including remedial measures if applicable, and maintaining all monitoring systems;

(iv) Monitoring landfill gas and maintaining and operating the gas collection and control systems;

(v) Maintaining, operating, and monitoring hydraulic gradient controls systems if applicable;

(vi) Monitoring settlement; and

(vii) Any other activities deemed appropriate by the jurisdictional health department.

(b) The owner or operator shall commence post-closure activities for the facility, or portion thereof, after completion of closure activities outlined in subsection (6) of this section. The jurisdictional health department may direct that post-closure activities cease until the owner or operator receives a notice to proceed with post-closure activities.

(c) The owner or operator shall develop, keep, and abide by a post-closure plan approved by the jurisdictional health department as a part of the permitting process. The post-closure plan shall:

(i) Address facility maintenance and monitoring activities for at least a twenty-year period or until the landfill becomes stabilized (i.e., little or no settlement, gas production or leachate generation), and monitoring of groundwater, surface water, gases and settlement can be safely discontinued; and

(ii) Project time intervals at which post-closure activities are to be implemented, and identify post-closure cost estimates and projected fund withdrawal intervals from the selected financial assurance instrument, where applicable, for the associated post-closure costs.

(d) The owner or operator shall complete post-closure activities for the facility, or portion thereof, in accordance with the approved post-closure plan and schedule, or the plan shall be so amended with the approval of the jurisdictional health department. The jurisdictional health department may direct facility post-closure activities, in part or completely, to cease until the post-closure plan has been amended and has received written approval by the health department.

(e) When post-closure activities are complete, the owner or operator shall submit a certification to the jurisdictional health department, signed by the owner or operator, and a professional engineer registered in the state of Washington stating why post-closure activities are no longer necessary.

(f) If the jurisdictional health department finds that post-closure monitoring has established that the landfill is stabilized, the health department may authorize the owner or operator to discontinue post-closure maintenance and monitoring activities.

(g) The jurisdictional health department shall notify the owner or operator, the department, and the financial assur-

ance instrument provider, of the date when the jurisdictional health department has verified that the facility has completed post-closure activities in accordance with the specifications of the approved post-closure plan.

(8) *Limited purpose landfills - Financial assurance requirements*.

(a) Financial assurance is required for all limited purpose landfills.

(b) Each owner or operator shall establish a financial assurance mechanism in accordance with WAC 173-350-600 that will accumulate funds equal to the closure and post-closure cost estimates over the life of the landfill, or over the life of each landfill unit if closed discretely.

(c) No owner or operator shall commence or continue disposal operations in any part of a facility subject to this section until a financial assurance instrument has been provided for closure and post-closure activities in conformance with WAC 173-350-600.

(9) *Limited purpose landfills - Permit application contents*. The owner or operator shall obtain a solid waste permit from the jurisdictional health department. All applications for permits shall be in accordance with the procedures established in WAC 173-350-710. In addition to the requirements of WAC 173-350-710 and 173-350-715, each application for a permit shall contain:

(a) Demonstrations that the facility meets the location standards of subsection (2) of this section;

(b) Documentation that all owners of property located within one thousand feet of the facility property boundary have been notified that the proposed facility may impact their ability to construct water supply wells, in accordance with chapter 173-160 WAC, Minimum standards for construction and maintenance of wells;

(c) Engineering reports/plans and specifications that address the design standards of subsection (3) of this section;

(d) A plan of operation meeting the requirements of subsection (4) of this section;

(e) Hydrogeologic reports and plans that address the requirements of subsection (5) of this section;

(f) A closure plan meeting the requirements of subsection (6) of this section;

(g) A post-closure plan meeting the requirements of subsection (7) of this section; and

(h) Documentation as needed to meet the financial assurance requirements of subsection (8) of this section.

(10) *Limited purpose landfills - Construction records*. The owner or operator of a limited purpose landfill shall provide copies of the construction record drawings for engineered facilities at the site and a report documenting facility construction, including the results of observations and testing carried out as part of the construction quality assurance plan, to the jurisdictional health department and the department. Facilities shall not commence operation until the jurisdictional health department has determined that the construction was completed in accordance with the approved engineering report/plans and specifications and has approved the construction documentation in writing.

[Statutory Authority: Chapter 70.95 RCW. WSR 03-03-043 (Order 99-24), § 173-350-400, filed 1/10/03, effective 2/10/03.]

WAC 173-350-410 Inert waste landfills. (1) *Inert waste landfills - Applicability*. These standards apply to landfills that receive only inert wastes, as identified pursuant to WAC 173-350-990, including facilities that use inert wastes as a component of fill. In accordance with RCW 70.95.305, facilities with a total capacity of two hundred fifty cubic yards or less of inert wastes are categorically exempt from solid waste handling permitting and other requirements of this section, provided that the inert waste landfill is operated in compliance with the performance standards of WAC 173-350-040. An owner or operator that does not comply with the performance standards of WAC 173-350-040 is required to obtain a permit from the jurisdictional health department, and may be subject to the penalty provisions of RCW 70.95.315.

(2) *Inert waste landfills - Location standards*. All inert waste landfills shall be located to meet the following requirements. No inert waste landfill's active area shall be located:

(a) On an unstable slope;

(b) Closer than ten feet from the facility property line;

(c) Closer than one hundred feet to a drinking water supply well; or

(d) In a channel migration zone as defined in WAC 173-350-100, or within one hundred feet measured horizontally, of a stream, lake, pond, river, or saltwater body, nor in any wetland nor any public land that is being used by a public water system for watershed control for municipal drinking water purposes in accordance with WAC 248-54-660(4).

(3) *Inert waste landfills - Design standards*. The owner or operator of an inert waste landfill shall prepare engineering reports/plans and specifications to address the design standards of this subsection. The existing site topography, including the location and approximate thickness and nature of any existing waste, the vertical and horizontal limits of excavation and waste placement, final closure elevation and grades, and the design capacity of each landfill unit, total design capacity, and future use of the facility after closure, shall be included. Inert waste landfills shall be designed and constructed to:

(a) Ensure that all waste is above the seasonal high level of groundwater. For the purpose of this section, groundwater includes any water-bearing unit which is horizontally and vertically extensive, hydraulically recharged, and volumetrically significant;

(b) Maintain a stable site; and

(c) Manage surface water, including run-on prevention and runoff conveyance, storage, and treatment, to protect the waters of the state;

(4) *Inert waste landfills - Operating standards*. The owner or operator of an inert waste landfill shall:

(a) Operate the facility to:

(i) Control public access and prevent unauthorized vehicular traffic and illegal dumping of wastes;

(ii) Implement a program at the facility capable of detecting and preventing noninert wastes from being accepted or mixed with inert waste;

(iii) Handle all inert waste in a manner that is in compliance with the performance standards of WAC 173-350-040;

(iv) Handle all inert waste in a manner that controls fugitive dust and is protective of waters of the state; and

(v) Prevent unstable conditions resulting from their activities;

(b) Inspect and maintain the facility to prevent malfunctions and deterioration, operator errors and discharges that may cause a threat to human health. Inspections shall be as needed, but at least weekly, to ensure meeting operational standards, unless an alternate schedule is approved by the jurisdictional health department as part of the permitting process;

(c) Maintain daily operating records of the quantities of inert waste disposed. In addition, record and retain information that documents that all wastes landfilled meet the criteria for inert waste. Facility inspection reports shall be maintained in the operating record. Significant deviations from the plan of operation shall be noted in the operating record. Records shall be maintained for minimum of five years and shall be available upon request by the jurisdictional health department;

(d) Prepare and submit a copy of an annual report to the jurisdictional health department and the department by April 1st on forms supplied by the department. The annual report shall detail the facility's activities during the previous calendar year and shall include the following information:

(i) Name and address of the facility;

(ii) Calendar year covered by the report;

(iii) Annual quantity and type of waste disposed in tons or cubic yards with an estimate of density in pounds per cubic yard; and

(iv) Any additional information required by the jurisdictional health department as a condition of the permit;

(e) Develop, keep, and abide by a plan of operation approved as part of the permitting process. The plan shall describe the facility's operation and shall convey to site operating personnel the concept of operation intended by the designer. The plan of operation shall be available for inspection at the request of the jurisdictional health department. If necessary, the plan shall be modified with the approval, or at the direction of the jurisdictional health department. Each plan of operation shall include:

(i) A description of the types of solid waste to be handled at the facility;

(ii) A description of how solid wastes are to be handled on-site during its active life including:

(A) Acceptance criteria that will be applied to the waste;

(B) Procedures for ensuring only the waste described will be accepted;

(C) Procedures for handling unacceptable wastes; and

(D) Procedures for transporting and routine filling and grading;

(iii) A description of how equipment, structures and other systems are to be inspected and maintained, including the frequency of inspection and inspection logs;

(iv) Safety and emergency plans;

(v) The forms used to record weights and volumes; and

(vi) Other such details to demonstrate that the facility will meet the requirements of this subsection and as required by the jurisdictional health department.

(5) *Inert waste landfills - Groundwater monitoring standards*. There are no specific groundwater monitoring requirements for inert waste landfills subject to this chapter; however, inert waste landfills must meet the requirements provided under WAC 173-350-040(5).

(6) *Inert waste landfills - Closure requirements*. The owner or operator of an inert waste landfill shall:

(a) Notify the jurisdictional health department sixty days in advance of closure of the facility;

(b) Close the inert waste landfill unit by leveling the wastes to the extent practicable, or as appropriate for the proposed future use, and fill all voids which could pose a physical threat for persons, or which provide disease vector harborages. The inert waste landfills shall be closed in a manner to control fugitive dust and protect the waters of the state; and

(c) Record maps and a statement of fact concerning the location of the landfill as part of the deed with the county auditor not later than three months after closure.

(7) *Inert waste landfills - Financial assurance requirements*. There are no specific financial assurance requirements for inert waste landfills subject to this chapter; however, inert waste landfills must meet the requirements provided under WAC 173-350-040(5).

(8) *Inert waste landfills - Permit application contents*. The owner or operator shall obtain a solid waste permit from the jurisdictional health department. All applications for permits shall be submitted in accordance with the procedures established in WAC 173-350-710. In addition to the requirements of WAC 173-350-710 and 173-350-715, each application for a permit shall contain:

(a) Engineering reports/plans and specifications that address the design standards of subsection (3) of this section;

(b) A plan of operation that meets the requirements of subsection (4) of this section; and

(c) Documentation that all owners of property located within one thousand feet of the facility property boundary have been notified that the proposed facility may impact their ability to construct water supply wells, in accordance with chapter 173-160 WAC, Minimum standards for construction and maintenance of wells.

[Statutory Authority: Chapter 70.95 RCW. WSR 03-03-043 (Order 99-24), § 173-350-410, filed 1/10/03, effective 2/10/03.]

WAC 173-350-490 Other methods of solid waste handling. (1) *Other methods of solid waste handling - Applicability*. This section applies to other methods of solid waste handling not specifically identified elsewhere in this regulation, nor excluded from this regulation.

(2) *Other methods of solid waste handling - Requirements*. Owners and operators of solid waste handling facilities subject to this section shall:

(a) Comply with the requirements in WAC 173-350-040; and

(b) Obtain a permit in accordance with the provisions of WAC 173-350-700 from the jurisdictional health department. Permit applications shall be submitted in accordance with the provisions of WAC 173-350-710 and shall include information required in WAC 173-350-715, and any other information as may be required by the jurisdictional health department.

[Statutory Authority: Chapter 70.95 RCW. WSR 03-03-043 (Order 99-24), § 173-350-490, filed 1/10/03, effective 2/10/03.]

WAC 173-350-500 Groundwater monitoring. (1) *Groundwater monitoring - Professional qualifications*. All reports, plans, procedures, and design specifications required

by this section shall be prepared by a licensed professional in accordance with the requirements of chapter 18.220 RCW.

(2) *Groundwater monitoring - Site characterization*. A site proposed for solid waste activities shall be characterized for its geologic and hydrogeologic properties and suitability for constructing, operating, and monitoring a solid waste facility in accordance with all applicable requirements of this chapter. The site characterization report shall be submitted with the permit application and shall include at a minimum the following:

(a) A summary of local and regional geology and hydrology, including:

(i) Faults;

(ii) Zones of joint concentrations;

(iii) Unstable slopes and subsidence areas on-site;

(iv) Areas of groundwater recharge and discharge;

(v) Stratigraphy; and

(vi) Erosional and depositional environments and facies interpretation(s);

(b) A site-specific borehole program including description of lithology, soil/bedrock types and properties, preferential groundwater flow paths or zones of higher hydraulic conductivity, the presence of confining unit(s) and geologic features such as fault zones, cross-cutting structures, etc., and the target hydrostratigraphic unit(s) to be monitored. Requirements of the borehole program include:

(i) Each boring will be of sufficient depth below the proposed grade of the bottom liner to identify soil, bedrock, and hydrostratigraphic unit(s);

(ii) Boring samples shall be collected from five-foot intervals at a minimum and at changes in lithology. Representative samples shall be described using the unified soil classification system following ASTM D2487-85 and tested for the following if appropriate:

(A) Particle size distribution by sieve and hydrometer analyses in accordance with approved ASTM methods (D422 and D1120); and

(B) Atterburg limits following approved ASTM method D4318;

(iii) Each lithologic unit on-site will be analyzed for:

(A) Moisture content sufficient to characterize the unit using ASTM method D2216; and

(B) Hydraulic conductivity by an in situ field method or laboratory method. All samples collected for the determination of permeability shall be collected by standard ASTM procedures;

(iv) All boring logs shall be submitted with the following information:

(A) Soil and rock descriptions and classifications;

(B) Method of sampling;

(C) Sample depth, interval and recovery;

(D) Date of boring;

(E) Water level measurements;

(F) Standard penetration number following approved ASTM method D1586-67;

(G) Boring location; and

(H) Soil test data;

(v) All borings not converted to monitoring wells or piezometers shall be carefully backfilled, plugged, and recorded in accordance with WAC 173-160-420;

(vi) During the borehole drilling program, any on-site drilling and lithologic unit identification shall be performed under the direction of a licensed professional in accordance with the requirements of chapter 18.220 RCW who is trained to sample and identify soils and bedrock lithology;

(vii) An on-site horizontal and vertical reference datum shall be established during the site characterization. The standards for land boundary surveys and geodetic control surveys and guidelines for the preparation of land descriptions shall be used to establish borehole and monitoring well coordinates and casing elevations from the reference datum;

(viii) Other methods, including geophysical techniques, may be used to supplement the borehole program to ensure that a sufficient hydrogeologic site characterization is accomplished;

(c) A site-specific flow path analysis that includes:

(i) The depths to groundwater and hydrostratigraphic unit(s) including transmissive and confining units; and

(ii) Potentiometric surface elevations and contour maps, direction and rate of horizontal and vertical groundwater flow;

(d) Identification of the quantity, location, and construction (where available) of private and public wells within a two thousand-foot radius, measured from the site boundaries;

(e) Tabulation of all water rights for groundwater and surface water within a two thousand-foot (610 m) radius, measured from site boundaries;

(f) Identification and description of all surface waters within a one-mile (1.6 km) radius, measured from site boundaries;

(g) A summary of all previously collected site groundwater and surface water analytical data, and for expanded facilities, identification of impacts of the existing facility upon ground and surface waters from landfill leachate discharges to date;

(h) Calculation of a site water balance;

(i) Conceptual design of groundwater and surface water monitoring systems, and where applicable a vadose zone monitoring system, including proposed construction and installation methods for these systems;

(j) Description of land use in the area, including nearby residences;

(k) A topographic map of the site and drainage patterns, including an outline of the waste management area, property boundary, the proposed location of groundwater monitoring wells, and township and range designations; and

(l) Geologic cross sections.

(3) *Groundwater monitoring - System design*.

(a) The groundwater monitoring system design and report shall be submitted with the permit application and shall meet the following criteria:

(i) A sufficient number of monitoring wells shall be installed at appropriate locations and depths to yield representative groundwater samples from those hydrostratigraphic units which have been identified in the site characterization as the earliest potential contaminant flowpaths;

(ii) Represent the quality of groundwater at the point of compliance, and include at a minimum:

(A) A groundwater flow path analysis which supports why the chosen hydrostratigraphic unit is capable of provid-

ing an early warning detection of any groundwater contamination.

(B) Documentation and calculations of all of the following information:

(I) Hydrostratigraphic unit thickness including confining units and transmissive units;

(II) Vertical and horizontal groundwater flow directions including seasonal, man-made, or other short-term fluctuations in groundwater flow;

(III) Stratigraphy and lithology;

(IV) Hydraulic conductivity; and

(V) Porosity and effective porosity.

(b) Upgradient monitoring wells (background wells) shall meet the following performance criteria:

(i) Shall be installed in groundwater that has not been affected by leakage from a landfill unit; or

(ii) If hydrogeologic conditions do not allow for the determination of an upgradient monitoring well, then sampling at other monitoring wells which provide representative background groundwater quality may be allowed.

(c) Downgradient monitoring wells (compliance wells) shall meet the following performance criteria:

(i) Represent the quality of groundwater at the point of compliance;

(ii) Be installed as close as practical to the point of compliance;

(iii) When physical obstacles preclude installation of groundwater monitoring wells at the relevant point of compliance at the landfill unit or solid waste facility, the downgradient monitoring system may be installed at the closest practical distance hydraulically downgradient from the relevant point of compliance that ensures detection of groundwater contamination in the chosen hydrostratigraphic unit.

(d) All monitoring wells shall be constructed in accordance with chapter 173-160 WAC, Minimum standards for construction and maintenance of wells, and chapter 173-162 WAC, Regulation and licensing of well contractors and operators.

(e) The owner or operator shall notify the jurisdictional health department and the department of any proposed changes to the design, installation, development, and decommission of any monitoring wells, piezometers, and other measurement, sampling, and analytical devices. Proposed changes shall not be implemented prior to the jurisdictional health department's written approval. Upon completing changes, all documentation, including date of change, new monitoring well location maps, boring logs, and monitoring well diagrams, shall be submitted to the jurisdictional health department and shall be placed in the operating record.

(f) All monitoring wells, piezometers, and other measurement, sampling, and analytical devices shall be operated and maintained so that they perform to design specifications throughout the life of the monitoring program.

(4) *Groundwater monitoring - Sampling and analysis plan*.

(a) The groundwater monitoring program shall include consistent sampling and analysis procedures that are designed to provide monitoring results that are representative of groundwater quality at the upgradient and downgradient monitoring wells. In addition to monitoring wells, facilities with hydraulic gradient control and/or leak detection systems will provide representative groundwater samples from those systems. The owner or operator shall submit a compliance sampling and analysis plan as part of the permit application. The plan shall include procedures and techniques for:

(i) Sample collection and handling;

(ii) Sample preservation and shipment;

(iii) Analytical procedures;

(iv) Chain-of-custody control;

(v) Quality assurance and quality control;

(vi) Decontamination of drilling and sampling equipment;

(vii) Procedures to ensure employee health and safety during well installation and monitoring; and

(viii) Well operation and maintenance procedures.

(b) Facilities collecting leachate shall include leachate sampling and analysis as part of compliance monitoring.

(c) The groundwater monitoring program shall include sampling and analytical methods that are appropriate for groundwater samples. The sampling and analytical methods shall provide sufficient sensitivity, precision, selectivity and limited bias such that changes in groundwater quality can be detected and quantified. All samples shall be sent to an accredited laboratory for analyses in accordance with chapter 173-50 WAC, Accreditation of environmental laboratories.

(d) Groundwater elevations shall be measured in each monitoring well immediately prior to purging, each time groundwater is sampled. The owner or operator shall determine the rate and direction of groundwater flow each time groundwater is sampled. All groundwater elevations shall be determined by a method that ensures measurement to the one hundredth of a foot (3 mm) relative to the top of the well casing.

(e) Groundwater elevations in wells that monitor the same landfill unit shall be measured within a period of time short enough to avoid any groundwater fluctuations which could preclude the accurate determination of groundwater flow rate and direction.

(f) The owner or operator shall establish background groundwater quality in each upgradient and downgradient monitoring well. Background groundwater quality shall be based upon a minimum of eight independent samples. Samples shall be collected for each monitoring well and shall be analyzed for parameters required in the permit for the first year of groundwater monitoring. Each independent sampling event shall be no less than one month after the previous sampling event.

(g) Groundwater quality shall be determined at each monitoring well at least quarterly during the active life of the solid waste facility, including closure and the post-closure period. More frequent monitoring may be required to protect downgradient water supply wells. Groundwater monitoring shall begin after background groundwater quality has been established. The owner or operator may propose an alternate groundwater monitoring frequency. Groundwater monitoring frequency must be no less than semiannually. The owner or operator must apply for a permit modification or must apply during the renewal process for changes in groundwater monitoring frequency making a demonstration based on the following information:

(i) A characterization of the hydrostratigraphic unit(s) including the unsaturated zone, transmissive and confining units and include the following:

(A) Hydraulic conductivity; and

(B) Groundwater flow rates;

(ii) Minimum distance between upgradient edge of the solid waste handling unit and downgradient monitoring wells (minimum distance of travel); and

(iii) Contaminant fate and transport characteristics.

(h) All facilities shall test for the following parameters:

(i) Field parameters:

(A) pH;

(B) Specific conductance;

(C) Temperature;

(D) Static water level;

(ii) Geochemical indicator parameters:

(A) Alkalinity (as Ca CO_3);

(B) Bicarbonate (HCO_3);

(C) Calcium (Ca);

(D) Chloride (Cl);

(E) Iron (Fe);

(F) Magnesium (Mg);

(G) Manganese (Mn);

(H) Nitrate(NO_3);

(I) Sodium (Na);

(J) Sulfate (SO_4);

(iii) Leachate indicators:

(A) Ammonia (NH_3-N);

(B) Total organic carbon (TOC);

(C) Total dissolved solids (TDS).

(i) Based upon the site specific waste profile and also the leachate characteristics for lined facilities, the owner or operator shall propose additional constituents to include in the monitoring program. The jurisdictional health department shall specify the additional constituents in the solid waste permit.

(j) Testing shall be performed in accordance with "*Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*," U.S. EPA Publication SW-846, or other testing methods approved by the jurisdictional health department.

(k) Maximum contaminant levels (MCL) for groundwater are those specified in chapter 173-200 WAC, Water quality standards for groundwaters of the state of Washington.

(5) *Groundwater monitoring - Data analysis, notification and reporting*.

(a) The results of monitoring well sample analyses as required by subsection (4)(h) and (i) of this section shall be evaluated using an appropriate statistical procedure(s), as approved by the jurisdictional health department during the permitting process, to determine if a significant increase over background has occurred. The statistical procedure(s) used shall be proposed in the sampling and analysis plan and be designed specifically for the intended site, or prescriptive statistical procedures from appropriate state and federal guidance may be used.

(b) If statistical analyses determine a significant increase over background:

(i) The owner or operator shall:

(A) Notify the jurisdictional health department and the department of this finding within thirty days of receipt of the sampling data. The notification shall indicate what parameters or constituents have shown statistically significant increases;

(B) Immediately resample the groundwater for the parameter(s) showing statistically significant increase in the monitoring well(s) where the statistically significant increase has occurred;

(C) Establish a groundwater protection standard using the groundwater quality criteria of chapter 173-200 WAC, Water quality standards for groundwaters of the state of Washington. Constituents for which the background concentration level is higher than the protection standard, the owner or operator shall use background concentration for constituents established in the facility's monitoring record.

(ii) The owner or operator may demonstrate that a source other than a landfill unit or solid waste facility caused the contamination, or the statistically significant increase resulted from error in sampling, analyses, statistical evaluation, or natural variation in groundwater quality. If such a demonstration cannot be made and the concentrations or levels of the constituents:

(A) Meet the criteria established by chapter 173-200 WAC, Water quality standards for groundwaters of the state of Washington, the owner or operator shall:

(I) Assess and evaluate sources of contamination; and

(II) Implement remedial measures in consultation with the jurisdictional health department and the department.

(B) Exceed the criteria established by chapter 173-200 WAC, Water quality standards for groundwaters of the state of Washington, the owner or operator shall:

(I) Characterize the chemical composition of the release and the contaminant fate and transport characteristics by installing additional monitoring wells;

(II) Assess and, if necessary, implement appropriate intermediate measures to remedy the release. The measures shall be approved by the jurisdictional health department and the department; and

(III) Evaluate, select, and implement remedial measures as required by chapter 173-340 WAC, the Model Toxics Control Act cleanup regulation, where applicable. The roles of the jurisdictional health department and the department in remedial action are further defined by WAC 173-350-900.

(c) The owner or operator shall submit a copy of an annual report to the jurisdictional health department and the department by April 1st of each year. The jurisdictional health department may require more frequent reporting based on the results of groundwater monitoring. The annual report shall summarize and interpret the following information:

(i) All groundwater monitoring data, including laboratory and field data for the sampling periods;

(ii) Statistical results and/or any statistical trends including any findings of any statistical increases for the year and time/concentration series plots;

(iii) A summary of concentrations above the maximum contaminant levels of chapter 173-200 WAC;

(iv) Static water level readings for each monitoring well for each sampling event;

(v) Potentiometric surface elevation maps depicting groundwater flow rate and direction for each sampling event, noting any trends or changes during the year;

(vi) Geochemical evaluation including cation-anion balancing and trilinear and/or stiff diagraming for each sampling event noting any changes or trends in water chemistry for each well during the year; and

(vii) Leachate analyses where appropriate for each sampling event.

[Statutory Authority: Chapter 70.95 RCW. WSR 03-03-043 (Order 99-24), § 173-350-500, filed 1/10/03, effective 2/10/03.]

WAC 173-350-600 Financial assurance requirements. (1) *Financial assurance requirements - Applicability*. This section is applicable to:

(a) Waste tires storage facilities regulated under WAC 173-350-350;

(b) Moderate risk waste facilities regulated under WAC 173-350-360; and

(c) Limited purpose landfills regulated under WAC 173-350-400.

(2) *Financial assurance requirements - Definitions*. For the purposes of this section, the following definitions apply:

(a) Public facility means a publicly or privately owned facility that accepts solid waste generated by other persons.

(b) Private facility means a privately owned facility maintained on private property solely for the purpose of managing waste generated by the entity owning the site.

(3) *Financial assurance requirements - Instrument options*. Financial assurance options are available, based on facility type as defined in WAC 173-350-600(2), ownership and permittee. Contents of all instruments must be acceptable to the jurisdictional health department. The following instrument options exist:

(a) Reserve accounts that are managed as either:

(i) Cash and investments accumulated and restricted for activities identified in the closure or post-closure plans, with the equivalent amount of fund balance reserved in the fund; or

(ii) Cash and investments held in a nonexpendable trust fund.

(b) Trust funds to receive, manage and disburse funds for activities identified in the approved closure and post-closure plans. Trust funds shall be established with an entity that has authority to act as a trustee and whose trust operations are regulated and examined by a federal or state agency.

(c) Surety bond(s) issued by a surety company listed as acceptable in Circular 570 of the United States Treasury Department. A standby trust fund for closure or post-closure shall also be established by the owner or operator to receive any funds that may be paid by the operator or surety company. The surety shall become liable for the bond obligation if the owner or operator fails to perform as guaranteed by the bond. The surety may not cancel the bond until at least one hundred twenty days after the owner or operator, the jurisdictional health department and the department have received notice of cancellation. If the owner or operator has not provided alternate financial assurance acceptable under this section within ninety days of the cancellation notice, the surety shall pay the amount of the bond into the standby closure or post-closure trust account. The following types of surety bonds are options:

(i) Surety bond; or

(ii) Surety bond guaranteeing that the owner or operator will perform final closure or post-closure activities.

(d) Irrevocable letter of credit issued by an entity which has the authority to issue letters of credit and whose letter of credit operations are regulated and examined by a federal or state agency. Standby trust funds for closure and post-closure shall also be established by the owner or operator to receive any funds deposited by the issuing institution resulting from a draw on the letter of credit. The letter of credit shall be irrevocable and issued for a period of at least one year, and renewed annually, unless the issuing institution notifies the owner or operator, the jurisdictional health department and the department at least one hundred twenty days before the current expiration date. If the owner or operator fails to perform activities according to the closure or post-closure plan and permit requirements, or if the owner or operator fails to provide alternate financial assurance acceptable to the jurisdictional health department within ninety days after notification that the letter of credit will not be extended, the jurisdictional health department may require that the financial institution provide the funds from the letter of credit to the jurisdictional health department to be used to complete the required closure and post-closure activities;

(e) Insurance policies issued by an insurer who is licensed to transact the business of insurance or is eligible as an excess or surplus line insurer in one or more states, the content of which:

(i) Guarantees that the funds will be available to complete those activities identified in the approved closure or post-closure plans;

(ii) Guarantees that the insurer will be responsible for paying out funds for those activities;

(iii) Provides that the insurance is automatically renewable and that the insurer may not cancel, terminate, or fail to renew the policy except for failure to pay the premium;

(iv) Provides that if there is a failure to pay the premium, the insurer may not terminate the policy until at least one hundred twenty days after the notice of cancellation has been received by the owner or operator, the jurisdictional health department and the department;

(v) Provides that termination of the policy may not occur and the policy shall remain in full force and effect if:

(A) The jurisdictional health department determines the facility has been abandoned;

(B) Closure has been ordered by the jurisdictional health department or a court of competent jurisdiction;

(C) The owner or operator has been named as debtor in a voluntary or involuntary proceeding under Title 11 U.S.C., Bankruptcy; or

(D) The premium due is paid;

(vi) The owner or operator is required to maintain the policy in full force and until an alternative financial assurance guarantee is provided or when the jurisdictional health department has verified that closure, and/or post-closure, as appropriate, have been completed in accordance with the approved closure or post-closure plan;

(vii) For purposes of this rule, "captive" insurance companies as defined in WAC 173-350-100, are not an acceptable insurance company.

(f) Financial Test/corporate guarantee allows for a private corporation meeting the financial test to provide a corpo-

rate guarantee those activities identified in the closure and post-closure plans will be completed.

(i) To qualify, a private corporation owner or operator shall meet the criteria of either option A or B:

(A) Option A - to pass the financial test under this option the private corporation shall have:

(I) Two of the following three ratios: A ratio of total liabilities to net worth less than 2.0; a ratio of the sum of net income plus depreciation, depletion, and amortization to total liabilities greater than 0.1; or a ratio of current assets to current liabilities greater than 1.5;

(II) Net working capital and tangible net worth each at least six times the sum of the current closure and post-closure cost estimates;

(III) Tangible net worth of at least ten million dollars; and

(IV) Assets in the United States amounting to at least ninety percent of its total assets or at least six times the sum of the current closure and post-closure cost estimates.

(B) Option B - to pass this alternative financial test, the private corporation shall have:

(I) A current rating of AAA, AA, A, or BBB as issued by Standard and Poor's or Aaa, Aa, A, or Baa as issued by Moody's;

(II) Tangible net worth at least six times the sum of the current closure and post-closure cost estimates;

(III) Tangible net worth of at least ten million dollars; and

(IV) Assets in the United States amounting to at least ninety percent of its total assets or at least six times the sum of the current closure and post-closure cost estimates.

(ii) The owner or operator's chief financial officer shall provide a corporate guarantee that the corporation passes the financial test at the time the closure plan is filed. This corporate guarantee shall be reconfirmed annually ninety days after the end of the corporation's fiscal year by submitting to the jurisdictional health department a letter signed by the chief financial officer that:

(A) Provides the information necessary to document that the owner or operator passes the financial test;

(B) Guarantees that the funds to finance closure and post-closure activities according to the closure or post-closure plan and permit requirements are available;

(C) Guarantees that closure and post-closure activities will be completed according to the closure or post-closure plan and permit requirements;

(D) Guarantees that within thirty days if written notification is received from the jurisdictional health department that the owner or operator no longer meets the criteria of the financial test, the owner or operator shall provide an alternative form of financial assurance consistent with the requirements of this section;

(E) Guarantees that the owner or operator's chief financial officer will notify in writing the jurisdictional health department and the department within fifteen days any time that the owner or operator no longer meets the criteria of the financial test or is named as debtor in a voluntary or involuntary proceeding under Title 11 U.S.C., Bankruptcy;

(F) Acknowledges that the corporate guarantee is a binding obligation on the corporation and that the chief financial officer has the authority to bind the corporation to the guarantee;

(G) Attaches a copy of the independent certified public accountant's report on examination of the owner or operator's financial statements for the latest completed fiscal year; and

(H) Attaches a special report from the owner or operator's independent certified public accountant (CPA) stating that the CPA has reviewed the information in the letter from the owner or operator's chief financial officer and has determined that the information is true and accurate.

(iii) The jurisdictional health department may, based on a reasonable belief that the owner or operator no longer meets the criteria of the financial test, require reports of the financial condition at any time in addition to the annual report. The jurisdictional health department will specify the information required in the report. If the jurisdictional health department finds, on the basis of such reports or other information, that the owner or operator no longer meets the criteria of the financial test, the owner or operator shall provide an alternative form of financial assurance consistent with the requirements of this section, within thirty days after notification by the jurisdictional health department.

(iv) If the owner or operator fails to perform final closure and, where required, provide post-closure care of a facility covered by the guarantee in accordance with the approved closure and post-closure plans, the guarantor will be required to complete the appropriate activities.

(v) The guarantee will remain in force unless the guarantor sends notice of cancellation by certified mail to the owner or operator, the jurisdictional health department and the department. Cancellation may not occur, however, during the one hundred twenty days beginning on the date of receipt of the notice of cancellation by the owner or operator, the jurisdictional health department and the department.

(vi) If the owner or operator fails to provide alternate financial assurance as specified in this section and obtain the written approval of such alternate assurance from the jurisdictional health department within ninety days after receipt of a notice of cancellation of the guarantee from the guarantor, the guarantor will provide such alternative financial assurance in the name of the owner or operator.

(4) *Financial assurance requirements - Eligible financial assurance instruments*. The financial assurance instruments identified in subsection (3) of this section are available for use based on facility category and whether the permittee is a public or private entity as follows:

(a) For a public facility, as defined in subsection (2) of this section, when the permittee is a public entity, the following options are available:

(i) Reserve account;

(ii) Trust account;

(iii) Surety bond (payment or performance); or

(iv) Insurance;

(b) For a public facility as defined in subsection (2) of this section, where the permittee is a private entity, the following options are available:

(i) Trust account;

(ii) Surety bond (payment or performance);

(iii) Letter of credit; or

(iv) Insurance;

(c) For private facilities as defined in subsection (2) of this section, the following options are available:

(i) Trust account;

(ii) Surety bond (payment or performance);

(iii) Letter of credit;

(iv) Insurance; or

(v) Financial test/corporate guarantee.

(5) *Financial assurance requirements - Cost estimate for closure*. The owner or operator shall:

(a) Prepare a written closure cost estimate as part of the facility closure plan. The closure cost estimate shall:

(i) Be in current dollars and represent the cost of closing the facility;

(ii) Provide a detailed written estimate, in current dollars, of the cost of hiring a third party to close the facility at any time during the active life when the extent and manner of its operation would make closure the most expensive in accordance with the approved closure plan;

(iii) Project intervals for withdrawal of closure funds from the closure financial assurance instrument to complete the activities identified in the approved closure plan;

(iv) Not reduce by allowance for salvage value of equipment, solid waste, or the resale value of property or land;

(b) Prepare a new closure cost estimate in accordance with (a) of this subsection whenever:

(i) Changes in operating plans or facility design affect the closure plan; or

(ii) There is a change in the expected year of closure that affects the closure plan;

(c) Review the closure cost estimate by March 1st of each calendar year. The review shall be submitted to the jurisdictional health department, with a copy to the department, by April 1st of each calendar year stating that the review was completed and the findings of the review. The review will examine all factors, including inflation, involved in estimating the closure cost. Any cost changes shall be factored into a revised closure cost estimate and submit the revised cost estimate to the jurisdictional health department for review and approval. The jurisdictional health department shall evaluate each cost estimate for completeness, and may accept, or require a revision of the cost estimate in accordance with its evaluation.

(6) *Financial assurance requirements - Cost estimate for post-closure*. The owner or operator shall:

(a) Prepare a written post-closure cost estimate as part of the facility post-closure plan. The post-closure cost estimate shall:

(i) Be in current dollars and represent the total cost of completing post-closure activities for the facility for a twenty-year post-closure period or a time frame determined by the jurisdictional health department;

(ii) Provide a detailed written estimate, in current dollars, of the cost of hiring a third party to conduct post-closure care for the facility in compliance with the post-closure plan;

(iii) Project intervals for withdrawal of post-closure funds from the post-closure financial assurance instrument to complete the activities identified in the approved post-closure plan; and

(iv) Not reduce by allowance for salvage, value of equipment, or resale value of property or land.

(b) Prepare a new post-closure cost estimate for the remainder of the post-closure care period in accordance with (a) of this subsection, whenever a change in the post-closure plan increases or decreases the cost of post-closure care.

(c) During the operating life of the facility, the owner or operator must review the post-closure cost estimate by March 1st of each calendar year. The review will be submitted to the jurisdictional health department, with a copy to the department by April 1st of each calendar year stating that the review was completed and the finding of the review. The review shall examine all factors, including inflation, involved in estimating the post-closure cost estimate. Any changes in costs shall be factored into a revised post-closure cost estimate. The new estimate shall be submitted to the jurisdictional health department for approval. The jurisdictional health department shall evaluate each cost estimate for completeness, and may accept, or require a revision of the cost estimate in accordance with its evaluation.

(7) *Financial assurance requirements - Closure/post-closure financial assurance account establishment and reporting*.

(a) Closure and post-closure financial assurance funds generated shall be provided to the selected financial assurance instrument at the schedule specified in the closure and post-closure plans, such that adequate closure and post-closure funds will be generated to ensure full implementation of the approved closure and post-closure plans.

(b) The facility owner or operator with systematic deposits shall establish a procedure with the financial assurance instruments trustee for notification of nonpayment of funds to be sent to the jurisdictional health department and the department.

(c) The owner or operator shall file with the jurisdictional health department, no later than April 1st of each year, an annual audit of the financial assurance accounts established for closure and post-closure activities, and a statement of the percentage of user fees, as applicable, diverted to the financial assurance instruments, for the previous calendar year:

(i) For facilities owned and operated by municipal corporations, the financial assurance accounts shall be audited according to the audit schedule of the office of state auditor. A certification of audit completion and summary findings shall be filed with the jurisdictional health department and the department, including during each of the post-closure care years.

(ii) For facilities not owned or operated by municipal corporations:

(A) Annual audits shall be conducted by a certified public accountant licensed in the state of Washington. A certification of audit completion and summary findings shall be filed with the jurisdictional health department and the department, including during each of the post-closure care years.

(B) The audit shall also include, as applicable, calculations demonstrating the proportion of closure or post-closure, completed during the preceding year as specified in the closure and post-closure plans.

(d) Established financial assurance accounts shall not constitute an asset of the facility owner or operator.

(e) Any income accruing to the established financial assurance account(s) will be used at the owner's discretion upon approval of the jurisdictional health department.

(8) *Financial assurance requirements - Fund withdrawal for closure and post-closure activities*.

(a) The owner or operator will withdraw funds from the closure and/or post-closure financial assurance instrument as specified in the approved closure/post-closure plans;

(b) If the withdrawal of funds from the financial assurance instrument exceeds by more than five percent the withdrawal schedule stated in the approved closure and/or post-closure plan over the life of the permit, the closure and/or post-closure plan shall be amended.

(c) After verification by the jurisdictional health department of facility closure, excess funds remaining for closure in a financial assurance account shall be released to the facility owner or operator.

(d) After verification by the jurisdictional health department of facility post-closure, excess funds remaining for post-closure in a financial assurance account shall be released to the facility owner or operator.

[Statutory Authority: Chapter 70.95 RCW. WSR 03-03-043 and 03-04-103 (Order 99-24 and Order 99-24A), § 173-350-600, filed 1/10/03 and 2/4/03, effective 3/7/03 and 3/31/03.]

WAC 173-350-700 Permits and local ordinances. (1) *Permit required*.

(a) No solid waste storage, treatment, processing, handling or disposal facility shall be maintained, established, substantially altered, expanded or improved until the person operating or owning such site has obtained a permit or permit deferral from the jurisdictional health department or a beneficial use exemption from the department pursuant to the provisions of this chapter. Facilities operating under categorical exemptions established by this chapter shall meet all the conditions of such exemptions or will be required to obtain a permit under this chapter. Persons dumping or depositing solid waste without a permit in violation of this chapter shall be subject to the penalty provisions of RCW 70.95.240.

(b) Permits issued under this chapter are not required for remedial actions performed by the state and/or in conjunction with the United States Environmental Protection Agency to implement the Comprehensive Environmental Response Compensation and Liability Act of 1980 (CERCLA), or remedial actions taken by others to comply with a state and/or federal cleanup order or consent decree.

(c) Any jurisdictional health department and the department may enter into an agreement providing for the exercise by the department of any power that is specified in the contract and that is granted to the jurisdictional health department under chapter 70.95 RCW, Solid waste management—Reduction and recycling. However, the jurisdictional health department shall have the approval of the legislative authority or authorities it serves before entering into any such agreement with the department.

(2) *Local ordinances*. Each jurisdictional health department shall adopt local ordinances implementing this chapter not later than one year after the effective date of this chapter, and shall file the ordinances with the department within ninety days following local adoption. Local ordinances shall not be less stringent than this chapter, but may include additional requirements.

[Statutory Authority: Chapter 70.95 RCW. WSR 03-03-043 (Order 99-24), § 173-350-700, filed 1/10/03, effective 2/10/03.]

WAC 173-350-710 Permit application and issuance. (1) *Permit application process*.

(a) Any owner or operator required to obtain a permit shall apply for a permit from the jurisdictional health department. All permit application filings shall include two copies of the application. An application shall not be considered complete by the jurisdictional health department until the information required under WAC 173-350-715 has been submitted.

(b) The jurisdictional health department may establish reasonable fees for permits, permit modifications, and renewal of permits. All permit fees collected by the health department shall be deposited in the account from which the health department's operating expenses are paid.

(c) Once the jurisdictional health department determines that an application for a permit is complete, it shall:

(i) Refer one copy to the appropriate regional office of the department for review and comment;

(ii) Investigate every application to determine whether the facilities meet all applicable laws and regulations, conform to the approved comprehensive solid waste management plan and/or the approved hazardous waste management plan, and comply with all zoning requirements; and

(d) Once the department has received a complete application for review, it shall:

(i) Ensure that the proposed site or facility conforms with all applicable laws and regulations including the minimum functional standards for solid waste handling;

(ii) Ensure that the proposed site or facility conforms to the approved comprehensive solid waste management plan and/or the approved hazardous waste management plan; and

(iii) Recommend for or against the issuance of each permit by the jurisdictional health department within forty-five days of receipt of a complete application.

(e) Application procedures for statewide beneficial use exemptions and permit deferrals are contained in WAC 173-350-200 and 173-350-710(8), respectively.

(2) *Permit issuance*.

(a) When the jurisdictional health department has evaluated all pertinent information, it may issue or deny a permit. Every solid waste permit application shall be approved or disapproved within ninety days after its receipt by the jurisdictional health department. Every permit issued by a jurisdictional health department shall contain specific requirements necessary for the proper operation of the permitted site or facility.

(b) Every permit issued shall be valid for a period not to exceed five years at the discretion of the jurisdictional health department.

(c) Jurisdictional health departments shall file all issued permits with the appropriate regional office of the department no more than seven days after the date of issuance.

(d) The department shall review the permit in accordance with RCW 70.95.185 and report its findings to the jurisdictional health department in writing within thirty days of permit issuance.

(e) The jurisdictional health department is authorized to issue one permit for a location where multiple solid waste handling activities occur, provided all activities meet the applicable requirements of this chapter.

(3) *Permit renewals*.

(a) Prior to renewing a permit, the health department shall conduct a review as it deems necessary to ensure that the solid waste handling facility or facilities located on the site continue to:

(i) Meet the solid waste handling standards of the department;

(ii) Comply with applicable local regulations; and

(iii) Conform to the approved solid waste management plan and/or the approved hazardous waste management plan.

(b) A jurisdictional health department shall approve or deny a permit renewal within forty-five days of conducting its review.

(c) Every permit renewal shall be valid for a period not to exceed five years at the discretion of the jurisdictional health department.

(d) The department shall review the renewal in accordance with RCW 70.95.190 and report its findings to the jurisdictional health department in writing.

(e) The jurisdictional board of health may establish reasonable fees for permits reviewed under this section. All permit fees collected by the health department shall be deposited in the treasury and to the account from which the health department's operating expenses are paid.

(4) *Permit modifications*. Any significant change to the operation, design, capacity, performance or monitoring of a permitted facility may require a modification to the permit. The following procedures shall be followed by an owner or operator prior to making any change in facility operation, design, performance or monitoring:

(a) The facility owner or operator shall consult with the jurisdictional health department regarding the need for a permit modification;

(b) The jurisdictional health department shall determine whether the proposed modification is significant. Upon such a determination, the owner or operator shall make application for a permit modification, using the process outlined in subsections (1) through (3) of this section; and

(c) If a proposed change is determined to not be significant and not require a modification to the permit, the department shall be notified.

(5) *Inspections*.

(a) At a minimum, annual inspections of all permitted solid waste facilities shall be performed by the jurisdictional health department, unless otherwise specified in this chapter.

(b) All facilities and sites shall be physically inspected prior to issuing a permit, permit renewal or permit modification.

(c) Any duly authorized representative of the jurisdictional health department may enter and inspect any property, premises or place at any reasonable time for the purpose of determining compliance with this chapter, and relevant laws and regulations. Findings shall be noted and kept on file. A copy of the inspection report or annual summary shall be furnished to the site operator.

(6) *Permit suspension and appeals*.

(a) Any permit for a solid waste handling facility shall be subject to suspension at any time the jurisdictional health department determines that the site or the solid waste handling facility is being operated in violation of this chapter.

(b) Whenever the jurisdictional health department denies a permit or suspends a permit for a solid waste handling facility, it shall:

(i) Upon request of the applicant or holder of the permit, grant a hearing on such denial or suspension within thirty days after the request;

(ii) Provide notice of the hearing to all interested parties including the county or city having jurisdiction over the site and the department; and

(iii) Within thirty days after the hearing, notify the applicant or the holder of the permit in writing of the determination and the reasons therefore. Any party aggrieved by such determination may appeal to the pollution control hearings board by filing with the board a notice of appeal within thirty days after receipt of notice of the determination of the health officer.

(c) If the jurisdictional health department denies a permit renewal or suspends a permit for an operating waste recycling facility that receives waste from more than one city or county, and the applicant or holder of the permit requests a hearing or files an appeal under this section, the permit denial or suspension shall not be effective until the completion of the appeal process under this section, unless the jurisdictional health department declares that continued operation of the waste recycling facility poses a very probable threat to human health and the environment.

(d) Procedures for appealing beneficial use exemption determinations are contained in WAC 173-350-200 (5)(g).

(7) *Variances*.

(a) Any person who owns or operates a solid waste handling facility subject to a solid waste permit under WAC 173-350-700, may apply to the jurisdictional health department for a variance from any section of this chapter. No variance shall be granted for requirements specific to chapter 70.95 RCW, Solid waste management—Reduction and recycling. The application shall be accompanied by such information as the jurisdictional health department may require. The jurisdictional health department may grant such variance, but only after due notice or a public hearing if requested, if it finds that:

(i) The solid waste handling practices or location do not endanger public health, safety or the environment; and

(ii) Compliance with the section from which variance is sought would produce hardship without equal or greater benefits to the public.

(b) No variance shall be granted pursuant to this section until the jurisdictional health department has considered the relative interests of the applicant, other owners of property likely to be affected by the handling practices and the general public.

(c) Any variance or renewal shall be granted within the requirements of subsections (1) through (3) of this section and for time period and conditions consistent with the reasons therefore, and within the following limitations:

(i) If the variance is granted on the grounds that there is no practicable means known or available for the adequate

prevention, abatement, or control of pollution involved, it shall be only until the necessary means for prevention, abatement or control become known and available and subject to the taking of any substitute or alternative measures that the jurisdictional health department may prescribe;

(ii) The jurisdictional health department may grant a variance conditioned by a timetable if:

(A) Compliance with this chapter will require spreading of costs over a considerable time period; and

(B) The timetable is for a period that is needed to comply with the chapter.

(d) An application for a variance, or for the renewal thereof, submitted to the jurisdictional health department shall be approved or disapproved by the jurisdictional health department within ninety days of receipt unless the applicant and the jurisdictional health department agree to a continuance.

(e) No variance shall be granted by a jurisdictional health department except with the approval and written concurrence of the department prior to action on the variance by the jurisdictional health department.

(8) *Permit deferral*.

(a) A jurisdictional health department may, at its discretion and with the concurrence of the department, waive the requirement that a solid waste permit be issued for a facility under this chapter by deferring to other air, water or environmental permits issued for the facility which provide an equivalent or superior level of environmental protection.

(b) The requirement to obtain a solid waste permit from the jurisdictional health department shall not be waived for any transfer station, landfill, or incinerator that receives municipal solid waste destined for final disposal.

(c) Any deferral of permitting or regulation of a solid waste facility granted by the department or a jurisdictional health department prior to June 11, 1998, shall remain valid and shall not be affected by this subsection.

(d) Any person who owns or operates an applicable solid waste handling facility subject to obtaining a solid waste permit may apply to the jurisdictional health department for permit deferral. Two copies of an application for permit deferral shall be signed by the owner or operator and submitted to the jurisdictional health department. Each application for permit deferral shall include:

(i) A description of the solid waste handling units for which the facility is requesting deferral;

(ii) A list of the other environmental permits issued for the facility;

(iii) A demonstration that identifies each requirement of this chapter and a detailed description of how the other environmental permits will provide an equivalent or superior level of environmental protection;

(iv) Evidence that the facility is in conformance with the approved comprehensive solid waste management plan and/or the approved hazardous waste management plan;

(v) Evidence of compliance with chapter 197-11 WAC, SEPA rules; and

(vi) Other information that the jurisdictional health department or the department may require.

(e) The jurisdictional health department shall notify the applicant if it elects not to waive the requirement that a solid waste permit be issued for a facility under this chapter. If the jurisdictional health department elects to proceed with permit deferral, it shall:

(i) Forward one copy of the complete application to the department for review;

(ii) Notify the permit issuing authority for the other environmental permits described in (d)(ii) of this subsection and allow an opportunity for comment; and

(iii) Determine if the proposed permit deferral provides an equivalent or superior level of environmental protection.

(f) The department shall provide a written report of its findings to the jurisdictional health department and recommend for or against the permit deferral. The department shall provide its findings within forty-five days of receipt of a complete permit deferral application or inform the jurisdictional health department as to the status with a schedule for its determination.

(g) No solid waste permit deferral shall be effective unless the department has provided written concurrence. All requirements for solid waste permitting shall remain in effect until the department has provided written concurrence.

(h) When the jurisdictional health department has evaluated all information, it shall provide written notification to the applicant and the department whether or not it elects to waive the requirement that a solid waste permit be issued for a facility under this chapter by deferring to other environmental permits issued for the facility. Every complete permit deferral application shall be approved or denied within ninety days after its receipt by the jurisdictional health department or the owner or operator shall be informed as to the status of the application with a schedule for final determination.

(i) The jurisdictional health department shall revoke any permit deferral if it or the department determines that the other environmental permits are providing a lower level of environmental protection than a solid waste permit. Jurisdictional health departments shall notify the facility's owner or operator of intent to revoke the permit deferral and direct the owner or operator to take measures necessary to protect human health and the environment and to comply with the permit requirements of this chapter.

(j) Facilities which are operating under the deferral of solid waste permitting to other environmental permits shall:

(i) Allow the jurisdictional health department, at any reasonable time, to inspect the solid waste handling units which have been granted a permit deferral;

(ii) Notify the jurisdictional health department and the department whenever changes are made to the other environmental permits identified in (d)(ii) of this subsection. This notification shall include a detailed description of how the changes will affect the facility's operation and a demonstration, as described in (d)(iii) of this subsection, that the amended permits continue to provide an equivalent or superior level of environmental protection to the deferred solid waste permits. If the amended permits no longer provide an equivalent or superior level of environmental protection, the facility owner or operator shall close the solid waste handling unit or apply for a permit from the jurisdictional health department;

(iii) Notify the jurisdictional health department and the department within seven days of discovery of any violation of, or failure to comply with, the conditions of the other environmental permits identified in (d)(ii) of this subsection;

(iv) Prepare and submit a copy of an annual report to the jurisdictional health department and the department by April 1st as required under the appropriate annual reporting section of this chapter;

(v) Operate in accordance with any other written conditions that the jurisdictional health department deems appropriate; and

(vi) Shall take any measures deemed necessary by the jurisdictional health department when the permit deferral has been revoked.

[Statutory Authority: Chapter 70.95 RCW. WSR 03-03-043 (Order 99-24), § 173-350-710, filed 1/10/03, effective 2/10/03.]

WAC 173-350-715 General permit application requirements. (1) Every permit application shall be on a format supplied by the department and shall contain the following information:

(a) Contact information for the facility owner, and the facility operator and property owner if different, including contact name, company name, mailing address, phone fax, and e-mail;

(b) Identification of the type of facility that is to be permitted;

(c) Identification of any other permit (local, state or federal) in effect at the site;

(d) A vicinity plan or map (having a minimum scale of 1:24,000) that shall show the area within one mile (1.6 km) of the property boundaries of the facility in terms of the existing and proposed zoning and land uses within that area, residences, and access roads, and other existing and proposed man-made or natural features that may impact the operation of the facility;

(e) Evidence of compliance with chapter 197-11 WAC, SEPA rules;

(f) Information as required under the appropriate facility permit application subsection of this chapter; and

(g) Any additional information as requested by the jurisdictional health department or the department.

(2) Engineering plans, reports, specifications, programs, and manuals submitted to the jurisdictional health department or the department shall be prepared and certified by an individual licensed to practice engineering in the state of Washington, in an engineering discipline appropriate for the solid waste facility type or activity.

(3) Signature and verification of applicants:

(a) All applications for permits shall be accompanied by evidence of authority to sign the application and shall be signed by the owner or operator as follows:

(i) In the case of corporations, by a duly authorized principal executive officer of at least the level of vice-president; in the case of a partnership or limited partnership, by:

(A) A general partner;

(B) Proprietor; or

(C) In case of sole proprietorship, by the proprietor;

(ii) In the case of a municipal, state, or other government entity, by a duly authorized principal executive officer or elected official.

(b) Applications shall be signed or attested to by, or on behalf of, the owner or operator, in respect to the veracity of all statements therein; or shall bear an executed statement by, or on behalf of, the owner or operator to the effect that false statements made therein are made under penalty of perjury.

(c) The signature of the applicant shall be notarized on the permit application form.

[Statutory Authority: Chapter 70.95 RCW. WSR 03-03-043 (Order 99-24), § 173-350-715, filed 1/10/03, effective 2/10/03.]

WAC 173-350-900 Remedial action. When the owner or operator of a solid waste facility is subject to remedial measures in compliance with chapter 173-340 WAC, the Model Toxics Control Act, the roles of the jurisdictional health department and the department shall be as follows:

(1) The jurisdictional health department:

(a) May participate in all negotiations, meetings, and correspondence between the owner and operator and the department in implementing the model toxics control action;

(b) May comment upon and participate in all decisions made by the department in assessing, choosing, and implementing a remedial action program;

(c) Shall require the owner or operator to continue closure and post-closure activities as appropriate under this chapter, after remedial action measures are completed; and

(d) Shall continue to regulate all solid waste facilities during construction, operation, closure and post-closure, that are not directly impacted by chapter 173-340 WAC.

(2) The department shall carry out all the responsibilities assigned to it by chapter 70.105D RCW, Hazardous waste cleanup—Model Toxics Control Act.

[Statutory Authority: Chapter 70.95 RCW. WSR 03-03-043 (Order 99-24), § 173-350-900, filed 1/10/03, effective 2/10/03.]

WAC 173-350-990 Criteria for inert waste. (1) *Criteria for inert waste - Applicability*. This section provides the criteria for determining if a solid waste is an inert waste. Dangerous wastes regulated under chapter 173-303 WAC, Dangerous waste regulation, PCB wastes regulated under 40 C.F.R. Part 761, Polychlorinated Biphenyls (PCBs) Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions, and asbestos-containing waste regulated under federal 40 C.F.R. Part 61 rules are not inert waste. For the purposes of determining if a solid waste meets the criteria for an inert waste a person shall:

(a) Apply knowledge of the waste in light of the materials or process used and potential chemical, physical, biological, or radiological substances that may be present; or

(b) Test the waste for those potential substances that may exceed the applicable criteria. A jurisdictional health department may require a person to test a waste to determine if it meets the applicable criteria. Such testing may be required if the jurisdictional health department has reason to believe that a waste does not meet the applicable criteria or has not been adequately characterized. Testing shall be performed in accordance with:

(i) "*Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*," U.S. EPA Publication SW-846; or

(ii) Other testing methods approved by the jurisdictional health department.

(2) *Criteria for inert waste - Listed inert wastes*. For the purpose of this chapter, the following solid wastes are inert wastes, provided that the waste has not been tainted, through exposure from chemical, physical, biological, or radiological

substances, such that it presents a threat to human health or the environment greater than that inherent to the material:

(a) Cured concrete that has been used for structural and construction purposes, including embedded steel reinforcing and wood, that was produced from mixtures of Portland cement and sand, gravel or other similar materials;

(b) Asphaltic materials that have been used for structural and construction purposes (e.g., roads, dikes, paving) that were produced from mixtures of petroleum asphalt and sand, gravel or other similar materials. Waste roofing materials are not presumed to be inert;

(c) Brick and masonry that have been used for structural and construction purposes;

(d) Ceramic materials produced from fired clay or porcelain;

(e) Glass, composed primarily of sodium, calcium, silica, boric oxide, magnesium oxide, lithium oxide or aluminum oxide. Glass presumed to be inert includes, but is not limited to, window glass, glass containers, glass fiber, glasses resistant to thermal shock, and glass-ceramics. Glass containing significant concentrations of lead, mercury, or other toxic substance is not presumed to be inert; and

(f) Stainless steel and aluminum.

(3) *Criteria for inert waste - Inert waste characteristics*. This subsection provides the criteria for determining if a solid waste not listed in subsection (2) of this section is an inert waste. Solid wastes meeting the criteria below shall have comparable physical characteristics and comparable or lower level of risk to human health and the environment as those listed in subsection (2) of this section.

(a) Inert waste shall have physical characteristics that meet the following criteria. Inert waste shall:

(i) Not be capable of catching fire and burning from contact with flames;

(ii) Maintain its physical and chemical structure under expected conditions of storage or disposal including resistance to biological and chemical degradation; and

(iii) Have sufficient structural integrity and strength to prevent settling and unstable situations under expected conditions of storage or disposal.

(b) Inert waste shall not contain chemical, physical, biological, or radiological substances at concentrations that exceed the following criteria. Inert waste shall not:

(i) Be capable of producing leachate or emissions that have the potential to negatively impact soil, groundwater, surface water, or air quality;

(ii) Pose a health threat to humans or other living organisms through direct or indirect exposure; or

(iii) Result in applicable air quality standards to be exceeded, or pose a threat to human health or the environment under potential conditions during handling, storage, or disposal.

[Statutory Authority: Chapter 70.95 RCW. WSR 03-03-043 (Order 99-24), § 173-350-990, filed 1/10/03, effective 2/10/03.]