

Department of Environmental Quality Agency Headquarters

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TO: Joint Committee on Ways and Means: Subcommittee on Natural Resources

FROM: Richard Whitman, Director, Department of Environmental Quality

RE: Follow-up to questions during March 8 hearing

Co-chair Frederick, Co-chair Witt and subcommittee members:

Below is information related to questions raised during the Mar. 8 Department of Environmental Quality budget hearing. Please let me know if you would like additional information.

How long has DEQ had long-term air quality trend sites in place and what brought that on?

DEQ's two long-term trend sites are part of the federal National Air Toxics Trends monitoring network. The U.S. Environmental Protection Agency has supported these monitoring stations in Oregon and other states to provide information about national trends in hazardous air pollutants. The first was established in North Portland in 1999 to be representative of an urban area in EPA Region 10. The second was established in La Grande in 2004 to be representative of a rural area. DEQ initially requested to be involved in the trend site program because modeling data had shown elevated air toxics in Portland and La Grande.

How many existing DEQ Air Quality program staff are available to respond to complains?

DEQ currently only has one FTE located in Northwest Region dedicated to complaint response for unpermitted sources and assists with nuisance odor investigations regarding Air Quality. The rest of the complaint response activities are performed by approximately 27 air quality permit writers and inspectors that balance work load across writing permits, investigating complaints and other regular duties. DEQ has seven staff throughout the agency that assist with complaint intake, but their main job responsibilities are not complaint related.

The public expects robust and timely investigation into complaints filed with DEQ. DEQ currently uses existing staff to investigate complaints filed with the agency. Because of the staffing levels, and the existing work that DEQ staff must accomplish to meet our other obligations, DEQ is not able to meet the public's expectations regarding complaint response.

Three Basin Rule

During yesterday's subcommittee hearing, Senator Girod talked briefly about how the "three basin rule" affected the City of Stayton, and asked what would happen if this rule was applied to the cities of Eugene, Salem and Portland.

The Environmental Quality Commission adopted the "three basin rule" [OAR 340-041-0350] in the late 70s/early 80s and amended it in the mid-90s at the urging of local governments who were concerned about protecting the quality of their source of drinking water. The rule prohibits new or increased waste discharges in the Clackamas River Subbasin, McKenzie River Subbasin above river mile 15, and the North Santiam River Subbasin, except as provided by the rule, in order to preserve or improve the existing high quality water for municipal water supplies, recreation, and preservation of aquatic life. The full text of the rule is attached.

The three basin rule applied to the City of Stayton when it upgraded its treatment plant in 1997 to a "sequencing batch reactor" and again in 2013 to add filters. Each time the city had to stay within their existing pollutant loads.

If the three basin rule applied to the Willamette River Basin, the cities of Eugene, Salem and Portland would not be allowed to increase the mass load of pollutants in their municipal wastewater discharges, thereby requiring them to accommodate growth through improved treatment methods or alternate means of disposal.

For facilities elsewhere in the state where DEQ is able to authorize increased pollutant loads, our rules typically expect treatment upgrades (e.g., highest and best practicable treatment requirement). In addition, increasingly stringent water quality standards and basin-level clean water plans for reducing pollution (Total Maximum Daily Loads) can also lead to requirements for upgrades in sewage treatment technology. This is one reason that there has been a substantial increase in the use of land disposal for many cities as well as some industries. It also can lead to delays in permit renewals, an issue that will be addressed in the public hearing today.

340-041-0350

The Three Basin Rule: Clackamas, McKenzie (above RM 15) and the North Santiam

- (1) In order to preserve or improve the existing high quality water for municipal water supplies, recreation, and preservation of aquatic life, new or increased waste discharges must be prohibited, except as provided by this rule, to the waters of:
- (a) The Clackamas River Subbasin;
- (b) The McKenzie River Subbasin above the Hayden Bridge (river mile 15);
- (c) The North Santiam River Subbasin.
- (2) Except as otherwise provided for in this rule, this rule becomes effective and applies to all permits pending or applied for after the date of filing with the Secretary of State.

- (3) Special Definitions. The following special definitions apply to this rule:
- (a) "Waste Discharges" are defined to mean any discharge that requires and NPDES permit, WPCF permit, or 401 Certification. Individual on-site sewage disposal systems subject to issuance of a construction-installation permit; domestic sewage facilities that discharge less than 5,000 gallons per day under WPCF permit; biosolids land applied within agronomic loading rates pursuant to OAR chapter 340, division 50; and reclaimed domestic waste water land applied at agronomic rates pursuant to OAR chapter 340, division 55 are excluded from this definition.
- (b) "Existing Discharges" are defined as those discharges from point sources which existed prior to January 28, 1994;
- (c) "Existing Facilities" are defined as those for which construction started prior to January 28, 1994. Where existing facilities are exempted from requirements placed on new facilities, the exemption applies only to the specific permit(s) addressed in the subsection which allows the exemption;
- (d) "New" NPDES and WPCF permits are defined to include permits for potential or existing discharges which did not previously have a permit, and existing discharges which have a permit, but request an increased load limitation;
- (e) "Agronomic Loading Rate" means the application of biosolids or reclaimed effluent to the land at a rate which is designed to:
- (A) Provide the quantity of plant nutrients, usually nitrogen, needed by a food crop, feed crop, fiber crop, cover crop or other vegetation grown on the land; and
- (B) Minimize the quantity of nitrogen or other nutrients from land applied materials that pass below the root zone of the crop or vegetation grown on the land to groundwater.
- (f) "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 chemical stabilize solids to the extent that they do not attract vectors. This term refers to domestic wastewater treatment facility solids that have undergone adequate treatment to permit their land application;
- (g) "Reclaimed Wastewater" means treated effluent from a domestic wastewater treatment system which, as a result of treatment, is suitable for a direct beneficial purpose or a controlled use that could not otherwise occur.
- (4) To respond to emergencies or to otherwise avoid imminent serious danger to public health or welfare, the Director or designee may allow lower water quality on a short-term basis.
- (5) The Director or a designee may renew or transfer NPDES and WPCF permits for existing facilities. Existing facilities with NPDES permits may not be granted increases in their permitted mass load limitations. The following restrictions and exceptions apply:

- (a) The Department may conduct an inspection prior to permit renewal. Existing sources with general permits that are found not to qualify for a general permit, and who wish to continue discharging, must apply for an individual permit;
- (b) Fish hatcheries (General Permit 300) and log ponds (General Permit 400) are required to apply for an individual permit at the time of permit renewal;
- (c) Additional industrial, confined animal feeding operations, or domestic waste loads that are irrigated on land at agronomic rates or that otherwise meet the conditions of section (7) of this rule is not be considered to be an increase in the permitted wasteload.
- (6) The Director or a designee may issue the following General Permits or Certifications subject to the conditions of the Permit or Certification:
- (a) Stormwater construction activities (General Permits 1200C and 1200CA);
- (b) Underground storage tank cleanups using best available treatment technology (General Permit 1500);
- (c) Non-contact cooling water (General Permit 100);
- (d) Filter backwash (General Permit 200);
- (e) Boiler blowdown water (General Permit 500);
- (f) Suction dredging (General Permit 700) only in portions of the basins that are not designated as Scenic Waterways under ORS 390.805 to 390.925;
- (g) Federal Clean Water Act Section 401 water quality certifications.
- (7) Long-term general and individual stormwater permits may be allowed as required by State and/or Federal law. The following requirements apply:
- (a) New stormwater discharge permit holders must maintain a monitoring and water quality evaluation program that is effective in evaluation of the in-stream water quality impacts of the discharge; and
- (b) When sufficient data is available to do so, the Department will assess the water quality impacts of stormwater discharges. Within a subbasin, if the proportion of total degradation that is contributed by the stormwater is determined to be significant compared to that of other permitted sources, or if the Department determines that reducing degradation due to stormwater is cost- effective when compared to other available pollution control options, the Department may institute regulatory mechanisms or modify permit conditions to require control technologies and/or practices that result in protection that is greater than that required Statewide.
- (8) Industrial waste discharge sources, confined animal feeding operations, and domestic sewage treatment facilities must meet the following conditions:

- (a) No NPDES permits for new industrial or new confined animal feeding operation waste discharges, or new domestic sewage treatment facilities may be issued, except as allowed under sections (3), (4), (5), and (6) of this rule;
- (b) The Department may issue WPCF permits for new industrial or confined animal feeding operation waste discharges provided:
- (A) There is no waste discharge to surface water; and
- (B) All groundwater quality protection requirements of OAR 340-040-0030 are met. Neither the Department nor the Commission may grant a concentration limit variance as provided in OAR 340-040-0030, unless the Commission finds that all appropriate groundwater quality protection requirements and compliance monitoring are met and there will be no measurable change in the water quality of the surface water that would be potentially affected by the proposed facility. For any variance request, a public hearing must be held prior to Commission action on the request.
- (c) The Department may issue WPCF permits for new domestic sewage treatment facilities provided there is no waste discharge to surface water and provided:
- (A) All groundwater quality protection requirements of OAR 340-040-0030 are met. Neither the Department nor the Commission may grant a concentration limit variance as provided in OAR 340-040-0030, unless the Commission finds that all appropriate groundwater quality protection requirements and compliance monitoring are met and there will be no measurable change in the water quality of the surface water that would be potentially affected by the proposed facility. For any variance request, a public hearing must be held and the permit application will be evaluated according to paragraphs (B) and (C) of this subsection;
- (B) The Commission finds that the proposed new domestic sewage treatment facility provides a preferable means of sewage collection, treatment and disposal as compared to individual on-site sewage disposal systems. To be preferable, the Commission must find that one of the following criteria applies:
- (i) The new sewage treatment facility will eliminate a significant number of failing individual on-site sewage disposal systems that cannot be otherwise reliably and cost-effectively repaired; or
- (ii) The new sewage treatment facility will treat domestic sewage that would otherwise be treated by individual on-site sewage disposal systems, from which the cumulative impact to groundwater is projected to be greater than that from the new facility; or
- (iii) If an individual on-site sewage disposal system, or several such systems, would not normally be utilized, a new sewage treatment facility may be allowed if the Commission finds that the social and economic benefits of the discharge outweigh the possible environmental impacts.
- (C) Applicants for domestic wastewater WPCF permits must meet the following requirements:
- (i) Application must be for an individual permit; and
- (ii) The proposed discharge must not include wastes that incapacitate the treatment system; and

- (iii) The facility must be operated or supervised by a certified wastewater treatment plant operator as required in OAR 340-049-0015, except as exempted by ORS 448.430; and
- (iv) An annual written certification of proper treatment and disposal system operation must be obtained from a qualified Registered Sanitarian, Professional Engineer, or certified wastewater treatment system operator.
- (9) The Environmental Quality Commission may investigate, together with any other affected State agencies, the means of maintaining at least existing minimum flow during the summer low flow period.

Stat. Auth.: ORS 468.020, 468B.030, 468B.035 & 468B.048 Stats. Implemented: ORS 468B.030, 468B.035 & 468B.048

Hist.: DEQ 17-2003, f. & cert. ef. 12-9-03; DEQ 2-2007, f. & cert. ef. 3-15-07