

State of Oregon  
DEPARTMENT OF ENVIRONMENTAL QUALITY

Rulemaking Proposal  
for  
**Composting Facilities**

Amend solid waste composting facility rules. Clarify financial assurance requirements for solid waste disposal facilities and public notice requirements for renewal of several solid waste permits.

**SUMMARY OF RULE REVISIONS**

This proposed rulemaking amends four rule divisions: OAR Chapter 340, Division 12, 93, 96 and 97. Following is a summary of the proposed amendments.

**Division 12 Amendments**

These rules propose to amend OAR 340 Division 12, the rule that describes DEQ Enforcement Procedures and Civil Penalties, as follows:

- (1) 340-012-0065 is amended to identify specific violations for composting facilities

**Division 93 Amendments**

OAR 340 Division 93 provides definitions and general procedures for most solid waste facilities and for the permits issued to those facilities. The proposed rules make several substantive changes and numerous non-substantive stylistic and grammatical changes, as follows:

- (1) 340-093-0030 Definitions, is amended to:
  - Revise the definition of “agricultural waste” and “agricultural composting”
  - Create a new definition of “composted material” and revise definition of “composting” and “composting facility”
  - Create new definitions of “feedstock” types and delete existing definition of “green” and “non-green” feedstocks
  - Delete the definition of “institutional composting” and supplemental feedstocks”, and
  - Create new definition to address “vermicomposting.”
- (2) 340-093-0050 is amended to delete existing exemptions and permit requirements for composting facilities. New exemptions and permit requirements are found in OAR 340 division 96.

- (3) 340-093-0070 is amended to delete the composting general permit. Composting permits are now provided for in OAR 340 Division 96.
- (4) 340-0105 is amended to clarify public notice categories for various permit actions.
- (5) The remainder of the changes to Division 93, in 93-0100, 0130, 0140, and 0150, are non-substantive changes to update the style of the rule to meet current standards.

### **Division 96 Amendments**

OAR 340 Division 96 provides rules for certain types of solid waste disposal sites. The proposed rules make certain technical and stylistic changes, but are amended primarily to create a new set of rules, 340-096-0060 through 0150, specifically to address composting facilities.

- (1) 340-096-0001 is amended to make clear existing requirements that all facilities address in Division 96, including all composting facilities, are subject to financial assurance requirements. The proposed amendment would allow DEQ to waive financial assurance requirements for low risk facilities.
- (2) 340-096-0050 is amended to make non-substantive changes to update the style of the rule to meet current standards.
- (3) 340-096-0060 Special Rules Pertaining to Composting: Applicability is a new rule.
  - Highest level organizer, applies the exemptions that moved over from Div 93, directs composting facilities to the rules that apply to each facility
  - Raises the exemption size limit from 20 to 100 tons. All non-exempt facilities over that amount, including commercial, agricultural, and institutional facilities, must go through Screening (0080)
  - Requires that all facilities, including exempt facilities, must comply with Performance Standards (0070)
- (4) 340-097-0070 Special Rules Pertaining to Composting: Performance Standards is a new rule.
  - Describes the performance standards that must be met by all compost facilities, including those exempt from screening, registration, and permitting.
- (5) 340-096-0080 Special Rules Pertaining to Composting: Screening is a new rule.
  - Describes submission requirements and screening process for all non-exempt facilities. DEQ will provide a template that will assist both operators and DEQ in gathering and organizing this information.
  - Describes general screening criteria and decisions DEQ will make. Screening is supplemented by the internal guidance document on screening.

- Facilities that DEQ determines are low risk go directly to Registration (0100)
  - Facilities that DEQ determines pose risk go to Operations Plan Approval (0090) and then to Compost Permit (0110) with a department-approved plan.
- (6) 340-096-0090 Special Rules Relating to Composting: Operations Plan Approval I a new rule.
- Sections (1) –(4) are general process provisions
  - Section (5) describes elements that must be in every operations plan
  - Allows each facility to decide how that facility will meet the performance standards.
  - Provides links to special rules related to Groundwater Protection, Leachate Collection and Design, Pathogen Reduction, and Odors for facilities that DEQ determines must address those matters
  - Section (6) includes material that was in various parts of the revised Div 96 and SW permits. Functions as a menu; allows DEQ to require additions to and modification of an Operations Plan as necessary for an individual facility.
- (7) 340-096-0100 Special Rules Relating to Composting: Registration is a new rule.
- Describes registration process, reporting requirement, etc.
  - Allows DEQ to attach Approval Conditions for facilities that need conditions that don't require a full composting plan
- (8) 340-096-0110 Special Rules Pertaining to Composting: Compost Permit is a new rule
- Describes issuance of a Compost Permit, reporting requirements, etc.
- (9) 340-096-0120 Special Rules Pertaining to Composting: Groundwater Protection is a new rule.
- Describes generally department standards for groundwater protection, conditions for approval of infiltration; department authority to condition or prohibit infiltration.
- (10) 340-096-0130 Special Rules Pertaining to Composting: Leachate Collection Design Requirements
- Collects in one place the provisions related to leachate management structures and operation that were in existing Division 96 and solid waste permits.

(11) 340-096-0140 Special Rules Pertaining to Composting: Pathogen Reduction is a new rule.

- Collects in one place the pathogen reduction provisions that were in existing 96-0026 and 96-0027
- Required for all composting facilities, except exempt farm composters.
- Allows DEQ to approve alternative methods.

(12) 340-096-0150 Special Rules Pertaining to Composting: Odors is a new rules

- Collects in one place requirements for addressing odor that were scattered in rules and permits.
- Describes process DEQ will use to evaluate and take action on odor concerns.

### **Division 97 Amendments**

OAR 340 Division 97 provides the fee schedules for solid waste permits, including permits issued for composting facilities. Division 97 is amended to adopt new fee schedules for composting permits.

340-097-0110 is amended to make an addition to the schedule of weight to volume conversions in section (7).

340-097-0120 is amended:

- to provide a screening fee for all composting facilities
- to provide a plan review fee for composting facilities that require plan review and approval,
- to provide an engineering review fee for composting facilities that require DEQ engineering review, and
- to amend existing permit compliance fees for composting facilities that will operate under a Composting Permit.

**The Oregon Administrative Rules contain OARs filed through May 15,  
2009**

**DEPARTMENT OF ENVIRONMENTAL QUALITY**

**DIVISION 12**

**ENFORCEMENT PROCEDURE AND CIVIL PENALTIES**

**340-012-0065**

**Solid Waste Management Classification of Violations**

**(1) Class I:**

- (a) Establishing or operating a disposal site without first obtaining a registration or permit;
- (b) Accepting solid waste for disposal in a permitted solid waste unit or facility that has been expanded in area or capacity without first submitting plans to the department and obtaining department approval;
- (c) Disposing of or authorizing the disposal of a solid waste at a location not permitted by the department to receive that solid waste;
- (d) Violating a lagoon freeboard limit that results in the overflow of a sewage sludge or leachate lagoon;
- (e) Accepting for treatment, storage, or disposal at a solid waste disposal site, without approval from the department, waste defined as hazardous waste, waste from another state which is hazardous under the laws of that state, or wastes prohibited from disposal by statute, rule, permit, or order;
- (f) Failing to properly construct, maintain, or operate in good functional condition, groundwater, surface water, gas or leachate collection, containment, treatment, disposal or monitoring facilities in accordance with the facility permit, department approved plans, or department rules;

(g) Failing to collect, analyze or report groundwater, surface water or leachate quality data in accordance with the facility permit, the facility environmental monitoring plan, or department rules;

(h) Mixing for disposal or disposing of recyclable material that has been properly prepared and source separated for recycling;

(i) Failing to establish or maintain financial assurance as required by statute, rule, permit or order; ~~or~~

(j) Failing to comply with the terms of a permit terminated due to a failure to submit a timely application for renewal; or

(k) Operating a composting facility in a manner that causes a discharge to surface water of pollutants, leachate or stormwater when that discharge is not authorized by a NPDES permit.

**(2) Class II:**

(a) Failing to accurately report the amount of solid waste disposed, by a permitted disposal site or a metropolitan service district;

(b) Failing to timely or accurately report the weight and type of material recovered or processed from the solid waste stream;

(c) Failing to comply with landfill cover requirements, including but not limited to daily, intermediate, and final covers, or limitation of working face size;

(d) Operating a Household Hazardous Waste (HHW) collection event or temporary site without first obtaining department approval or without complying with an approved plan for a HHW collection event; or

(e) Receiving or managing waste in violation of or without a department approved Special Waste Management Plan; or

(f) Unless otherwise specifically classified, operating a composting facility in a manner that fails to comply with the facility's registration, permit, department-approved plans or department rules.

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**(3) Class III:**

(a) Failing to post required signs;

(b) Failing to control litter;

(c) Failing to notify the department of any name or address change; or

(d) Violating any labeling requirement under ORS 459A.675-.685.

Stat. Auth.: ORS 459.045 & 468.020

Stats. Implemented: ORS 459.205, 459.376, 459.995 & 468.090 - 468.140

Hist.: DEQ 78, f. 9-6-74, ef. 9-25-74; DEQ 1-1982, f. & ef. 1-28-82; DEQ 22-1984, f. & ef. 11-8-84; DEQ 22-1988, f. & cert. ef. 9-14-88; DEQ 4-1989, f. & cert. ef. 3-14-89; DEQ 15-1990, f. & cert. ef. 3-30-90; DEQ 21-1992, f. & cert. ef. 8-11-92; DEQ 4-1994, f. & cert. ef. 3-14-94; DEQ 26-1994, f. & cert. ef. 11-2-94; DEQ 9-1996, f. & cert. ef. 7-10-96; DEQ 19-1998, f. & cert. ef. 10-12-98; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 4-2005, f. 5-13-05, cert. ef. 6-1-05; DEQ 4-2006, f. 3-29-06, cert. ef. 3-31-06

## DEPARTMENT OF ENVIRONMENTAL QUALITY

### DIVISION 93

#### SOLID WASTE: GENERAL PROVISIONS

##### 340-093-0030

##### Definitions

As used in OAR chapter 340, divisions 93, 94, 95, 96 and 97 unless otherwise specified:

(1) "Access Road" means any road owned or controlled by the disposal site owner that terminates at the disposal site and that provides access for users between the disposal site entrance and a public road.

(2) "Agricultural Waste" ~~means waste on farms resulting from the raising or growing of plants and animals including but not limited to crop residue, manure, animal bedding, and carcasses of dead animals.~~ ~~means residues from agricultural products generated by the raising or harvesting of such products on farms or ranches.~~

(3) "Agricultural Composting" means ~~composting conducted of agricultural waste by an agricultural operation (as defined in ORS 467.120(2)(a)) 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 (as defined in ORS 215.203).~~ ~~composting as an agricultural operation (as defined in ORS 467.120(2)(a)) conducted on lands employed for farm use (as defined in ORS 215.203). Agricultural composting operations may include supplemental feedstocks to aid in composting feedstocks generated on the farm~~

(4) "Agronomic Application Rate" means land application of no more than the optimum quantity per acre of compost, sludge or other materials. In no case ~~shall~~ may such application adversely impact the waters of the state. Such application ~~shall~~ must be designed to:

(a) Provide the amount of nutrient, usually nitrogen, needed by crops or other plantings, to prevent controllable loss of nutrients to the environment;

(b) Condition and improve the soil comparable to that attained by commonly used soil amendments; or

(c) Adjust soil pH to desired levels.

(5) "Airport" means any area recognized by the Oregon Department of Transportation, Aeronautics Division, for the landing and taking-off of aircraft which is normally open to the public for such use without prior permission.

(6) "Aquifer" means a geologic formation, group of formations or portion of a formation capable of yielding usable quantities of groundwater to wells or springs.

(7) "Asphalt paving" means asphalt which has been applied to the land to form a street, road, path, parking lot, highway, or similar paved surface and that is weathered, consolidated, and does not contain visual evidence of fresh oil.

(8) "Assets" means all existing and probable future economic benefits obtained or controlled by a particular entity.

(9) "Baling" means a volume reduction technique whereby solid waste is compressed into bales for final disposal.

(10) "Base Flood" means a flood that has a one percent or greater chance of recurring in any year or a flood of a magnitude equaled or exceeded once in 100 years on the average of a significantly long period.

(11) "Biological Waste" means blood and blood products, excretions, exudates, secretions, suctionings and other body fluids that cannot be directly discarded into a municipal sewer system, and waste materials saturated with blood or body fluids, but does not include diapers soiled with urine or feces.

(12) "Biosolids" means solids derived from primary, secondary or advanced treatment of domestic wastewater which have been treated through one or more controlled processes that significantly reduce pathogens and reduce volatile solids or chemically stabilize solids to the extent that they do not attract vectors.

(13) "Clean Fill" means material consisting of soil, rock, concrete, brick, building block, tile or asphalt paving, which do not contain contaminants which could adversely impact the waters of the State or public health. This term does not include putrescible wastes, construction and demolition wastes and industrial solid wastes.

(14) "Cleanup Materials Contaminated by Hazardous Substances" means contaminated materials from the cleanup of releases of hazardous substances into the environment, and which are not hazardous wastes as defined by ORS 466.005.

(15) "Closure Permit" means a document issued by the ~~Department~~department bearing the signature of the Director or his/her authorized representative which by its conditions authorizes the permittee to complete active operations and requires the permittee to properly close a land disposal site and maintain and monitor the site after closure for a period of time specified by the ~~Department~~department.

(16) "Commercial Solid Waste" means solid waste generated by stores, offices, including manufacturing and industry offices, restaurants, warehouses, schools, colleges, universities, hospitals, and other non-manufacturing entities, but does not include solid waste from manufacturing activities. Solid waste from business, manufacturing or processing activities in residential dwellings is also not included.

(17) "Commission" means the Environmental Quality Commission or the Commission's authorized designee.

(18) "Composted material" is the product resulting from the composting process.

~~(1819) "Composting" means the managed process of controlled biological decomposition of organic or mixed solid waste feedstocks. A managed process includes but is not limited to reducing particle size, adding moisture, manipulating piles, and performing procedures to achieve human pathogen reduction. Composting may include amendments beneficial to the composting process. It does not include composting for the purposes of soil remediation. Compost is the product resulting from the composting process.~~

~~(1920) "Composting Facility" means a site or facility which utilizes composting feedstocks organic solid waste or mixed solid waste to produce a useful product through a managed process of controlled biological decomposition. Composting may include amendments beneficial to the composting process. Sites and facilities that use methods such as Vermiculture, vermicomposting and agricultural composting to produce a useful product are also operations are considered composting facilities.~~

(2021) "Construction and Demolition Waste" means solid waste resulting from the construction, repair, or demolition of buildings, roads and other structures, and debris from the clearing of land, but does not include clean fill when separated from other construction and demolition wastes and used as fill materials or otherwise land disposed. Such waste typically consists of materials including concrete, bricks, bituminous concrete, asphalt paving, untreated or chemically treated wood, glass, masonry, roofing, siding, plaster; and soils, rock, stumps, boulders, brush and other similar material. This term does not include industrial solid waste and municipal solid waste generated in residential or commercial activities associated with construction and demolition activities.

(2122) "Construction and Demolition Landfill" means a landfill that receives only construction and demolition waste.

(2223) "Corrective Action" means action required by the ~~Department~~ department to remediate a release of constituents above the levels specified in 40 CFR §258.56 or OAR chapter 340 division 40, whichever is more stringent.

(2324) "Cover Material" means soil or other suitable material approved by the ~~Department~~ department that is placed over the top and side slopes of solid wastes in a landfill.

(~~2425~~) "Cultures and Stocks" means etiologic agents and associated biologicals, including specimen cultures and dishes and devices used to transfer, inoculate and mix cultures, wastes from production of biologicals, and serums and discarded live and attenuated vaccines. "Culture" does not include throat and urine cultures.

(~~2526~~) "Current Assets" means cash or other assets or resources commonly identified as those that are reasonably expected to be realized in cash or sold or consumed during the normal operating cycle of the business.

(~~2627~~) "Current Liabilities" means obligations whose liquidation is reasonably expected to require the use of existing resources properly classifiable as current assets or the creation of other current liabilities.

(~~2728~~) "Department" means the Department of Environmental Quality.

(~~2829~~) "Digested Sewage Sludge" means the concentrated sewage sludge that has decomposed under controlled conditions of pH, temperature and mixing in a digester tank.

(~~2930~~) "Director" means the Director of the Department of Environmental Quality or the Director's authorized designee.

(~~3031~~) "Disposal Site" means land and facilities used for the disposal, handling, treatment or transfer of or energy recovery, material recovery and recycling from solid wastes, including but not limited to dumps, landfills, sludge lagoons, sludge treatment facilities, disposal sites for septic tank pumping or cesspool cleaning service, land application units (except as exempted by subsection (~~84812~~)(b) of this rule), transfer stations, energy recovery facilities, incinerators for solid waste delivered by the public or by a collection service, composting ~~plants-facilities~~ and land and facilities previously used for solid waste disposal at a land disposal site; but the term does not include a facility authorized by a permit issued under ORS 466.005 to 466.385 to store, treat or dispose of both hazardous waste and solid waste; a facility subject to the permit requirements of ORS 468B.050; a site that is used by the owner or person in control of the premises to dispose of soil, rock, concrete or other similar non-decomposable material, unless the site is used by the public either directly or through a collection service; or a site operated by a wrecker issued a certificate under ORS 822.110.

(~~3132~~) "Domestic Solid Waste" includes, but is not limited to, residential (including single and multiple residences), commercial and institutional wastes, as defined in ORS 459A.100; but the term does not include:

(a) Sewage sludge or septic tank and cesspool pumpings;

(b) Building demolition or construction wastes and land clearing debris, if delivered to a disposal site that is limited to those purposes and does not receive other domestic or industrial solid wastes;

(c) Industrial waste going to an industrial waste facility; or

(d) Waste received at an ash monofill from an energy recovery facility.

~~(3233)~~ "Endangered or Threatened Species" means any species listed as such pursuant to Section 4 of the federal Endangered Species Act and any other species so listed by the Oregon Department of Fish and Wildlife.

~~(3334)~~ "Energy Recovery" means recovery in which all or a part of the solid waste materials are processed to use the heat content, or other forms of energy, of or from the material.

~~(35)~~ "Feedstock" means organic and other solid wastes used in a composting process to produce composted material:

(a) Type 1 feedstocks include source-separated yard and garden wastes, wood wastes, agricultural crop residues, wax-coated cardboard, vegetative food wastes including department approved industrially produced vegetative food waste, and other materials the department determines pose a low level of risk from hazardous substances, physical contaminants and human pathogens.

(b) Type 2 feedstocks include manure and bedding and other materials the department determines pose a low level of risk from hazardous substances and physical contaminants and a higher level of risk from human pathogens compared to type 1 feedstock.

(c) Type 3 feedstocks include dead animals, meat and source-separated mixed food waste and industrially produced non-vegetative food waste. They also include other materials the department determines pose a low level of risk from hazardous substances and a higher level of risk from physical contaminants and human pathogens compared to type 1 and 2 feedstocks.

~~(3436)~~ "Financial Assurance" means a plan for setting aside financial resources or otherwise assuring that adequate funds are available to properly close and to maintain and monitor a ~~land~~ disposal site after the site is closed according to the requirements of a permit issued by the ~~Department~~department.

~~(35)~~ ~~(37)~~ "Floodplain" means the lowland and relatively flat areas adjoining inland and coastal waters that are inundated by the base flood.

~~(36)~~~~(38)~~ "Gravel Pit" means an excavation in an alluvial area from which sand or gravel has been or is being mined.

~~(37) "Green Feedstocks" are materials used to produce a compost. Green feedstocks are low in a) substances that pose a present or future hazard to human health or the environment and b) low in and unlikely to support human pathogens. Green feedstocks include but are not limited to: yard debris, animal manures, wood waste (as defined in OAR 340-093-0030(94)), vegetative food waste, produce waste, vegetative restaurant waste, vegetative food processor by products~~

~~and crop residue. Green feedstocks may also include other materials that can be shown to DEQ by the compostor to be low in substances that pose a present or future hazard to human health or the environment and low in and unlikely to support human pathogens. This term is not intended to include materials fed to animals and not used for composting.~~

~~(38)~~(39) "Groundwater" means water that occurs beneath the land surface in the zone(s) of saturation.

~~(39)~~(40) "Hazardous Substance" means any substance defined as a hazardous substance pursuant to Section 101(14) of the federal Comprehensive Environmental Response, Compensation and Liability Act, as amended, 42 U.S.C. 9601 et seq.; oil, as defined in ORS 465.200; and any substance designated by the Commission under ORS 465.400.

~~(40)~~(41) "Hazardous Waste" means discarded, useless or unwanted materials or residues and other wastes that are defined as hazardous waste pursuant to ORS 466.005.

~~(41)~~(42) "Heat-Treated" means a process of drying or treating sewage sludge where there is an exposure of all portions of the sludge to high temperatures for a sufficient time to kill all pathogenic organisms.

~~(42)~~(43) "Home composting" means composting operated and controlled by the owner or person in control of a single or multiple family dwelling unit and used to ~~dispose of~~compost residential food waste produced within the dwelling unit and yard debris produced on the property.

~~(43)~~(44) "Incinerator" means any device used for the reduction of combustible solid wastes by burning under conditions of controlled airflow and temperature.

~~(44)~~(45) "Industrial Solid Waste" means solid waste generated by manufacturing or industrial processes that is not a hazardous waste regulated under ORS chapters 465 and 466 or under Subtitle C of the federal Resource Conservation and Recovery Act. Such waste may include, but is not limited to, waste resulting from the following processes: Electric power generation; fertilizer/agricultural chemicals; food and related products/by-products; inorganic chemicals; iron and steel manufacturing; leather and leather products; nonferrous metals manufacturing/foundries; organic chemicals; plastics and resins manufacturing; pulp and paper industry; rubber and miscellaneous plastic products; stone, glass, clay and concrete products; textile manufacturing; transportation equipment; water treatment; and timber products manufacturing. This term does not include construction/demolition waste; municipal solid waste from manufacturing or industrial facilities such as office or "lunch room" waste; or packaging material for products delivered to the generator.

~~(45)~~(46) "Industrial Waste Landfill" means a landfill that receives only a specific type or combination of industrial waste.

~~(46)~~(47) "Inert" means containing only constituents that are biologically and chemically inactive and that, when exposed to biodegradation and/or leaching, will not adversely impact the waters of the state or public health.

~~(47)~~(48) "Infectious Waste" means biological waste, cultures and stocks, pathological waste, and sharps; as defined in ORS 459.386.

~~(48)~~(49) "Institutional Composting" means the composting of green feedstocks generated on site from the a facility's own activities. It may also include supplemental feedstocks. Feedstocks must be composted on site, the compost produced must be utilized within the contiguous boundaries of the institution and not offered for sale or use off site. Institutional composting includes but is not limited to composting at facilities such as: parks, apartments, universities, schools, hospitals, golf courses and industrial parks.

(49) "Land Application Unit" means a disposal site where sludges or other solid wastes are applied onto or incorporated into the soil surface for agricultural purposes or for treatment and disposal.

(50) "Land Disposal Site" means a disposal site in which the method of disposing of solid waste is by landfill, dump, waste pile, pit, pond, lagoon or land application.

(51) "Landfill" means a facility for the disposal of solid waste involving the placement of solid waste on or beneath the land surface.

(52) "Leachate" means liquid that has come into direct contact with solid waste and contains dissolved, miscible and/or suspended contaminants as a result of such contact.

(53) "Liabilities" means probable future sacrifices of economic benefits arising from present obligations to transfer assets or provide services to other entities in the future as a result of past transactions or events.

(54) "Local Government Unit" means a city, county, Metropolitan Service District formed under ORS chapter 268, sanitary district or sanitary authority formed under ORS chapter 450, county service district formed under ORS chapter 451, regional air quality control authority formed under ORS 468A.100 to 468A.130 and 468A.140 to 468A.175 or any other local government unit responsible for solid waste management.

(55) "Low-Risk Disposal Site" means a disposal site which, based upon its size, site location, and waste characteristics, the ~~Department~~ department determines to be unlikely to adversely impact the waters of the State or public health.

(56) "Material Recovery" means any process of obtaining from solid waste, by pre-segregation or otherwise, materials which still have useful physical or chemical properties and can be reused, recycled or composted for some purpose.

(57) "Material Recovery Facility" means a solid waste management facility that separates materials for the purposes of recycling from an incoming mixed solid waste stream by using manual and/or mechanical methods, or a facility at which previously separated recyclables are collected.

(58) "Medical Waste" means solid waste that is generated as a result of patient diagnosis, treatment, or immunization of human beings or animals.

(59) "Monofill" means a landfill or landfill cell into which only one type of waste may be placed.

(60) "Municipal Solid Waste Landfill" means a discrete area of land or an excavation that receives domestic solid waste, and that is not a land application unit, surface impoundment, injection well, or waste pile, as those terms are defined under **§257.2 of 40 CFR**, Part 257. It may also receive other types of wastes such as nonhazardous sludge, hazardous waste from conditionally exempt small quantity generators, construction and demolition waste and industrial solid waste.

(61) "Net Working Capital" means current assets minus current liabilities.

(62) "Net Worth" means total assets minus total liabilities and is equivalent to owner's equity.

~~\_(63) "Non-green Feedstocks" are materials used to produce a compost. Non-green feedstocks are high in:~~

~~(a) Substances that pose a present or future hazard to human health or the environment; and~~

~~(b) High in and likely to support human pathogens. Non-green feedstocks include but are not limited to: animal parts and by-products, mixed materials containing animal parts or by-products, dead animals and municipal solid waste. This term is not intended to include materials fed to animals and not used for composting.~~

(634) "Pathological Waste" means biopsy materials and all human tissues, anatomical parts that emanate from surgery, obstetrical procedures, autopsy and laboratory procedures and animal carcasses exposed to pathogens in research and the bedding and other waste from such animals. "Pathological waste" does not include teeth or formaldehyde or other preservative agents.

(645) "Permit" means a document issued by the ~~Department~~ department which by its conditions may authorize the permittee to construct, install, modify, operate or close a disposal site in accordance with specified limitations.

(656) "Permit Action" means the issuance, modification, renewal or revocation by the ~~Department~~ department of a permit.

- | (667) "Person" means the United States, the state or a public or private corporation, local government unit, public agency, individual, partnership, association, firm, trust, estate or any other legal entity.
- | (678) "Processing of Wastes" means any technology designed to change the physical form or chemical content of solid waste including, but not limited to, baling, composting, classifying, hydropulping, incinerating and shredding.
- | (689) "Public Waters" or "Waters of the State" include lakes, bays, ponds, impounding reservoirs, springs, wells, rivers, streams, creeks, estuaries, marshes, inlets, canals, the Pacific Ocean within the territorial limits of the State of Oregon and all other bodies of surface or underground waters, natural or artificial, inland or coastal, fresh or salt, public or private (except those private waters which do not combine or effect a junction with natural surface or underground waters), which are wholly or partially within or bordering the state or within its jurisdiction.
- | (6970) "Putrescible Waste" means solid waste containing organic material that can be rapidly decomposed by microorganisms, and which may give rise to foul smelling, offensive products during such decomposition or which is capable of attracting or providing food for birds and potential disease vectors such as rodents and flies.
- | (704) "Recycling" means any process by which solid waste materials are transformed into new products in such a manner that the original products may lose their identity.
- | (712) "Regional Disposal Site" means a disposal site that receives, or a proposed disposal site that is designed to receive more than 75,000 tons of solid waste a year from outside the immediate service area in which the disposal site is located. As used in this section, "immediate service area" means the county boundary of all counties except a county that is within the boundary of the Metropolitan Service District. For a county within the Metropolitan Service District, "immediate service area" means that Metropolitan Service District boundary.
- | (723) "Release" has the meaning given in ORS 465.200(14).
- | (734) "Resource Recovery" means the process of obtaining useful material or energy from solid waste and includes energy recovery, material recovery and recycling.
- | (745) "Reuse" means the return of a commodity into the economic stream for use in the same kind of application as before without change in its identity.
- | (756) "Salvage" means the controlled removal of reusable, recyclable or otherwise recoverable materials from solid wastes at a solid waste disposal site.
- | (767) "Sensitive Aquifer" means any unconfined or semiconfined aquifer that is hydraulically connected to a water table aquifer, and where flow could occur between the aquifers due to either natural gradients or induced gradients resulting from pumpage.

(778) "Septage" means the pumpings from septic tanks, cesspools, holding tanks, chemical toilets and other sewage sludges not derived at sewage treatment plants.

(789) "Sharps" means needles, IV tubing with needles attached, scalpel blades, lancets, glass tubes that could be broken during handling and syringes that have been removed from their original sterile containers.

(7980) "Sludge" means any solid or semi-solid waste and associated supernatant generated from a municipal, commercial, or industrial wastewater treatment plant, water supply treatment plant or air pollution control facility or any other such waste having similar characteristics and effects.

(804) "Sole Source Aquifer" means the only available aquifer, in any given geographic area, containing potable groundwater with sufficient yields to supply domestic or municipal water wells.

(812) "Solid Waste" means all useless or discarded putrescible and non-putrescible materials, including but not limited to garbage, rubbish, refuse, ashes, paper and cardboard, sewage sludge, septic tank and cesspool pumpings or other sludge, useless or discarded commercial, industrial, demolition and construction materials, discarded or abandoned vehicles or parts thereof, discarded home and industrial appliances, manure, vegetable or animal solid and semi-solid materials, dead animals and infectious waste. The term does not include:

(a) Hazardous waste as defined in ORS 466.005;

(b) Materials used for fertilizer, soil conditioning, humus restoration, or for other productive purposes or which are salvageable for these purposes and are used on land in agricultural operations and the growing or harvesting of crops and the raising of fowls or animals, provided the materials are used at or below agronomic application rates.

(823) "Solid Waste Boundary" means the outermost perimeter (on the horizontal plane) of the solid waste at a landfill as it would exist at completion of the disposal activity.

(834) "Source Separate" means that the person who last uses recyclable materials separates the recyclable material from solid waste.

~~(85) "Supplemental Feedstock" are green feedstocks from off farm or off site used to produce a compost at an agricultural or institutional operation, are the minimum amount necessary to allow composting of on farm and on site feedstocks, and can be shown by the composter to DEQ to be necessary to maintain porosity, moisture level or carbon to nitrogen ratio in the farm or institution's composting operation. The goal of these feedstocks is to supplement those feedstocks generated on the farm or at the institution so that composting may occur.~~

(846) "Tangible Net Worth" means the tangible assets that remain after deducting liabilities; such assets would not include intangibles such as goodwill and rights to patents or royalties.

(857) "Third Party Costs" mean the costs of hiring a third party to conduct required closure, post-closure or corrective action activities.

(868) "Transfer Station" means a fixed or mobile facility other than a collection vehicle where solid waste is taken from a smaller collection vehicle and placed in a larger transportation unit for transport to a final disposal location.

(879) "Treatment" or "Treatment Facility" means any method, technique, or process designed to change the physical, chemical, or biological character or composition of any solid waste. It includes but is not limited to soil remediation facilities. It does not include "composting" as defined in section (18) of this rule, "material recovery" as defined in section (56) of this rule, nor does it apply to a "material recovery facility" as defined in section (57) of this rule.

(8890) "Underground Drinking Water Source" means an aquifer supplying or likely to supply drinking water for human consumption.

(8994) "Vector" means any insect, rodent or other animal capable of transmitting, directly or indirectly, infectious diseases to humans or from one person or animal to another.

(902) "Vegetative" means feedstocks used for composting that are derived from plants including but not limited to: fruit and vegetable peelings or parts, grains, coffee grounds, crop residue, waxed cardboard and uncoated paper products. Vegetative material does not include oil, grease, or dairy products such as milk, mayonnaise or ice cream.

(913) "Vermicomposting" means the controlled and managed process by which live worms convert solid waste into dark, fertile, granular excrement.

(924) "Vermiculture" means the raising of earth worms for the purpose of collecting castings for composting or enhancement of a growing medium.

(93) "Water Table Aquifer" means an unconfined aquifer in which the water table forms the upper boundary of the aquifer. The water table is typically below the upper boundary of the geologic strata containing the water, the pressure head in the aquifer is zero and elevation head equals the total head.

(94) "Wellhead protection area" means the surface and subsurface area surrounding a water well, spring or wellfield, supplying a public water system, through which contaminants are reasonably likely to move toward and reach that water well, spring, or wellfield. A public water system is a system supplying water for human consumption that has four or more service connections or supplies water to a public or commercial establishment which operates a total of at least 60 days per year, and which is used by 10 or more individuals per day.

(95) "Wood waste" means chemically untreated wood pieces or particles generated from processes commonly used in the timber products industry. Such materials include but are not limited to sawdust, chips, shavings, stumps, bark, hog-fuel and log sort yard waste, but do not

include wood pieces or particles containing or treated with chemical additives, glue resin, or chemical preservatives.

(96) "Wood waste Landfill" means a landfill that receives primarily wood waste.

(97) "Zone of Saturation" means a three-dimensional section of the soil or rock in which all open spaces are filled with groundwater. The thickness and extent of a saturated zone may vary seasonally or periodically in response to changes in the rate or amount of groundwater recharge, discharge or withdrawal.

**NOTE:** Definition updated to be consistent with current Hazardous Waste statute.

[Publications: The publications referenced in this rule are available from the agency.]

Stat. Auth.: ORS 459.045 & ORS 468.020

Stats. Implemented: ORS 459 & ORS 459A

Hist.: DEQ 41, f. 4-5-72, ef. 4-15-72; DEQ 26-1981, f. & ef. 9-8-81; DEQ 2-1984, f. & ef. 1-16-84; DEQ 18-1988, f. & cert. ef. 7-13-88 (and corrected 2-3-89); DEQ 14-1990, f. & cert. ef. 3-22-90; DEQ 24-1990, f. & cert. ef. 7-6-90; DEQ 5-1993, f. & cert. ef. 3-10-93; Renumbered from 340-061-0010; DEQ 10-1994, f. & cert. ef. 5-4-94; DEQ 9-1996, f. & cert. ef. 7-10-96; DEQ 17-1997, f. & cert. ef. 8-14-97; DEQ 27-1998, f. & cert. ef. 11-13-98; DEQ 15-2000, f. & cert. ef. 10-11-00

### 340-093-0050

#### Permit Required

(1) Except as provided by section (3) of this rule, no person ~~shall~~may establish, operate, maintain or substantially alter, expand, improve or close a disposal site, and no person ~~shall~~may change the method or type of disposal at a disposal site, until the person owning or controlling the disposal site obtains a permit therefore from the ~~Department~~department.

(2) Persons owning or controlling the following classes of disposal sites ~~shall~~must comply ~~with~~abide by the requirements in the following rules:

(a) Municipal solid waste landfills ~~shall~~must comply ~~with~~abide by OAR 340, Division 94 "Municipal Solid Waste Landfills";

(b) Industrial Solid Waste Landfills, Construction and Demolition Landfills, Wood Waste Landfills and other facilities not listed in OAR 340, Division 96 ~~shall~~must comply ~~with~~abide by OAR 340, Division 95 "Land Disposal Sites Other Than Municipal Solid Waste Landfills";

(c) Energy recovery facilities and incinerators receiving domestic solid waste ~~shall~~must comply ~~with~~abide by OAR 340, Division 96 "Special Rules Pertaining to Incineration";

(d) Composting facilities ~~except as excluded in OAR 340-093-0050(3)(d) shall must comply with abide by~~ OAR 340-096-006020 through OAR 340-096-0150: ~~340-096-0024 and 340-096-0028.~~ "Special Rules Pertaining to Composting."

(e) Land used for deposit, spreading, lagooning or disposal of sewage sludge, septage and other sludges ~~shall must comply with abide by~~ OAR 340-096-0030 "Special Rules Pertaining to Sludge and Land Application Disposal Sites";

(f) Transfer stations and Material Recovery Facilities ~~shall must~~ comply with abide by OAR 340-096-0040 "Transfer Stations and Material Recovery Facilities";

(g) Petroleum contaminated soil remediation facilities and all other solid waste treatment facilities ~~shall must~~ comply with abide by OAR 340-096-0050 "Solid Waste Treatment Facilities."

(3) Persons owning or controlling the following classes of disposal sites are specifically exempted from the above requirements to obtain a permit under OAR Chapter 340, Divisions 93 through 97, but ~~shall must~~ comply with all other provisions of OAR Chapter 340, Divisions 93 through 97 and other applicable laws, rules, and regulations regarding solid waste disposal:

(a) A facility authorized by a permit issued under ORS 466.005 to 466.385 to store, treat or dispose of both hazardous waste and solid waste;

(b) Disposal sites, facilities or disposal operations operated pursuant to a permit issued under ORS 468B.050 if all applicable requirements in OAR chapter 340, divisions 93 through 97 have been met;

(c) A land disposal site used exclusively for the disposal of clean fill, unless the materials have been contaminated such that the ~~Department department~~ determines that their nature, amount or location may create an adverse impact on groundwater, surface water or public health or safety;

**NOTE:** Such a landfill may require a permit from the Oregon Division of State Lands. A person wishing to obtain a permit exemption for an inert waste not specifically mentioned in this subsection may submit a request to the ~~Department department~~ with such information as the ~~Department department~~ may require to evaluate the request for exemption, pursuant to OAR 340-093-0080.

~~(d) Composting facilities. The following are exempted from the above requirements to obtain a permit:~~

~~(A) Sites, facilities or agricultural composting operations utilizing an amount of green or non-green feedstocks less than or equal to 20 tons in a calendar year~~

~~(B) Agricultural composting operations that are~~

~~(i) Composting green feedstocks generated and composted at the same agricultural operation; and~~

~~(I) All the compost produced is used at the same agricultural operation at an agronomic rate or less; or~~

~~(II) If any of the compost produced is sent off farm, the operation is described in a composting management plan on file at the Oregon Department of Agriculture. The composting management plan must be approved by the Oregon Department of Agriculture and implemented by the composter for this exclusion to apply.~~

~~(ii) composting non-green feedstocks:~~

~~(I) Generated and composted at the same agricultural operation; and~~

~~(II) The operation is described in a composting management plan on file at the Oregon Department of Agriculture. The composting management plan must be approved by the Oregon Department of Agriculture and implemented by the composter in order for this exclusion to apply.~~

~~(C) Production of silage on a farm for animal feed;~~

~~(D) Home composting, unless the Department determines there is an adverse impact on to ground water, surface water or public health or safety;~~

~~(E) Institutional composting, provided there is no adverse impact on ground water, surface water or public health or safety;~~

~~(F) A site or facility that accepts and reloads only yard debris and wood waste (as defined in OAR 340-093-0030(94)) or transports those materials to another location, providing no composting occurs at the site.~~

~~(de) A Site or facility utilizing any amount of sewage sludge or biosolids under a valid water quality permit, pursuant to ORS 468B.050;~~

~~(ef) Facilities which receive only source separated materials for purposes of material recovery, except when the Department determines that the nature, amount or location of the materials is such that they constitute a potential threat of adverse impact on the waters of the state or public health;~~

~~(fg) A site used to transfer a container, including but not limited to a shipping container, or other vehicle holding solid waste from one mode of transportation to another (such as barge to truck); if:~~

~~(A) The container or vehicle is not available for direct use by the general public;~~

(B) The waste is not removed from the original container or vehicle; and

(C) The original container or vehicle does not stay in one location longer than 72 hours, unless otherwise authorized by the ~~Department~~department.

(4) The ~~Department~~department may, in accordance with a specific permit containing a compliance schedule, grant reasonable time for solid waste disposal sites or facilities to comply with OAR Chapter 340, Divisions 93 through 97.

(5) If it is determined by the ~~Department~~department that a proposed or existing disposal site is not likely to create a public nuisance, health hazard, air or water pollution or other environmental problem, the ~~Department~~department may waive any or all requirements of OAR 340-0930-0070, 340-093-0130, 340-093-0140, 340-093-0150, 340-094-0060(2) and 340-095-0030(2) and issue a letter authorization in accordance with OAR 340-093-0060.

(6) Each person who is required by sections (1) and (5) of this rule to obtain a permit ~~shall~~must:

(a) Make prompt application to the ~~Department~~department therefore;

(b) Fulfill each and every term and condition of any permit issued by the ~~Department~~department to such person;

(c) Comply with OAR Chapter 340, Divisions 93 through 97;

(d) Comply with the ~~Department's~~department's requirements for recording, reporting, monitoring, entry, inspection, and sampling, and make no false statements, representations, or certifications in any form, notice, report, or document required thereby;

(e) Allow the ~~Department~~department or an authorized governmental agency to enter the property under permit at reasonable times to inspect and monitor the site and records as authorized by ORS 459.385 and 459.272.

(7) Failure to conduct solid waste disposal according to the conditions, limitations, or terms of a permit or OAR Chapter 340, Divisions 93 through 97, or failure to obtain a permit is a violation of OAR Chapter 340, Divisions 93 through 97 and ~~shall~~may be cause for the assessment of civil penalties for each violation as provided in OAR Chapter 340, Division 12 or for any other enforcement action provided by law. Each and every day that a violation occurs is considered a separate violation and may be the subject of separate penalties.

Stat. Auth.: ORS 459A.025, ORS 459.045 & ORS 468.020

Stats. Implemented: ORS 459.205, ORS 459.215 & ORS 459.225

Hist.: DEQ 41, f. 4-5-72, ef. 4-15-72; DEQ 26-1981, f. & ef. 9-8-81; DEQ 2-1984, f. & ef. 1-16-84; DEQ 14-1984, f. & ef. 8-8-84; DEQ 5-1993, f. & cert. ef. 3-10-93; Renumbered from 340-61-020; DEQ 10-1994, f. & cert. ef. 5-4-94; DEQ 2-1995, f. & cert. ef. 1-10-95; DEQ 17-1997, f. & cert. ef. 8-14-97; DEQ 27-1998, f. & cert. ef. 11-13-98

### 340-093-0070

#### Applications for Permits

(1) Any person wishing to obtain a new, modified, or renewal permit from the ~~Department~~ department must submit a written application on a form provided by the ~~Department~~ department. The ~~Department~~ department must receive renewal applications at least 180 days before a permit is needed. All other applications must be received 60 days before a permit is needed. All application forms must be completed in full, signed by the applicant or the applicant's legally authorized representative, and accompanied by the specified number of copies of all required exhibits. The name of the applicant must be the legal name of the owner of the facility or the owner's agent or the lessee responsible for the operation and maintenance of the facility.

(2) The ~~Department~~ department will accept applications for a permit, ~~including those required for a composting facility general permit~~, only when complete, as detailed in section (3) ~~and (4)~~ of this rule. Within 45 days after receipt of an application, the ~~Department~~ department will conduct a preliminary ~~Hy~~ review of the application to determine the adequacy of the information submitted. Failure to complete this review within 45 days does not preclude the ~~Department~~ department from later requesting further information from the applicant as provided in this section.

(a) If the ~~Department~~ department determines that additional information is needed it will promptly request the needed information from the applicant. The application will be considered to be withdrawn if the applicant fails to submit the requested information within 90 days of the request or such other time as the ~~Department~~ department establishes in writing.

(b) If additional measures are necessary to gather facts regarding the application, the ~~Department~~ department will notify the applicant that such measures will be instituted, and the timetable and procedures to be followed. The application will be considered to be withdrawn if the applicant fails to comply with these additional measures.

~~-(3) General permit: Composting facilities as defined in OAR 340-096-0024(2) are considered to be "lower risk disposal sites" and thus subject to general permits. General permits are permits and permittees shall comply with all pertinent rules except subsections (4)(e) and (f) of this rule, and the requirements of OAR 340-093-0150, 340-093-0210, 340-094-0060(2) and 340-095-0030(2). In order to comply with requirements, persons applying for a general permit must submit to DEQ items listed in (4)(a), (b), (c), and (d) of this rule prior to receiving a permit. To comply with the remainder of all pertinent rules, these composting facilities must have procedures in place and documentation at the composting site available for review and acceptance by DEQ that shows all requirements have been met. A composting facility for which a general permit has been issued, but DEQ determines has inadequate or incomplete plans, specifications, operations and maintenance manuals, operational procedures, or other requirements, may be required to revise documents or operational procedures to comply with current technological practices and pertinent rules of the Department.~~

(43) Applications for a ~~registration or~~ permit ~~shall~~will be complete only if they:

(a) Are submitted in triplicate on forms provided by the ~~Department~~department, are accompanied by all required exhibits using paper with recycled content with copy printed on both sides of the paper whenever possible, follow the organizational format and include the level of informational detail required by the ~~Department~~department, and are signed by the property owner or person in control of the premises;

(b) Include written recommendations of the local government unit or units having jurisdiction with respect to new or existing disposal sites, or alterations, expansions, improvements or changes in method or type of disposal at new or existing disposal sites. Such recommendations ~~shall~~must include, but not be limited to, a statement of compatibility with the acknowledged local comprehensive plan and zoning requirements or the Land Conservation and Development Commission's Statewide Planning Goals;

(c) Identify any other known or anticipated permits from the ~~Department~~department or other governmental agencies. If previously applied for, include a copy of such permit application and if granted, a copy of such permit;

(d) Include payment of application fees as required by OAR 340-097-0110 and 340-097-0120;

(e) Include a site characterization report(s) prepared in accordance with OAR 340-093-0130, to establish a new disposal site or to substantially alter, expand or improve a disposal site or to make a change in the method or type of disposal at a disposal site, unless the requirements of said site characterization report(s) have been met by other prior submittals;

(f) Include detailed plans and specifications as required by OAR 340-093-0140;

(g) For a new land disposal site:

(A) Include a written closure plan that describes the steps necessary to close all land disposal units at any point during their active life pursuant to OAR 340-094-0110 to 340-094-0120 or OAR 340-095-0050 to 340-095-0060; and

(B) Provide evidence of financial assurance for the costs of closure of the land disposal site and for post-closure maintenance, of the land disposal site, pursuant to OAR 340-094-0140 or OAR 340-095-0090, unless the ~~Department~~department exempts a non-municipal land disposal site from this requirement pursuant to OAR 340-095-0050(3).

(h) Include any other information the ~~Department~~department may deem necessary to determine whether the proposed disposal site and the operation thereof will comply with all applicable rules of the ~~Department~~department.

(54) If the ~~Department~~department determines that a disposal site is a "low-risk disposal site" or is not likely to adversely impact the waters of the State or public health, the ~~Department~~

department may waive any of the requirements of subsections (43)(e) and (f) of this rule, OAR 340-093-0150, 340-094-0060(2) and 340-095-0030(2). In making this judgment, the Department department may consider the size and location of the disposal site, the volume and types of waste received and any other relevant factor. The applicant must submit any information the Department department deems necessary to determine that the proposed disposal site and site operation will comply with all pertinent rules of the Department department.

(65) If a local public hearing regarding a proposed disposal site has not been held and if, in the judgment of the Department department, there is sufficient public concern regarding the proposed disposal site, the Department department may, as a condition of receiving and acting upon an application, require that such a hearing be held by the county board of commissioners or county court or other local government agency responsible for solid waste management, for the purpose of informing and receiving information from the public.

(76) Permit ~~or registration~~ modifications and renewals:

(a) Permit Modification: An application for a permit modification is required for:

(i ~~A~~) The sale or exchange of the activity or facility; or

(ii ~~B~~) Any change in the nature of the activities or operations from those of the last application including modification or expansion of the disposal site or a change in the method or type of disposal. Any application that would substantially change the scope or operations of the disposal site must include written recommendations from the local government unit as required in subsection (43)(b) of this rule.

(b) Permit Renewal: An application for a permit renewal is required if a permittee intends to continue operation beyond the permitted period. A complete renewal application must be filed at least 180 days before the existing permit expires.

(i ~~A~~) A complete application for renewal must be made in the form required by the Department department and include the information required by this Division and any other information required by the Department department.

(ii ~~B~~) Any application for renewal which would substantially change the scope of operations of the disposal site must include written recommendations from the local government unit as required in subsection (43)(b) of this rule.

(iii ~~C~~) If a completed application for renewal of a permit is filed with the Department department in a timely manner before the expiration date of the permit, the permit does not expire until the Department department takes final action on the renewal application.

(iv ~~D~~) If a completed application for renewal of a permit is not filed with the Department department in a timely manner before the expiration date of the permit, the Department department

department may require the permittee to close the site and apply for a closure permit, pursuant to OAR 340-094-0100 or 340-095-0050.

(~~87~~) Permits extended under subsection (~~76~~) of this rule remain fully effective and enforceable until the effective date of the new permit.

Stat. Auth.: ORS 459

Stats. Implemented: ORS 459.235

Hist.: DEQ 41, f. 4-5-72, ef. 4-15-72; DEQ 26-1981, f. & ef. 9-8-81; DEQ 2-1984, f. & ef. 1-16-84; DEQ 5-1993, f. & cert. ef. 3-10-93; Renumbered from 340-061-0025; DEQ 10-1994, f. & cert. ef. 5-4-94; DEQ 17-1997, f. & cert. ef. 8-14-97; DEQ 15-2000, f. & cert. ef. 10-11-00

### **340-093-0100**

#### **Public Notice and Participation Requirements Regarding Permit Actions**

(1) The ~~Department~~department has categorized permit actions according to environmental and public health significance. Category I1 represents permit actions with low environmental and public health significance and less public notice and opportunity for public participation. Category IV4 represents permit actions with potentially high environmental and public health significance, and the greatest level of public notice and opportunity for participation.

(2) OAR 340-093-0105 classifies permits as Category I1 through Category IV4. If a permit action is uncategorized, the permit action will be processed under Category III3. The following describes the public notice and participation requirements for each category:

(a) Category I1 -- No public notice or opportunity for public participation;

(b) Category H2 -- The ~~Department~~department will provide public notice of the proposed permit action and a minimum of 30 days to submit written comments.

(c) Category III3 -- The ~~Department~~department will provide public notice of the proposed permit action and a minimum of 35 days to submit written comments. The ~~Department~~department will provide a minimum of 30 days notice for a hearing if one is scheduled. The ~~Department~~department will schedule a hearing to allow interested persons to submit oral or written comments if:

(i A) Within 14 days of the mailing of the notice, the ~~Department~~department receives written requests from ten persons, or from an organization representing at least ten persons, for a hearing, or

(ii B) The ~~Department~~department determines that a hearing is necessary.

(d) Category IV4 -- Once an application is considered complete under OAR 340-093-0070, the ~~Department~~department will:

(i ~~A~~) Provide public notice of the receipt of a completed application and requested permitting action; and

(ii ~~B~~) Schedule an informational meeting within the community where the facility will be or is located and provide public notice of the meeting. The ~~Department~~department will consider any information gathered in this process when it drafts the proposed permit.

(iii ~~C~~) Once a draft permit is completed, provide public notice of the proposed permit and a minimum of 40 days to submit written comments.

(iv ~~D~~) Schedule a public hearing to allow interested persons to submit oral or written comments and a minimum of 30 days notice for the hearing.

(3) The ~~Department~~department may move a permit action to a higher category under (2) of this rule, based on, but not limited to, the following factors:

(a) Anticipated public interest in the facility;

(b) Compliance and enforcement history of the facility or owner;

(c) Potential for significant environmental or public harm due to location or type of facility; or

(d) A change in the nature of the facility or the quantity or types of solid waste received, processed or disposed of at the facility.

(4) The public notice required under (2)(b), (2)(c) and (2)(d)(~~C~~~~iii~~) of this rule will contain at least the following information:

(a) Name of the applicant and location of the facility;

(b) Type of facility including a description of the facility's process subject to the permit;

(c) Description of permitted substances stored, disposed of, discharged or emitted, including whether there has been an increase or decrease in the substance since the last permit action for the facility;

(d) Location and description of documents relied upon in preparing the draft permit action;

(e) Other permits required by the ~~Department~~department;

(f) Date of previous permit action;

(g) Opportunity for public comment, whether in writing or in person;

(h) Compliance, enforcement and complaint history along with resolution of the same; and

(i) A summary of the discretionary decisions made by the ~~Department~~department in drafting the permit.

(5) The ~~Department~~department will provide the notice, as required under section (2) of this rule, to the applicant, those requesting notice of the permitting action, local news media, and other interested persons as identified by the ~~Department~~department.

Stat. Auth.: ORS 459.005 – ORS 459.418, ORS 459A.100 – ORS 459A.120

Stats. Implemented: ORS 459.245

Hist.: DEQ 34-1990, f. 8-20-90, cert. ef. 9-1-90; DEQ 5-1993, f. & cert. ef. 3-10-93;

Renumbered from 340-061-0024; DEQ 15-2000, f. & cert. ef. 10-11-00

### **340-093-0105**

#### **Categories for Permit Actions**

(1) Category 1:

~~(a) Composting facility registration under 340-096-0024(1).~~

~~(b) Assignment to a composting facility general permit under 340-096-0024(2).~~

~~(ea)~~ Waste Tire Carrier Permit under 340-064-0055.

~~(db)~~ Letter Authorization under 340-093-0060.

~~(ec)~~ Modification to a permit that is administrative in nature or does not alter permit conditions.

(2) Category 2:

(a) Renewal of a construction and demolition debris landfill permit under 340-093-0070.

(b) Renewal of an industrial waste landfill permit under 340-093-0070.

~~(a)~~ (c) Renewal of Closure-a closure permit under 340-094-0100 and 340-095-0500.

~~(bd)~~ Renewal of a transfer station permit under 340-096-0040.

~~(ee)~~ Renewal of a material recovery facility permit under 340-096-0040.

(f) Renewal of a solid waste treatment facility permit under 340-093-0070.

~~(dg)~~ Renewal of a waste tire storage site permit under 340-064-0015.

(h) Renewal of a solid waste composting -permit under 340-093-0070.

(i) New composting registration issued under OAR 340-096-0100.

(j) Renewal of a composting facility registration under 340-096-0100.

~~(k)~~ All other modifications not listed under category 1.

(3) Category 3:

(a) New captive industrial facility permit as defined in 340-097-0120(1)(c).

(b) New transfer station or material recovery facility permit under 340-096-0040.

~~(c) New Composting facility permit issued under 340-096-0110.0024~~

~~(d) New Closure permit under 340-094-0100 and 340-095-0500.~~

~~(e) Issuance of a composting facility general permit under 340-096-0024.~~

~~(f)~~ New construction and demolition landfill permit under 340-095-0001.

~~(g)~~ New solid waste treatment facility permit under 340-096-0050.

~~(h)~~ New off-site industrial facility permit under 340-097-0120(2)(a).

~~(i)~~ New sludge disposal facility permit under 340-096-0030.

(i) New waste tire storage facility permit under 340-064-0015.

~~(k) Renewal of a municipal landfill permit under 340-093-0070.~~

~~(j) Renewal of an incinerator or energy recovery facility permit under 340-093-0070.~~

(4) Category 4:

(a) New municipal solid waste landfill facility permit under 340-094-0001.

~~(b) New waste tire storage site under 340-064-0015.~~

~~(e)~~ New incinerator permit under 340-096-0010.

~~(d)~~ New energy recovery facility permit under 340-097-0120(2)(a).

Stat.Auth.: ORS 459A.025, ORS 459.045 & ORS 468.020

Stats. Implemented: ORS 459.245

Hist.: DEQ 15-2000, f. & cert. ef. 10-11-00

### 340-093-0130

#### Site Characterization Report(s)

The purpose of the site characterization report(s) required by OAR 340-093-0070(43)(e) is to demonstrate that the proposed facility will be located in a suitable site and will use appropriate technology in design, construction and operation. The site characterization report(s) ~~shall~~must describe existing site conditions and a conceptual engineering proposal in sufficient detail to determine whether the facility is feasible and protects the environment. Except as provided in OAR 340-093-0070(4), ~~the~~ site characterization report(s) ~~shall~~must include, but not be limited to, the following:

- (1) Information on site location and existing site conditions, including:
  - (a) A site location description, including a location map and list of adjacent landowners;
  - (b) An Existing Conditions Map of the area showing land use and zoning within 1/4 mile of the disposal site; and
  - (c) Identification of any siting limitations and how those limitations will be addressed.
- (2) A description of the scope, magnitude, type, and purpose of the proposed facility, including but not limited to the following:
  - (a) Estimated capacity and projected life of the site;
  - (b) Identification of the communities, industries and/or markets to be served;
  - (c) Anticipated types and quantities of solid wastes to be received, disposed of and/or processed by the facility;
  - (d) Summary of general design criteria and submittal of conceptual engineering plans;
  - (e) Description of how the proposed technology compares to current technological practices, or to similar proven technology, including references to where similar technology has been effectively implemented;
  - (f) Demonstration that the proposed facility is compatible with the local solid waste management plan and the state solid waste management plan;
  - (g) Planned future use of the disposal site after closure;
  - (h) Key assumptions used to calculate the economic viability of the proposed facility; and
  - (i) The public involvement process that has been and will be implemented.

(3) A proposal for protection and conservation of the air, water and land environment surrounding the disposal site, including control and/or treatment of leachate, methane gas, litter and vectors, and control of other discharges, emissions and activities which may result in a public health hazard, a public nuisance or environmental degradation.

(4) For a landfill, the following shall~~must~~ be included:

(a) A detailed soils, geologic, and groundwater report of the site prepared and stamped by a professional Engineer, Geologist or Engineering Geologist with current Oregon registration. The report shall~~must~~ include consideration of surface features, geologic formations, soil boring data, water table profile, direction of groundwater flow, background quality of water resources in the anticipated zone of influence of the landfill, need and availability of cover material, climate, average rates of precipitation, evapotranspiration, runoff, and infiltration (preliminary water balance calculations);

(b) Information on soil borings to a minimum depth of 20 feet below the deepest proposed excavation and lowest elevation of the site or to the permanent groundwater table if encountered within 20 feet. A minimum of one boring per representative landform at the site and an overall minimum of one boring per each ten acres shall~~must~~ be provided. Soil boring data shall~~must~~ include the location, depth, surface elevation and water level measurements of all borings, the textural classification (Unified Soil Classification System), permeability and cation exchange capacity of the subsurface materials and a preliminary soil balance;

(c) For all water wells located within the anticipated zone of influence of the disposal site, the depth, static level and current use shall~~must~~ be identified;

(d) Background groundwater quality shall~~must~~ be determined by laboratory analysis and shall~~must~~ include at least each of the constituents specified by the ~~Department~~department.

(5) Any other information the ~~Department~~department may deem necessary to determine whether the proposed disposal site is feasible and will comply with all applicable rules of the ~~Department~~department.

Stat. Auth.: ORS 459

Stats. Implemented: ORS 459.015 & ORS 459.205(1)

Hist.: DEQ 41, f. 4-5-72, ef. 4-15-72; DEQ 26-1981, f. & ef. 9-8-81; DEQ 5-1993, f. & cert. ef. 3-10-93; Renumbered from 340-061-0030; DEQ 10-1994, f. & cert. ef. 5-4-94; DEQ 17-1997, f. & cert. ef. 8-14-97

**340-093-0140**

### **Detailed Plans and Specifications Required**

Except as provided in OAR 340-093-0070~~(5)~~(4):

(1) Any person applying for a Solid Waste Disposal Permit ~~shall~~must submit plans and specifications conforming with current technological practices, and sufficiently detailed and complete so that the ~~Department~~department may evaluate all relevant criteria before issuing a permit. The plans and specifications ~~shall~~must follow the organizational format, and include the level of information detail, as required by the ~~Department~~department. The ~~Department~~department may refuse to accept plans and specifications that are incomplete and may request such additional information as it deems necessary to determine that the proposed disposal site and site operation will comply with all pertinent rules of the ~~Department~~department.

(2) Engineering plans and specifications submitted to the ~~Department~~department ~~shall~~must be prepared and stamped by a professional engineer with current Oregon registration.

(3) If in the course of facility construction any person desires to deviate significantly from the approved plans, the permittee ~~shall~~must submit a detailed description of the proposed change to the ~~Department~~department for review and approval prior to implementation. If the ~~Department~~department deems it necessary, a permit modification ~~shall~~must be initiated to incorporate the proposed change.

Stat. Auth.: ORS 459

Stats. Implemented: ORS 459.015 & ORS 459.205(1)

Hist.: DEQ 41, f. 4-5-72, ef. 4-15-72; DEQ 26-1981, f. & ef. 9-8-81;; DEQ 5-1993, f. & cert. ef. 3-10-93; Renumbered from 340-061-0035; DEQ 10-1994, f. & cert. ef. 5-4-94; DEQ 17-1997, f. & cert. ef. 8-14-97

### **340-093-0150**

#### **Construction Certification**

Except as provided in OAR 340-093-0070(~~54~~):

(1) The ~~Department~~department may require, upon completion of major or critical construction at a disposal site, that the permittee submit to the ~~Department~~department a final project report signed by the project engineer or manager as appropriate. The report ~~shall~~must certify that construction has been completed in accordance with the approved plans including any approved amendments thereto.

(2) If any major or critical construction has been scheduled in the plans for phase development subsequent to the initial operation, the ~~Department~~department may require that the permittee submit additional certification for each phase when construction of that phase is completed.

(3) Solid waste ~~shall~~may not be disposed of in any new waste management unit (such as a landfill cell) of a land disposal site unless/until the permittee has received prior written approval from the ~~Department~~department of the required engineering design, construction, Construction Quality Assurance, operations, and monitoring plans. Only after the ~~Department~~department has accepted a construction certification report prepared by an independent party, certifying to the

~~Department~~department that the unit was constructed in accordance with the approved plans, may waste be placed in the unit. If the ~~Department~~department does not respond to a certified construction certification report within 30 days of its receipt, the permittee may proceed to use the unit for disposal of the intended solid waste.

Stat. Auth.: ORS 459.045, ORS 459A.025 & ORS 468.020

Stats. Implemented: ORS 459.015 & ORS 459.205 – ORS 459.245

Hist.: DEQ 26-1981, f. & ef. 9-8-81; DEQ 5-1993, f. & cert. ef. 3-10-93; Renumbered from 340-061-0036; DEQ 10-1994, f. & cert. ef. 5-4-94; DEQ 17-1997, f. & cert. ef. 8-14-97; DEQ 27-1998, f. & cert. ef. 11-13-98

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**The Oregon Administrative Rules contain OARs filed through May 15,  
2009**

**DEPARTMENT OF ENVIRONMENTAL QUALITY**

**DIVISION 96**

**SOLID WASTE: SPECIAL RULES FOR  
SELECTED SOLID WASTE DISPOSAL SITES**

**340-096-0001**

**Applicability**

OAR Chapter 340, Division 96 applies to energy recovery facilities and incinerators receiving solid waste delivered by the public or by a solid waste collection service, composting facilities, sludge disposal sites, land application disposal sites, transfer stations, material recovery facilities and solid waste treatment facilities. Such facilities are disposal sites as defined by ORS Chapter 459, and are also subject to the requirements of OAR Chapter 340, Division 93, financial assurance requirements as set forth in Division 95 at OAR 340-095-0090 and OAR 340-095-0095, and Division 97. The department may tailor the financial assurance requirements to the nature of the facility and may exempt low risk facilities. For purposes of these Division 96 rules, a low risk facility is one the department determines is not likely to generate significant amounts of residual waste materials or contamination from the operation of the facility that will remain at closure.

Stat. Auth.: ORS 459.005 - ORS 459.418 & ORS 459A.100 - ORS 459A.120

Stats. Implemented: ORS 459.015 & ORS 459.045

Hist.: DEQ 5-1993, f. & cert. ef. 3-10-93

**340-096-0010**

**Special Rules Pertaining to Incineration**

(1) Applicability. This rule applies to all energy recovery facilities and incinerators receiving solid waste delivered by the public or by a solid waste collection service. ~~Such facilities are disposal sites as defined by ORS Chapter 459, and are also subject to the requirements of OAR Chapter 340, Division 93 and applicable provisions in OAR Chapter 340, Divisions 95 and 97.~~

(2) Detailed Plans and Specifications:

(a) All incineration equipment and air pollution control appurtenances thereto shall must comply with air pollution control rules and regulations and emission standards of this ~~Department~~ department or the regional air pollution control authority having jurisdiction;

(b) Detailed plans and specifications for incinerator disposal sites shall must include, but not be limited to, the location and physical features of the site, such as contours, drainage control, landscaping, fencing, access and on-site roads, solid waste handling facilities, truck washing facilities, ash and residue disposal and design and performance specifications of incineration equipment and provisions for testing emissions therefrom.

(3) Incinerator Design and Construction:

(a) Ash and Residue Disposal. Incinerator ash and residues shall must be disposed in an approved landfill unless handled otherwise in accordance with a plan approved in writing by the ~~Department~~ department;

(b) Waste Water Discharges. There shall must be no discharge of waste water to public waters except in accordance with a permit from the ~~Department~~ department, issued under ORS 468B.050;

(c) Access Roads. All weather roads shall must be provided from the public highways or roads, to and within the disposal site and shall must be designed and maintained to prevent traffic congestion, traffic hazards and dust and noise pollution;

(d) Drainage. An incinerator site shall must be designed such that surface drainage will be diverted around or away from the operational area of the site;

(e) Fire Protection. Fire protection shall must be provided in accordance with plans approved in writing by the ~~Department~~ department and in compliance with pertinent state and local fire regulations;

(f) Fences. Access to the incinerator site shall must be controlled by means of a complete perimeter fence and gates which may be locked;

(g) Sewage Disposal. Sanitary waste disposal shall must be accomplished in a manner approved by the ~~Department~~ department or state or local health agency having jurisdiction;

(h) Truck Washing Facilities. Truck washing areas, if provided, shall must be hard surfaced and all wash waters shall must be conveyed to a catch basin, drainage and disposal system approved by the Department or state or local health agency having jurisdiction.

(4) Incinerator Operations:

(a) Storage:

(A) All solid waste deposited at the site shall be confined to the designated dumping area;

(B) Accumulation of solid wastes and undisposed ash residues shall be kept to minimum practical quantities.

(b) Salvage:

(A) A permittee may conduct or allow the recovery of materials such as metal, paper and glass from the disposal site only when such recovery is conducted in a planned and controlled manner approved by the ~~Department~~ department in the facility's operations plan;

(B) Salvaging shall be controlled so as not to interfere with optimum disposal operation and to not create unsightly conditions or vector harborage;

(C) All salvaged material shall be stored in a building or enclosure until it is removed from the disposal site in accordance with a recycling program authorized in the operations plan.

(c) Nuisance Conditions:

(A) Blowing debris shall be controlled such that the entire disposal site is maintained free of litter;

(B) Dust, malodors and noise shall be controlled to prevent air pollution or excessive noise as defined by ORS Chapters 467 and 468 and rules and regulations adopted pursuant thereto.

(d) Health Hazards. Rodent and insect control measures shall be provided, sufficient to prevent vector production and sustenance. Any other conditions which may result in transmission of disease to man and animals shall be controlled;

(e) Air Quality. The incinerator shall be operated in compliance with applicable air quality rules (OAR 340-025-0850 through 340-025-0905);

(f) Records. The ~~Department~~ department may require such records and reports as it considers are reasonably necessary to ensure compliance with conditions of a permit or OAR Chapter 340, Divisions 93 through 97. All records must be kept for a minimum of five years. In the case of a change in ownership of the permitted facility, the new permittee is responsible for ensuring that the records are transferred from the previous owner and maintained for the required five years.

Stat. Auth.: ORS 459.045, ORS 459A.025 & ORS 468.020

Stats. Implemented: ORS 459.015 & ORS 459.205

Hist.: DEQ 41, f. 4-5-72, ef. 4-15-72; DEQ 5-1993, f. & cert. ef. 3-10-93; Renumbered

from 340-061-0045; DEQ 10-1994, f. & cert. ef. 5-4-94; DEQ 27-1998, f. & cert. ef. 11-13-98

### **340-096-0020**

#### **Special Rules Pertaining to Composting: Applicability**

~~Applicability. This rule applies to all composting facilities, except as exempted in OAR 340-093-0050(3)(d) and (e). Composting facilities are disposal sites as defined by ORS Chapter 459, and are also subject to the requirements of OAR Chapter 340, Divisions 93, 95 and 97 as applicable. Composting facilities commencing operation prior to January 31, 1999 shall submit an application to the Department for a composting facility registration or permit within 18 months of the effective date of these rules. Following that date, composting facilities must apply for and receive a permit or registration prior to commencement of operation.~~

~~[NOTE: Portions of 340-096-0020 have moved to 340-096-0024 and 340-096-0028.]~~

~~Stat. Auth.: ORS 459.045, ORS 459A.025 & ORS 468.020~~

~~Stats. Implemented: ORS 459.005, ORS 459.015 & ORS 459.205~~

~~Hist.: DEQ 41, f. 4-5-72, ef. 4-15-72; DEQ 5-1993, f. & cert. ef. 3-10-93; Renumbered from 340-061-0050; DEQ 10-1994, f. & cert. ef. 5-4-94; DEQ 9-1996, f. & cert. ef. 7-10-96; DEQ 27-1998, f. & cert. ef. 11-13-98~~

### **340-096-0024**

#### **Special Rules Pertaining to Composting: Types of Composting Facilities**

~~Composting facilities are categorized by the following criteria and shall meet the portions of this rule as listed in (1)(c), (2)(c), or (3) below:~~

~~(1) Composting facility registration: For facilities utilizing as feedstocks for composting:~~

~~(a) More than 20 tons and less than or equal to 2,000 tons of green feedstocks in a calendar year; or~~

~~(b) More than 20 tons and less than or equal to 5,000 tons of feedstocks which are exclusively yard debris and wood waste in a calendar year;~~

~~(c) Composting facilities receiving a registration shall comply with only the following items of OAR 340-096-0028: (1)(d), (2)(c), (3)(a), (3)(b), (3)(c), and (4) and are not subject to the remaining requirements of OAR 340-096-0028;~~

~~(d) Persons applying for a composting facility registration shall submit to DEQ items listed in OAR 340-093-0070(4)(a), (b), (c), and (d) prior to receiving their registration. These facilities are subject to the procedures and requirements of OAR 340-093-0070 (1);~~

~~(6), and (7), (application processing, public hearings, registration renewal), but are exempted from the remaining requirements of OAR 340-093-0070;~~

~~(e) A composting facility registration will be treated as a permit only for purposes of OAR 340-018-0030 and not for other purposes;~~

~~(f) Upon determination by the Department that a registered facility is adversely affecting human health or the environment, a registered facility may be required to apply for and meet the requirements of a composting facility general permit.~~

~~(2) Composting facility general permit: For facilities utilizing as feedstocks for composting:~~

~~(a) More than 2,000 tons of green feedstocks in a calendar year; or~~

~~(b) More than 5,000 tons of green feedstocks which are exclusively yard debris and wood waste in a calendar year;~~

~~(c) Persons receiving a composting facility general permit shall comply with all items of OAR 340-096-0028 except (2)(b), (3)(g), and (3)(i). In order to meet these requirements, composters shall have procedures in place and written documentation at the composting site available for review and acceptance by DEQ that shows all requirements have been met;~~

~~(d) Persons applying for a composting facility general permit shall comply with the requirements of "General Permit," pursuant to OAR 340-093-0070(3);~~

~~(e) Upon determination by the Department that a facility with a composting facility general permit is adversely affecting human health or the environment, that facility may be required to apply for and meet the requirements of a composting facility full permit.~~

~~(3) Composting facility full permit: For facilities utilizing as feedstocks for composting more than 20 tons of feedstocks during a calendar year that includes any amount of non-green feedstocks. Persons applying for a composting facility full permit shall comply with all items of OAR 340-096-0028. In order to meet these requirements, these persons must submit written documents to the Department for review and approval prior to receiving their permit, as described in OAR 340-093-0050 and OAR 340-093-0070.~~

~~(4) Composting facilities exempted from requirements to obtain a permit are listed in OAR 340-093-0050(3)(d).~~

~~(5) The Director may issue a different level of composting regulation to a facility upon receipt of a request and justification regarding special conditions based on the amount and type of unique feedstocks which do not justify scrutiny of a higher level of regulation. Justification must be substantiated by results from testing, documentation of operational procedures or other methods. Applications shall be processed in accordance~~

~~with the Procedures for Issuance, Denial, Modification and Revocation of Permits as set forth in OAR 340, division 093.~~

~~Stat. Auth.: ORS 459.045, ORS 459A.025 & ORS 468.020~~

~~Stats. Implemented: ORS 459.005, ORS 459.015 & ORS 459.205~~

~~Hist.: DEQ 17-1997, f. & cert. ef. 8-14-97; DEQ 27-1998, f. & cert. ef. 11-13-98; DEQ 15-2000, f. & cert. ef. 10-11-00~~

### ~~340-096-0028~~

#### ~~Special Rules Pertaining to Composting: Conditions~~

~~(1) Feasibility Study Report shall include but not be limited to:~~

~~(a) Location and design of the physical features of the site and composting plant, surface drainage control, wastewater facilities, fences, residue disposal, controls to prevent adverse health and environmental impacts, and design and performance specifications for major composting equipment and detailed descriptions of methods to be used.~~

~~Agricultural composting operations need only provide information regarding surface drainage control and wastewater facilities as required by ORS 468B.050(1)(b), administered by the Oregon Department of Agriculture;~~

~~(b) A proposed plan for utilization of the processed compost or other evidence of assured utilization of composted feedstocks;~~

~~(c) A proposed facility closure plan of a conceptual "worst case" scenario to dispose of unused feedstocks, partially processed residues and finished compost, unless exempted from this requirement by the Department pursuant to OAR 340-095-0090(2). The plan will include a method for disposal of processed compost that, due to concentrations of contaminants, cannot be marketed or used for beneficial purposes. The facility closure plan shall also include evidence of financial assurance, pursuant to OAR 340-095-0090(1), for all composting facility full permits;~~

~~(d) A mass balance calculation showing all feedstocks and amendments and all products produced. For facilities applying for a composting facility full permit, the mass balance calculation shall be detailed and utilize a unit weight throughout.~~

~~(2) Composting Facility Plan Design and Construction shall include but not be limited to:~~

~~(a) Scale drawings of the facility, including the location and size of feedstock and finished storage area(s), composting processing areas, fixed equipment, and appurtenant facilities (scales, surface water control systems, wells, offices and others). Upon determination by the Department that engineered drawings are necessary, drawings will be produced under the supervision of a licensed engineer with current registration;~~

~~(b) Lining system design: If leachate is present, composter must provide a protective layer beneath compost processing and feedstock areas, leachate sumps and storage basins to prevent release of leachate to surface water or ground water. The lining system required would be dependent on leachate characteristics, climatic conditions and size of facility and shall be capable of resisting damage from movement of mobile operating equipment and weight of stored piles. Facility operators shall monitor all water releases and document no release to ground water. A construction quality assurance plan shall be included detailing monitoring and testing to assure effectiveness of liner system;~~

~~(c) Water Quality: Composting facilities shall have no discharge of leachate, wastewater, or wash water (from vehicle and equipment washing) to the ground or to surface waters, except in accordance with permit(s) from the Water Quality Program of the Department issued under ORS 468B.050. Agricultural composters must meet water quality requirements pursuant to ORS 468B.050 (1)(b), administered by the Oregon Department of Agriculture;~~

~~(d) Access Roads: When necessary to provide public access, all weather roads shall be provided from the public highway or roads to and within the compost operation and shall be designed and maintained to prevent traffic congestion, traffic hazards and dust and noise pollution;~~

~~(e) Fire Protection: Fire protection shall be provided in compliance with pertinent state and local fire regulations;~~

~~(f) Control of access to the site: Effective barriers to unauthorized entry and dumping shall be provided (such as fences, gates and lock(s));~~

~~(g) Control of noise, vectors, dust and litter: Effective methods to reduce or avoid noise, vectors, dust and litter shall be provided.~~

~~(3) Composting Facility Operations Plan shall include:~~

~~(a) Operations and Maintenance Manual which describes normal facility operations and includes procedures to address upset conditions and operating problems. The manual shall include monitoring of compost processing parameters including: feedstocks (C:N ratio), moisture content, aeration, pH and temperature;~~

~~(b) Odor Minimization Plan shall be developed to address odor within the confines of the composting site and include methods to address:~~

~~(A) A management plan for malodorous loads;~~

~~(B) Procedures for receiving and recording odor complaints, immediately investigating any odor complaints to determine the cause of odor emissions, and remedying promptly any odor problems at the facility;~~

~~(C) Additional odor minimizing measures, which may include the following:~~

~~(i) Avoidance of anaerobic conditions in the composting material;~~

~~(ii) Use of mixing for favorable composting conditions;~~

~~(iii) Formation of windrow or other piles into a size and shape favorable to minimizing odors; and~~

~~(iv) Use of end product compost as cover to act as a filter during early stages of composting.~~

~~(D) Specification of a readily available supply of bulking agents, additives or odor control agents;~~

~~(E) Procedures for avoiding delay in processing and managing feedstocks during all weather conditions;~~

~~(F) Methods for taking into consideration the following factors prior to turning or moving composted material:~~

~~(i) Time of day;~~

~~(ii) Wind direction;~~

~~(iii) Percent moisture;~~

~~(iv) Estimated odor potential; and~~

~~(v) Degree of maturity.~~

~~(c) Methods for measuring and keeping records of incoming feedstocks;~~

~~(d) Removal of Compost: Other than for compost used on site at an agronomic rate, compost shall be removed from the composting facility as frequently as possible, but not later than two years after processing is completed;~~

~~(e) Incorporation of feedstock(s): Feedstocks shall be incorporated into active compost piles within a reasonable time;~~

~~(f) Use of Composted Solid Waste: Composted solid waste offered for use by the public shall be relatively odor free and shall not endanger public health or safety;~~

~~(g) Pathogen reduction: Composting facilities accepting any amount of non-green feedstocks shall document and implement a pathogen reduction plan that addresses~~

~~requirements of the Code of Federal Regulations, 40 CFR Part 503. The plan shall include a Process to Further Reduce Pathogen (PFRP), pursuant to 40 CFR Part 503 Appendix B, item (B)(1), dated February 19, 1993, that shall include:~~

~~(A) Using either the within-vessel composting method or the static aerated-pile composting method, the temperature of the active compost pile shall be maintained at 55 degrees Celsius or higher for three days;~~

~~(B) Using the windrow composting method, the temperature of the active compost pile shall be maintained at 55 degrees Celsius or higher for 15 days or longer. During the period when the compost is maintained at 55 degrees Celsius or higher, there shall be a minimum of five turnings of the windrow; or~~

~~(C) An alternative method that can be demonstrated by permittee to achieve an equivalent reduction of human pathogens.~~

~~(h) Storage:~~

~~(A) All feedstocks deposited at the site shall be confined to the designated dumping area;~~

~~(B) Accumulation of feedstocks shall not exceed one month's production capacity and undisposed residues shall be kept to minimum practical quantities;~~

~~(C) Facilities and procedures shall be provided for handling, recycling or disposing of feedstocks that are non-biodegradable by composting;~~

~~(i) Salvage:~~

~~(A) A permittee may conduct or allow the recovery of materials such as metal, paper and glass from the composting facility only when such recovery is conducted in a planned and controlled manner approved by the Department in the facility's operations plan;~~

~~(B) Salvaging shall be controlled so as not to interfere with optimum composting operation and not create unsightly conditions or vector harborage.~~

~~(j) Methods to minimize vector attraction (such as rats, birds, flies) shall be used in order to prevent nuisance conditions or propagation of human pathogens in the active or finished compost.~~

~~(4) Records: Annual reporting of the weight of feedstocks utilized for composting is required on a form provided by the Department. The Department may also require such records and reports as it considers are reasonably necessary to ensure compliance with conditions of a registration or permit or OAR Chapter 340, Divisions 93 through 97. All records must be kept for a minimum of five years. In the case of a change in ownership of the permitted facility, the new permittee is responsible for ensuring that the records are transferred from the previous permittee and maintained for the required five years.~~

~~Stat. Auth.: ORS 459.045, ORS 459A.025 & ORS 468.020~~

~~Stats. Implemented: ORS 459.005, ORS 459.015 & ORS 459.205~~

~~Hist.: DEQ 17-1997, f. & cert. ef. 8-14-97; DEQ 27-1998, f. & cert. ef. 11-13-98~~

### **340-096-0050**

#### **Solid Waste Treatment Facilities**

(1) Applicability. This rule applies to all solid waste treatment facilities. Such facilities are disposal sites as defined by ORS Chapter 459, and are also subject to the requirements of OAR Chapter 340, Divisions 93, 95, and 97 as applicable.

(2) Plans and Specifications. Plans and specifications for a solid waste treatment facility shall must include, but not be limited to, the location and physical features of the facility such as contours, surface drainage control, access and on-site roads, traffic routing, landscaping, weigh stations, fences and specifications for solid waste handling equipment, truck and area washing facilities and wash water disposal, and water supply and sanitary waste disposal.

(3) Air Quality. A permittee shall must ensure that all solid waste treatment facilities comply with air pollution control rules and regulations and emission standards of this Department or the regional air pollution control authority having jurisdiction.

(4) Bioremediation Facilities. Facilities that propose to biologically treat petroleum contaminated soil must design the operation to prevent contamination of the area and minimize the possibility of contaminants leaching to groundwater. Such facilities shall must in general comply with regulations in OAR Chapter 340, Division 95, "Land Disposal Sites Other Than Municipal Solid Waste Landfills," for location restrictions, operating criteria and design criteria. The following requirements also apply:

(a) To prevent leaching, design criteria must include either:

(A) A landfill-type liner with a leachate removal system. A concrete slab is not considered a liner. An applicant must demonstrate that the proposed liner is compatible with the waste; or

(B) A vadose zone monitoring system, pursuant to **40 CFR 264, Subpart M**.

(b) Groundwater. The ~~D~~Department may require groundwater monitoring depending on the facility's cover, run-on controls and irrigation;

(c) Operating criteria:

(A) Each permittee shall must ensure that surface runoff and leachate seeps are controlled so as to minimize discharges of pollutants into public waters;

(B) The permittee must ensure that the facility is operated in a manner such that the liner is not damaged;

(C) The permittee must provide a monitoring plan to demonstrate completion of the biodegradation process.

(d) Financial assurance. An application for a bioremediation solid waste treatment facility ~~shall~~**must** include a financial assurance plan sufficient to cover costs for a third party to remove the waste to a thermal desorption facility if it is deemed necessary by the ~~D~~**d**epartment.

(5) Records. The ~~D~~**d**epartment may require such records and reports as it considers are reasonably necessary to ensure compliance with conditions of a permit or OAR Chapter 340, Divisions 93 through 97. All records must be kept for a minimum of five years. In the case of a change in ownership of the permitted facility, the new permittee is responsible for ensuring that the records are transferred from the previous permittee and maintained for the required five years.

[Publications: The publication(s) referred to or incorporated by reference in this rule are available from the agency.]

Stat. Auth.:ORS 459.045, ORS 459A.025 & ORS 468.020

Stats. Implemented: ORS 459.005, ORS 459.015 & ORS 459.205

Hist.: DEQ 5-1993, f. & cert. ef. 3-10-93; DEQ 10-1994, f. & cert. ef. 5-4-94; DEQ 27-1998, f. & cert. ef. 11-13-98

### [340-096-0060](#)

#### [Special Rules Pertaining to Composting: Applicability](#)

[\(1\) No person may construct or operate a composting facility except as provided in this rule.](#)

[\(2\) All composting facilities must comply with 340-096-0070: \*Performance Standards\*.](#)

[\(3\) All composting facilities, except those composting facilities exempt under \(3\)\(a\) of this rule, must comply with OAR 340-096-0080: \*Screening\*.](#)

[\(a\) The following composting facilities are exempt from the requirements of OAR 340-096-0080: \*Screening\*, OAR 340-096-100: \*Registration\*, and OAR 340-096-0110 \*Composting Permit\* unless the department determines the composting facility may adversely affect human health or the environment:](#)

[\(A\) Any composting facility composting less than 100 tons of Type 1 feedstock, Type 2 feedstock, or both during any calendar year;](#)

(B) Any composting facility composting less than 20 tons of Type 3 feedstock during any calendar year;

(C) Any composting facility composting less than 40 tons of Type 3 feedstock in any calendar year when conducting in-vessel composting in containers designed to prohibit vector attraction and prevent nuisance and odor generation;

(D) Any composting facility that produces silage on a farm for animal feed; and

(E) Any home composting facility.

(F) Any Confined Animal Feeding Operation operating under a Confined Animal Feeding Operation permit issued by the Oregon Department of Agriculture and operating a composting facility, in conjunction with the Confined Animal Feeding Operation, in compliance with a composting facility management plan approved by the Oregon Department of Agriculture that meets the requirements of OAR 340-096-0090 and for which the Oregon Department of Agriculture is providing oversight under an agreement with the department. The Oregon Department of Agriculture may require that a facility subject to this section (3)(a)(F) comply with OAR 340-096-0080: *Screening*.

(4) All composting facilities that are determined by the department to present a risk to human health or the environment under OAR 340-096-0080(3)(b): *Screening*, or under (3)(a) of this rule, must comply with OAR 340-096-0090: *Operations Plan Approval* and OAR 340-096-0110: *Composting Permit*.

(5) All composting facilities that are not exempt under this rule, including but not limited to all facilities operating under a solid waste composting facility individual permit, general permit, or registration issued by the department prior to the effective date of this rule, must submit the materials required by OAR 340-096-0080: *Screening* within 180 days after the effective date of this rule. Any composting facility in operation before the effective date of these rules may continue in operation pending a determination by the department under OAR 340-096-0080: *Screening* and issuance by the department of a Registration under OAR 340-096-0100: *Registration* or a Composting Permit under OAR 340-096-0110: *Composting Permit*.

(6) Any person proposing to begin operation of a new composting facility or to substantially modify an existing facility, where such a facility is not exempt under section (3) of this rule, must comply with OAR 340-096-0080: *Screening* and provide to the department the information required by OAR 340-096-0080(1) at least 180 days before the facility is proposed to begin operation.

Stat. Auth.: ORS 459.045, ORS 459A.025 & ORS 468.020

Stats. Implemented: ORS 459.005, ORS 459.015 & ORS 459.205

Hist.: DEQ 41, f. 4-5-72, ef. 4-15-72; DEQ 5-1993, f. & cert. ef. 3-10-93; Renumbered from 340-061-0050; DEQ 10-1994, f. & cert. ef. 5-4-94; DEQ 9-1996, f. & cert. ef. 7-10-96; DEQ 27-1998, f. & cert. ef. 11-13-98

### **340-096-0070 Special Rules Pertaining to Composting: Performance Standards**

(1) All composting facilities must be designed, constructed, and operated in a manner that does not cause a discharge of leachate or stormwater from the facility to surface water, except:

(a) Leachate from a composting facility may be discharged to surface water only in compliance with a discharge permit issued by the department.

(b) Stormwater from a composting facility may be discharged to surface water only in compliance with a discharge permit issued by the department.

(2) All composting facilities that collect and dispose of leachate or stormwater in engineered structures must comply with the applicable requirements of OAR 340-096-0130: *Leachate Collection Design and Operating Requirements*.

(3) All composting facilities must be designed, constructed, and operated in a manner that does not cause a likely adverse impact to groundwater under OAR 340 Division 40. All composting facilities proposing to use infiltration in soil as a method for managing leachate or stormwater must comply with OAR 340-096-0120: *Groundwater Protection*.

(4) All composting facilities must be designed, constructed, and operated in a manner that, to the greatest extent practicable, consistent with proper facility design and operation, controls and minimizes odors that are likely to cause adverse impacts outside the boundaries of the facility.

(5) All composting facilities must be designed, constructed, and operated in a manner that achieves human pathogen reduction as required by OAR 340-096-0140: *Pathogen Reduction*.

(6) All composting facilities must be designed, constructed, and operated in a manner that controls or prevents propagation, harborage, or attraction of vectors, including but not limited to rats, birds, and flies.

(7) All composting facilities must comply with all other applicable laws and regulations.

### **340-096-0080 Special Rules Pertaining to Composting: Screening**

(1) All composting facilities not exempted by OAR 340-96-0060(3)(a) will be screened by the department under this rule to determine whether the facility poses a risk to human health or the environment. All facilities subject to this rule must provide to the department the information described below. The department may require any additional information the department considers necessary to evaluate the potential environmental risks posed by a facility. All information must be submitted on application forms provided by the department and include the screening fee required by OAR 340-097-0120(3). The application must be accompanied by all required exhibits using paper with

recycled content with copy printed on both sides of the paper whenever possible, follow the organizational format and include the level of informational detail required by the department, and be signed by the property owner or person in control of the premises.

(a) Physical information, including:

(A) The location and site schematic, including areas for management of leachate and stormwater, of the existing or proposed composting facility by latitude and longitude, identified on a map;

(B) The location of the facility on a tax lot map;

(C) The location of and distance to surface water in the drainage area of the composting facility, and all drainage channels, ditches and any other water conveyances leading from the composting facility to surface water, identified on a map;

(D) Distance to the uppermost groundwater aquifer and other known aquifers at the location of the composting facility and in any areas proposed for infiltration of leachate or stormwater from the composting facility;

(E) Soil type or types, and permeability if known or available, at the location of the composting facility and in any areas proposed for infiltration of leachate or stormwater;

(F) The location and well logs of all wells on the property where the composting facility is located; the location and well logs of any wells within ¼ mile of the composting facility; and, if known, the location of any proposed wells within ¼ mile of the composting facility;

(G) The locations of all commercial and residential structures within a one mile radius of the composting facility, identified on a map or photograph;

(H) The prevailing wind direction, by season, identified on a map, and any other climactic information related to wind and air movement;

(b) Operational information, including:

(A) A description of the composting operation including feedstock types, volumes and sources, any grinding or other preparation of feedstocks, composting methods, and uses of composted material;

(B) A description of any leachate and stormwater produced at the facility, including information about the chemical composition of leachate;

(C) A description of all existing or planned structures and features for managing leachate and stormwater, including but not limited to information about any detention or infiltration basins, and any infiltration structures such as filter strips and bioswales;

(D) If the facility is subject to the pathogen reduction requirements of OAR 340-096-0070(5), a description of the methods the facility will use to achieve such pathogen reduction;

(E) A description of the methods the facility will use to achieve vector control;

(F) Any seasonal variances in the operation of the facility;

(G) Contact information including the composting facility operator, composting facility owner, and property owner; and

(H) Operational and compliance history of the facility.

(c) Information regarding other permits, including any other known or anticipated permits from the department or other governmental agencies. If previously applied for, include a copy of such permit application and, if granted, a copy of such permit.

(d) A Land Use Compatibility Statement pursuant to OAR 340 Division 18 and a statement that the facility is compatible with the solid waste management plan for the jurisdiction.

(2) To conduct the evaluation under section (3) of this rule, the department may require a composting facility to conduct groundwater sampling or monitoring and provide analytical results to the department.

(3) Based on information provided by the composting operator, and any other information available to the department, the department will evaluate the current and likely future impact of the composting facility to human health and the environment. The department will evaluate the degree to which a composting facility may present a risk of adverse effects to surface water and groundwater, and the likelihood the facility will create unacceptable odor problems.

(a) All composting facilities the department determines present a low environmental risk must comply with OAR 340-096-0100: *Registration*. Any requirements the department determines are necessary for a facility to operate in compliance with OAR 340-096-0070: *Performance Standards* will be incorporated into the registration Approval Conditions under OAR 340-096-0100. Approval Conditions may include any of the matters addressed in OAR 340-096-0090: *Operations Plan Approval*. The department will consider a composting facility a “low risk” facility if, based on the information provided under (1) and (2) of this rule, the specific location of the facility, the feedstocks used, and the operational and compliance history of the facility, the department determines:

(A) The facility is not likely to cause discharge of leachate or leachate-contaminated stormwater to surface water;

(B) Infiltration of leachate or stormwater from the facility will not cause a likely adverse impact to soil, groundwater quality, or indirectly to surface water quality; and

(C) The facility is not likely to cause odor problems beyond the boundaries of the facility.

(b) All composting facilities the department determines present a risk of potential adverse effects to surface water, groundwater, or soil, or may create odor problems beyond the boundaries of the facility, must comply with OAR 340-096-0090: *Operations Plan Approval*. The department will consider a composting facility to present a “ risk of potential adverse effects” if, based on the information provided under (1) and (2) of this rule, including but not limited to the location of the facility; the design, structures, and operational requirements necessary to meet the requirements of OAR 340-096-0070; the feedstocks used, and the operational and compliance history of the facility, the department determines:

(A) The composting facility presents a risk of unpermitted releases of leachate or stormwater to surface water;

(B) The facility presents a risk of causing a likely adverse impact to surface water or groundwater;

(C) The facility presents a risk of causing an unacceptable adverse impact to soil; or

(D) The facility presents a risk of causing odor problems beyond the boundaries of the facility.

(4) The department may at any time reevaluate a composting facility under this rule and may assign a facility to a different category under section (3) of this rule.

### **340-096-0090 Special Rules Relating to Composting: Operations Plan Approval**

(1) All composting facilities subject to this rule must prepare a composting facility operations plan for review and approval by the department that describes how the composting facility will be designed and operated to meet the performance standards set out in OAR 340-096-0070. The Operations Plan Approval fee required by OAR 340-097-0120(4) and, if applicable, the Engineering review fee required by OAR 340-097-0120(5), must be submitted to the department with the proposed plan.

(2) Except as provided in OAR 340-096-0060(5), a composting facility subject to this rule may not begin or continue operation until the department approves the facility Operations Plan. All composting facilities subject to this rule must operate in compliance with the Operations Plan approved by the department. Any significant changes in the Operations Plan must be approved by the department.

(3) If the department determines that an approved Operations Plan is incomplete, inadequate, or otherwise fails to provide the necessary information and assurances that

the composting facility will comply with OAR 340-096-0070: *Performance Measures* or with section (6) of this rule, the department may require the composting facility to revise the Operations Plan.

(4) After receiving a proposed Operations Plan, the department will provide the composting facility operator with an opportunity to meet with the department and discuss the composting facility, the proposed Operations Plan, and any department concerns or issues related to the facility and the plan. Upon final department approval of an Operations Plan, the composting facility must comply with OAR 340-096-0110: *Composting Permit*.

(5) All Operations Plans subject to this rule must address the elements set out in sections (5)(a) through (f) of this rule.

(a) Feedstocks. The Operations Plan must describe the types and volumes of feedstocks the facility will accept, the methods the facility will use to produce compost, and the proposed uses of the compost.

(b) Protection of Surface Water. The Operations Plan must describe how the facility will be designed and operated to comply with OAR 340-096-0070(1) and (2) by describing the operational procedures and any structures the facility will use to manage any leachate and any stormwater generated at the facility. Any facility that manages leachate or stormwater in an engineered structure must submit detailed plans and specifications for any such structures and comply with OAR 340-096-0130: *Leachate and Stormwater Collection Design and Management Requirements*.

(c) Protection of groundwater. The Operations Plan must describe how the facility will be designed and operated to comply with OAR 340-096-0070(3). Any facility that manages leachate or stormwater through infiltration into soil must comply with OAR 340-096-0120: *Groundwater*.

(d) Odor control. The Operations Plan must describe the methods and procedures the facility will use to comply with OAR 340-096-0070(4) and with OAR 340-096-0150: *Odors*.

(e) Pathogen reduction. Unless the facility is exempt from pathogen reduction under OAR 340-096-0140(1), the Operations Plan must describe methods the facility will use to comply with OAR 340-096-0140: *Pathogen Reduction*, including:

(A) Methods the facility will use to comply with OAR 340-096-0070(5) to achieve the pathogen reduction standards set out in OAR 340-096-0140(2);

(B) Methods the facility will use for sampling and testing of composted material to assure that the required human pathogen reduction is being achieved; and

(C) Procedures the facility will use for handling composted material that does not meet pathogen reduction standards.

(f) Vector attraction. The Operations Plan must describe methods the composting operation will use to comply with OAR 340-096-0070(6) to minimize the attraction of vectors such as rats, birds, flies.

(g) Closure. The Operations Plan must include a Closure Plan that must address:

(A) Removal of equipment and materials used to operate and maintain the facility;

(B) Disposal of unused feedstocks, partially processed residues and finished compost;

(C) Disposal of processed compost that, due to concentrations of contaminants, cannot be marketed or used for beneficial purposes; and

(D) Abandonment of treatment facilities, including ponds and lagoons, and removal of residues, including a preliminary evaluation of potential impacts to soil and groundwater below ponds and treatment facilities.

(h) Post Closure. The Operations Plan must include a Post-Closure Plan to address groundwater and surface water issues after the facility is closed.

(i) Recordkeeping. The Operations Plan must describe the methods the facility will use for keeping records of:

(A) Weight and volumes of incoming feedstocks;

(B) Pathogen testing conducted under 5(e) of this rule;

(C) Complaints and actions taken to address complaints; and

(D) Any upsets or violations of the Operations Plan.

(6) As part of the Operations Plan approval process, the department will review with the composting facility the matters in (6)(a) through (l) of this rule. The department may require, either in its initial Operations Plan review or under section (3) of this rule, that an Operations Plan include any of the matters in sections (6)(a) through (l) of this rule if the department determines that such measures are necessary for the facility to meet the requirements of OAR 340-096-0070: *Performance Standards*, to comply with any other laws or regulations, or when required to correct other unacceptable conditions at a facility.

(a) Process controls. When required by the department, an Operations Plan must:

(A) Describe how the facility will monitor and record compost processing parameters including nutrient balance (C:N ratio), moisture content, aeration, pH and temperature and compost retention time; and

(B) Include a mass balance calculation showing all feedstocks and amendments and all products produced. The mass balance calculation must be detailed and use a standard unit of measurement throughout.

(b) Material management. When required by the department, an Operations Plan must:

(A) Describe how the facility will handle feedstocks and composted material to prevent pathogen regrowth and cross contamination of piles.

(B) Describe how the facility will manage and dispose of composted material that due to concentrations of contaminants cannot be marketed or used for beneficial purposes.

(c) Removal of composted material. When required by the department, an Operations Plan must provide for removal of composted material from the facility as frequently as possible, but not later than two years after processing is completed.

(d) Incorporation of feedstocks. When required by the department, the Operations Plan must include a schedule for incorporating feedstocks into active compost piles.

(e) Storage of feedstocks. When required by the department, the Operations Plan must:

(A) Identify designated areas where all feedstocks deposited at the site will be confined;

(B) Provide that accumulation of feedstocks does not create odor or vector problems, or create other nuisance conditions;

(C) Provide that undisposed residues must be kept to minimum practical quantities; and

(D) Provide for facilities and procedures for handling, recycling or disposing of feedstocks that are non-biodegradable by composting.

(f) Salvage. When required by the department, the Operations Plan must provide procedures for recovery of materials such as metal, paper and glass so that recovery does not interfere with composting operations, or create unsightly conditions or vector harborage.

(g) Access Roads. When required by the department, the Operations Plan must:

(A) Provide for all-weather roads from the public highway or roads to and within the compost operation that are designed and maintained to prevent traffic congestion, traffic hazards and dust and noise pollution.

(B) Provide for effective barriers to unauthorized entry and dumping, such as fences, gates and locks.

(h) Fire Protection. When required by the department, the Operations Plan must provide for fire protection in compliance with applicable state and local fire regulations.

(i) Noise, dust and litter. When required by the department, the plan must provide for effective methods to reduce or avoid noise, dust, and litter, and to prevent tracking of mud or other materials off the facility;

(j) Containers. When required by the department, the operations plan must describe how the facility will clean and manage all containers at the facility.

(k) Vehicles. When required by the department, the Operations Plan must describe how all vehicles and devices operated by facility will be maintained and operated to prevent leaking, or spilling of feedstocks or finished compost while in transit.

(l) Truck Covers. When required by the department, the Operations Plan must describe how the facility will notify all incoming feedstock haulers that trucks must be covered or suitably cross-tied to prevent any load loss during shipment.

Stat. Auth.: ORS 459.045, ORS 459A.025 & ORS 468.020

Stats. Implemented: ORS 459.005, ORS 459.015 & ORS 459.205

### **340-096-0100**

#### **Special Rules Relating to Composting: Registration**

(1) All composting facilities required to register with the department by OAR 340-096-0080(3)(a) must comply with this rule. Except as provided in OAR 340-096-0060(5), all facilities subject to this rule must complete registration before a facility may operate.

(2) After a facility has completed the requirements of OAR 340-093-0100 with respect to public notice and comment, if the department determines that the facility has met all of the requirements of OAR Divisions 93, 96, 97, and all other applicable statutes and regulations, the department will register the facility. The registration is a permit for purposes of OAR Chapter 340, Division 18 and OAR Chapter 340 Divisions 93, 96, and 97, except the following: OAR 340-093-0070 (3); OAR 340-093-0130; and OAR 340-093-0140.

(3) All composting facilities registered under this rule must comply with the following:

(a) For facilities with department Conditions of Approval for operation of the facility, comply with all conditions;

(b) If required by the department, submit an annual report of the weight of feedstocks used for composting on a form provided by the department;

(c) If a composting facility discharges leachate or stormwater under a permit issued by the department, submit an annual report to the department with the sampling data required by the permit or permits;

(d) Immediately notify the department of any violation of the facility Conditions of Approval or OAR 340-096-0070: *Performance Standards*;

(e) Immediately notify the department of any significant change of status of the composting facility, including any change in the ownership or operation of the facility, the location of the composting operation, the type or volume of feedstocks used, and the composting process used by the facility;

(f) Keep all required records. If required by the department, maintain records for a minimum of ten years. In the case of a change in ownership of the composting facility, the owner is responsible for ensuring that the records are transferred from the previous owner and maintained for the required ten years;

(g) At the request of the department, submit any records or reports the department may require to ensure compliance with conditions of OAR chapter 340, divisions 93, 96, and 97; and

(h) If required by the department, demonstrate financial assurance as provided in OAR 340-096-0001. The department may tailor the financial assurance requirements to the nature of the facility and may exempt a facility if, based on the information submitted under OAR 340-096-0070, an Operations Plan approved under OAR 340-0096-0090, and any other information available to the department, the department determines that the facility is not likely to generate significant amounts of residual waste materials or contamination from the operation of the facility that will remain at closure; and

(i) If required, pay the Engineering Review fee under OAR 340-097-0120(5).

### **340-096-0110**

#### **Special Rules Pertaining to Composting: Composting Permit**

(1) All composting facilities required by OAR 340-096-0060 to operate under a Composting Permit must comply with this rule. Except as provided in OAR 340-096-0060(5), all facilities subject to this rule must receive a Composting Permit before a facility may operate.

(2) After a facility has completed OAR 340-096-0090: *Operations Plan Approval* and the department has approved the facility Operations Plan, to receive a Composting Permit, the facility must:

(a) Pay the plan approval fee required by OAR 340-097-0120(4); and

(b) If required, pay the Engineering Review fee under OAR 340-097-0120(5).

(3) After a facility has completed the requirements of section (2) of this rule, and after completing the requirements of OAR 340-093-0100 with respect to public notice and comment, if the department determines that the facility has met all of the requirements of OAR Divisions 93, 96, 97, and all other applicable statutes and regulations, the department will issue a Compost Permit for the facility. The Compost Permit is a permit for purposes of OAR Chapter 340, Division 18 and OAR Chapter 340 Divisions 93, 96, and 97, except the following: OAR 340-093-0070 (3); OAR 340-093-0130; and OAR 340-093-0140.

(4) All composting facilities permitted under this rule must comply with the following:

(a) Comply with OAR 340-096-0700: *Performance Standards*;

(b) Comply with all requirements of the facility Operations Plan;

(c) If required by the department, submit an annual report of the weight of feedstocks used for composting on a form provided by the department;

(d) If a composting facility discharges leachate or stormwater under a permit issued by the department, submit an annual report to the department with the sampling data required by the permit or permits;

(e) Immediately notify the department of any violation of the facility Operations Plan, Conditions of Approval, or OAR 340-096-0070: *Performance Standards*;

(f) Immediately notify the department of any significant change of status of the compost operation, including any change in the ownership or operation of the facility, the location of the facility, type or volume of feedstocks used, and the composting process used by the facility;

(g) Keep all required records. If required by the department, maintain records for a minimum of five years. In the case of a change in ownership of the composting facility, the owner is responsible for ensuring that the records are transferred from the previous owner and maintained for the required five years;

(h) Comply with OAR 340-097-0120(6)(c) with respect to fees;

(i) At the request of the department, submit any records or reports the department may require to ensure compliance with conditions of- OAR chapter 340, divisions 93, 96, and 97; and

(j) If required by the department, demonstrate financial assurance as provided in OAR 340-096-0001. The department may tailor the financial assurance requirements to the nature of the facility and may exempt a facility if the department determines, based on the information submitted under OAR 340-096-0070, an Operations Plan approved under OAR 340-0096-0090, and any other information available to the department, the facility is not likely to generate significant amounts of residual waste materials or contamination from the operation of the facility that will remain at closure.

### **340-096-0120 Special Rules Pertaining to Composting: Groundwater Protection**

(1) All composting facilities using or proposing to use infiltration in soil as a method for managing leachate or stormwater must comply with this rule.

(2) Methods of soil infiltration that are subject to this rule include, but are not limited to:

(a) Conducting any composting operations, including grinding, chipping, storing feedstocks, or composting feedstocks on surfaces that do not meet the requirements of OAR 340-096-0130: *Leachate Collection Design and Management Requirements*;

(b) Discharging any liquids from the composting facility, including leachate, leachate contaminated stormwater, or stormwater, to filter strips, bioswales, or other similar features; and

(c) Discharging any liquids from the composting facility, including leachate, leachate contaminated stormwater, or stormwater, to fields, pastures, cropland, or ditches.

(3) All composting facilities subject to this rule must provide to the department the information described in OAR 340-096-0080(1) and (2), and any other information required by the department to evaluate to proposed use of infiltration in soil.

(4) The department will evaluate the proposed infiltration methods to determine whether the proposed infiltration may cause likely adverse impacts to groundwater under OAR 340 Division 40.

(5) The department may approve, disapprove, restrict, require modifications to, and attach conditions to proposed infiltration methods and procedures. When approved by the department, the proposed infiltration methods and procedures, and any limitations, restrictions, and conditions required by the department as part of its approval, must be incorporated into the facility Operations Plan under OAR 340-096-0090. For “low risk” facilities exempt from OAR 340-096-0090 under OAR 340-096-0080(3)(a), any limitations, restrictions, and conditions required by the department will be incorporated into the facility Conditions of Approval under OAR 340-096-0100.

(6) As part of its approval under this rule, the department may require the facility to conduct groundwater sampling and monitoring, and submit analytical results to the department.

(7) The department may prohibit the use of infiltration to soil as a method for managing leachate or stormwater, for some or all actions, in some or all areas of a composting facility, if based on the factors in OAR 340-096-0080 and any other information available to the department, the department determines that infiltration at a facility is likely to cause an adverse impact to groundwater under OAR 340 Division 40. The department may require the facility to conduct operations on protective surfaces to prevent such impacts. Any such protective surface must comply with OAR 340-096-0130(8).

(8) Any infiltration method that is an Underground Injection Control, as defined in OAR Chapter 340, Division 44, must comply with that Division.

### **340-096-0130 Special Rules Pertaining to Composting: Leachate Collection Design and Management Requirements**

(1) All composting facilities that collect leachate or stormwater in engineered structures must comply with this rule.

(2) If required by the department, a person proposing to construct a new composting facility that is subject to this rule must prepare and submit to the department a Facility Design and Construction Plan, stamped by a registered professional engineer, as part of the Operations Plan approval under OAR 340-096-0090. The Plan must include site layout, lining and leachate collection/management system, and stormwater and process water collection and treatment facilities.

(3) If required by the department, any person subject to this rule must submit site design and engineering plans for any new facility construction such as site modifications, compost liners/pads, closure of existing composting areas/systems, and/or other ancillary facilities.

(4) All construction subject to this rule must be performed in accordance with the approved plans and specifications, including all conditions of approval. Any amendments to those plans and specifications must be approved in writing by the department.

(5) If required by the department, prior to initiating construction, a facility subject to this rule must submit and receive written department approval of complete construction documents for the project to be constructed. The construction documents submitted must:

(a) Define the construction project team;

(b) Include construction contract documents specifying material and workmanship, and requirements to guide how the Constructor is to furnish products and execute work; and

(c) Include a Construction Quality Assurance (CQA) plan describing the measures that will be taken to monitor and ensure that the quality of materials and the work performed by the Constructor complies with project specifications and contract requirements.

(6) If required by the department, within 90 days of completing construction, a facility subject to this rule must submit to the department a Construction Certification Report, prepared by a qualified independent party, to document and certify that all required components and structures have been constructed in compliance with the permit requirements and approved design specifications. This submittal shall include “as constructed” facility plans which note any changes from the original approved plans.

(7) For a facility subject to section (6) of this rule, the facility must not accept feedstocks for storage, processing or composting in newly constructed facilities or areas until the department has accepted the Construction Certification Report. If the department does not respond in writing to the Construction Certification Report within 30 days of its receipt, the facility may accept feedstock at the facility in the newly constructed facilities or areas.

(8) Protective surface requirements. If a protective surface is required by the department under OAR 340-096-0120 for feedstock storing, mixing, grinding, or active processing areas, the surfaces must be designed to prevent release of leachate to surface water or groundwater from such areas. The surface must:

(a) Consist of at least two (2) feet of compacted soil with a hydraulic conductivity of no more than  $1 \times 10^{-6}$  cm/sec or an equivalent protection of groundwater;

(b) Be capable of resisting damage from movement of mobile operating equipment and weight of stored piles;

(c) Prevent ponding; and

(d) Direct all collected leachate and stormwater to collection devices.

(9) Leachate storage design must assure collection of any leachate generated from areas of feedstock collection and preparation and active composting areas and convey the leachate to a storage basin, tank or other containment structure that has:

(a) Adequate capacity to collect and convey the amount of leachate generated. Volume calculations must be based on facility design, monthly water balance and precipitation data;

(b) A geomembrane liner or alternative design approved by the department that is equivalent to at least two (2) feet of compacted soil with a hydraulic conductivity of no more than  $1 \times 10^{-6}$  cm/sec;

(c) Secondary containment for tanks used to store leachate; and

(d) Underground tanks must have a monitoring system to identify releases.

(e) If part of the site design, dikes or slopes designed to maintain their structural integrity under conditions of a leaking liner and capable of withstanding erosion from wave action, overfilling or precipitation.

(10) Any leachate collection system subject to this rule must describe the methods the facility will use to beneficially reuse or properly dispose of all collected leachate.

(11) The department may approve alternative methods of compliance with this rule if the department determines that the proposed alternative methods will achieve the same level of protection. Proposed design alternatives to subsections (2) and (3) of this rule must be accompanied by engineered specifications for department review and approval.

Stat. Auth.: ORS 459.045, ORS 459A.025 & ORS 468.020

Stats. Implemented: ORS 459.005, ORS 459.015 & ORS 459.205

Hist.: DEQ 17-1997, f. & cert. ef. 8-14-97; DEQ 27-1998, f. & cert. ef. 11-13-98

### **340-096-0140**

#### **Special Rules Pertaining to Composting: Pathogen Reduction:**

(1) All composting facilities must comply with this rule, except that agricultural operations as defined by ORS 467.120(2)(a) producing composted material for on-farm use are not subject to the requirements of this rule. The department may require that an agricultural operation comply with this rule if the department determines that such compliance is necessary to protect human health or the environment.

(2) All composted material must meet the following limits:

(a) For composted material produced from Type 1 or Type 3 feedstock, or a mix of Type 1 and 3 feedstocks, analysis must be performed for salmonella or fecal coliform and meet the following limits:

(A) Salmonella analysis must result in less than 3 Most Probable Number per 4 grams of total solids (dry weight).

(B) Fecal coliform analysis must result in less than 1,000 Most Probable Number per gram of total solids (dry weight).

(b) For composted material produced from Type 1 or Type 3 feedstock with less than 50% by volume of Type 2 feedstock, analysis must be performed for salmonella or fecal coliform and meet the following limits:

(A) Salmonella analysis must result in less than 3 Most Probable Number per 4 grams of total solids (dry weight).

(B) Fecal coliform analysis must result in less than 1,000 Most Probable Number per gram of total solids (dry weight).

(c) For composted material produced from feedstock containing more than 50% volume of Type 2 feedstock in the initial pile, analysis must be performed for fecal coliform and meet the following limits:

(A) Analysis must result in less than 1,000 Most Probable Number per gram of total solids (dry weight).

(3) Methods of Pathogen Reduction. All composting facilities subject to this rule must document and implement a pathogen reduction plan that addresses requirements of the Code of Federal Regulations, **40 CFR Part 503**. The plan must include a Process to Further Reduce Pathogen (PFRP), pursuant to **40 CFR Part 503 Appendix B, item (B)(1)**, dated February 19, 1993, that must include **one** of the following elements:

(a) Using either the within-vessel composting method or the static aerated pile composting method, the temperature of the active compost pile must be maintained at 55 degrees Celsius or higher for three days;

(b) Using the windrow composting method, the temperature of the active compost pile must be maintained at 55 degrees Celsius or higher for 15 days or longer. During the period when the compost is maintained at 55 degrees Celsius or higher, there must be a minimum of five turnings of the windrow; or

(c) An alternative method that permittee can demonstrate achieves an equivalent reduction of human pathogens.

(4) Testing compost for pathogen reduction. All composting facilities subject to this rule must test composted material with the following frequency:

(a) If less than 2,500 tons of composted material from Type 1 and 2 feedstocks are produced per year, testing must be conducted once a year.

(b) If more than 2,500 tons of composted material from Type 1 and 2 feedstock are produced per year, testing must be conducted every 5,000 tons of feedstock used or a maximum of once every three months.

(c) If less than 2,500 tons of composted material from Type 3 feedstocks are produced per year, testing must be conducted once every four months.

(d) If more than 2,500 tons of composted material from Type 3 are produced per year, testing must be conducted every 5,000 tons of feedstock used or monthly.

Stat. Auth.: ORS 459.045, ORS 459A.025 & ORS & ORS 468.020

Stats. Implemented: ORS Stats. Implemented: ORS 459.005, ORS 459.015 & ORS 459.205

**340-096-0150**

**Special Rules Pertaining to Composting: Unacceptable Odors**

(1) The department recognizes that the microbial metabolic activity in compost piles causes odors, and that composting facilities cannot completely eliminate all odors. All composting facilities must be designed, constructed, and operated in manner that, to the greatest extent practicable consistent with proper facility design and operation, controls and minimizes odors that are likely to cause adverse impacts outside the boundaries of the facility.

(2) The department may require a facility to prepare an Odor Minimization Plan under section (5) of this rule, and may further require the facility to modify operations and otherwise implement all reasonable and practicable measures determined necessary by the department to control and minimize adverse impacts of odors outside the boundaries of the facility. In deciding whether to require an Odor Management Plan, the department will consider the frequency, duration, strength and intensity of odors; the number and frequency of complaints; and the number of people impacted.

(3) When a composting facility receives a complaint about odor, the facility must:

(a) Contact the complainant within 24 hours to discuss the complaint;

(b) Keep a record of the complaint; the name and telephone number of the complainant, when available; the date the complaint was received; and

(c) Immediately initiate procedures at the facility as appropriate to reduce or eliminate the odor identified by the complainant; and

(d) Initiate procedures as appropriate to prevent the release of odors in the future.

(4) A facility must notify the department :

(a) If a facility receives complaints from five or more individuals about a given event, or

(b) If an odor event lasts for more than 24 hours without resolution or mitigation of the problem creating the odor event.

(5) Odor Minimization Plan. If required by the department under OAR 340-096-0090 or this rule, the compost facility must develop an Odor Minimization Plan to minimize odors. The plan must include:

(a) A management plan for malodorous loads;

(b) Procedures for receiving and recording odor complaints, immediately investigating any odor complaints to determine the cause of odor emissions, and remedying promptly any odor problems at the facility;

(c) Additional odor-minimizing measures, which may include the following:

(A) Avoidance of anaerobic conditions in the composting material;

(B) Use of mixing for favorable composting conditions;

(C) Formation of windrow or other piles into a size and shape favorable to minimizing odors;

(D) Use of end-product compost as cover to act as a filter during early stages of composting;

(E) Specification of a readily available supply of bulking agents, additives or odor control agents;

(F) Procedures for avoiding delay in processing and managing feedstocks during all weather conditions; and

(G) Methods for taking into consideration the following factors prior to turning or moving composted material:

(i) Time of day;

(ii) Wind direction;

(iii) Percent moisture;

(iv) Estimated odor potential; and

(v) Degree of maturity.

Stat. Auth.: ORS 468, ORS 468A.010 & ORS 468A.025 Stats. Implemented: ORS 468A.010 & ORS 468A.025

Hist.: DEQ 2-2001, f. & cert. ef. 2-5-01

**The Oregon Administrative Rules contain OARs filed through May 15,  
2009**

**DEPARTMENT OF ENVIRONMENTAL QUALITY**

**DIVISION 97**

**SOLID WASTE: PERMIT FEES**

**340-097-0110**

**Solid Waste Permit and Disposal Fees**

- (1) Each person required to have a Solid Waste Disposal Permit ~~shall~~is be subject to the following fees:
- (a) An application processing fee for new facilities which ~~shall~~must be submitted with the application for a new permit ~~or registration~~ as specified in OAR 340-097-0120(2);
- (b) A solid waste permit ~~or registration~~ compliance fee as listed in OAR 340-097-0120(3); and
- (c) The 1991 Recycling Act permit fee as listed in OAR 340-097-0120(4).
- (2) Each disposal site receiving domestic solid waste ~~shall~~will be subject to the per-ton solid waste disposal fees on domestic solid waste as specified in OAR 340-097-0120(5).
- (3) Out-of-state solid waste. Each disposal site or regional disposal site receiving solid waste generated out-of-state ~~shall~~must pay a per-ton solid waste disposal fee as specified in OAR 340-097-0120(5).
- (4) Oregon waste disposed of out-of-state. A person who transports solid waste that is generated in Oregon to a disposal site located outside of Oregon that receives domestic solid waste shall pay the per-ton solid waste disposal fees as specified in OAR 340-097-0120(5):
- (a) For purposes of this rule and OAR 340-097-0120(5), a person is the transporter if the person transports or arranges for the transport of solid waste out of Oregon for final disposal at a disposal site that receives domestic solid waste, and is:

(A) A solid waste collection service or any other person who hauls, under an agreement, solid waste out of Oregon;

(B) A person who hauls his or her own industrial, commercial or institutional waste or other waste such as cleanup materials contaminated with hazardous substances;

(C) An operator of a transfer station, when Oregon waste is delivered to a transfer station located in Oregon and from there is transported out of Oregon for disposal;

(D) A person who authorizes or retains the services of another person for disposal of cleanup materials contaminated with hazardous substances; or

(E) A person who transports infectious waste.

(b) Notification requirement:

(A) Before transporting or arranging for transport of solid waste out of the State of Oregon to a disposal site that receives domestic solid waste, a person ~~shall~~must notify the ~~D~~department in writing on a form provided by the ~~D~~department. The persons identified in subsection (4)(a) of this rule are subject to this notification requirement;

(B) The notification ~~shall~~must include a statement of whether the person will transport the waste on an on-going basis. If the transport is on-going, the person ~~shall~~must re-notify the ~~D~~department by January 1 of each year of his or her intention to continue to transport waste out-of-state for disposal.

(c) As used in this section, "person" does not include an individual transporting the individual's own residential solid waste to a disposal site located out of the state.

(5) Fees. The solid waste permit ~~or registration~~ compliance fee must be paid for each year a disposal site is in operation or under permit. The 1991 Recycling Act permit fee, if applicable, must be paid for each year the disposal site is in active operation. The fee period shall be prospective and is as follows:

(a) New sites:

(A) Any new disposal site ~~shall~~will owe a solid waste permit ~~or registration~~ compliance fee and 1991 Recycling Act permit fee, if applicable, 30 days after the end of the calendar quarter in which solid waste is received at the facility, except as specified in paragraph (5)(a)(B), (C) or (D) of this rule;

(B) For a new disposal site receiving less than 1,000 tons of solid waste a year. For the first year's operation, the entire permit compliance fee ~~shall~~will apply if the facility is placed into operation on or before September 1. Any new facility placed into operation after September 1 ~~shall~~will not owe a permit compliance fee until the following January

31. An application for a new disposal site receiving less than 1,000 tons of solid waste a year ~~shall~~must include the applicable permit compliance fee for the first year of operation;

(C) For a new industrial solid waste disposal site, sludge or land application disposal site or solid waste treatment facility receiving more than 1,000 but less than 20,000 tons of solid waste a year. These facilities ~~shall~~will owe a solid waste permit compliance fee and 1991 Recycling Act permit fee, if applicable, on January 31 following the calendar year in which the facility is placed into operation;

(D) For a new transfer station, material recovery facility or composting facility. For the first fiscal year's operation, the entire permit compliance fee ~~shall~~will apply if the facility is placed into operation on or before April 1. Any new facility placed into operation after April 1 ~~shall~~will not owe a permit compliance fee until the ~~D~~department's annual billing for the next fiscal year. An application for a new transfer station, material recovery facility or composting facility ~~shall~~must include the applicable permit ~~or registration~~ compliance fee for the first year of operation.

(b) Existing permitted sites. Any existing disposal site that is in operation, is permitted to receive or receives solid waste in a calendar year must pay the solid waste permit ~~or registration~~ compliance fee and 1991 Recycling Act permit fee, if applicable, for that year as specified in OAR 340-097-0120(3)(a), (b), (c) and (4). A facility ~~shall~~will be deemed to be an "existing permitted site" from the time of permit issuance;

(c) Closed sites. If a land disposal site stops receiving waste before April 1 of the fiscal year in which the site permanently ceases active operations, the permittee ~~shall~~must pay the solid waste permit ~~or registration~~ compliance fee for the "year of closure" as specified in OAR 340-097-0120(3)(d)(A) as well as the permit compliance fee paid quarterly by the permittee based on the waste received in the previous calendar quarters. If a land disposal site has permanently ceased receiving waste and the site is closed, a solid waste permittee ~~shall~~must pay the solid waste permit compliance fee for closed sites as specified in OAR 340-097-0120(3)(d);

(d) The Director may alter the due date for the solid waste permit ~~or registration~~ compliance fee and, if applicable, the 1991 Recycling Act permit fee upon receipt of a justifiable request from a permittee.

(6) Tonnage reporting. The permit ~~or registration~~ compliance fee, 1991 Recycling Act permit fee if applicable, and per-ton solid waste disposal fees, if applicable, ~~shall~~must be submitted together with a form approved by the ~~D~~department. Information reported ~~shall~~must include the amount and type of solid waste and any other information required by the ~~D~~department to substantiate the tonnage or to calculate the state material recovery rate.

(7) Calculation of tonnage. Permittees and registrants are responsible for accurate calculation of solid waste tonnage. For purposes of determining appropriate fees under OAR 340-097-0120(3) through (5), annual tonnage of solid waste received ~~shall~~must be calculated as follows:

(a) Municipal solid waste facilities. Annual tonnage of solid waste received at municipal solid waste facilities, including construction and demolition sites and municipal solid waste composting facilities, receiving 50,000 or more tons annually ~~shall~~must be based on weight from certified scales. When certified scales are required, all solid waste received at the facility for disposal ~~shall~~must be weighed at the facility's scales, except as otherwise approved by the ~~D~~department in writing. If certified scales are required but are temporarily not functioning, all solid waste received at the facility ~~shall~~must either use other certified scales in the area or estimate tonnage as specified in this section. If certified scales are not required, estimated annual tonnage for municipal solid waste, including that at municipal solid waste composting facilities will be based upon 300 pounds per cubic yard of uncompacted waste received, and 700 pounds per cubic yard of compacted waste received. If yardage is not known, the solid waste facility may use one ton per resident in the service area of the disposal site, unless the permittee demonstrates a more accurate estimate. For other types of wastes received at municipal solid waste sites and where certified scales are not required or not available, the conversions and provisions in subsection (b) of this section ~~shall~~must be used;

(b) Industrial facilities. Annual tonnage of solid waste received at industrial facilities receiving 50,000 or more tons annually ~~shall~~must be based on weight from certified scales. When certified scales are required, all solid waste received at the facility ~~shall~~must be weighed at the facility's scales, except as otherwise approved by the ~~D~~department in writing. If certified scales are required but are temporarily not functioning, all solid waste received at the facility ~~shall~~must either use other certified scales in the area or estimate tonnage as specified in this section. If certified scales are not required, industrial sites ~~shall~~must use the following conversion factors to determine tonnage of solid waste disposed. Composting facilities ~~shall~~must use the following conversion factors for those materials appropriate for composting:

(A) Asbestos: 500 pounds per cubic yard;

(B) Pulp and paper waste other than sludge: 1,000 pounds per cubic yard;

(C) Construction, demolition and landclearing wastes: 1,100 pounds per cubic yard;

(D) Wood waste:

(i) Wood waste, mixed, including log sort waste (as defined in OAR 340-093-0030(94)): 1,200 pounds per cubic yard;

(ii) Wood waste including scrap lumber, pallets, wood from construction and demolition activities: 250 pounds per cubic yard;

(iii) Wood chips, green: 473 pounds per cubic yard;

(~~iii~~iv) Wood chips, dry: 243 pounds per cubic yard;

(iv) Sawdust, wet: 530 pounds per cubic yard;

(vi) Sawdust, bone dry: 275 pounds per cubic yard.

(E) Yard debris:

(i) Grass clippings: 950 pounds per cubic yard;

(ii) Leaves: 375 pounds per cubic yard;

(iii) Compacted yard debris: 640 pounds per cubic yard; and

(iv) Uncompacted yard debris: 250 pounds per cubic yard.

(F) ~~Food waste~~, manure, sludge, septage, grits, screenings and other wet wastes: 1,600 pounds per cubic yard;

(G) Food waste: 700 pounds per cubic yard

(~~G~~H) Ash and slag: 2,000 pounds per cubic yard;

(~~H~~I) Contaminated soils: 2,400 pounds per cubic yard;

(~~I~~J) Asphalt, mining and milling wastes, foundry sand, silica: 2,500 pounds per cubic yard;

(~~J~~K) For wastes other than the above, the permittee or registrant ~~shall~~must determine the density of the wastes subject to approval by the ~~D~~department in writing;

(~~K~~L) As an alternative to the above conversion factors, the permittee or registrant may determine the density of their own waste, subject to approval by the ~~D~~department in writing.

(8) The application processing fee may be refunded in whole or in part, after taking into consideration any costs the ~~D~~department may have incurred in processing the application, when submitted with an application if either of the following conditions exists:

(a) The ~~D~~department determines that no permit ~~or registration~~ will be required;

(b) The applicant withdraws the application before the ~~D~~department has granted or denied preliminary approval or, if no preliminary approval has been granted or denied, the ~~D~~department has approved or denied the application.

(9) Exemptions:

(a) Persons treating petroleum contaminated soils ~~shall~~will be exempt from the application processing and renewal fees for a Letter Authorization if the following conditions are met:

(A) The soil is being treated as part of a site cleanup authorized under ORS Chapters 465 or 466; and

(B) The ~~D~~department and the applicant for the Letter Authorization have entered into a written agreement under which costs incurred by the ~~D~~department for oversight of the cleanup and for processing of the Letter Authorization must be paid by the applicant.

(b) Persons to whom a Letter Authorization has been issued are not subject to the solid waste permit compliance fee or the 1991 Recycling Act permit fee.

(10) All fees shall be made payable to the Department of Environmental Quality.

(11) Submittal schedule:

(a) The solid waste permit ~~or registration~~ compliance fee ~~shall~~will be billed by the ~~D~~department to the holder of the following permits: transfer station, material recovery facility, composting facility and closed solid waste disposal site. The fee period ~~shall~~ be the state's fiscal year (July 1 through June 30), and the fee is due annually by the date indicated on the invoice. Any "year of closure" pro-rated fee ~~shall~~will be billed to the permittee of a closed site together with the site's first regular billing as a closed site;

(b) For holders of solid waste disposal site permits other than those in subsection (119)(a) of this rule, the solid waste permit ~~or registration~~ compliance fee and the 1991 Recycling Act permit fee, if applicable, are not billed to the permittee by the ~~D~~department. These fees ~~shall~~must be self-reported by the permittee to the ~~D~~department, pursuant to sections (5) and (6) of this rule. The fee period ~~shall~~will be either the calendar quarter or the calendar year, and the fees are due to the ~~D~~department as follows:

(A) For municipal solid waste disposal sites (including incinerators and energy recovery facilities) and construction and demolition landfills: on the same schedule as specified in subsection (11)(c) of this rule;

(B) For industrial solid waste disposal sites, sludge or land application disposal sites and solid waste treatment facilities:

(i) For sites receiving over 20,000 tons of waste a year: quarterly, on the 30th day of the month following the end of the calendar quarter; or

(ii) For sites receiving less than 20,000 tons of waste a year: annually, on the 31st day of January beginning on January 31, 1995;

(iii) A site which has received less than 20,000 tons of waste in past years but exceeds that amount in a given year, will in general be granted a one-year delay from the ~~D~~department before the site is required to begin submitting permit fees on a quarterly basis. If the site appears likely to continue to exceed the 20,000 annual ton limit, then the ~~D~~department will require the site to report tonnage and submit applicable permit fees on a quarterly basis.

(c) The per-ton solid waste disposal fees on domestic solid waste and the Orphan Site Account fee are not billed by the ~~D~~department. They are due on the following schedule:

(A) Quarterly, on the 30th day of the month following the end of the calendar quarter; or

(B) Annually, on the 31st day of January beginning in 1995, for holders of solid waste disposal site permits for sites receiving less than 1,000 tons of solid waste a year.

(d) The fees on Oregon solid waste disposed of out of state are due to the ~~D~~department quarterly on the 30th day of the month following the end of the calendar quarter, or on the schedule specified in OAR 340-097-0120(5)(e)(C). The fees ~~shall~~must be submitted together with a form approved by the ~~D~~department, which ~~shall~~must include the amount of solid waste, type, county of origin of the solid waste, and state to which the solid waste is being transported for final disposal.

Stat. Auth.: [ORS 459.045](#), [ORS 459.235](#), [ORS 459.236](#), [ORS 459A.025](#), [ORS 459A.110](#), [ORS 459A.115](#) & [ORS 468.065](#)

Stats. Implemented: [ORS 459.235](#), [ORS 459.236](#), [ORS 459A.110](#) & [ORS 459A.115](#)

Hist.: DEQ 3-1984, f. & ef. 3-7-84; DEQ 45-1990, f. & cert. ef. 12-26-90; DEQ 12-1991(Temp), f. & cert. ef. 8-2-91; DEQ 28-1991, f. & cert. ef. 12-18-91; DEQ 8-1992, f. & cert. ef. 4-30-92; DEQ 5-1993, f. & cert. ef. 3-10-93; Renumbered from 340-061-0115; DEQ 23-1993, f. 12-16-93, cert. ef. 1-1-94; DEQ 10-1994, f. & cert. ef. 5-4-94; DEQ 9-1996, f. & cert. ef. 7-10-96; DEQ 17-1997, f. & cert. ef. 8-14-97; DEQ 27-1998, f. & cert. ef. 11-13-98

### **340-097-0120**

#### **Permit/Registration Categories and Fee Schedule**

(1) For purposes of OAR Chapter 340, Division 97:

(a) A "new facility" means a facility at a location not previously used or permitted, and does not include an expansion to an existing permitted site;

(b) An "off-site industrial facility" means all industrial solid waste disposal sites other than a "captive industrial facility";

(c) A "captive industrial facility" means an industrial solid waste disposal site where the permittee is the owner and operator of the site and is the generator of all the solid waste received at the site.

(2) Application Processing Fee. Except as provided in sections (3), (4), and (5) of this rule with respect to composting facilities. An application processing fee ~~shall~~must be submitted with each application for a new facility, including application for preliminary approval pursuant to OAR 340-093-0090. The amount of the fee ~~shall~~will depend on the type of facility and the required action as follows:

(a) A new municipal solid waste landfill facility, construction and demolition landfill, incinerator, energy recovery facility, solid waste treatment facility, off-site industrial facility or sludge disposal facility:

(A) Designed to receive over 7,500 tons of solid waste per year: \$10,000;

(B) Designed to receive less than 7,500 tons of solid waste per year: \$5,000.

(b) A new captive industrial facility (other than a transfer station or material recovery facility): \$1,000;

(c) A new transfer station or material recovery facility:

(A) Receiving over 50,000 tons of solid waste per year: \$500;

(B) Receiving between 10,000 and 50,000 tons of solid waste per year: \$200;

(C) Receiving less than 10,000 tons of solid waste per year: \$100.

(d) Letter Authorization (pursuant to OAR 340-093-0060):

(A) New site: \$500;

(B) Renewal: \$500.

~~(e) A new composting facility (pursuant to OAR 340-096-0024):~~

~~(A) Composting facility registration: \$100;~~

~~(B) Composting facility general permit: \$500;~~

~~(C) Composting facility full permit. For facilities utilizing feedstocks for composting:~~

~~(i) Over 20 tons and less than or equal to 7,500 tons per year: \$1,000;~~

~~(ii) More than 7,500 tons per year: \$5,000.~~

~~(fe) Permit Exemption Determination (pursuant to OAR 340-093-0080(2)): \$500.~~

(3) Composting Facility Screening Fee. Every composting facility that is required to comply with OAR 340-096-0080: Screening must pay a screening fee of \$150. The fee must be submitted with the application for screening, as provided in OAR 340-096-0080(1).

(4) Composting Facility Plan Review and Approval Fee. Every composting facility that is required to comply with OAR 340-096-0090: Operations Plan Approval must pay a fee as provided below. The fee must be submitted with the proposed Operations Plan, as provided in OAR 340-096-0090(1). Agricultural composting facilities for which the Oregon Department of Agriculture is providing facility plan review and approval are not required to pay this fee.

(a) For facilities composting over 100 tons and less than or equal to 3,500 tons of feedstocks per year: \$500;

(b) For facilities composting over 3,500 tons and less than or equal to 7,500 of feedstocks tons per year: \$750;

(c) For facilities composting over 7,500 tons and less than or equal to 10,000 tons per year: \$1000;

(d) For facilities composting over 10,000 tons and less than or equal to 50,000 tons per year: \$2,000;

(e) For facilities composting over 50,000 tons per year: \$5,000.

(5) Composting Facility Engineering Review Fee. Every composting facility that requires department review of engineering plans and specifications under OAR 340-096-0130 must pay a fee of \$500. This fee is in addition to the fee required by (4) of this rule. Agricultural composting facilities for which the Oregon Department of Agriculture provides review of engineering plans and specifications are not required to pay this fee.

(6) Solid Waste Permit ~~and Registration~~ Compliance Fee. The Commission establishes the following fee schedule including base per-ton rates to be used to determine the solid waste permit compliance fee beginning with fiscal year 1993. The per-ton rates are based on the estimated solid waste to be received at all permitted solid waste disposal sites and on the ~~D~~department's Legislatively Approved Budget. The ~~D~~department will review annually the amount of revenue generated by this fee schedule. To determine the solid waste permit compliance fee, the ~~D~~department may use the base per-ton ~~rates; rates~~ or any lower rates if the rates would generate more revenue than provided in the ~~D~~department's Legislatively Approved Budget. Any increase in the base rates must be fixed by rule by the Commission. (In any case where a facility fits into more than one category, the permittee ~~shall~~must pay only the highest fee):

(a) All facilities accepting or permitted to accept solid waste except transfer stations, material recovery facilities and composting facilities:

(A) \$200, if the facility receives less than 1,000 tons of solid waste a year; or

(B) A solid waste permit compliance fee based on the total amount of solid waste received at the facility in the previous calendar quarter or year, as applicable, at the following rate:

(i) All municipal landfills, construction and demolition landfills, off-site industrial facilities, sludge disposal facilities, incinerators and solid waste treatment facilities: \$.21 per ton;

(ii) Captive industrial facilities: \$.21 per ton;

(iii) Energy recovery facilities. \$.13 per ton.

(C) If a disposal site (other than a municipal solid waste facility) is not required by the ~~D~~department to monitor and report volumes of solid waste collected, the solid waste permit compliance fee may be based on the estimated tonnage received in the previous quarter or year.

(b) Transfer stations and material recovery facilities:

(A) Facilities accepting over 50,000 tons of solid waste per year: \$1,000;

(B) Facilities accepting between 10,000 and 50,000 tons of solid waste per year: \$500;

(C) Facilities accepting less than 10,000 tons of solid waste per year: \$50.

(c) Composting facilities with a Composting Permit, except agricultural composting facilities for which the Oregon Department of Agriculture is providing facility oversight:

~~(A) Facilities with a registration: \$100;~~

~~(B) Facilities with a general permit:~~

~~(i) Utilizing over 50,000 tons of feedstocks for composting per year: \$5,000;~~

~~(ii) Utilizing over 7,500 and less than or equal to 50,000 tons of feedstocks for composting per year: \$1,000;~~

~~(iii) Utilizing less than or equal to 7,500 tons of feedstocks for composting per year: \$500.~~

~~(C) Facilities with a full permit:~~

~~(i)(A) Utilizing over 50,000 tons of feedstocks for composting per year: \$5,000;~~

~~(ii)(B) Utilizing over 7,500 and less than or equal to 50,000 tons of feedstocks for composting per year: ~~\$1,500~~ \$1,000~~

~~(iii)(C) Utilizing over 3,500 and less than or equal to 7,500 tons of feedstocks for composting per year: \$500.~~

~~(D) Utilizing over 100 tons and less than or equal to 3,500 tons of feedstocks for composting per year: \$100.~~

(d) Closed Disposal Sites:

(A) Year of closure. If a land disposal site stops receiving waste before April 1 of the fiscal year in which the site permanently ceases active operations, the ~~D~~department ~~shall~~will determine a pro-rated permit compliance fee for those quarters of the fiscal year not covered by the permit compliance fee paid on solid waste received at the site. The pro-rated fee for the quarters the site was closed shall be based on the calculation in paragraph (B) of this subsection;

(B) Each land disposal site which closes after July 1, 1984: \$150; or the average tonnage of solid waste received in the three most active years of site operation multiplied by \$.025 per ton, whichever is greater; but the maximum permit compliance fee shall not exceed \$2,500.

~~(7)~~ 1991 Recycling Act permit fee:

(a) A 1991 Recycling Act permit fee ~~shall~~must be submitted by each solid waste permittee which received solid waste in the previous calendar quarter or year, as applicable, except transfer stations, material recovery facilities, composting facilities and captive industrial facilities. The Commission establishes the 1991 Recycling Act permit

fee as \$.09 per ton for each ton of solid waste received in the subject calendar quarter or year;

(b) The \$.09 per-ton rate is based on the estimated solid waste received at all permitted solid waste disposal sites subject to this fee and on the ~~D~~department's Legislatively Approved Budget. The ~~D~~department will review annually the amount of revenue generated by this rate. To determine the 1991 Recycling Act permit fee, the ~~D~~department may use this ~~rate, rate~~ or any lower rate if the rate would generate more revenue than provided in the ~~D~~department's Legislatively Approved Budget. Any increase in the rate must be fixed by rule by the Commission;

(c) This fee is in addition to any other permit fee and per-ton fee which may be assessed by the ~~D~~department.

(8) Per-ton solid waste disposal fees on domestic solid waste. Each solid waste disposal site that receives domestic solid waste (except transfer stations, material recovery facilities, solid waste treatment facilities and composting facilities), and each person transporting solid waste out of Oregon for disposal at a disposal site that receives domestic solid waste except as excluded under OAR 340-097-0110(4)(c), ~~shall~~must submit to the ~~D~~department ~~of Environmental Quality~~ the following fees for each ton of domestic solid waste received at the disposal site:

(a) A per-ton fee of 50 cents;

(b) An additional per-ton fee of 31 cents;

(c) Beginning January 1, 1993, an additional per-ton fee of 13 cents for the Orphan Site Account;

(d) Submittal schedule:

(A) These per-ton fees ~~shall~~must be submitted to the ~~D~~department quarterly. Quarterly remittals shall be due on the 30th day of the month following the end of the calendar quarter;

(B) Disposal sites receiving less than 1,000 tons of solid waste per year ~~shall~~must submit the fees annually on January 31. If the disposal site is not required by the ~~D~~department to monitor and report volumes of solid waste collected, the fees ~~shall~~must be accompanied by an estimate of the population served by the disposal site;

(C) For solid waste transported out of state for disposal, the per-ton fees ~~shall~~must be paid to the ~~D~~department quarterly. Quarterly remittals ~~shall beare~~ due on the 30th day of the month following the end of the calendar quarter in which the disposal occurred. If the transportation is not on-going, the fee ~~shall~~must be paid to the ~~D~~department within 60 days after the disposal occurs.

(e) As used in this rule and in OAR 340-097-0110, the term "domestic solid waste" does not include source separated recyclable material, or material recovered at the disposal site;

(f) Solid waste that is used as daily cover at a landfill in place of virgin soil ~~shall~~will not be subject to the per-ton solid waste fees in this section, provided that:

(A) The amount of solid waste used as daily cover does not exceed the amount needed to provide the equivalent of six inches of soil used as daily cover;

(B) If disposed of in Oregon, the solid waste is not being used on a trial basis, but instead has received final approval from the ~~D~~department for use as daily cover; and

(C) If disposed of in a landfill outside of Oregon, the solid waste has received final approval from the appropriate state or local regulatory agency that regulates the landfill.

(g) For solid waste delivered to disposal facilities owned or operated by a Metropolitan Service District, the fees established in this section ~~shall~~will be levied on the district, not on the disposal site.

Stat. Auth.: [ORS 459.045](#), [ORS 459.235](#) & [ORS 468.065](#)

Stats. Implemented: [ORS 459.235](#), [ORS 459.236](#), [ORS 459A.110](#) & [ORS 459A.115](#)

Hist.: DEQ 3-1984, f. & ef. 3-7-84; DEQ 12-1988, f. & cert. ef. 6-14-88; DEQ 14-1990, f. & cert. ef. 3-22-90; DEQ 45-1990, f. & cert. ef. 12-26-90; DEQ 12-1991(Temp), f. & cert. ef. 8-2-91; DEQ 28-1991, f. & cert. ef. 12-18-91; DEQ 8-1992, f. & cert. ef. 4-30-92; DEQ 5-1993, f. & cert. ef. 3-10-93; Renumbered from 340-061-0120; DEQ 23-1993, f. 12-16-93, cert. ef. 1-1-94; DEQ 10-1994, f. & cert. ef. 5-4-94; DEQ 9-1996, f. & cert. ef. 7-10-96; DEQ 17-1997, f. & cert. ef. 8-14-97; DEQ 27-1998, f. & cert. ef. 11-13-98

## Summary of Public Comment and Agency Response

### Title of Rulemaking: Composting Facility Rulemaking

Prepared by: Charles Landman

Date: June 30, 2009

***Comment period***

The public comment period opened April 1, 2009 and closed April 30, 2009. DEQ held public hearings April 23 in Eugene, where eleven people attended and no one testified; April 28 in Bend, where nine people attended and two testified; and April 28<sup>th</sup> in Portland where five people attended and three people testified. Nineteen people submitted written comments for a total of twenty-four commenters.

***Organization of comments and responses***

Summaries of individual comments and DEQ's responses are provided below. The persons who provided each comment are referenced by number. A list of commenters and their reference numbers follows the summary of comments and responses.

<b><i>Summary of Comments and Agency Responses</i></b>	
<b><i>Comment 1</i></b>	Support proposed 100 ton exemption, important for small farms. Would prefer that it be larger, perhaps 200 tons. (1)
<b><i>Response</i></b>	<i>The proposed 100 ton exemption is based on DEQ's determination that composting operations below that size are unlikely to cause significant environmental problems. Many composting facilities above that size may not cause environmental problems, in which case the screening provided for in the rules will allow those facilities an easy path through the regulatory process.</i>
<b><i>Comment 2</i></b>	Allow farms that have multiple composting facilities to count them as separate facilities. (1)
<b><i>Response</i></b>	<i>Individual composting facilities are regulated independently as separate facilities, whether or not they are owned and operated by the same person or entity. DEQ will consider the degree of physical separation and possibility of additive or cumulative impacts in determining whether multiple composting sites on the same farm are separate facilities for purposes of the proposed rules.</i>
<b><i>Comment 3</i></b>	Small farm operations want to do the right thing environmentally. DEQ's regulatory efforts would be better spent on larger composting operations. (1)
<b><i>Response</i></b>	<i>The proposed rules are designed so that DEQ can easily identify facilities that are not causing or likely to cause environmental problems. Once that initial screening has been completed, DEQ will focus its efforts on facilities that are likely to cause environmental problems, whether they are agricultural or commercial operations.</i>

<b>Comment 4</b>	Unfair to those farmers who are composting; they come under the rules but those who let piles of manure sit are not subject to the rules. These manure piles are a greater threat to the environment than composting operations.(1)(2)
<b>Response</b>	<i>The proposed rules, as with the existing rules, address facilities that are actively composting. Other facilities that store solid waste but do not produce compost are not covered by the rules. Such facilities are subject to DEQ's general solid waste authorities and, if they are agricultural, may be subject to the water quality authorities of the Oregon Department of Agriculture).</i>
<b>Comment 5</b>	Support the case-by-case approach of the rules. (3)
<b>Response</b>	<i>No response required.</i>
<b>Comment 6</b>	Support \$150 screening fee because is good for 10 years. (3)
<b>Response</b>	<i>No response required.</i>
<b>Comment 7</b>	Fees and fear of regulation may cause many farmers to "fly under the radar." (3)
<b>Response</b>	<i>DEQ appreciates the concern of farmers and will work with ODA and OSU Extension service to provide outreach to agricultural composters.</i>
<b>Comment 8</b>	Need a compost facility near Portland where all residents and business can compost food scraps, etc. with ease. Make it easier for composters to start up. (4)
<b>Response</b>	<i>DEQ supports composting and has been discussing this matter with the city of Portland and Metro. It appears that the most significant roadblocks to siting a food waste composting facility near Portland are land use issues, not DEQ regulatory issues.</i>
<b>Comment 9</b>	Will require significant financial investment to meet the 1200 CP requirements. (5)
<b>Response</b>	<i>The proposed rules do not include the 1200 CP permit that was proposed in an earlier version.</i>
<b>Comment 10</b>	Requiring an impervious surface may have negative impacts on nursery operators. (5)
<b>Response</b>	<i>The proposed rules do not require that all composting be conducted on an impervious surface. Some facilities may have such a requirement, to protect groundwater, but the decisions will be made on a site-specific basis.</i>
<b>Comment 11</b>	Would like to offer grinding services to nurseries, but it may not be affordable for some nurseries. (5)
<b>Response</b>	<i>The proposed rules don't address this issue, other than that any grinding at a composting facility must not cause dust, noise, or other problems. Please note that grinding a large enough volume of wood or other waste may trigger the need for an AQ permit.</i>

<b>Comment 12</b>	Would like to offer drop box services to nurseries, but Clackamas County code requires hauling at no cost for the service. (5)
<b>Response</b>	<i>The proposed rules will not affect local government regulations. Suggest this to the county.</i>
<b>Comment 13</b>	Provide low cost loans to assist with compliance developments. (5)
<b>Response</b>	<i>DEQ does not have financial resources available or a program in place for such loans. The Oregon Economic and Community Development Department may be able to assist with loans for qualifying facilities.</i>
<b>Comment 14</b>	Assist composters that help nursery industry in getting environmental tax credits. (5)
<b>Response</b>	<i>The pollution control tax credit program sunset in 2007. DEQ ceased accepting tax credit applications December 31, 2008. DEQ is not aware of other environmental tax programs that may apply to composting facilities.</i>
<b>Comment 15</b>	Glad rules are being implemented. Believe they are necessary to ensure the health of our environment, rivers, water table. (6)
<b>Response</b>	<i>No response necessary.</i>
<b>Comment 16</b>	ODA will use DEQ criteria to review plans from CAFOs. Believe CAFO program will meet the goals of the rules. (7)
<b>Response</b>	<i>DEQ looks forward to continued collaboration with ODA on ODA-regulated facilities that include composting operations.</i>
<b>Comment 17</b>	ODA has authority to regulate water pollution from agricultural activities. May in the future enter into an agreement for implementation of composting rules for agricultural operations. (7)
<b>Response</b>	<i>DEQ looks forward to opportunities to work with ODA in the future to implement the composting rules.</i>
<b>Comment 18</b>	093-0030(31) definition of “disposal site” exempts facilities subject to the permit requirements of ORS 468B.050. 093-0050 has a similar exemption. Are permitted CAFO sites disposal sites? (7) Similar comment and question with respect to wastewater treatment plants and biosolids. (15)
<b>Response</b>	<i>All facilities that meet the definition of “disposal site” are disposal sites, and disposal sites that discharge stormwater under a DEQ-issued permit continue to be disposal sites. Whether such facilities also require a solid waste permit, such as a composting permit, depends upon the particular circumstances at each facility. To the extent a facility’s operations are included in and regulated by a stormwater permit, that portion of the facility operations would not require a solid waste permit, although such operations must meet all substantive requirements of the relevant solid waste rules. To the extent a facility’s operations are not covered by the stormwater permit, the facility</i>

	<i>must have the appropriate solid waste permit for that portion of its operations. Stormwater permits do not address many aspects of a composting operation, including management and discharge of leachate, protection of groundwater, prevention of odors, pathogen reduction and others. Those aspects of the facility would require a composting permit under the proposed rules.</i>
<b>Comment 19</b>	Technical and stylistic comments (7)
<b>Response</b>	<i>DEQ will review and make changes as appropriate.</i>
<b>Comment 20</b>	Delete 340-096-0140(5). ODA does not have requirements for composting animal mortality. (7)
<b>Response</b>	<i>Agreed.</i>
<b>Comment 21</b>	Need to reduce organic component of waste to meet recovery goals. (8)
<b>Response</b>	<i>Agreed.</i>
<b>Comment 22</b>	Establish a better balance between soil quality and water quality in the rules. Rules protect water but increase costs for composters, which may cause less composting, hurting soil quality. (8)
<b>Response</b>	<i>DEQ designed the proposed rules to focus on composting facilities that are now, or have the likelihood of, causing environmental problems, particularly water quality problems. Only those facilities that are or might cause problems will be required to make changes. All others will continue to operate as they do now. In addition, the rules provide flexibility for operators to implement the most cost-effective solutions for each facility. DEQ designed the rules with features to provide opportunities to address current problems and avoid future environmental problems while allowing the composting industry to grow. DEQ understands that responsible environmental management and good business practices go hand in hand. DEQ cannot avoid responding to facilities that are or likely to cause significant water quality or other environmental problems.</i>
<b>Comment 23</b>	Concern about cost of compliance. Make adoption of rules contingent on DEQ or Metro grants to cover cost of upgrades for composters. DEQ should designate waste reduction grants for composters. (8)
<b>Response</b>	<i>The costs of compliance for any particular facility will depend upon the nature of the environmental problems, if any that are currently being caused or are likely to be caused in the future, by the facility. These will likely vary widely depending upon the location of the facility, the current condition of the facility, its nature of operation, etc. DEQ will work with all facilities to find reasonable and cost effective solutions for any environmental problems. However, DEQ cannot delay responding to facilities that are or likely to cause significant environmental problems.</i>

	<i>Upgrade costs may be eligible for a DEQ Solid Waste Recycling grant but must be applied for through a partnership with a local government or non-profit eligible to receive the funds. Grants are awarded on a competitive basis and the DEQ's grant funding is limited. Note that Solid Waste Recycling grants cannot be used to bring a facility into compliance with a permit or rule requirements.</i>
<b>Comment 24</b>	Raise the tonnage figure for screening from proposed 100 tons to 250 tons. Small composters under 250 tons should be exempt because land use regulations can be a hurdle that many potential composters have not been able to overcome. (8)
<b>Response</b>	<i>See response to Comment 1.</i>
<b>Comment 25</b>	Sponsor research on low-cost ways to compost without having runoff that could damage water quality. Based on the research, select some standard designs that could be used to screen out composters. (8)
<b>Response</b>	<i>This is a good idea, but in many cases, a design that is good for one facility might not necessarily be a good match for a different operation, in a different location, with different feedstocks, using different methods. DEQ will review the results of the initial risk screenings to see if there are some commonly used composting facility designs that we could highlight for existing or proposed operators.</i>
<b>Comment 26</b>	Change wording of 096-0080(1)(F) to require more research into future water use, such as wells proposed but not yet constructed. (9)
<b>Response</b>	<i>Good suggestion. DEQ will consider how to implement this idea through changes to the rules or the Screening Internal Management Directive.</i>
<b>Comment 27</b>	Wind is local and variable. Amend 096-0080(1)(H) to require more research on the wind history at the specific site. (9)
<b>Response</b>	<i>Good suggestion. DEQ will consider how to implement this idea through changes to the rules or the Screening Internal Management Directive.</i>
<b>Comment 28</b>	Commenter's odor problems with PRC facility . (9)
<b>Response</b>	<i>DEQ regional staff will follow up on this problem.</i>
<b>Comment 29</b>	Look at more than just prevailing wind. (9)
<b>Response</b>	<i>Good suggestion. DEQ will consider how to implement this idea through changes to the rules or the Screening Internal Management Directive.</i>
<b>Comment 30</b>	096-0150(3)(a) requirement of a 24 hour response: if a complaint is made at 5 p.m. Saturday , must the response call be by 5 p.m. Sunday? (9)
<b>Response</b>	<i>Yes. However, if a complaint is received on a day the facility is not operating and no personnel are on-site, the facility operator must contact the complainant as quickly as possible on the first day back in operation.</i>

<b>Comment 31</b>	096-0150 (3)(c): how quick is immediately? (9)
<b>Response</b>	<i>Immediately means as soon as possible to identify if an odor problem is occurring and to take steps to reduce or eliminate the problem. Normally problem identification should be initiated as soon as the complaint is received. This is the first step. If an odor problem is identified, then the facility should formulate a plan and implement it to minimize the odor. DEQ expects actions to be taken once the permittee is aware of the complaint and have formulated a plan to correct it.</i>

<b>Comment 32</b>	096-0150(3)(d): supports this rule, requires a response to problems. (9)
<b>Response</b>	<i>No response required.</i>

<b>Comment 33</b>	096-0150(4): what if significant odor events but there are fewer than five people complaining? Would prefer some scientific or quantitative measurement, perhaps two odor events lasting more than four hours would need to be reported to DEQ. (9)
<b>Response</b>	<i>DEQ agrees that a more realistic and quantifiable approach would be to focus on the length of time of the event and length of time for resolution and not on the number of complainants. DEQ will consider changing this section to address these concerns.</i>

<b>Comment 34</b>	096-0150(5): does “load” refer to a load on a truck or a stockpile? (9)
<b>Response</b>	<i>Load refers to malodorous incoming vehicle loads, such as springtime deliveries of ripe grass clippings or loads of days-old, vegetative waste. These loads can be a significant source of facility odor, which, can appropriately managed to control the odor.</i>

<b>Comment 35</b>	Do the rules provide any recourse for noise that begins at 4 a.m. and goes on all day long? (9)
<b>Response</b>	<i>Noise issues are generally not addressed as part of a solid waste permit, including a composting facility permit. Noise issues are generally addressed by local government ordinances, and many local governments have requirements for hours of operation. DEQ suggests checking with the local government code enforcement officer for noise concerns about a specific facility.</i>

<b>Comment 36</b>	Not sure where a proposed surface water pond would fit in the rules. (9)
<b>Response</b>	<i>Where a proposed surface water pond fits in the rules or in the screening process would depend on the answer to the following questions, among others:</i> <ol style="list-style-type: none"> <li><i>1) Is the proposed pond intended to be part of the composting facility? That is, will the proposed pond be receiving clean water, stormwater, or wastewater (i.e., leachate)?</i></li> <li><i>2) Does the pond have a discharge point?</i></li> <li><i>3) If there is no discharge point and the proposed pond will receive</i></li> </ol>

	<p><i>leachate, will the pond pose a potentially significant impact on groundwater beneficial uses in the vicinity of the pond?</i></p> <p><i>Ponds containing clean water only (e.g., a stream feeds the pond and no leachate mixes with the pond water) and has a discharge point, DEQ will evaluate the potential for leachate to reach the pond and/or surface water resources receiving water from the pond. Stormwater detention ponds receiving no leachate will be evaluated similarly, but if there is a discharge point, it may require a separate DEQ stormwater permit. If there is no discharge point and the proposed pond will receive leachate, DEQ will evaluate whether the pond could pose a potentially significant impact on groundwater beneficial uses in the vicinity of the pond.</i></p> <p><i>A proposed surface water pond may require an NPDES or water pollution control permit and/or Oregon Division of State Lands and US Army Corps of Engineers permits. DEQ solid waste staff may be able to advise an applicant on options available and regulatory requirements that may apply to a surface water pond.</i></p>
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<b>Comment 37</b>	Two typos. (10)
<b>Response</b>	<i>Agreed, they will be corrected in the final rules.</i>

<b>Comment 38</b>	Support general approach of rules providing flexible, case by case approach with same standards for agricultural and commercial composters. (11)
<b>Response</b>	<i>No response required.</i>

<b>Comment 39</b>	Does DEQ have resources to implement the rules? If not, consider entering into agreements with agencies like Metro that already conduct frequent inspections. (11)
<b>Response</b>	<i>The proposed rules are designed to provide a more efficient and focused regulatory program for DEQ and composting facilities. After the initial risk screening and plan approval steps, DEQ anticipates that a good portion of facilities will need much less regulatory oversight, allowing DEQ to assist the other facilities with measures necessary to meet their environmental responsibilities. DEQ agrees that coordination with local governments is needed to best utilize limited resources. DEQ inspectors often are able to best address environmental impacts that affect water, air or land in ways that a local government may not be able to. DEQ inspectors do work closely with Metro staff or other local government code officers where jurisdictions overlap.</i>

<b>Comment 40</b>	There are no enforcement mechanisms or penalties associated with the rules. How will DEQ ensure compliance? (11)
<b>Response</b>	<i>DEQ will rely on a combination of technical assistance, informal enforcement, and, if necessary, civil penalties to assure that composting facilities meet their environmental obligations. DEQ's Division 12 civil</i>

	<i>penalty rules apply to composting facilities and DEQ revised those rules as part of this rulemaking to specifically address composting facilities.</i>
<b>Comment 41</b>	093-0030(19) uses the terms “organic material” but the term is not defined. (11)
<b>Response</b>	<i>The proposed rules will be revised to use the term “feedstocks” rather than “organic material.” See also the response to Comment 61.</i>
<b>Comment 42</b>	96-0060 exempts certain facilities from screening and permitting. How will DEQ know those facilities are meeting the performance standards? (11)
<b>Response</b>	<i>The facilities exempt under OAR 340-096-0060(3)(a) are facilities that DEQ believes have a low potential to cause environmental harm. DEQ will rely on information gathered from other sources (e.g. ODA visits) and complaints to assess these facilities. If DEQ determines an otherwise exempt facility might adversely affect human health and the environment, DEQ may require the facility go through screening and permitting.</i>
<b>Comment 43</b>	The mention of home composting in the exemptions is confusing. It makes it seem as though home composters must also meet performance standards. (11)
<b>Response</b>	<i>Home composting facilities are exempt from screening and permitting, unless DEQ determines the site may cause environmental problem. However, home composting facilities must meet the same environmental protection standards as all other composting facilities.</i>
<b>Comment 44</b>	How will DEQ ensure access to sites for inspections? Doesn’t seem to be provided for in the rules. How will DEQ access sites that do not have permits? (11)
<b>Response</b>	<i>Providing access to DEQ for inspections will be a condition of all registrations and permits. For the composting operations that are exempt from registration and permit requirements, DEQ will use its general statutory access authority in ORS 465.385.</i>
<b>Comment 45</b>	96-0080(1)(b)(D) should refer directly to the actual pathogen reduction requirements in 096-0140. (11)
<b>Response</b>	<i>The purpose of this requirement in the screening section is for the operator of a facility that is subject to those requirements, and not all facilities are, to tell DEQ how that operator will meet the pathogen reduction requirements. The performance standards for facilities subject to the requirement point directly to the pathogen reduction rule, 096-0140.</i>
<b>Comment 46</b>	096-0080(3)(a) is confusing. Will DEQ determine which performance standards a facility must meet? (11)
<b>Response</b>	<i>All composting facilities, including all facilities determined to be low risk, must meet all of the performance standards. 096-0080(3)(a) is intended to refer to any measures the facility may propose (e.g., only seasonal</i>

	<i>composting; moving the location every year) to meet the performance standards. These approval conditions would become part of the registration. DEQ will consider revising this section to make the meaning clear.</i>
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<b>Comment 47</b>	In 096-0090, recommend that DEQ add requirements to report the source of feedstocks. (11)
<b>Response</b>	<i>At this time, DEQ does not see any reason to require this information.</i>

<b>Comment 48</b>	Has DEQ considered some degree of end product testing or standards in addition to pathogen reduction? High levels of nutrients, salts, etc. could affect soil and water quality where the finished compost is used. (11)
<b>Response</b>	<i>DEQ's advisory group considered the issue of standards and decided that DEQ should not require that finished compost be required to meet any particular standards, in part because there is such a variety of compost products being produced. However, nothing in the proposed rules would prevent operators from testing their products and making that information available to consumers.</i>

<b>Comment 49</b>	096-0140: why are agricultural operators exempt from pathogen reduction rules? Does not seem to create a level playing field. Agricultural operations compost manure and materials that produce fecal coliform and salmonella that can easily be transmitted to humans. Pathogen reduction should be required for all composting operators. (11)
<b>Response</b>	<i>The rule provides that only agricultural operations producing compost for on-farm use are exempt from the pathogen reduction requirements. The use of finished compost on farmland does not expose the public to potential human pathogens, and DEQ understands that such pathogens rather quickly expire after compost is applied into the environment.</i>

<b>Comment 50</b>	096-0140: why test for fecal coliform or salmonella and not both? (11)
<b>Response</b>	<i>Pathogens are disease causing organisms including, bacteria, viruses, fungi, helminths, and protozoa that may be present in raw wastes or by-products. Plant, animal and human pathogens are found in living organisms and are present at some background levels in the environment. Therefore, the composting process must eliminate or reduce pathogens to a level that is below the threshold where the danger of transmitting diseases will occur. Testing finished compost for the presence of an indicator pathogen, such as fecal coliform or salmonella, is an effective means to demonstrate pathogen reduction. The presence of either fecal coliform or salmonella is a good indication of pathogen destruction and it is not necessary to test for both. Laboratory analytical capabilities may be the limiting factor in the type of test conducted.</i>

<b>Comment 51</b>	096-0140: why must facilities that accept more than 50 percent manure as initial feedstock only test for fecal coliform not salmonella as well? (11)
<b>Response</b>	<i>Fecal coliform occurs in large numbers in animal manures and salmonella to</i>

	<i>a much lesser degree. Testing for the presence of fecal coliform in compost produced from animal manures is a good indicator of the level of pathogen reduction.</i>
<b>Comment 52</b>	096-0140 (5) seems arbitrary. Why don't these facilities have to meet the same requirements as others? And what are the ODA requirements? (11)
<b>Response</b>	<i>This section was unclear, but was intended to require that such facilities meet ODA animal mortality requirements in addition to all other requirements of the pathogen reduction rule. However, because ODA has no animal mortality requirements (see Comment 20), DEQ is proposing to delete this section from the final rule.</i>
<b>Comment 53</b>	096-0150(1): revise paragraph, does not make sense as written. (11)(12)
<b>Response</b>	<i>Agree the sentence is confusing. It will be rewritten in the final rules. TDEQ recognizes that compost piles will always produce odor due to the metabolic activity of compost microorganisms. While odor cannot be eliminated, the amount of odor can be controlled through proper facility design and operation. Therefore, all composting facilities must be designed, constructed, and operated in a manner that minimizes odors that are likely to cause adverse impacts outside the boundaries of the facility.</i>
<b>Comment 54</b>	State should discuss whether it makes sense to continue categorizing composting facilities as solid waste disposal sites. Important for how we view composting and in light of state's climate change initiatives. (11)
<b>Response</b>	<i>DEQ agrees that composting reuses valuable resources and that the terminology "solid waste disposal site" is not a good fit. However, our existing statutory structure and authority are all tied to that definition. Changing those would require a change in the underlying statutes.</i>
<b>Comment 55</b>	In pathogen reduction rule, in the federal rule, Class A biosolids must meet only one of the requirements, so why must composters meet both? (12)
<b>Response</b>	<i>Assuming this comment refers to 096-0140(3) Methods of Pathogen Reduction, the last sentence of this section should read: "The plan must include a Process to Further Reduce Pathogen (PFRP), pursuant to <b>40 CFR Part 503 Appendix B</b>, item(B)(1), dated February 19, 1993, that must include, <del>at minimum</del> <u>one of the following element</u>. Composters must meet one or the other unless they take &gt; 50 percent Type 2, in which case they must meet fecal coliform criteria. DEQ will make the change in the proposed rules.</i>
<b>Comment 56</b>	Suggest adding more detail on windrow turning to meet pathogen reduction from White House Document dealing with biosolids. (12)
<b>Response</b>	<i>DEQ staff will provide operational technical assistance to permittees. The guidance document referenced can be made available.</i>
<b>Comment 57</b>	Strongly object to proposed change to not regulate facilities composting less than 20 tons/year of meat waste or animal carcasses. Creates numerous

	environmental problems. DEQ should protect everybody. ODA will not control the piles of dead carcasses. (13)
<b>Response</b>	<i>All facilities that are Confined Animal Feeding Operations, including the facility referred to in the comment, are permitted and regulated by ODA. DEQ has referred this matter to ODA. Facilities that compost animal mortality that are not regulated by ODA will be regulated by DEQ. All facilities that compost over 100 tons of feedstock (and 20 tons of animal mortality and other Type III feedstocks) per year will go through the screening and permitting processes. Smaller facilities must still meet all of the environmental performance measures, and may be inspected and regulated by DEQ if DEQ receives complaints or learns through other sources that a facility may not be meeting its environmental obligations.</i>
<b>Comment 58</b>	096-0140(4)(c) is not practical. Testing should occur prior to application and/or removal from the site. Multiple testing of the same product would be redundant. Once pathogen reduction is accomplished and verified thorough testing, subsequent testing should not be necessary. (14)
<b>Response</b>	<i>DEQ expects new, finished compost to be tested. The four month standard is for new composted material, not for material already tested. If no new composted material is produced, then no tests are necessary.</i>
<b>Comment 59</b>	The exemption from the definition of solid waste in 093-0030(81)(b) should clearly reflect existing DEQ policy that materials are exempt when they are applied, but not during collection and processing, as was proposed in the earlier version of the rules. (15) (16)
<b>Response</b>	<i>DEQ will continue to interpret and apply this rule and the underlying statute as we have in the past. However, we are not proposing to amend the rule at this time.</i>
<b>Comment 60</b>	Definitions of “solid waste”, “feedstock”, “composting” and “disposal site” need to be consistent with each other and with 093-0050. Use of “organic material” in the definition of composting is problematic. (15)
<b>Response</b>	<i>The definition of “disposal site” in the proposed rules includes composting facilities. The rules assume that composting facilities compost solid wastes; however, we recognize the rules aren’t specific on that issue. We will adjust the definitions of “feedstock”, “composting”, and “composting facility” to make that clear, and to be consistent with each other.</i>
<b>Comment 61</b>	How would the proposed rules address leaves that are stored until spring and then applied as a soil amendment? How does DEQ policy on storage and speculative accumulation fit with the proposed rules? Suggest creating an additional section of Div 96 that addresses storage of feedstocks. (15)
<b>Response</b>	<i>The proposed rules, as with the existing rules, address facilities that are actively composting. Other facilities that store solid waste but do not produce compost are not covered by the rules. Such facilities are subject to DEQ’s general solid waste authorities, including DEQ’s policy on storage and</i>

	<i>speculative accumulation. If such facilities are agricultural, they also may be subject to the water quality authorities of the Oregon Department of Agriculture. At this time, DEQ is not proposing to adopt additional rules related to facilities that store but do not compost solid wastes.</i>
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<b>Comment 62</b>	See site-specific flexibility as both an advantage and a potential problem. Industry is used to standards and measurable goals that are the same wherever a facility is built. Could result in uneven regulation of similar facilities, creating competitive disadvantages. (16)
<b>Response</b>	<i>The goal of these rules is to require that a particular facility implement measures or take other actions only as required to address the environmental conditions at that particular facility. The rules require that all facilities meet the same environmental protection standards, regardless of where a facility may be located. All similarly situated facilities will be treated the same. So for example, facilities that pose similar threats to surface water based on factors such as annual rainfall, proximity to streams, etc. will be required to address those concerns. But the rules specifically acknowledge that not all applicants are the same. A facility in a different location, for example one with much less rainfall, or located much farther from a water body, will present a different set of environmental conditions. DEQ sees no reason to require measures or actions at facilities that do not present environmental risks, or to require the same measures from facilities that present different risks, or that may be able to adopt different solutions. See also response to comments 67, 71, and 72.</i>

<b>Comment 63</b>	Terms used in Div 96 such as “likely to discharge”, “potential adverse impact”, etc. are vague and make it hard for business to make investment decisions. Concerned that regulations will be based on subjective judgment of DEQ staff reviewing the site, which could create inconsistencies. How will DEQ insure consistency in the screening process? (16)
<b>Response</b>	<i>The proposed rules are designed with the expectation that a person proposing to construct a new composting facility or make significant changes to an existing composting facility will meet with DEQ before making any significant investment decisions. For new facilities, DEQ will use its screening tools to evaluate a proposed location or locations, discuss potential environmental concerns with the facility developer, and review and approve a proposed facility plan. This can all occur before any significant investment decisions are made and, if the developer engages DEQ early on, can even occur before a developer selects a final location for the facility. This is not very different from DEQ’s current procedure, and will provide certainty to the developer that the design, construction, and operation of the facility will meet the operator's environmental responsibilities.</i>  <i>DEQ would expect that any significant modifications to an existing facility would go through the same process: the facility operator would meet with</i>

	<i>DEQ to discuss the proposed changes, and work with DEQ staff on design and any plan and/or permit modifications before the operator made any significant investment decisions.</i>
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<b>Comment 64</b>	Facility A is currently operating a composting facility. How would the rules affect that facility today? Will Facility A be screened and by whom? At what point will Facility A know what it needs to do to comply with the rule, in particular surface water, ground water and odor issues? (16)
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<b>Response</b>	<i>The proposed rules provide that all existing facilities must submit screening information to DEQ within 180 days of the effective date of the rules. Assuming the rules are effective about September 1, 2009, screening information would be due to DEQ March 1, 2010. DEQ will then screen the facilities. DEQ intends to conduct the screening using a panel that includes a hydrogeologist and a solid waste staff person from each DEQ regional office. This panel will screen all facilities statewide to insure consistency. At the conclusion of the screening process, DEQ will make a determination about current and potential environmental risks at a facility. It will then be the responsibility of the facility to decide how that facility will address those issues. The facility will work with DEQ on solutions, which, after final DEQ approval, will be included in a facility plan and permit.</i>
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<b>Comment 65</b>	Facility B is sited three years after the rules take effect. How will that facility be reviewed and permitted in three years? When facility B is screened, will the same group that reviewed Facility A also review Facility B? (16)
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<b>Response</b>	<i>Future composting facilities will be screened, evaluated, and permitted in the same manner as existing facilities. After the initial screenings of existing facilities, screening of new facilities will be done by regional solid waste staff relying in part on earlier screening decisions. The proposed rules (096-0060(6)) require that new facilities coordinate with DEQ at least 180 days before the facility is proposed to begin operation. This will allow DEQ and the facility to discuss potential environmental issues related to the specific location and work to resolve those issues in a timely manner at the facility planning and design stage. See also response to comment 81.</i>
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<b>Comment 66</b>	What happens in the Metro region, where Metro has taken over some of DEQ's enforcement responsibilities? Will DEQ or Metro have the screening and review authority? (16)
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<b>Response</b>	<i>DEQ will screen all composting facilities statewide, including those in the Portland Metro region. DEQ and Metro had an intergovernmental agreement that expired December 31, 2007 where Metro issued some of the permits and conducted inspections at composters. However, Metro has never carried out DEQ enforcement actions. For any facilities that require plan review and approval, DEQ will provide that review and approval. See also response to comment 87.</i>
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<b>Comment 67</b>	What are the timelines for implementing the screening results? Will the department show flexibility in its expectations of when and how facilities will meet these new requirements? (16)
<b>Response</b>	<i>The schedule for addressing any environmental issues identified in a screening decision will depend upon the nature of the problem and the proposed response. Some problems reasonably may be addressed quickly; other may take longer. DEQ will work with each existing facility operator to identify a schedule for implementing any necessary improvements.</i>

<b>Comment 68</b>	Strongly disagree with raising the tonnage exemption from 20 to 100. Not a good approach to regulate the smaller sites only on a complaint basis. The other exemptions create additional unfairness in the compost system. (16)
<b>Response</b>	<i>The proposed 100 ton exemption is based on DEQ's determination that composting operations below that size using specific feedstocks are unlikely to cause significant environmental problems. However, the proposed rules give DEQ the authority to require a facility of any size to go through the screening process, and through plan approval and permitting if necessary to address environmental problems caused by smaller facilities. DEQ will rely on information gathered from other sources (e.g. ODA visits) and complaints to identify any smaller facilities that may be causing problems that need DEQ attention.</i>

<b>Comment 69</b>	Does 096-0060(5) refer to the screening requirements at 096-0080 or the performance standards at 096-0070? (16)
<b>Response</b>	<i>The proposed rules will be effective upon adoption by the Environmental Quality Commission and filing by the Secretary of State. 096-0060(5) provides timing for screening (180 days to provide screening information to DEQ) and also allows facilities to continue to operate under existing permits until screening decisions have been made, any plans approved, and registrations or permits issued. The performance standards in 0070 will be effective when the rules are adopted. However, except in situations where there are continuing and significant environmental problems, DEQ expects that any environmental problems will be addressed through implementation of plans after the plans have been approved and permits issued. See also response to comment 67.</i>

<b>Comment 70</b>	Concerned that performance standards seem to require a subjective decision about what is "likely" or "not likely." What does "adverse" mean? How can DEQ institute practices that will insure consistency in this process? (16)
<b>Response</b>	<i>The two performance standards in question, those relating to groundwater and odor (096-0070(3) and (4)), are designed with the understanding that many composting facilities may operate with minimal, environmentally acceptable impacts to groundwater or cause minimal offsite odor impacts. The two performance standards acknowledge that there may be minimal impacts and at the same time prevent more significant impacts. Contrast this with the standard for surface water, which is no discharge, unless in</i>

	<p><i>compliance with a permit. The NPDES discharge permits allow discharge of a minimal, acceptable amount of pollution. The levels in those permits are based on a judgment by DEQ that releases of pollutants at those levels are not likely to cause adverse impacts to beneficial uses in the receiving water body.</i></p> <p><i>In the two performance standards in question, those relating to groundwater and odor (096-0070(3) and (4)), whether an occurrence is “likely” or “not likely” is not a subjective decision, but is instead a conclusion based on an evaluation of a variety of objective criteria. Those factors are identified in 096-0080 and the Screening Internal Management Directive guidance document. DEQ believes that the factors will place many facilities firmly into one category or the other. For facilities where there is some question,, e.g. concerning possible groundwater impacts, DEQ may require - or the facility may choose to conduct - groundwater sampling or monitoring for some period of time to determine whether the facility is impacting groundwater.</i></p> <p><i>In 096-0070(3), relating to groundwater, “adverse impact” means an impact to groundwater that interferes with a beneficial use such as human consumption. In 096-0070(4), relating to odor, “adverse impact” is an impact to business or residences outside the boundaries of the facilities. DEQ understands that composting unavoidably produces some odors. The rules require composting facilities to perform in a manner that minimizes such impacts.</i></p>
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<p><b>Comment 71</b></p>	<p>The discretion left to DEQ in the operations plan section could lead to inconsistent enforcement. If an operations plan is required, the elements should be consistent. (16)</p>
<p><b>Response</b></p>	<p><i>As described in the response to comment 67, the goal of these rules is to require that a particular facility implement measures or take other actions only as required to address the environmental conditions at that particular facility. All similarly situated facilities will be treated the same, but the rules specifically acknowledge that not all facilities are the same.</i></p> <p><i>In 096-0090, Operations Plan Approval, all facilities will be required to have certain elements in an operations plan. Those elements are described in section (5), and are closely related to the environmental performance measures in 096-0070 that all facilities must meet.</i></p> <p><i>The items described in section (6) may not be present at all facilities or present problems at all facilities. DEQ sees no reason for DEQ rules to address issues such as material management and storage of feedstocks if those do not create potential environmental problems at a facility. Similarly, not all composting operations are open to the public. In that case, issues such as access roads, fences, gates, salvage, etc. may not be problems at those facilities. Not all facilities may have incoming feedstock haulers and may not</i></p>

	<p><i>haul finished compost away, in which case vehicles and truck covers may not be issues.</i></p> <p><i>In this context, as in others identified in the proposed rules, treating all applicants the same would in fact result in unfairness to applicants whose sites are very different from those of other applicants.</i></p>
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<b>Comment 72</b>	In 096-0100 and 0110, delete “if required by the department” and treat all applicants the same. (16)
<b>Response</b>	<p><i>As described in the responses to comments 67 and 71, the goal of these rules is to require that a particular facility implement measures or take other actions only as required to address the environmental conditions at that particular facility. All similarly situated applications will be treated the same, but the rules specifically acknowledge that not all applicants are the same.</i></p> <p><i>Under 096-0100(3)(h) and 096-0110(4)(j), only those facilities that DEQ determines meet the criteria of 096-0001 will be required to provide financial assurance. DEQ sees no reason to require financial assurance from facilities that would present no significant environmental risks if they unexpectedly closed down. In this context, as in others identified in the proposed rules, treating all applicants the same would in fact result in unfairness to applicants whose sites are very different from those of other applicants.</i></p>

<b>Comment 73</b>	In 096-0120, concerned there are no standards to judge the operator’s compliance and reduce risk to the operator. (16)
<b>Response</b>	<i>Similar to the response to comment 63, DEQ expects that a facility proposing to use infiltration to soil to manage leachate or stormwater will consult with DEQ before designing and constructing any new facilities or modifications to an existing facility. DEQ’s approval will identify the compliance points and standards for the proposed groundwater infiltration actions at that facility, so the operator will have a clear statement from DEQ with which to judge compliance.</i>

<b>Comment 74</b>	In 096-0130, how will a facility know if its decisions about a leachate treatment system will meet the standard? In addition, delete “if required by the department” and treat all applicants the same. (16)
<b>Response</b>	<p><i>Assuming a facility intends to discharge treated leachate, the treatment system must provide treatment to a level that will meet the standards set in the discharge permit. In addition, the rule identifies standards that must be met for leachate storage (see 096-0130(9)). Similar to the response to Comment 73, DEQ expects that a facility proposing to construct a leachate treatment system will consult with DEQ before designing and constructing any new facilities or modifications to an existing facility.</i></p> <p><i>The rules are drafted to take into account the many different leachate and</i></p>

	<i>stormwater storage and treatment systems that may be proposed. These may range from very simple ponds to very elaborate engineered facilities. These different levels of complexity should receive different levels of attention from DEQ. In this context, as in others identified in the proposed rules, treating all applicants the same would in fact result in unfairness to applicants whose sites and proposed facilities are very different from those of other applicants.</i>
<b>Comment 75</b>	Clarify 096-0150(3)(a): if the operator speaks to the complainant on the original call, is the operator required to call the complainant again within 24 hours? (16)
<b>Response</b>	<i>No. This section is intended to ensure attentiveness and responsiveness to neighbor complaints by compost operators. If the operator has contacted the complainant, the 24 hour timeframe has been satisfied. DEQ would expect that at a minimum, the facility operator would follow-up with the complainant after action has been taken to summarize activities and close out the complaint.</i>
<b>Comment 76</b>	Suggest revising definition of “composting facility” in 093-0030(20) to include the “storing” of feedstocks. Facilities that store feedstocks should also be subject to regulation. (16)
<b>Response</b>	<i>See response to comment 61.</i>
<b>Comment 77</b>	Concerned about possible inconsistent application of definition of “feedstock” in 093-0030(35) in determination of risk. (16)
<b>Response</b>	<i>The determination of the relative risk of a feedstock from hazardous substances, physical contaminants and human pathogens will be based on an evaluation of the presence and amounts of those substances in the proposed feedstocks, the harm such substances could cause, the ability of the composting process to eliminate or reduce the effectiveness of those substances, and the pathways for such substances to cause human or ecological effects.</i>
<b>Comment 78</b>	Concerns about compostable containers, possibility of contamination of feedstocks, possible labeling requirements. (16)
<b>Response</b>	<i>See comments 82-85.</i>
<b>Comment 79</b>	The definition of “low risk disposal site” in 093-0030(55) is circular and does not refer to a standard. (16)
<b>Response</b>	<i>The standard referred to in the rule is “unlikely to adversely impact the waters of the State or public health.” DEQ will determine whether a particular facility meets that standard based on an evaluation of the specific factors at a specific facility. See response to comment 70.</i>
<b>Comment 80</b>	In 093-0105, why are permit categories unrelated to composting being revised and have affected parties been given sufficient notice? How does DEQ determine new versus existing facilities? If an existing facility takes a new

	feedstock type, does that make it a new facility for permit purposes? (16)
<b>Response</b>	<p><i>This was primarily a housekeeping rule change. DEQ was trying to better list all possible permit actions in each permit category as some are not listed in the rule currently. Most renewals are category 2 permit actions and most new permits are category 3. These proposed changes are consistent with how DEQ actually implements this section of the rules so there was no stakeholder involvement other than the normal public comment period including three hearings.</i></p> <p><i>The only policy change proposed here is that DEQ is proposing that the issuance of a new waste tire storage permit be reduced from a category 4 to a category 3 permit action. Based on the most recent waste tire storage permit applications, DEQ does not feel that this type of permit warrants an initial public hearing prior to drafting the permit and a second hearing once the permit is drafted. Recent waste tire storage permit applications have proposed environmentally sound practices, such as storing the tires in trailers and not in the open, which reduce the risk of fire and vector harborage dramatically. OAR 340 -093-0100(3) allows DEQ to move a permit action to a higher category based on considerations such as anticipated public interest and potential for significant environmental or public harm due to location or type of facility. This discretion would be exercised if DEQ felt it was warranted.</i></p> <p><i>DEQ issues new permits to facilities that have not previously held a permit for a specific activity. In some cases, a facility may hold multiple permits such as a transfer station and compost permit. Each is considered a new permit when it is issued. A change in feedstock type at a compost facility will usually require a modification of the operations plan. Under the proposed rules, DEQ will evaluate the addition of that feedstock for any increased risk to the environment or public health from the composting operation. That evaluation could require a modification to the registration or the compost permit. It could also, in some cases, move a facility from a registration to a compost permit. In that case, the existing compost facility that is registered would have to get a new compost permit.</i></p>

<b>Comment 81</b>	<p>Request DEQ implement procedures to provide uniformity and consistency in screening and review of facilities, including:</p> <ol style="list-style-type: none"> <li>1. Establish a permanent DEQ screening group;</li> <li>2. Establish an appeal process for screening decisions;</li> <li>3. Review and add more FAQ to the internal management directive using existing composting facilities, with detail so facilities will know what “likely adverse impact” etc. might mean;</li> <li>4. Perform an annual internal evaluation of the rules. Use as a way to build a set of standard operating procedures that DEQ can use regardless of changes in staff. Share this with interested parties and allow them to comment as well. (16)</li> </ol>
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<p><b>Response</b></p>	<p><i>DEQ believes these are all good suggestions and we intend to implement these – and other similar measures - in some form, as staffing and resources allow.</i></p> <p><i>For (1), to ensure consistency, we will screen all existing sites using the same group of DEQ staff. At the end of that round of screening, we will have developed a “bank” of screening decisions that future screening decisions can look to and rely on. Whether we will bring together the original screening group will depend in part on resources and in part on our confidence that we have developed a procedure that will provide consistent decisions without needing a group involved.</i></p> <p><i>For (2), DEQ expects that there will be communication between DEQ and the facility owner before DEQ makes a final screening decision. For facilities that disagree with a screening decision, DEQ will provide an opportunity for the facility to meet informally with DEQ staff and the regional solid waste manager to discuss the facility and the decision. Because screening decisions will result in plan and permit requirements, those decisions would be appealable as provided in OAR 340-093-0110.</i></p> <p><i>For (3), DEQ expects to make its screening decisions publicly available, to provide guidance and information to other facilities and developers considering locations for new facilities.</i></p> <p><i>For (4), this seems like a good suggestion, but may depend upon staffing and budget resources. We would like to explore this with stakeholders after adoption of the rules.</i></p>
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<p><b>Comment 82</b></p>	<p>Rules contain ambiguity regarding compostable products. Successful composting programs require independently verifiable and scientifically based standards, and labeling of compostable products by a third party certifier. (17) (3H)</p>
<p><b>Response</b></p>	<p><i>The issues raised by compostable products were not considered by DEQ and its advisory group during development of the proposed rules. These are important issues and will require thorough discussion with all interested parties, including composters, composting product producers, and local governments, before DEQ would be prepared to propose rules addressing these matters.</i></p> <p><i>DEQ does support the use of independently verifiable, science-based standards to determine the compostability of products, and appropriate labeling of products that meet such standards. One such standard is the Biodegradable Products Institute compostable standard, which references ASTM D6400 and ASTM D6868 specifications for compostable plastics and biodegradable plastic coatings on paper and other compostable substrates, respectively. However, it is our understanding from conversations with the city of Portland that not all products meeting the BPI standard are successfully composted under the Portland Composts! program. This particular standard appears to be creating, rather than reducing, confusion in the marketplace. Until DEQ has better confidence that the BPI standard</i></p>

	<i>(and/or ASTM specifications) adequately protects the compost industry from physical contaminants in feedstocks, or a better standard is developed, we're not prepared to incorporate a specific standard into rule. Regardless, the proposed rules allow the use compostable products as feedstocks provided DEQ and a composting facility determine the products are acceptable feedstocks.</i>
<b>Comment 83</b>	Suggest adding a rule that commercial composting facilities only accept compostable products that meet ASTM standards. (17)(3H)
<b>Response</b>	<i>See comment 82.</i>
<b>Comment 84</b>	Suggest requiring labeling by a third party certifier such as BPI. This is required by some municipalities in California and Canada. (17)(3H)
<b>Response</b>	<i>See comment 82.</i>
<b>Comment 85</b>	Suggest expanding the definition of feedstock to include compostable products. (17)(3H)
<b>Response</b>	<i>See comment 82.</i>
<b>Comment 86</b>	DEQ should delay implementation of the proposed rules until the earlier-proposed 1200 CP stormwater permit is ready for adoption. (18)
<b>Response</b>	<i>The proposed rules are separate from and do not rely on the earlier-proposed 1200 CP stormwater permit. The proposed rules address many issues in addition to stormwater, including groundwater, odor, and pathogen reduction. Facilities that operate under the existing 1200 Z stormwater permit may continue to do so. When the new 1200 Z is adopted, tentatively planned for two years from now, those operators may register and operate under that permit. At that time, DEQ in consultation with stakeholders will decide whether to propose adoption of a stormwater permit specifically for composting facilities. In any case, operators should understand that the discharge benchmarks in the 1200 Z and any proposed 1200 CP likely will be more stringent than existing benchmarks, and may be adopted as permit limits. Operators should begin planning now for that likelihood.</i>
<b>Comment 87</b>	Overlapping regulatory agencies is a problem (DEQ, Metro, Clean Water Services). All regulation should be done by one agency. (18)
<b>Response</b>	<i>DEQ authorized Metro to implement DEQ composting regulations through an intergovernmental agreement from 1998 through December 2007. In September 2007, DEQ and Metro sent letters to permitted compost facilities within Metro's jurisdiction providing notification that the agreement was set to expire on December 31, 2007 and an explanation about the impending changes.</i>  <i>Compost facilities are now regulated by both DEQ and Metro in a similar manner as other solid waste facilities (such as transfer stations and material recovery facilities) located within Metro's jurisdiction. DEQ frequently</i>

	<p><i>communicates with Metro in an effort to provide consistent regulatory oversight to solid waste facilities. DEQ corresponds with Metro about plan reviews, permits, enforcements actions and inspections. Based upon the current overlapping regulation of solid waste facilities within Metro’s jurisdiction, DEQ does not anticipate that the overlapping regulation of compost facilities will generate problems.</i></p> <p><i>DEQ agrees that coordination with local governments including Metro is needed. DEQ inspectors often are able to best address environmental impacts that affect water, air or land in ways that a local government may not be able to. DEQ inspectors do work closely with Metro staff or other local government code officers where jurisdictions overlap.</i></p>
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<b>Comment 88</b>	The proposed rules were developed without adequate input from industry. (18)
<b>Response</b>	<i>DEQ engaged industry stakeholders throughout the rulemaking process. Industry representatives were part of the external advisory group that formulated the earlier proposed rules. And beginning last summer, DEQ met several times with industry representatives, including the director of ORRA and individual composting facility operators, to discuss proposed changes to the rules. In February, before offering the currently proposed rules for public comment, DEQ again convened the external workgroup, which included industry representatives.</i>

<b>Comment 89</b>	Proposed rules may require significant capital expenditures. DEQ should grandfather in existing facilities with good records, provide grant money to assist with compliance, or postpone implementation of the regulations. Forcing composters out of business is not good for the composting industry or the environment. (18)
<b>Response</b>	<i>The proposed rules are designed so that only facilities currently causing environmental problems, or likely to cause such problems in the future, will need to make changes to their facilities or operations. Facilities that are not causing problems or not likely to in the future will not be required to make changes. In addition, for facilities that do have environmental problems, the rules are designed to give each operator the flexibility to select measures to address environmental problems that are the best for each facility. This will allow operators the ability to select the most cost-effective solutions to environmental problems. DEQ heard from many operators and local governments that the proposed rules should be finalized to give current and future operators clear guidance on requirements for facility construction and expansion. See response to comment 23 regarding grant funding.</i>

<b>Comment 90</b>	The proposed regulations place composting industry at a competitive disadvantage with respect to other industries, such as co-generation facilities, which handle the same material. This creates an uneven playing field and discourages composting. (18)
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<b>Response</b>	<i>The proposed rules are intended to address only facilities that compost. Because co-generation plants and other hogged fuel processing facilities do not compost, they are not addressed by the changes in this rulemaking. Such facilities may be subject to solid waste, air quality and water quality permit requirements.</i>
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<b>Comment 91</b>	DEQ needs to enforce existing regulations with respect to illegal dumping and non-permitted facilities before undertaking anything new. (18)
<b>Response</b>	<i>DEQ frequently works with a local government code enforcement officer to respond to complaints about illegal dumping as the local government often has codes that can be used to clean up illegal dumping. DEQ prioritizes complaints depending on the perceived environmental concerns associated with the complaint. Where DEQ identifies a facility that is operating as a disposal site without a permit, DEQ gives the facility the option to stop its operations that would require a permit or requires that the facility apply for a solid waste permit within a specific timeframe. If the facility does neither, DEQ refers the violations to our enforcement staff in the Office of Compliance and Enforcement for penalty determinations.</i>

<b>Comment 92</b>	Existing rules do not classify composting facilities as disposal sites and do not require financial assurance. Imposing financial assurance requirements on composting facilities is not justified, will increase costs, and is not based on any particular problems or need. (19)
<b>Response</b>	<i>Under existing rules, compost facilities are considered disposal sites as defined in OAR 340-093-0030(30). They can be subject to financial assurance requirements outlined in OAR 340-095-0090 although few ever have been. DEQ added proposed language to OAR 340-096-0001 to clearly state that.</i>

<b>Comment 93</b>	Unclear how DEQ will apply the exemptions in the proposed financial assurance rule. Vagueness creates uncertainty, uneven application, unfair regulations. Lack of objective criteria invite decisions that are political not scientific. DEQ has few staff with skills or time to make these decisions. (19)
<b>Response</b>	<i>OAR 340-096-0001 states that DEQ may exempt low risk facilities from financial assurance requirements. The rule further defines low risk facilities. In addition, OAR 340-095-0090(2) includes other exemptions. All of the exemption criteria can be addressed during the financial assurance risk screening.</i>

<b>Comment 94</b>	Concern about how proposed rules will affect vermicomposting, in particular you can't heat worms to accomplish pathogen reduction. (4H)
<b>Response</b>	<i>Heating is one but not the only pathogen reduction measure allowed by the proposed rules. The proposed rules allow a composting facility to achieve pathogen reduction by alternative means that accomplish the pathogen reduction standards.</i>

<b>Comment 95</b>	Concerned regulations will require concrete containment when any runoff sits on the ground and evaporates. (4H)
<b>Response</b>	<i>The rules evaluate the risk of impacts to surface water and groundwater based on the specific conditions of each facility and location. A facility that has a low potential to cause environmental problems would not be required to implement significant protective measures such as concrete containment.</i>
<b>Comment 96</b>	Suggest a standard for compost tea, it's very advantageous and the quality of the tea is very important. (5H)
<b>Response</b>	<i>DEQ appreciates the efforts of operators in developing high quality compost products, including compost tea. DEQ's advisory group considered the issue of standards and decided that DEQ should not require that finished compost be required to meet any particular standards, in part because there is such a variety of compost products being produced. However, nothing in the proposed rules would prevent operators from testing their products and making that information available to consumers.</i>
<b>Comment 97</b>	Concerned about groundwater at his property near a proposed composting facility. Suggest the regulations require protection up front rather than waiting until a problem occurs. (1H)
<b>Response</b>	<i>The goal of these rules is to require that a particular facility implement measures or take other actions only as required to address the environmental conditions at that particular facility. The rules require that all facilities meet the same environmental protection standards, regardless of where a facility may be located. See response to comment 62</i>
<b>Comment 98</b>	Support composting but want DEQ to make sure that quality of living is protected, groundwater, and quality and beauty of surrounding area. (2H)
<b>Response</b>	<i>The proposed rules are intended to meet DEQ's statutory obligations to protect human health and the environment, in a manner that supports and encourages composting.</i>

## Inventory of Public Commenters and Comment Format on Compost Rule Amendments, Closed on April 30, 2009

### Part 1: Written Public Commenters

Ref. No.	Name	Organization	Address, Contact Info	Comment Format	Date Received
1	Wali Via	Winter Green Farm	Noti, OR 541-935-7676 <a href="mailto:walivia@wintergreenfarm.com">walivia@wintergreenfarm.com</a>	Email, one page comments and questions	3/30/2009
2	Wali Via	Winter Green Farm	Noti, OR 541-935-7676 <a href="mailto:walivia@wintergreenfarm.com">walivia@wintergreenfarm.com</a>	Email, one page comment, addendum	3/30/2009
3	Wali Via	Winter Green Farm	Noti, OR 541-935-7676 <a href="mailto:walivia@wintergreenfarm.com">walivia@wintergreenfarm.com</a>	Email, one page comments	4/3/2009
4	Amaranth Wilson	People, Planet, Profit Initiatives	306-906-4426 <a href="mailto:amaranthw@burgerville.com">amaranthw@burgerville.com</a>	Email, one page	4/20/2009
5	Kathleen McFarlane	McFarlanes Bark	13345 SE Johnson Rd. Milwaukie, OR 97222 <a href="mailto:KMcfarlane@mcfarlanesbark.com">KMcfarlane@mcfarlanesbark.com</a> 503-659-4240	Emailed two page letter - from Feb. 25 2008 comments	4/23/2009
6	Laura Baldschun		8770 SW Birchwood Road, Portland, OR 97225 971-255-9159 Laurab83@aol.com	Emailed two-sentence comment	4/29/2009
7	Ray Jaindl	Oregon Dept. of Agriculture	ODA, Natural Resources Division, <a href="mailto:rjaindl@oda.state.or.us">rjaindl@oda.state.or.us</a> , 503-986-4713	Emailed two pages of comments	4/29/2009
8	Jeanne Roy	Center for Earth Leadership	2420 SW Boundary St., Portland, OR 97239	Mailed two page letter	4/29/2009
9	John Dinnis	Red Barn Farm	30129 Camp Adair Road, Monmouth, OR 97361 <a href="mailto:jdinnis@2farmconnect.net">jdinnis@2farmconnect.net</a>	Mailed three page letter	4/29/2009
10	Raghu Namburi		Comments sent through Bob Barrows	Email, one page	4/29/2009
11	Jennifer	METRO	600 NE Grand Ave.	Emailed	4/29/2009

	Erickson		Portland, OR 97232-2736 Jennifer.Erickson@oregonmetr o.gov	three page letter	
12	Larry Brown	DEQ	Eastern Region DEQ, The Dalles <a href="mailto:Brown.larry@deq.state.or.us">Brown.larry@deq.state.or.us</a>	Emailed two pages	4/29/2009
13	Jeff & Cheryl Hollabaugh		PO Box 336 St. Paul, OR 97137 <a href="mailto:holabah@hotmail.com">holabah@hotmail.com</a>	Emailed one page letter and 20 photographs, posted online	4/30/2009
14	Ross & Kelly McGarva	Lakeview Lockers, LLC	<a href="mailto:lakeviewlockers@centurytel.net">lakeviewlockers@centurytel.net</a> , 541-947-3789	Emailed one page letter	4/30/2009
15	Roger Dilts	Clean Water Services	<a href="mailto:DiltsR@CleanWaterServices.org">DiltsR@CleanWaterServices.org</a> ; 503-681-4467	Emailed five page letter	4/30/2009
16	Kristan Mitchell	Oregon Refuse & Recycling Association	PO Box 2186 Salem, Or 97308 <a href="mailto:kristanm@orra.net">kristanm@orra.net</a>	Emailed seven page letter	4/30/2009
17	Jessica Repa	Blue Tree Strategies	<a href="mailto:Jessica@bluetreestrategies.com">Jessica@bluetreestrategies.com</a> 415-465-0415	Emailed two page letter, 19 page position paper, two page Organics Recycling letter to retailers	4/30/2009
18	Jeff Grimm	Grimm's Fuel Co.	18850 SW Cipole Rd., Tualatin, OR 97062	Mailed two page letter	4/30/2009
19	Mark P. Reeve	Reeve Kearns PC	610 SW Alder St., Ste 910 Portland, OR 97205	Faxed and emailed a three page letter	4/30/2009

## Part 2: Oral Public Commenters

<b>Ref. No.</b>	<b>Name</b>	<b>Organization</b>	<b>Address, Contact Info</b>	<b>Comment Format</b>	<b>Date Received</b>
*H		NO ORAL COMMENTS RECEIVED		Eugene Public Hearing	4/23/2009
1H	Richard Porter		3525 NE Dogwood Ln. Madras, OR 97741 541-475-4233 <a href="mailto:dickporter@hughes.net">dickporter@hughes.net</a>	Bend Public Hearing	4/28/2009
2H	Michael Goss		PO Box 1020 Madras, OR 97741 541-475-3864 <a href="mailto:m_d_goss@hotmail.com">m_d_goss@hotmail.com</a>	Bend Public Hearing	4/28/2009
3H	Jessica Repa	Blue Tree Strategies	<a href="mailto:jessica@bluetreestrategies.com">jessica@bluetreestrategies.com</a> 415-465-0415 <a href="http://www.bluetreestrategies.com">www.bluetreestrategies.com</a>	Portland Public Hearing	4/28/2009
4H	Dave Bergin	Columbia Gorge Organics & Pest Management Systems	<a href="mailto:herifs@otcb.com">herifs@otcb.com</a> <a href="mailto:Bugman-munk@yahoo.com">Bugman-munk@yahoo.com</a>	Portland Public Hearing	4/28/2009
5H	Rick Trumbull	Quality Compost	53377 Robin Lane Milton-Freewater, OR 97865	Portland Public Hearing	4/28/2009
			*H = oral public hearing comment		

## Compost Rule Work Group Members

<p>Nick Andrews  Metro Area Small Farms Extension Agent  Oregon State University - OSU Extension Service  North Willamette Research and Extension Center</p>
<p>Roy Brower  Regulatory Affairs Administrator, Metro Regulatory Affairs Program</p>
<p>Keith Emerson  Director of East Valley Orchards, Environmental Programs</p>
<p>Lee Fortier  Operations Manager, Dry Creek Landfill  Rogue Waste Systems</p>
<p>Russ Halvorsen  Operations Manager, Compost, Inc.</p>
<p>Del McGill  Organix</p>
<p>Matt Stern  Recycling Manager, Western Oregon Waste, NW Greenlands Composting</p>
<p>Rick Winterhalter  Waste Reduction Coordinator, Clackamas County</p>
<p>Glenn Zimmerman  Pacific Land Clearing, Inc./Wood Waste, Inc.</p>
<p>Bob Barrows  Project Manager/Waste Reduction Analyst, DEQ - Regional Environmental Solutions</p>
<p>Stephanie Rawson  Solid Waste Compliance Specialist, DEQ</p>
<p>Charles Landman  Legal Policy Advisor, DEQ</p>
<p>Pat Vernon  Compost Projects Coordinator, DEQ - Solid Waste Policy and Program Develop Section</p>
<p>Duane Altig  Solid Waste Technical Assistant, DEQ</p>

**State of Oregon**  
**Department of Environmental Quality**

**Memorandum**

**Presiding Officer's Report**

**Date:** April 24, 2009

**To:** Solid Waste - Composting Facility  
Proposed Rulemaking Public Hearing File

**From:** Julie M. Berndt; Solid Waste Analyst

**Subject:** Presiding Officer's Report for Public Hearing  
Hearing Date and Time: April 23, 2009, 7:10 p.m.  
Hearing Location: DEQ Office Conference Room - Eugene, Oregon

**Proposals:** Proposed Compost Facility Rulemaking

The public hearing on the above proposal was convened at 7:10 p.m. after the conclusion of an informational presentation from about 6 to 7 pm. on Apr. 23, 2009. Bob Barrows of the DEQ presented information on the proposed compost facility rule changes. He explained the specific proposals, the reason for the proposed rule changes, and responded to questions from the audience.

Julie Berndt of DEQ was the presiding officer. Ms. Berndt asked those attending the hearing to sign the attendance sheet and to sign witness registration forms if they wished to present testimony. Ms. Berndt informed the audience about the purpose of the hearing and explained that the hearing would be being recorded.

Eleven people attended the hearing. No one signed up to give testimony.

**Summary of Questions During DEQ Presentation**

The concerns and questions included, but were not limited to the following:

- Concern that new rules won't address piled yard debris, under 100 tons, that isn't being "composted," such as landscapers storing waste on the "back-40." They won't pay fees and are not managing the waste. Want to make sure they are addressed.
- Jeff Grimm wondered how DEQ and Metro regulation will work in the future.
- Lots of discussion about the screening process. We walked through a number of scenarios, mostly farm-related and some commercial composter related.

- One question about how the screening process deals with flood plain designations
- Questions about the permitting process – such as “Do the permits go out for public notice?” and “Will we have to get a new LUCS if we already have one?”
- Pathogen reduction questions – “What are the criteria for pathogen testing?” and “What’s the frequency of testing?”
- “How will farm folks know whether they fall into the category of being regulated if they do not currently have a permit?”
- Several people wanted us to know (the permitted composters) that it’s time to finalize the rules so that investments can be made into composting sites and they can move forward with site improvements. They need to know the ground rules before they can proceed. They are in complete support of these rules sticking to the proposed timeline of EQC adoption in August. They do not want any more delays.

### **Written Testimony**

Bob Barrows provided information about how to submit written comments via e-mail, postal mail, fax and a blog. No written comments were received at the hearing.

There was no testimony and the hearing was closed at 7:12 p.m.

**State of Oregon**  
**Department of Environmental Quality**

**Memorandum**

**Presiding Officer's Report**

**Date:** May 5, 2009

**To:** Solid Waste – Composting Facility  
Proposed Rulemaking Public Hearing File

**From:** Lawrence Brown; Solid Waste Technical Assistant

**Subject:** Presiding Officer's Report for Rulemaking Hearing  
Hearing Date and Time: April 28, 2009; 6:55 p.m.  
Hearing Location: DEQ Office Conference Room – Bend, Oregon

After the conclusion of an informational presentation provided by Lissa Druback of the DEQ the public hearing on the proposed compost facility rulemaking started at 6:55 p.m. and closed at 7:01 p.m. During the informational presentation Lissa presented information on the proposed compost facility rule changes and explained the specific proposals, the reason for the proposed rule changes and responded to questions from the audience.

Lawrence Brown of DEQ was the presiding officer of the hearing. He requested that those who attended the hearing sign the attendance sheet, and to sign witness registration forms if they wished to present testimony, and explained that the hearing was being recorded.

Seven people attended the hearing, two of them by phone. Two persons were present but did not sign the attendance sheet. Kelly McGarva was on the phone representing Lakeview Lockers, Lake County, and Bruce Lumper from DEQ attended by phone from The Dalles.

Two provided verbal testimony. One was concerned with why impermeable surfaces were not pursued as part of the rule package. This person mentioned that the area has fractured basalt soils, which are highly permeable, and he had concerns about a compost facility that might be located uphill from him. He wanted to be assured that groundwater would be protected. The other person who testified was concerned about how DEQ approves siting of compost facilities and that he wanted DEQ to be protective of their quality of life.

**Summary of Questions During Lissa's Presentation:**

The major issue of those attending dealt with a proposed compost facility to be located in Jefferson County, near Madras. They raised environmental issues, wanting DEQ to be proactive rather than reactive regarding groundwater protection, air pollution and pathogen reduction.

Another person questioned how DEQ was going to get the rule change information out to the agricultural community.

**Written Testimony:**

Lissa Druback provided information about how to submit written comments. Lawrence Brown also provided this information during the hearing. No written comments were received at the hearing.

**State of Oregon**  
**Department of Environmental Quality**

**Memorandum**

**Presiding Officer's Report**

**Date:** June 10, 2009

**To:** Environmental Quality Commission

**From:** Loretta Pickerell, Solid Waste Manager

**Subject:** Presiding Officer's Report for Rulemaking Hearing  
Title of Proposal: Amending Composting Facility Rules  
Hearing Date and Time: April 28, 2009, 6 p.m  
Hearing Location: DEQ Headquarters Office, Room EQC A,  
811 SW 6<sup>th</sup> Ave., Portland, OR

DEQ convened an information session followed by a rulemaking hearing to accept comments on proposed amendments to the state's composting facility rules on Apr. 28, 2009, at 6 p.m. at the DEQ's headquarters in downtown Portland. During the information session, Charlie Landman, DEQ's project lead for this rulemaking, explained the rulemaking proposal and answered questions from those attending.

The hearing opened to accept comments at 7 p.m. and closed at 7:35 p.m. Hearing organizers advised attendees of hearing procedures, including the recording of the hearing, and asked them to sign a registration form if they wished to present comments.

Five people attended the information session and hearing; no one participated via a teleconference line. Three testified and no one submitted written comments at the hearing.

The following is a summary of the comments received at the hearing. DEQ will include these comments in the summary of comments and agency responses for this rulemaking.

- Jessica Repa, representing Blue Tree Strategies and Stalk Market Products in Portland, asked that the rules address compostable products such as beverage containers and packaging, including specific reference as a feedstock and a requirement that compostable products be third party certified as meeting specific ASTM performance standards.
- Dave Bergin, a consultant in the organics industry, requested the proposed rules address vermicomposting more specifically, including the lower temperatures requirements and tolerances for worm composting. He also noted a concern that the proposed rules would force him to install concrete containment for runoff that poses little environmental risk.
- Rick Trumbull, representing Quality Compost in Milton-Freewater, asked DEQ to consider setting a standard for compost tea.

State of Oregon  
DEPARTMENT OF ENVIRONMENTAL QUALITY

**Relationship to Federal Requirements**

**COMPOSTING FACILITY RULEMAKING**

**Amends Oregon's Solid Waste Composting facility rules to provide greater environmental protection, flexibility and efficiency.**

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*Answers to the following questions identify how the proposed rulemaking relates to federal requirements and potential justification for differing from, or adding to, federal requirements. This statement is required by OAR 340-011-0029(1).*

**1. Is the proposed rulemaking different from, or in addition to, applicable federal requirements? If so, what are the differences or additions?**

There are no applicable federal requirements for the regulation of solid waste composting facilities. This is a state-only regulatory program.

Composting is a managed biological process through which organic materials such as manure, leaves, yard debris, and food wastes are converted into a more homogeneous, fine-particle material called compost. Composting can be an efficient method for recycling organic materials that might otherwise be disposed of in a landfill, and by avoiding anaerobic decomposition, it prevents the release of methane, a significant component of greenhouse gas. The use of compost offers numerous benefits: when incorporated into soil, it can improve soil tilth and fertility; it can provide a more stable form of nitrogen less susceptible to leaching into water supplies; on heavy soils, compost helps reduce compaction and increases infiltration.

DEQ supports and encourages composting. At the same time, DEQ is aware that, if not conducted in the proper manner, or if conducted at an improper location, composting presents potential environmental problems, most notably to surface water and groundwater. The proposed rules include performance standards that all composting facilities must meet. These standards protect surface water and groundwater, require control of offensive odors and vectors, and require testing of finished compost to make sure human pathogens have been reduced to safe levels.

Individual composting facilities may need to make changes to their facilities or operations to meet these standards. However, the proposed rules do not mandate any particular changes. Instead, the rules recognize that each facility will have unique problems depending upon the

location and nature of the facility, and so each facility will need a different solution to those problems. The proposed rules give each operator the flexibility and responsibility to address facility issues in a manner that best suits that facility.

**2. If the proposal differs from, or is in addition to, applicable federal requirements, explain the reasons for the difference or addition (including as appropriate, the public health, environmental, scientific, economic, technological, administrative or other reasons).**

If not conducted in the proper manner, or if conducted at an improper location, composting presents potential environmental problems, including potential pollution of surface water or groundwater, release of offensive odors, harboring of vectors, and production of human pathogens. The proposed rules are designed to address those potential environmental and public health problems.

**3. If the proposal differs from, or is in addition to, applicable federal requirements, did DEQ consider alternatives to the difference or addition? If so, describe the alternatives and the reason(s) they were not pursued.**

DEQ considered several alternatives during the course of this rulemaking to address the environmental threats listed above. For surface water, DEQ developed a compost-specific stormwater discharge permit. That alternative was not pursued because DEQ's stormwater permitting program is currently in litigation on the validity of its permits. For groundwater, DEQ considered requiring all composting facilities to operate only on impermeable surfaces. That alternative was not pursued because it was determined not to be necessary at all facilities, it would have imposed significant costs on some operators, and it could have created unintended environmental problems by requiring capture, storage and disposal of large volumes of process water. For odor, DEQ considered using a nuisance-based regulatory approach. That alternative was not pursued because it was determined to be impractical and would have involved DEQ in land use issues outside our purview.

**DEPARTMENT OF ENVIRONMENTAL QUALITY**  
**Chapter 340**  
**Proposed Rulemaking**  
**STATEMENT OF NEED AND FISCAL AND ECONOMIC IMPACT**

Amend solid waste composting facility rules for composting facilities. Clarify financial assurance requirements for solid waste disposal facilities and public notice requirements for renewal of several solid waste permits.

<b>Title of Proposed Rulemaking</b>	Composting Facility Solid Waste Regulations
<b>Stat. Authority or Legal Authority</b>	ORS 459.045, 459.205, 459.215, 459.225, 459.235, 459A.025,
<b>Stat. Implemented</b>	ORS 459.005, 459.015, 459.205, 459.215, 459.245, 459.248, 459.272 – 273, 459A,
<b>Need for the Rule(s)</b>	The rule changes are needed to amend, update, and clarify requirements for composting facilities to promote composting and ensure protection of public health, groundwater, and surface water.
<b>Documents Relied Upon for Rulemaking</b>	<ol style="list-style-type: none"> <li>1. CH2MHill. “Commercial Composting Water Quality Permit Development.” April 2004. Evaluates best management practices for composting facilities and their estimated costs.</li> <li>2. Tetra Tech. “DEQ Commercial Food Waste Composting Study.” October 2002. Examines the reliability of low technological compost methods to meet regulatory requirements when composting mixed food waste, animal parts and yard debris.</li> <li>3. DEQ Water Quality. “DEQ Leachate and Stormwater Sampling Study.” March 2006. Identifies pollutants in leachate and runoff from composting facilities.</li> <li>4. DEQ Solid Waste. “DEQ Compost Survey.” May 2004. Assesses best management practices currently in use for water quality protection.</li> <li>5. Bartlett, Jerry. “Stormwater Treatment Options at Composting Facilities.” <u>BioCycle</u> February 2006, 23-29. Reviews potential costs for implementing best management practices in Oregon.</li> <li>6. Allen and Bakz. “Increasing Feedstock Throughput on a Smaller Footprint.” <u>BioCycle</u> September 2006, 32-37. Analyzes composting capacity of aerated piles at various depths.</li> <li>7. Kennedy/Jenks. “Literature Review of Compost Leachate.” October 2007. Reviews studies evaluating the impact of compost leachate on groundwater.</li> </ol> <p>These documents are available on line at <a href="http://www.deq.state.or.us/lq/sw/compost/rulemaking.htm">http://www.deq.state.or.us/lq/sw/compost/rulemaking.htm</a>, or in hard copy by request.</p>
<b>Request for Other Options</b>	<b>Pursuant to ORS 183.335(2)(b)(G), DEQ requests public comment on whether other options should be considered for achieving the rules’ substantive goals while reducing the negative economic impact of the rules on business.</b>
<b>Overview</b>	Composting facilities are operations that process certain organic feedstocks into a finished product called compost. The most commonly used feedstocks for composting are yard debris, wood waste, manure, and food waste. Composting can be an efficient

method for recycling organic materials that might otherwise be disposed of in a landfill, and by avoiding anaerobic decomposition, it prevents the release of methane, a significant component of greenhouse gas. The use of compost offers numerous benefits: when incorporated into soil, it can improve soil tilth and fertility; it can provide a more stable form of nitrogen less susceptible to leaching into water supplies; and on heavy soils, compost helps reduce compaction and increases infiltration.

Composting also contributes to achieving the state's solid waste recovery goal of 50% by 2009. In 2006, 41 permitted composting facilities in the state composted over 591,000 tons of feedstock, which accounted for 15% of all solid waste diverted from landfills.

DEQ supports and encourages composting. At the same time, we are aware that, if not conducted in the proper manner, or if conducted at an improper location, composting presents potential environmental problems, most notably to surface water and groundwater. For this reason, composting facilities require a solid waste facility permit unless specifically exempt from permit requirements.

DEQ has determined that the existing solid waste rules for composting facilities need to be revised to ensure protection of public health and the environment while allowing Oregon's composting industry to grow.

The proposed rules include a number of significant new features:

- (1) The proposed rules establish clear, objective performance standards that all composting facilities must meet.
- (2) Under the proposed rules, the level of DEQ involvement with a composting facility will be proportional to the environmental risk presented by the facility. DEQ will assess the level of risk through a screening process, with an accompanying screening fee.
- (3) The proposed rules provide clear requirements for operations plans for facilities that must have one.
- (4) The proposed rules provide for a Plan Review and Approval Fee.
- (5) The proposed rules provide for a special engineering review fee for facilities with complex engineered water management systems.
- (6) The proposed rules eliminate existing application fees
- (7) The proposed rules modify permit types and compliance fees.
- (8) The proposed rules adjust the existing size exemption to exempt more small facilities.
- (9) The proposed rules eliminate the agricultural exemptions and limitations.
- (10) The proposed rules eliminate the current exemption for institutional composting facilities.
- (11) The proposed rules provide clear requirements for groundwater protection
- (12) The proposed rules clarify the requirement for financial assurance to ensure environmentally safe closure of a composting facility and other solid waste disposal facilities.

	<p><b>The combined fiscal impact of these changes on any particular composting facility will depend upon facility-specific factors, most importantly: the size of the facility, location of the facility, whether the facility presents environmental risks that are not currently being addressed, and, especially, the measures necessary to address those risks.</b></p>
<p><b>Summary of Rule Changes</b></p>	<p><b><u>Solid Waste Rules Changes</u></b></p> <p><b>1. Performance Standards.</b> The proposed rules require that all composting facilities, regardless of size, location, permit category, etc, must operate in a manner that meets DEQ’s environmental goals for protection of surface water and groundwater, prevention of unacceptable odors and vectors, and reduction of pathogens in finished compost. These are not new requirements; rather, in the proposed rules they are gathered in one place and stated clearly. Because these are not new requirements, except for the groundwater protection standard, this rule change will not have a fiscal impact. <b>The fiscal impact of the proposed groundwater protection standard is discussed below.</b></p> <p><b>2. Environmental Risk Screening.</b> The proposed rules require that all existing composting facilities that process over 100 tons of feedstocks per year, and any new facilities over 100 tons, must provide DEQ basic information that will allow DEQ to evaluate the environmental risk presented by the facility. This is a new requirement. However, many facilities already have this information, and much of it is readily accessible on-line. Based on information provided by compost operators, DEQ estimates that it will cost between \$1000 and \$5000 for an average facility to gather this information and submit it to DEQ. Every facility will also pay a one-time screening fee of \$150. There are currently 42 commercial composting facilities and an estimated 30 farm-based composting facilities that will pay this fee. <b>The estimated fiscal impact of this proposed change is between \$1150 and \$5150 per facility.</b></p> <p><b>3. Operations Plans.</b> The proposed rules require that every facility that DEQ determines presents an environmental risk must submit an operations plan, for DEQ approval, that describes how the facility will operate to meet its environmental responsibilities. This is a new requirement that will apply to the composting facilities that DEQ determines present environmental risk. DEQ estimates that 50 percent, 21 of the existing 42 commercial composting operations, will be determined to present environmental risk and will be required to provide an operations plan to DEQ. All currently operating commercial composting operations have operations plans. DEQ estimates that 50 percent of the 21 facilities that will be required to get plan approval from DEQ have plans that comply with the proposed rules. DEQ estimates that 11 facilities will be required to update their plans to describe how the facility will be operated with respect to the environmental risk or risk identified by DEQ. <b>DEQ estimates that the cost for updating a plan will cost between \$5000 and \$10,000 per facility.</b></p> <p>Farm based composting facilities will submit a plan for approval by the Oregon Department of Agriculture (ODA). DEQ, ODA, the Oregon State University Extension Service will work together to provide a basic composting plan template for farm-based composting operations, and ODA and OSU will provide assistance to these operators in completing</p>

their plans. **DEQ estimates that, with ODA and OSU assistance, it will cost an average farm based composting facility between \$1000 and \$5000 to prepare a basic composting plan.**

**4. Plan Review and Approval Fee.** Each of the estimated 21 facilities that require plan review and approval will pay a one-time Plan Review and Approval fee to DEQ. The amount of the fee will depend upon the size of the facility. Farm-based composting facilities will be working with ODA and OSU, and therefore will not be required to pay this fee. The fee schedule is set out in Table 1 below.

**TABLE 1: Plan Review and Approval Fees**

<b>Tons Processed per Year</b>	<b>One Time Plan Review and Approval Fee</b>	<b>Estimated Number of Facilities</b>
>100 and <3,500	\$500	10
> 3,500 ≤ 7,500	\$750	2
> 7,500 and ≤ 10,000	\$1,000	0
>10,000 and <50,000	\$2,000	6
> 50,000	\$5,000	2

**5. Engineering Review Fee.** The proposed rules provide for a one-time fee of \$500 for facilities that have or propose more complex water management systems that will require review by a DEQ engineer. **DEQ estimates that 5 of the larger facilities might require such review and would incur the \$500 fee.**

**6. Elimination of Application Fees.** The proposed rules will eliminate the existing permit application fees for new composting facilities. In their place, all new composting facilities will pay the screening fee, as discussed above; facilities that require a composting plan will pay the Plan Review and Approval Fee, also discussed above. The existing application fees that will be eliminated are: the \$100 fee for registration permits; the \$500 fee for general permits; and the tonnage-based fees of \$1000 (up to 7,500 tons/year) and \$5,000 (over 7,500 tons/year) for individual permits. **This will be cost neutral for facilities that would have applied for a registration and will provide a one-time savings of \$400 for facilities that would have applied for a general permit under existing rules.** For facilities that would have applied for an individual permit, the financial impact will depend upon the size of the facility, as present in Table 2 below. **The proposed fees will provide a cost savings for new facilities that go through the plan review and approval process.**

**TABLE 2: Financial Impact From Elimination of Individual Permit Application Fees for New Facilities That will Pay The Plan Review And Approval Fee**

<b>Tons Processed per Year</b>	<b>Eliminated Application Fee</b>	<b>Proposed Plan Review and Approval Fee</b>	<b>One Time Fiscal Impact for New Facilities</b>
>100 and <3,500	\$1,000	\$500	(\$500)
3,500 ≤ 7,500	\$1,000	\$750	(\$250)
> 7,500 and ≤ 10,000	\$5,000	\$1,000	(\$4,000)
>10,000 and <50,000	\$5,000	\$2,000	(\$2,000)
> 50,000	\$5,000	\$5,000	\$0

**7. Modify Permit Types and Compliance Fees.** Existing rules provide three permit types: registration permits, general permits, and individual permits. The general permit has expired and will not be readopted by the new rules. The registration permits will continue, as will the individual permits, although under the name “composting permit.” As discussed above, facilities that DEQ determines present a low environmental risk will be issued a registration permit and pay a one time screening fee. Facilities that DEQ determines present environmental risk will prepare an operations plan, receive a composting permit, and pay an annual compliance fee.

The fee impacts from this shift for existing facilities will depend upon the kind of permit the facility is currently operating under and the kind of permit the facility will receive under the proposed rules. **As described below, DEQ estimates these changes will either have no fiscal impact or will result in reduced compliance fees for existing composting facilities.**

The proposed rules modify the existing compliance fees for both registration permits and individual permits (renamed compost permits.). The existing annual compliance fee for registration permits is \$100. There will be no compliance fee for registration permits under the new rules. The existing general permit compliance fees that will be eliminated are shown in Table 3.

**Table 3: Existing Compliance Fees for General Permits (to be eliminated)**

<i>Permit Type</i>	<b>Tons Processed per Year</b>	<b>Annual Compliance Fee</b>
General Permit	> 20 ≤ 7,500	\$500
	> 7,500 and ≤ 50,000	\$1,000
	> 50,000	\$5,000

Proposed annual compliance fee changes for individual permits (to be renamed composting permits) are shown in Table 5.

**Table 4: Existing Fees for Individual Permits**

<b>Tons Processed per Year</b>	<b>Annual Compliance Fee</b>
≤7,500	\$500
> 7,500 and ≤ 50,000	\$1,500
> 50,000	\$5,000

**Table 5: Proposed Fees for Composting Permits**

<b>Tons Processed per Year</b>	<b>Annual Compliance Fee</b>
≤ 100	\$0
> 100 and ≤ 3,500	\$100
> 3,500 and ≤ 7,500	\$500
> 7,500 and ≤ 50,000	\$1,000
> 50,000	\$5,000

The fiscal impact of these changes on existing composting operations will depend upon the current permit the facility operates under, the permit the facility will move to, and the size of the facility.

Of the 41 composting facilities currently permitted, 39 have registration or general permits. DEQ assumes that half of those will move to registration permits and half to compost permits. The two facilities with individual permits are not currently in operation.

**Table 6: Estimated Fiscal Impacts of Registration, General Permit, and Compost Permit Fee Changes**

<b>Tons Processed per Year</b>	<b>Annual Fiscal impact - Registration to Registration</b>	<b>Annual Fiscal impact - Registration to Compost Permit</b>	<b>Annual Fiscal Impact – General Permit to Registration</b>	<b>Annual Fiscal Impact - General Permit to Compost Permit</b>
> 100 and ≤ 3,500	(\$50)	\$0	(\$500)	(\$400)
> 3,500 and ≤ 7,500	NA*	NA	(\$500)	\$0
> 7,500 and ≤ 50,000	NA	NA	(\$1000)	\$0
> 50,000	NA	NA	(\$5000)	\$0

\* No existing facilities meet these criteria.

**8. Adjust Size Exemptions.** The proposed rules increase from 20 to 100 tons the amount of Type 1 and Type 2 feedstocks that a facility may compost annually without a permit. They add a new exemption allowing 40 tons of Type 3 feedstock to be composted annually without a permit if composting takes place in a vessel designed to prohibit vector attraction and odor. These changes in permit exemptions will allow more small facilities to compost without a solid waste registration or composting permit. As described above, all composting facilities regardless of size will be required to meet performance standards in the new rules. Currently there are no commercial composting operations under 100 tons. **Therefore, DEQ estimates this change will have no fiscal impact on existing commercial composting facilities. This change may exempt many smaller farm based and institutional composting facilities.**

**9. Eliminate Agricultural Exemptions and Limitations.** Agricultural composters are generally subject to some existing solid waste composting facility rules, but are not required to apply for and receive a permit from DEQ. Current rules limit the amount of off-site feedstocks composted without a permit to the amounts needed to supplement (enable) composting of feedstocks generated on site. Agricultural composting facilities that took extra “supplemental” feedstocks from off the farm, and facilities that sent finished compost off the farm, were required to operate under an Agricultural Compost Management Plan (ACMP) administered by the Oregon Department of Agriculture.

The proposed rules eliminate all restrictions on the amount or sources of feedstocks that may be used by a farm based composting facilities. These facilities will go through the same screening process as all other composting facilities and pay the one-time screening fee of \$150. This will be a new fee for the estimated 30 farm based compost facilities. Farm based composting facilities that are determined to be low risk facilities will register with DEQ. As discussed above, there is no separate registration fee under the proposed rules. **For farm based facilities, the fiscal impact of the proposed rules will be \$150.**

As discussed above, ODA will address farm based facilities that DEQ and ODA determine will need an operations plan and composting permit. Because ODA will provide this oversight, those facilities will not pay the DEQ plan review and approval fee or annual compliance fees for a composting permit. Therefore, this proposed change will have no other fiscal impact on farm based facilities.

**10. Eliminate Exemption for Institutional Composting Facilities.** The proposed rules eliminate the existing exemption for institutional composting facilities. Institutional facilities that are larger than 100 tons will go through the same screening process as all other composting facilities and pay the one-time screening fee of \$150. Facilities that are determined to be low risk facilities will register with DEQ. As discussed above, there is no separate registration fee under the proposed rules. Institutional facilities that are determined to present environmental risk will go through the plan approval process and receive a compost permit as will all other composting facilities. Facilities no longer exempt from permit requirements will incur costs including plan review and annual compliance fees and may incur additional costs to comply with permit requirements. DEQ estimates there are approximately 25 institutional composting facilities that are larger than 100 tons, DEQ estimates that almost all of those facilities will be determined to be low risk facilities, and that the average fiscal impact of this proposed change will be \$150.

**11. Groundwater protection standard.** The proposed rules include a specific performance standard requiring all composting facilities to protect groundwater. However, the groundwater protection requirement will not be a new requirement. The existing composting rules prohibit all composting facilities from discharging leachate or other wastewater to groundwater or surface water without a water quality permit. Similarly, DEQ's Groundwater Protection rules (OAR 340 Division 40) prohibit causing an unacceptable adverse impact to groundwater.

DEQ will determine during the screening process (discussed above) whether each existing composting facility is operating in a manner that protects groundwater, and whether the proposed operations of a new facility will protect groundwater. Many composting facilities already have some management practices in place to provide such protection. For facilities that DEQ determines pose a risk to groundwater, the proposed rules provide the operators with the flexibility and responsibility to select the methods, practices, or improvements that will provide groundwater protection for their facility. DEQ will review the proposed approach as part of the facility operations plan review.

Several factors affect the groundwater protection measures any particular facility may choose including: the types of composting methods used, the amounts and types of feedstock composted, the amounts of leachate and stormwater generated, and the methods used to manage those waste streams. Climate, site conditions, existing measures, and other factors will further affect the measures selected and the costs to construct and implement them. For example, composting facilities in areas with heavy rainfall are more likely to need measures to protect groundwater than facilities in drier areas.

Such measures may range from simple measures such as covering a pile during the wet months, to creating filter strips, bioswales, or other passive features to manage water from the composting operation. Some facilities may find it advisable to move the composting operation to a different part of the property. Facilities that are in areas DEQ considers especially vulnerable for groundwater contamination may need to provide a protective surface beneath the composting processing and feedstock areas, and manage any water collected from those areas.

**The measures and costs will depend upon factors specific to each facility and will be selected by the facility operator (with DEQ approval.) DEQ estimates that half of all existing facilities will be determined not to pose a threat to groundwater. DEQ further estimates that most of the remaining facilities will be able to provide the necessary groundwater protection through measures such as filter strips and bioswales, at a cost of less than \$5,000 per facility. For facilities that may choose to, or are required to, implement much more complex and extensive measures, the estimated costs for two such measures are provided in Appendix A. DEQ cannot estimate whether any facility will be required to or will in fact implement those measures.**

**12. Clarify Financial Assurance Requirements.** Financial assurance requires planning for a composting facility's closure, post-closure maintenance and any corrective action that may be needed and assurances that the amount of financial resources necessary to carry out those plans will be available when needed. The proposed rules clarify those requirements for composting facilities, and allow DEQ to require financial assurance if DEQ determines that such assurance is necessary. The rules provide that DEQ may exempt low risk facilities from the financial assurance requirements, and DEQ estimates that most facilities will be exempted from the requirement.

For facilities that will be required to provide financial assurance, the costs would vary considerably depending on a number of variables such as the costs to load and transport material off-site; the costs of disposal at another composting facility, farm or disposal site; and the financial assurance mechanisms used (e.g., trust, insurance, letter of credit or another DEQ-approved alternative.) One composting facility that was operating under an individual permit (no longer in operation), estimated the costs to close the facility at \$2/ton x the maximum amount of feedstock and composted material on-site at any time and established a trust fund to cover the \$213,200 in estimated closure costs. Note this was a very large facility with more than 100,000 tons of feedstocks and composted material on site at one time. There are fewer than five such facilities currently operating in Oregon.

The proposed rules also clarify that all solid waste facilities permitted under OAR 340, Division 96 (transfer stations and material recovery facilities, incinerators, sludge and land application disposal sites and solid waste treatment facilities) are subject to financial assurance requirements, and that these facilities may be exempt from the requirements if the department determines they are low risk. This proposed clarification reflects standard practice and will not pose new fiscal or economic impacts on facilities.

<p><b>Summary of Other Potential Fiscal Impacts</b></p>	<p><b>1. Tip Fees.</b> Composting facilities charge a tip fee (disposal fee) for incoming feedstocks, and may increase the tip fees to recoup all or part of the costs of implementing the proposed rules. DEQ estimates tip fees would be increased, if at all, only for facilities that need to implement the more expensive groundwater protection measures discussed in Appendix A. Composting facility tip fees across Oregon for uncompacted yard debris range from \$10 per ton to \$26 per ton. These tip fees could increase between an estimated \$1.61 and \$9.10 per ton for yard debris or other organic feedstocks if composting facility operators recover all or most of their costs to implement the most expensive groundwater protection measures by increasing tip fees.</p> <p><b>2. Sale price of compost product.</b> As an alternative to passing costs on through higher tip fees, a facility operator may choose to pass the costs of compliance to the consumer through the sale price of finished product. The price of finished compost may increase by an estimated \$1.53 - \$6.50 per ton if facilities implemented the most expensive measures described in Appendix A and passed those costs on in the form of increased prices.</p> <p><b>3. Collection rates:</b> Many local governments provide yard debris (and potentially other organics) pick up at residences and commercial businesses by franchising solid waste hauling and recycling services. Local governments approve collection rates after consideration of costs to provide the service, an allowable profit margin, and third party auditor review. Information from the City of Portland, Clackamas County and Marion County residential yard debris collection programs was used to estimate the potential increase in collection rates given the estimated range of tip fee increases in # 1 above. Some jurisdictions do not anticipate changing collection rates specifically for tip fee increases resulting from this rulemaking. If collection rates are changed to address tip fee increases resulting from this rulemaking, monthly residential collection rates may increase between \$.01 and \$.45.</p>
<p><b>Small Businesses</b></p>	<p>All but two of the existing composting facilities are small businesses. The fiscal impact of the proposed rules on these facilities includes, potentially, all of those described above. The exact impact on any particular facility will depend upon whether DEQ determines the facility presents and environmental risk and, if so, the measures necessary for the facility to properly manage those risks.</p>
<p><b>Large Business</b></p>	<p>Currently, two composting facilities are large businesses with over 50 employees. Depending upon site-specific factors, composting facilities that are large businesses will incur the same fiscal and economic impacts as those that are small businesses.</p> <p>Haulers that are large businesses face the same tip fee and other fiscal and economic impacts as the general public, described above.</p>
<p><b>General Public</b></p>	<p>The general public may be indirectly affected by increased costs of compliance with the proposed rule changes that are passed on through tip fees or the price of finished compost, as discussed above</p>

<b>Businesses Involved in the Rulemaking</b>	Three commercial composting businesses and three agricultural composting facilities represented their respective businesses on DEQ’s Composting Facility Rulemaking Work Group. These and several other composting facilities participated in the rulemaking process by attending meetings or staying current with the process via DEQ’s website. A group of composting facility operators provided assistance in developing the BMP cost estimates in Tables 7 and 8.
<b>Local and Regional Government</b>	<p>Many municipalities (mostly in metropolitan areas) and counties throughout the state that serve rural populations have yard debris collection programs. Local governments franchise with haulers to collect compostable wastes at the curbside. If composting facilities choose to pass increased costs onto the tip fee, haulers may request local governments to increase the collection rate to cover the tip fee increase. Local government may have provisions to increase collection rates without a rate review in such cases, or may need to perform a rate review.</p> <p>Potential collection rate increases are estimated to range between \$.01 and \$.45 per month, as described in #1 above.</p> <p>If a composting facility closes, cities or counties could be faced with redirecting feedstocks to other facilities, which might increase the tip fee to cover increases in transportation or disposal costs</p> <p>Metro licenses composting facilities to regulate operations and ensure proper waste management. There is no fiscal or economic impact for Metro.</p>
<b>State Agencies</b>	<p>Oregon Department of Agriculture (ODA) staff provides oversight of agricultural composting operations. ODA does not expect to require additional FTE to implement the proposed rules.</p> <p>State institutions such as the universities and prisons that compost may incur the same fiscal and economic impacts to comply with the proposed rules as other composting facilities, described for small businesses above.</p>
<b>DEQ</b>	Existing FTE are sufficient to manage the solid waste composting facility workload in the long term.
<b>Other Agencies</b>	Other agencies that compost or generate feedstocks or purchase finished product may incur the same fiscal and economic impacts described above for small businesses and the general public.
<b>Housing Costs</b>	The department has determined that this proposed rulemaking will have no measurable effect on the cost of development of a 6,000 square foot parcel and the construction of a 1,200 square foot detached single-family dwelling on that parcel.
<b>Administrative Rule Advisory Committee</b>	A Composting Facility Rulemaking Work Group consisting of composting facility operators, local and regional governments, Compost Council of Oregon representative, agricultural composters and other interested parties met more than fifteen times between February 2004 and October 2007 to develop the proposed rules. In addition, DEQ

conducted a survey of composting facility operators in October 2005, contacting 75% of the permittees. Of those surveyed, only two were unaware that DEQ was conducting this rulemaking process. Twenty-seven reported that they were involved in the process and attended meetings or followed the process by viewing the minutes on DEQ's website.

In the fall of 2008, DEQ met with representatives of commercial composters and local government to discuss the proposed rules, and held a workshop for farm based composting facilities on the proposed rules. In February 2009, DEQ provided the external workgroup with copies of the rulemaking documents for their review and comment, and met with the group to discuss the rules.

**APPENDIX A**

<p><b>Analysis of Costs to Implement Best Management Practices</b></p>	<p><b>Potential costs to construct and operate certain BMPs to Protect groundwater</b></p> <p>This section evaluates potential costs to construct and operate best management practices (BMPs) to protect groundwater. As noted above, DEQ will determine through its screening process whether a facility will need to implement groundwater protection measures, or other or additional measures, to meet the groundwater protection performance standard. The facility will then include measures in its operations plan that it believes will meet the performance standard. DEQ will review the proposed measures and will approve them if it determines the measures will be protective.</p> <p><b>The BMPs discussed below would be necessary only at facilities that are unable to demonstrate to DEQ that alternative methods will protect groundwater and surface water. It is uncertain whether any facilities would be required to or would implement these measures.</b></p> <p>This analysis uses two hypothetical composting operations to illustrate potential costs to implement BMPs at a facility. Both hypothetical operations use an aerated windrow method of composting, but one manages leachate and stormwater on site and the other discharges them to a sewer. The suite of BMPs selected for each varies accordingly. Other assumptions needed to evaluate the costs for implementing the selected BMPs are the same for both facilities and are described below. Table 4 summarizes the costs for implementing BMPs at the facility treating leachate and stormwater on site. Table 5 summarizes those costs for the facility discharging to a sewer.</p> <p><i>Other assumptions for hypothetical composting facilities:</i></p> <ul style="list-style-type: none"> <li>• The facilities are located in Western Oregon with high average rainfall.*</li> <li>• The sites receive up to one million gallons of rainwater per acre annually.</li> <li>• The facilities are 5 acres and process 18,000 to 41,000 tons of feedstock annually.</li> <li>• The 5 acre site needs an additional 2½ acres of protective surface. **</li> <li>• The facilities using a negative or positive forced air method will produce much less leachate than a turner or excavator.</li> </ul> <p>* The average annual rainfall for facilities located in Western Oregon is 38 inches. ** DEQ surveyed 75% of the permitted composting facilities. The survey showed that 42% have a protective surface on 50-100% of the site, while 21% have a protective surface on 25-49% of the site. However, this analysis assumed that a facility would pave an additional 2½ acres.</p>

**Table 7: BMP Costs – New Construction to Manage Leachate On-site.**

<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>
<b>Best Management Practice</b>	<b>Capital Cost</b>	<b>Annual Capital Cost</b>  (10 year amortization, no interest)	<b>Annual Operating Costs</b>	<b>Total Annual BMP Costs</b>  ( Col C + Col D)	<b>Comments</b>
Grading facility areas	\$22,000	\$2,200	\$6,000	\$8,200	May not be needed if site already paved
Paving	\$381,000	\$38,100		\$38,100	Based on \$3.50/sq. ft. for 2.5 acres. Includes compacted rock base and paving. Not needed if site already paved.
Sediment basins solid separator	\$26,000	\$2,600	\$800	\$3,400	
Bio-swale or grassy areas	\$7,000	\$700	\$700	\$1,400	Estimated for construction and operation cost.
Oil and water separator	\$20,000	\$2,000	\$2,000	\$4,000	Includes purchase, site preparation and installation.
Leachate pump	\$4,000	\$400	\$1,000	\$1,400	Based on 15 horsepower at 1,230 hrs per year.
Holding pond or detention facility	\$146,000	\$14,600	\$9,000	\$23,600	Includes lined ponds, excavation, aerators, and leachate pump.
Wet pond	\$20,000	\$2,000	\$1,000	\$3,000	Based on unlined pond. 200,000 gallon
Sweeper truck			\$31,000	\$31,000	Based on \$600 bi-weekly rental.
<b>Totals</b>	<b>\$626,000</b>	<b>\$ 62,600</b>	<b>\$51,500</b>	<b>\$114,100</b>	

**Table 8: BMP Costs – New Construction for Disposing Leachate to Sewer.**

A	B	C	D	E	F
Best Management Practice	Capital Cost	Annual Capital Cost (10 year amortization, no interest)	Annual Operating Costs	Total BMP Costs (Col C + Col D)	Comments
Grading Facility Areas	\$22,000	\$2,200	\$6,000	\$8,200	May not be needed.
Paving	\$381,000	\$38,100		\$38,100	Based on \$3.50 sq. ft. for 2.5 acres. Includes compacted rock base and paving.
Sediment Basins Solid Separator	\$26,000	\$2,600	\$800	\$3,400	
Oil and Water Separator	\$20,000	\$2,000	\$2,000	\$4,000	Includes purchase, site preparation and installation.
Holding pond or detention facility	\$146,000	\$14,600	\$9,000	\$23,600	Includes lined ponds, excavation, aerators, and leachate pump.
System Development Fee	\$36,000	\$3,600		\$3,600	Estimates varied from \$11,000 to \$61,000.
Direct connect to sanitary sewer			\$7,000	\$7,000	Estimate was based on 2 additional acres or 2 million gallons on a five-acre site.
<b>Total fixed cost</b>	<b>\$630,650</b>	<b>\$63,065</b>	<b>\$24,800</b>	<b>\$87,900</b>	

Note: Assuming a composting facility that chooses to haul leachate to a sewer treatment facility travels 20 miles round trip, estimated average annual hauling costs would be \$95,000 (using the average of a wide range of estimated hauling costs.)

State of Oregon  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
**Land Use Evaluation Statement**

**Rulemaking Proposal**  
for  
**Composting Facilities**

Amend solid waste composting facility rules. Clarify financial assurance requirements for solid waste disposal facilities and public notice requirements for renewal of several solid waste permits.

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**1. Explain the purpose of the proposed rules.**

This rulemaking modifies permit exemptions for composting facilities; creates performance requirements for all composting facilities to protect surface water, groundwater, prevent odors and vectors, and ensure pathogen reduction; creates an environmental risk screening process; describes registration and permit requirements; clarifies operating and maintenance requirements; and modifies the compost facility registration, application, and compliance fee schedules.

**2. Do the proposed rules affect existing rules, programs or activities that are considered land use programs in the DEQ State Agency Coordination (SAC) Program?**

Yes  No

**a. If yes, identify existing program/rule/activity**

Issuance of Solid Waste permit.

**b. If yes, do the existing statewide goal compliance and local plan compatibility procedures adequately cover the proposed rules?**

Yes  No  (if no, explain):

**c. If no, apply the following criteria to the proposed rules.**

**In the space below, state if the proposed rules are considered programs affecting land use. State the criteria and reasons for the determination.**

**3. If the proposed rules have been determined a land use program under 2 above, but are not subject to existing land use compliance and compatibility procedures, explain the new procedures the Department will use to ensure compliance and compatibility.**

N/A