**OAR CHAPTER 340**

**DIVISION 045**
**REGULATIONS PERTAINING TO NPDES AND WPCF PERMITS**

**340-045-0015**
**Permit Required**
(1) Without first obtaining a permit from the Director, no person shall:
(a) Discharge any wastes into the waters of the state from any industrial or commercial establishment or activity or any disposal system;
(b) Construct, install, modify, or operate any disposal system or part thereof or any extension or addition thereto;
(c) Increase in volume or strength any wastes in excess of the permissive discharges specified under an existing permit;
(d) Construct, install, operate or conduct any industrial, commercial, or other establishment or activity or any extension or modification thereof or addition thereto, the operation or conduct of which would cause an increase in the discharge of wastes into the waters of the state or which would otherwise alter the physical, chemical, or biological properties of any waters of the state in any manner not already lawfully authorized;
(e) Construct or use any new outlet for the discharge of any wastes into the waters of the state.
(2) NPDES Permit Requirement:
(a) Without first obtaining an NPDES permit, no person shall discharge pollutants from a point source into navigable waters.
(b) Without first obtaining an NPDES permit, no person owning or operating an animal feeding operation designated by the Director as a significant contributor of pollutants pursuant to the provisions of 40 CFR §122.23(c) shall discharge pollutants from a point source into navigable waters. Any person designated as such may seek review of the Director's determination by requesting a contested case hearing pursuant to ORS 183.413 to 183.470.
(3) Any person who has a valid NPDES permit shall be considered to be in compliance with the requirements of section (1) of this rule. No additional permit for the discharge is required.
(4) Although not exempted from complying with all applicable laws, rules, and regulations regarding water pollution, persons discharging wastes into a sewerage system are specifically exempted from requirements to obtain a WPCF or NPDES permit, provided the owner of such sewerage system has a valid WPCF or NPDES permit. In such cases, the owner of such sewerage system assumes ultimate responsibility for controlling and treating the wastes he allows to be discharged into said system. Notwithstanding the responsibility of the owner of such sewerage systems, each user of the sewerage system shall comply with applicable toxic and pretreatment standards and the recording, reporting, monitoring, entry, inspection, and sampling requirements of the Commission and the Federal Act and federal regulations and guidelines issued pursuant thereto.
(5) Each person who is required by sections (1) and (2) of this rule to obtain a permit shall:
(a) Make prompt application to the Department therefor;
(b) Fulfill each and every term and condition of any permit issued to such person;
(c) Comply with applicable federal and state requirements, effluent standards, and limitations including, but not limited to, those contained in or promulgated pursuant to Sections 204, 301, 302, 304, 306, 307, 402, and 403 of the Federal Act, and applicable federal and state water quality standards;
(d) Comply with the 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.

Stat. Auth.: ORS 468 & ORS 468B
Stats. Implemented: ORS 468.065 & ORS 468B.050
Hist.: DEQ 53(Temp), f. & ef. 6-21-73 thru 10-18-73; DEQ 58, f. 9-21-73, ef. 10-25-73; DEQ 113, f. & ef. 5-10-76

**340-045-0033**
**General Permits**
(1) The Director may issue general permits for certain categories of minor discharge sources or minor activities where individual NPDES or WPCF permits are not necessary to adequately protect the environment. Before the Director can issue a general permit, the following conditions must be met:
(a) There must be several minor sources or activities that involve the same or substantially similar types of operations.
(b) The sources or activities must have the potential to discharge or dispose of the same or similar types of wastes.

(c) The general permit must require the same or similar monitoring requirements, effluent limitations and operating conditions for the categories.
(d) The category of sources or activities would be more appropriately controlled under a general permit than an individual permit.
(e) The Commission has adopted the general permit into rule by reference.
(2) General permits issued after the effective date of this rule will specify the following:
(a) The requirements to obtain coverage under a general permit, including application requirements and application submittal deadlines. The Department may determine that submittal of an application is not necessary after evaluating the type of discharge, potential for toxic and conventional pollutants in the discharge, expected discharge volume, availability of other means to identify dischargers, and estimated number of dischargers to be covered by the permit. The Department's evaluation must be provided in the public notice for the general permit.
(b) The process used by the Department to notify a person that coverage under a general permit has been obtained and the discharge or activity is authorized.
(3) Although general permits may include activities throughout the state, they may also be restricted to more limited geographical areas.
(4) Prior to issuing a general permit, the Department will follow the public notice and participation procedures outlined in OAR 340-045-0027, 340-045-0035(3), and ORS 183.325 to 183.410. In addition the Department will make a reasonable effort to mail notices of pending actions to those persons known by the Department who are likely to be covered by the general permit.
(5) Any person operating a discharge source or conducting an activity described in a general permit must apply for coverage under the general permit, unless the general permit does not require submission of an application pursuant to (2)(a) of this rule or the source or activity is specifically covered by an individual NPDES or WPCF permit. Any person seeking coverage under a general permit must submit an application as required under the terms of the applicable NPDES or WPCF general permit. If application requirements are not specified in the general permit, procedures in OAR 340-045-0030 or OAR 340-071-0162, whichever is applicable, must be followed. A person who fails to submit application in accordance with the terms of the general permit, OAR 340-045-0030 or OAR 340-071-0162, whichever is applicable, is not authorized to conduct the activity described in the permit.
(6) Any person required to have coverage under a general permit must pay permit fees as required in OAR 340-045-0070 to 340-045-0075 or OAR 340-071-0140 to obtain and maintain coverage under that permit.
(7) Any permittee covered by an individual NPDES or WPCF permit may request that the individual permit be canceled or allowed to expire, and that it be covered by a general permit if its discharge or activity may be covered by an existing general permit. As long as the permittee is covered by an individual NPDES or WPCF permit, the conditions and limitations of the individual permit govern, until such time as it is canceled or expires.
(8) Any person not wishing to be covered by a general permit may make application for an individual permit in accordance with OAR 340-045-0030 or OAR 340-071-0162, whichever is applicable.
(9) The Director may revoke coverage and authorization under a general permit pursuant to OAR 340-045-0060 as it applies to any person and require such person to apply for and obtain an individual NPDES or WPCF permit. Any interested person may petition the Director to take action under this section. Cases where an individual permit may be required include the following:
(a) The discharge or activity is a significant contributor of pollution or creates other environmental problems;
(b) The permittee is not in compliance with the terms and conditions of the general permit, submitted false information, or is in violation of any applicable law;
(c) A change occurs in the availability of demonstrated technology or practices for the control or abatement of pollutants being discharged;
(d) For NPDES general permits, effluent limitation guidelines are promulgated for point sources covered by a general permit and the guidelines are not already in the general permit; or
(e) Circumstances have changed so that the discharge or activity is no longer appropriately controlled under a general permit, or either a temporary or permanent reduction or elimination of the authorized discharge is necessary.
(10) The following general permits are adopted by reference in this rule and available for review at the Department:
(a) NPDES 200-J, Filter backwash (issued August 29, 1997)
(b) NPDES 500-J, Boiler blowdown (issued August 29, 1997)
(c) WPCF 600, Offstream placer mining (issued April 9, 1997)
(d) NPDES 700-J, Suction dredges (issued May 3, 1999)
(e) WPCF 800, Confined animal feeding operations (issued August 8, 1990)

(f) NPDES 900-J, Seafood processing (issued June 7, 1999)
(g) WPCF 1000, Gravel mining (issued July 26, 2002)
(h) NPDES 1200-A, Storm water runoff from sand, gravel & non-metallic quarrying & mining in Standard Industrial Classification (SIC) 14, asphalt mix batch plants, and concrete batch plants. Facilities may qualify for a conditional exclusion from the requirement to obtain a permit if there is no exposure of industrial activities and materials to storm water pursuant to 40 CFR §122.26(g); see permit for details. (issued July 26, 2002)
(i) NPDES 1200-C, Storm water runoff from construction activities, including clearing, grading, and excavation, and stockpiling that disturbs five or more acres, including activities that will disturb five or more acres over time as part of a larger common plan of development; effective December 1, 2002, construction activities that disturb one or more acre are covered (issued February 20, 2001)
(j) NPDES 1200-CA, Government agencies responsible for storm water runoff from construction activities that disturbs five or more acres; effective December 1, 2002, construction activities that disturb one or more acres are covered (issued February 20, 2001)
(k) NPDES 1200-COLS, Storm water runoff in the Columbia Slough watershed from industrial activities listed in 8(l) of this rule (issued December 22, 1999)
(l) NPDES 1200-Z, Storm water runoff from: Warehousing in SIC 4221-4225; Food processing in SIC 20; Landfills, land app. sites; Heavy industrial in SIC 28, 29, 30, 31, 32, 33 & steam electric power generating (includes coal/hogged fuel handling); Light mfg. in SIC 34, 35, 36, 37, 38 & 39 includes ship & boat building/repair; Printing in SIC 27; Textile & apparel mfg. in SIC 22 & 23; Transportation in SIC 40, 41, 42, 43, 44, 45 & 5171; Wood products mfg. in SIC 24 & 25; Metal scrap yards, battery reclaimers & auto salvage yards in SIC 5015 & 5093; Hazardous waste treatment, storage, & disposal facilities. Facilities may qualify for a conditional exclusion from the requirement to obtain a permit if there is no exposure of industrial activities and materials to storm water pursuant to 40 CFR §122.26(g); see permit for details. (issued July 26, 2002)
(m) NPDES 1300-J, Oily storm water runoff and oil/water separators (issued January 11, 2000)
(n) WPCF 1400-A, Seasonal food processing & wineries, less than 25,000 gallons/day (issued August 22, 2000)
(o) WPCF 1400-B, Other food processing, less than 25,000 gallons/day (issued August 22, 2000)
(p) NPDES 1500-A, Petroleum hydrocarbon cleanups discharged to surface waters (issued August 22, 2000)
(q) WPCF 1500-B, Petroleum hydrocarbon cleanups (issued August 22, 2000)
(r) NPDES 1700-A, Vehicle and equipment wash water discharged to surface waters (issued March 5, 1998)
(s) WPCF 1700-B, Vehicle and equipment wash water (issued March 5, 1998)
(t) NPDES 1900-J, Non-contact geothermal heat exchange (issued September 11, 1997)
(u) NPDES 01, Confined animal feeding operations (issued October 1, 2003)

Stat. Auth.: ORS 468.020, ORS 468B.020 & ORS 468B.035
Stats. Implemented: ORS 468.065, ORS 468B.015, ORS 468B.035 & ORS 468B.050
Hist.: DEQ 28-1980, f. & ef. 10-27-80; DEQ 15-2000, f. & cert. ef. 10-11-00; DEQ 13-2001, f. & cert. ef. 10-16-01; DEQ 8-2002, f. & cert. ef. 8-9-02

## DIVISION 051
## CONFINED ANIMAL FEEDING OPERATIONS

### 340-051-0005
### Purpose
It is the purpose of these rules to protect the quality of the environment and public health in Oregon by requiring compliance with federal requirements in 40 CFR §122, 123, and 412 [68 FR 7176 (February 12, 2003)] and application of applicable waste control technology relative to location, construction, operations and maintenance of confined animal feeding operations.

Stat. Auth.: ORS 468.020 & ORS 468B.200 – ORS 468B.230
Stats. Implemented: ORS 468B.200 - ORS 468B.300
Hist.: DEQ 34, f. 2-3-72, ef. 2-15-72

### 340-051-0007
### Implementation of OAR 340-051
(1) **Oregon Department of Agriculture Authority.** Pursuant to ORS 468B.200 through 468B.230 and the Memorandum of Understanding between the Environmental Quality Commission and Oregon Department of

Agriculture (October 2002), the Oregon Department of Agriculture is authorized to implement the provisions of OAR Chapter 340, Division 051 consistent with OAR Chapter 603, Division 074 *Confined Animal Feeding Operation Program.*

(2) **Certification of Plans and Specifications.** In lieu of Department approval of plans and specifications as required by OAR 340-051-0015, the Department will accept certification by a licensed engineer that waste water control facilities specified in subsection (2)(a) of this rule were designed and constructed in compliance with OAR 340-051-0055 through 340-051-0070.

(a) Certifications may only be made for:

(A) Earthen impoundments, conveyances, and animal holding areas;

(B) Earthen-floored buildings and animal travel lanes between buildings in the production area; and

(C) Primary storage structures for liquid and solid manure. For purpose of this paragraph, a primary storage structure is any storage structure intended to hold an operation's waste for a period of five or more days.

(b) Certifications must be submitted on forms approved by the Department.

(c) Certification in lieu of Department approval is not allowed for waste water control facilities using experimental or unproven treatment methods or technology and may be disallowed for any other facility if the Department determines that the nature of the facility or operation is such that Department review is needed to ensure protection of waters of the state.

(3) **Exclusion from Department Approval** Construction or modification of waste water control facilities, other than impoundments, conveyances, holding areas, buildings and animal travel lanes within the production area, and primary storage structures, are not subject to design or post-construction review and approval requirements unless the Department determines that the nature of the facility is such that review is needed to ensure protection of waters of the state.

Stat. Auth.: ORS 468.020 & ORS 468B.200 – ORS 468B.230
Stats. Implemented: ORS 468.005, ORS 468B.005 & ORS 468B.205
Hist.:

**340-051-0010**
**Definitions**

Unless the context or OAR Chapter 603, Division 074 requires otherwise, as used in these rules:

(1) "Department" means the Oregon Department of Environmental Quality or the Oregon Department of Agriculture.

(2) "Confined Animal Feeding Operation" means:

(a) The concentrated confined feeding or holding of animals or poultry, including, but not limited to horse, cattle, sheep, or swine feeding areas, dairy confinement areas, slaughterhouse or shipping terminal holding pens, poultry and egg production facilities and fur farms;

(A) In buildings or in pens or lots where the surface has been prepared with concrete, rock or fibrous material to support animals in wet weather; or

(B) That have wastewater treatment works; or

(C) That discharge any wastes into waters of the state; or

(b) An animal feeding operation that is subject to regulation as a concentrated animal feeding operation pursuant to 40 CFR §122.23.

(3) "Manure" means manure, bedding, compost and raw materials or other materials commingled with manure or set aside for disposal.

(4) "Person" means the state, any individual, public or private corporation, political subdivision, governmental agency, municipality, industry, copartnership, association, firm, trust, estate or any other legal entity whatsoever.

(5) "Process Wastewater" means water directly or indirectly used in the operation of the confined animal feeding operation for any or all of the following: spillage or overflow from animal or poultry watering systems; washing, cleaning or flushing pens, barns, manure pits, or other confined animal feeding operation facilities; direct contact swimming, washing, or spray cooling of animals; or dust control. Process wastewater or process wastes also includes any water that comes into contact with any raw materials, products, or byproducts including manure, litter, feed, milk, eggs, or bedding.

(6) "Production Area" means that part of a confined animal feeding operation that includes the animal confinement area, the manure storage area, the raw materials storage area, and the waste containment areas. The animal

confinement area includes but is not limited to open lots, housed lots, feedlots, confinement houses, stall barns, free stall barns, milkrooms, milking centers, cowyards, barnyards, medication pens, walkers, animal walkways, and stables. The manure storage area includes but is not limited to lagoons, runoff ponds, storage sheds, stockpiles, under house or pit storages, liquid impoundments, static piles, and composting piles. The raw materials storage area includes but is not limited to feed silos, silage bunkers, and bedding materials. The waste containment areas include but are not limited to settling basins, and areas within berms and diversions that separate uncontaminated storm water. Also included in the definition of production area is any egg washing or egg processing facility and any area used in the storage, handling, treatment, or disposal of animal mortalities.
(7) "Waste Water Control Facility" means a "disposal system" or "treatment works" as defined by ORS 468B.005 that may cause pollution of surface water or groundwater and is used for collecting, conveying, treating, stabilizing or storing manure, litter, process wastewater, or contaminated production area drainage (i.e., silage leachate, contaminated storm water runoff, etc.) at confined animal feeding operations.
(8) "Waters of the State" include lakes, bays, ponds, impounding reservoirs, springs, wells, rivers, streams, creeks, estuaries, marshes, inlet, 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 that do not combine or effect a junction with natural surface or underground waters) that are wholly or partially within or bordering the state or within its jurisdiction.

Stat. Auth.: ORS 468.020 & ORS 468B.200 – ORS 468B.230
Stats. Implemented: ORS 468.005, ORS 468B.005 & ORS 468B.205
Hist.: DEQ 34, f. 2-3-72, ef. 2-15-72; DEQ 21-1990, f. & cert. ef. 7-6-90

**340-051-0015**
**New, Modified or Expanded Facilities and Operations**
A person constructing or commencing to operate a confined animal feeding operation or waste water control facility, or substantially modifying or expanding an existing confined animal feeding operation or waste water control facility shall first submit detailed plans and specifications for said facility and operation and other necessary information to the Department and obtain approval for the proposed facility and operation from the Department in writing:
(1) Plans and specifications and other information to be submitted will constitute a complete, descriptive proposal and should include, to the extent that such information is pertinent and available, the following:
(a) Location map showing ownership, zoning and use of adjacent lands and location of the proposed confined animal feeding operation in relation to residences and domestic water supply sources;
(b) Topographic map of the proposed site showing the natural drainage pattern and the proposed surface water diversion and area and roof drainage control system or systems;
(c) Climatological data for the proposed site describing normal annual and seasonal precipitation quantities and patterns, evaporation rates and prevailing winds;
(d) Information regarding the occurrence of usable groundwaters and typical soil types in the area of the proposed site and disposal areas;
(e) Estimated maximum numbers and types of animals to be confined at the site at any one time and estimated volume of wastes to be collected and disposed of;
(f) Detailed plans and specifications and procedures for wastewater and manure collection, handling, retention, storage, treatment and disposal systems;
(g) Details of feed preparation, storage, handling and use and proposed methods and facilities for controlling wastes that are likely to result therefrom;
(h) Any additional information that the Department may reasonably require to enable it to pass intelligently upon the effects of the proposed confined animal feeding operation upon environmental quality.
(2) Receipt of applications and a preliminary evaluation of completeness shall be made within 14 days to all applicants. Written notice of approval or disapproval will be issued by the Department to the applicant within 45 days of receipt of complete plans and specifications. Any notice of disapproval will contain itemized deficiencies.
(3) New or substantially modified or expanded facilities or operations must be constructed in accordance with plans and specifications as approved in writing by the Department.

Stat. Auth.: ORS 468.020 & ORS 468B.200 – ORS 468B.230
Stats. Implemented: ORS 468B.200 - ORS 468B.300
Hist.: DEQ 34, f. 2-3-72, ef. 2-15-72

**340-051-0020**
**Construction, Operation and Maintenance Requirements**
All waste water control facilities and confined animal feeding operations must be designed, constructed, maintained, and operated in accordance with the following:
(1) All confinement areas, manure handling and accumulation areas and disposal areas and facilities must be located, constructed, and operated such that manure, contaminated drainage waters or other wastes do not enter the waters of the state at any time, except as may be permitted by the conditions of a specific waste discharge permit issued in accordance with ORS 468B.050.
(2) Unless it can be demonstrated that contaminated drainage can be effectively controlled by other means, or unless a specific written variance is obtained from the Department as provided in OAR 340-051-0025, the design, construction, operation, and maintenance of confined animal feeding operations and waste water control facilities must be in conformance with "Guidelines for the Design and Operation of Animal Waste Water Control Facilities". (OAR 340-051-0050 through 340-051-0080)

Stat. Auth.: ORS 468.020 & ORS 468B.200 – ORS 468B.230
Stats. Implemented: ORS 468B.200 - ORS 468B.300
Hist.: DEQ 34, f. 2-3-72, ef. 2-15-72

**340-051-0025**
**Variances From Specified Requirements**
(1) The Department may, by specific written variance, waive certain requirements of these regulations when size of operation, location and topography, operational procedures, or other special conditions indicate that the purpose of these regulations can be achieved without strict adherence to all of the requirements.
(2) The Department may, in accordance with a specific compliance schedule, grant reasonable time for existing confined animal feeding operations to comply with these regulations.

Stat. Auth.: ORS 468.020 & ORS 468B.200 – ORS 468B.230
Stats. Implemented: ORS 468B.200 - ORS 468B.300
Hist.: DEQ 34, f. 2-3-72, ef. 2-15-72

**340-051-0030**
**Advisory Committee**
(1) At the request of the animal industry, provision is made for a 13-person committee to serve in an advisory capacity to the Department on problems related to the location, construction, operation and maintenance of confined animal feeding operations. The advisory committee will include one member each from:
(a) Oregon Horsemen's Association.
(b) Oregon Dairymen's Association.
(c) Oregon Sheep Growers Association.
(d) Oregon Purebred Swine Growers Association.
(e) Oregon State Fur Breeders Association.
(f) Oregon State Department of Agriculture.
(g) Department of Animal Science, Oregon State University.
(h) Western Oregon Livestock Association and divisional representation from:
(A) Oregon Cattlemen's Association (Producer representative and feeder representative);
(B) Oregon Poultry Council (Oregon Turkey Improvement Association representative, Oregon Poultry Growers Association and Oregon Broiler Growers Association representatives).
(2) Each member will be appointed by the presiding officer of the organization the member represents and will serve at the pleasure of the organization. The Department shall not be liable for any of the expenses of the advisory committee or its individual members.

Stat. Auth.: ORS 468.020 & ORS 468B.200 – ORS 468B.230
Stats. Implemented: ORS 468B.200 - ORS 468B.300
Hist.: DEQ 34, f. 2-3-72, ef. 2-15-72; Administrative correction 8-14-97

## Guidelines for the Design and Operation of Animal Waste Water Control Facilities

**340-051-0050**
**Scope**
The guidelines contained in this rule are recommendations for design and operation of animal waste water control facilities and are intended to supplement OAR 340-051-0020. They convey many of the criteria considered by the Department to conform to applicable design and operational practices. Alternative methods of control will be acceptable if they can be shown to provide fully equivalent control. Compliance with these guidelines will in most instances constitute satisfactory performance of the design and operation functions to which OAR 340-051-0020 apply. To the extent possible, the Department will reference applicable guidelines or appropriate sections of OAR Chapter 340, Division 051 when it disapproves of submitted plans or requires improvements to facilities or their operations.

Stat. Auth.: ORS 468.020 & ORS 468B.200 – ORS 468B.230
Stats. Implemented: ORS 468B.200 - ORS 468B.300
Hist.: DEQ 34, f. 2-3-72, ef. 2-15-72

**340-051-0055**
**Drainage and Waste Volume Control**
(1) Roof drainage and uncontaminated surface drainage should be diverted such that it is not allowed to flow through confinement areas or enter waste water holding lagoons, sumps or tanks, unless it can be demonstrated by detailed design and proven operational practices that wastes and contaminated drainage waters can be effectively controlled by other means.
(2) Where large winter use confinement areas are exposed to heavy rainfall, and wastewater storage and disposal capacities are limited, such areas should be covered to minimize wastewater volume.
(3) Waste collection systems utilizing water for flushing manure from floors should minimize water use, and washwater reuse practices should be employed wherever possible.
(4) Animal drinking water and atmospheric control sprays should be managed such that drainage through contaminated areas is minimized.

Stat. Auth.: ORS 468.020 & ORS 468B.200 – ORS 468B.230
Stats. Implemented: ORS 468B.200 - ORS 468B.300
Hist.: DEQ 34, f. 2-3-72, ef. 2-15-72

**340-051-0060**
**Collection and Storage Facilities**
(1) Liquid Manure Systems:
(a) When waste holding lagoons are used to accumulate manure and contaminated drainage waters they should have sufficient usable capacity to contain the maximum accumulated rainfall and manure runoff from the entire collection area for the maximum expected period of accumulation. (As a generalized rule of thumb for design, ponds with capacity equal to 1/2 the average annual rainfall over the entire collection area will usually provide adequate operating and reserve capacity to catch one in ten year peak storm runoff from a feedlot);
(b) Waste holding lagoons and collection sumps should be constructed to provide for at least annual removal of accumulated solids to maintain effective storage capacity;
(c) Earth dikes should be constructed of good quality soil material, well compacted during construction, with sideslopes consistent with accepted earthfill practices for the materials used and stabilized with vegetation recommended by the Agricultural Extension Service, immediately following construction;

(d) Waste holding lagoons or collection sumps with earth dikes should be constructed with overflow relief structures to prevent a washout in the event of failure in other parts of the system;
(e) Where unusually windy conditions prevail, or surface aeration equipment is used, dikes should be protected to prevent erosion;
(f) Reinforced concrete manure holding tanks should be constructed in accordance with, or at least equivalent to, specifications for steel placement and concrete quality contained in a design that has been prepared by or has been reviewed and found acceptable by a qualified structural engineer;
(g) Where seasonal groundwater levels rise above the bottom of a below-ground-level tank, drain tile should be laid at the base of the tank before it is backfilled.
(2) Solids Handling Systems:
(a) Manure solids should be collected, stored, and utilized or disposed of with a minimum of water (or rainfall) addition, in a manner that will prevent water pollution and minimize the production of flies and odors;
(b) Where large accumulations of manure are stored during winter months, contaminated drainage collection and holding or disposal facilities should be provided.
Stat. Auth.: ORS 468.020 & ORS 468B.200 – ORS 468B.230
Stats. Implemented: ORS 468B.200 - ORS 468B.300
Hist.: DEQ 34, f. 2-3-72, ef. 2-15-72

**340-051-0065**
**Conveyance Facilities and Practices**
(1) Liquid manure irrigation systems should have delivery mains buried wherever practicable to minimize the amount of pipe exposed to the hazards of surface damage and failure.
(2) Trucks or tank wagons carrying manure or manure slurry on public roads should be of water tight construction and sufficiently closed or baffled to prevent spillage of any kind.
(3) Manure slurry delivery pipelines crossing streams or gullies should be permanently placed with adequate protection from streamflow hazards and/or braced to prevent excessive bending stress in the pipe.

Stat. Auth.: ORS 468.020 & ORS 468B.200 – ORS 468B.230
Stats. Implemented: ORS 468B.200 - ORS 468B.300
Hist.: DEQ 34, f. 2-3-72, ef. 2-15-72

**340-051-0070**
**Disposal Facilities and Practices**
(1) Liquid Manure Disposal:
(a) When slurry is spread by tank wagon or truck, a predetermined plan of uniform coverage should be established and adhered to. Under no circumstances should a tank be drained when not in motion across suitable receiving land;
(b) Liquid manure irrigation systems should be operated according to a predetermined plan of rotation to insure uniform coverage and prevent prolonged ponding or surface runoff from excessive applications. Leaks and sprinkler head malfunctions should be repaired immediately;
(c) The selection of equipment for land disposal should be based upon land configuration, labor requirement, and long term dependability of the system and its components;
(d) Adequate land should be provided on a year-round basis for effective assimilation of all manure slurry applied, regardless of the method of application used. Land with poor vertical drainage characteristics, high water table or steep slopes should not be selected for use in a year-round plan of manure disposal;
(e) The vegetative cover on disposal land should be harvested or grazed regularly to prevent thatch accumulations of mature grasses and weeds;
(f) Livestock should not be permitted to graze the disposal area during periods of saturated soil conditions;
(g) Seepage basins should not be used except where it can be demonstrated that ground water pollution will not result.
(2) Solids Disposal:
(a) Field spreading of manure should be uniform in distribution and limited in quantity to the capacity of the land to retain it;
(b) Manure should not be stored or deposited where it can be washed into the surface drainage;

(c) Manure solids should not be used as a fill or land raising material where they will pollute ground or surface waters;
(d) All dead animals should be promptly collected and disposed of in an approved manner.

Stat. Auth.: ORS 468.020 & ORS 468B.200 – ORS 468B.230
Stats. Implemented: ORS 468B.200 - ORS 468B.300
Hist.: DEQ 34, f. 2-3-72, ef. 2-15-72

**340-051-0075**
**Incidental Control Practices**
(1) The application of manure or manure slurry to land areas should be accomplished when air movements is least likely to carry objectionable odors to residential or recreational areas.
(2) New confined animal feeding operations should not be located where prevailing winds are likely to carry odors into residential or recreational areas. Attention should also be given to expansion of suburban areas and the stability of local zoning restrictions in locating new operations or substantially expanding existing operations.

Stat. Auth.: ORS 468.020 & ORS 468B.200 – ORS 468B.230
Stats. Implemented: ORS 468B.200 - ORS 468B.300
Hist.: DEQ 34, f. 2-3-72, ef. 2-15-72

**340-051-0080**
**Sources of Qualified Assistance for Design of Facilities**
(1) Where drainage control, structural or mechanical facilities are sufficiently large or complex to require specialized professional design, the Department may require that detailed plans and specifications be prepared by a qualified engineer for approval prior to construction.
(2) Appropriate design services are available through:
(a) USDA – Natural Resource Conservation Service;
(b) Oregon State University Extension Service and associated plan services;
(c) Various equipment manufacturers;
(d) Independent consulting engineers. Useful design information is often available through:
(A) County extension offices and Agricultural Experiment Stations;
(B) Department engineering staff;
(C) Oregon State University Departments of Agricultural Engineering and Animal Science;
(D) Certain power companies and irrigation districts.
(e) Climatological data reporting services (Oregon State University and state climatologist);
(f) Other livestock operations that have waste water control facilities in operation;
(g) Various livestock production associations;
(h) Soil and Water Conservation District offices.
(3) Where long range operational planning appears necessary to development of a workable waste control and disposal system, the Department may request that special planning assistance be obtained from Oregon State University and recommendations therefrom be included in the proposal submitted.
(4) Any dam or dike in excess of ten feet in height, or any impoundment volume in excess of 9.2 acre feet is required by state laws to be designed by a qualified engineer and approved by the office of the State Engineer. A copy of **"Rules and Regulations of the State Engineer"**, published annually, should be obtained prior to designing a facility of this type.
(5) Approval by the Department of a confined animal feeding operation does not relieve the applicant from his obligation to comply with other pertinent federal, state or local statutes, regulations or ordinances.
[Publications: The publication(s) referred to or incorporated by reference in this rule are available from the agency.]

Stat. Auth.: ORS 468.020 & ORS 468B.200 – ORS 468B.230
Stats. Implemented: ORS 468B.200 - ORS 468B.300
Hist.: DEQ 34, f. 2-3-72, ef. 2-15-72