



## STATUTORY MINOR CORRECTION

DEQ 4-2020  
CHAPTER 340  
DEPARTMENT OF ENVIRONMENTAL QUALITY

**FILED**

01/27/2020 11:37 AM  
ARCHIVES DIVISION  
SECRETARY OF STATE  
& LEGISLATIVE COUNSEL

FILING CAPTION: OAR 340-041-0345 Statutory Minor Correction

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AGENCY ATTESTS THE FOLLOWING CHANGES HAVE BEEN MADE, ACCORDING TO ORS 183.335(7):

Correcting statutory or rule references

AMEND: 340-041-0345

RULE SUMMARY: Corrected cross reference in (6)(d) from "(f)" to "subsection (6)(e)."

CHANGES TO RULE:

340-041-0345

Basin-Specific Criteria (Willamette): Water Quality Standards and Policies for this Basin ¶¶

(1) pH (hydrogen ion concentration). pH values may not fall outside the following ranges:¶¶

(a) All basin waters, except main stem Columbia River and Cascade lakes: 6.5 to 8.5;¶¶

(b) Cascade lakes above 3,000 feet altitude: 6.0 to 8.5.¶¶

(2) Total Dissolved Solids. Guide concentrations listed may not be exceeded unless DEQ specifically authorizes otherwise upon such conditions as it may deem necessary to carry out the general intent of this plan and to protect the beneficial uses set forth in OAR 340-041-0340: Willamette River and Tributaries - 100.0 mg/l.¶¶

(3) Minimum Design Criteria for Treatment and Control of Sewage Wastes:¶¶

(a) Willamette River and tributaries except Tualatin River Subbasin:¶¶

(A) During periods of low stream flows (approximately May 1 to October 31): Treatment resulting in monthly average effluent concentrations not to exceed 10 mg/l of BOD and 10 mg/l of SS or equivalent control;¶¶

(B) During the period of high stream flows (approximately November 1 to April 30): A minimum of secondary treatment or equivalent control and, unless DEQ otherwise specifically authorizes, operating all waste treatment and control facilities at maximum practical efficiency and effectiveness so as to minimize waste discharges to public waters.¶¶

(b) Main stem Tualatin River from mouth to Gaston (river mile 0 to 65):¶¶

(A) During periods of low stream flows (approximately May 1 to October 31): Treatment resulting in monthly average effluent concentrations not to exceed 10 mg/l of BOD and 10 mg/l of SS or equivalent control;¶¶

(B) During the period of high stream flows (approximately November 1 to April 30): Treatment resulting in monthly average effluent concentrations not to exceed 20 mg/l of BOD and 20 mg/l of SS or equivalent control.¶¶

(c) Main stem Tualatin River above Gaston (river mile 65) and all tributaries to the Tualatin River: Treatment resulting in monthly average effluent concentrations not to exceed 5 mg/l of BOD and 5 mg/l of SS or equivalent

control;¶¶

(d) Tualatin River Subbasin: The dissolved oxygen level in the discharged effluents may not be less than 6 mg/l;¶¶

(4) Nonpoint source pollution control in the Tualatin River subbasin and lands draining to Oswego Lake:¶¶

(a) Subsection (5)(b) of this rule applies to any new land development within the Tualatin River and Oswego Lake subbasins except those developments with application dates before January 1, 1990. The application date is the date on which the local jurisdiction receives a complete application for development approval as the local jurisdiction's regulations require;¶¶

(b) For land development, no jurisdiction in these subbasins may approve any preliminary plat, site plan, permit, or public works project unless the conditions of the plat permit or plan approval include an erosion control plan containing methods or interim facilities, or both, to be constructed or used concurrently with land development and to be operated during construction to control the discharge of sediment in the stormwater runoff. The erosion control plan must include the following elements:¶¶

(A) Protection techniques to control soil erosion and sediment transport to less than one ton per acre per year, as calculated using the Natural Resources Conservation Service's Universal Soil Loss Equation or other equivalent methods (see Figures 1 to 6 in Appendix 1 for examples). The erosion control plan must include temporary sedimentation basins or other sediment control devices when, because of steep slopes or other site specific considerations, other on-site sediment control methods will not likely keep the sediment transport to less than one ton per acre per year. The local jurisdictions may establish additional requirements for meeting an equivalent degree of control. Any sediment basin constructed must be sized using 1.5 feet minimum sediment storage depth plus 2.0 feet storage depth above for a settlement zone. The storage capacity of the basin must be sized to store all of the sediment that is likely to be transported and collected during construction while the erosion potential exists. When the erosion potential has been removed, the sediment basin, or other sediment control facilities, can be removed and the site restored as per the final site plan. All sediment basins must be constructed with an emergency overflow to prevent erosion or failure of the containment dike; or¶¶

(B) A soil erosion control matrix derived from and consistent with the universal soil equation the jurisdiction or DEQ approves.¶¶

(c) The Director may modify Appendix 1 as necessary without approval from the Environmental Quality Commission. The Director may modify Appendix 1 to simplify it and to make it easier for people to apply;¶¶

(d) Subsection (5)(e) of this rule applies to any new land development within the Tualatin River and Oswego Lake subbasins, except:¶¶

(A) Those developments with application dates before June 1, 1990. The application date is the date on which the local jurisdiction receives a complete application for development approval as that jurisdiction's regulations require;¶¶

(B) One and two family dwellings on existing lots of record;¶¶

(C) Sewer lines, water lines, utilities, or other land development that will not directly increase nonpoint source pollution once construction has been completed and the site is either restored to, or not altered from, its approximate original condition;¶¶

(D) If the Environmental Quality Commission determines that a jurisdiction does not need to require stormwater quality control facilities for new development;¶¶

(E) When a jurisdiction adopts ordinances that provide for a stormwater quality program equivalent to subsection (e) of this section. Ordinances adopted to implement equivalent programs must:¶¶

(i) Encourage on-site retention of stormwater, require phosphorus removal equivalent to the removal efficiency required by subsection (e) of this section, provide for adequate operation and maintenance of stormwater quality control facilities, and require financial assurance, or equivalent security, that assures construction of the stormwater quality control facilities the ordinance requires;¶¶

(ii) If the ordinances provide for exemptions other than those allowed for by paragraphs (B) and (C) of this subsection, the ordinances must provide for collecting in-lieu fees, or other equivalent mechanisms, that assure financing for, and construction of, associated, off-site stormwater quality control facilities. No exemption may be allowed if the jurisdiction is not meeting an approved schedule for identifying location of the off-site stormwater

quality control facility to serve the development requesting an exemption.¶

(e) For new development, no jurisdiction may approve any plat, site plan, building permit or public works project in these subbasins unless the conditions of the plat, permit, or plan approval require permanent stormwater quality control facilities to control phosphorus loadings associated with stormwater runoff from the development site. Jurisdictions must encourage and provide preference to techniques and methods that prevent and minimize pollutants from entering the storm and surface water systems. Permanent stormwater quality control facilities for phosphorus must meet the following requirements:¶

(A) The stormwater quality control facilities must be designed to achieve a phosphorus removal efficiency as calculated from the following equation:¶

$$R_p = 100 - 24.5/R_v$$

Where:¶

$R_p$  = Required phosphorus removal efficiency¶

$R_v$  = Average site runoff coefficient¶

The average site runoff coefficient can be calculated from the following equation:¶

$$R_v = (0.7 \times A_1) + (0.3 \times A_2) + (0.7 \times A_3) + (0.05 \times A_4) + (A_5 \times 0.0)$$

Where:¶

$A_1$  = fraction of total area that is paved streets with curbs and that drain to storm sewers or open ditches.¶

$A_2$  = fraction of total area that is paved streets that drain to water quality swales located on site.¶

$A_3$  = fraction of total area that is building roof and paved parking that drains to storm sewers.¶

$A_4$  = fraction of total area that is grass, trees and marsh areas.¶

$A_5$  = fraction of total area for which runoff will be collected and retained on site with no direct discharge to surface waters.¶

(B) A jurisdiction may modify the equation for  $R_v$  to allow applying additional runoff coefficients associated with land surfaces not identified in this subsection. DEQ must be notified in writing whenever an additional runoff coefficient is used. The use of additional runoff coefficients must be based on scientific data. The jurisdiction must discontinue using an additional runoff coefficient if DEQ objects to its use in writing within ten days of receiving notification;¶

(C) The stormwater quality control facilities must be designed to meet the removal efficiency specified in paragraph (A) of this subsection for a mean summertime storm event totaling 0.36 inches of precipitation with an average return period of 96 hours;¶

(D) The removal efficiency specified in paragraph (A) of this subsection specify only design requirements and are not intended to be used as a basis for performance evaluation or compliance determination of the stormwater quality control facility installed or constructed pursuant to this subsection;¶

(E) A jurisdiction may approve stormwater quality control facilities this subsection requires only if the following are met:¶

(i) For developments larger than one acre, the plat or site plan must include plans and a certification prepared by an Oregon registered, professional engineer, that the proposed stormwater control facilities have been designed in accordance with criteria expected to achieve removal efficiencies for total phosphorus required by paragraph (A) of this subsection;¶

(ii) The plat or site plan must be consistent with the area and associated runoff coefficients used to determine the removal efficiency required in paragraph (A) of this subsection;¶

(iii) The developer must provide a financial assurance, or equivalent security acceptable to the jurisdiction, with the jurisdiction that assures that the stormwater control facilities are constructed according to the plans established in the plat or site plan approval. Where practicable, the jurisdiction must combine the financial assurance this rule requires with other financial assurance requirements imposed by the jurisdiction;¶

(iv) Each jurisdiction that constructs or authorizes construction of permanent stormwater quality control facilities must file with DEQ an operation and maintenance plan for the stormwater quality control facilities within its jurisdiction. The operation and maintenance plan must allow for public or private ownership, operation, and maintenance of individual permanent stormwater quality control facilities. The jurisdiction or private operator

must operate and maintain the permanent stormwater control facilities as the operation and maintenance plan specifies.¶¶

(f) Except as paragraph (D) of this subsection requires, the jurisdiction may grant an exception to subsection (e) of this section if the jurisdiction chooses to adopt and, on a case-by-case basis, impose a one time in-lieu fee. The fee will be an option where, because of the size of the development, topography, or other factors, the jurisdiction determines that the construction of on-site permanent stormwater treatment systems is impracticable or undesirable.¶¶

(A) The in-lieu fee will be based upon a reasonable estimate of the current, prorated cost for the jurisdiction to provide stormwater quality control facilities for the land development being assessed the fee. Estimated costs include costs associated with off-site land and rights-of-way acquisition, design, construction, and construction inspection.¶¶

(B) The jurisdiction must deposit any in-lieu fees collected under this paragraph in an account dedicated only to reimbursing the jurisdiction for expenses related to off-site land and rights-of-way acquisition, design, construction, and construction inspection of stormwater quality control facilities.¶¶

(C) The ordinance establishing the in-lieu fee must include provisions that reduce the fee in proportion to the ratio of the site's average runoff coefficient ( $R_v$ ), as established according to the equation in paragraph (6)(e)(A) of this rule.¶¶

(D) No new development may be granted an exemption if the jurisdiction is not meeting an approved time schedule for identifying the location for the off-site stormwater quality control facilities that would serve that development.¶¶

(g) DEQ may approve other mechanisms that allow jurisdictions to grant exemptions to new development. DEQ may only approve those mechanisms that assure financing for off-site stormwater quality control facilities and that encourage or require on-site retention where feasible.¶¶

(h) Subsection (b) of this section applies until a jurisdiction adopts ordinances that provide for a program equivalent to subsection (b) of this section, or the Environmental Quality Commission determines such a program is not necessary when it approves the jurisdiction's program plan required by OAR 340-041-0470(2)(g).¶¶

(5) In order to improve water quality within the Yamhill River subbasin to meet the existing water quality standard for pH, the following special rules for total maximum daily loads, waste load allocations, load allocations and program plans are established:¶¶

(a) After wastewater control facilities and program plans the EQC approved under this rule are completed, and no later than June 30, 1994, no activities may be allowed, and no wastewater may be discharged to the Yamhill River or its tributaries, without the EQC's authorization, that cause the monthly median concentration of total phosphorus to exceed 70 ug/1 as measured during the low flow period between approximately May 1 and October 31 of each year.¶¶

[NOTE: DEQ may condition precise dates for complying with this rule on the receiving water's physical conditions (i.e., flow temperature). DEQ may specify the compliance dates in individual permits or memorandums of understanding. DEQ may consider design flows, river travel times, and other relevant information, when establishing the specific conditions it inserts in the permits or memorandums of understanding.]¶¶

(b) Within 90 days of adoption of these rules, the Cities of McMinnville and Lafayette must submit a program plan and time schedule to DEQ describing how and when they will modify their sewerage facility to comply with this rule.¶¶

(c) The commission will review and approve final program plans. The commission may define alternative compliance dates as program plans are approved. All proposed final program plans must be subject to public hearing before the commission considers them for approval.¶¶

(d) DEQ will, within 60 days of adoption of these rules, distribute initial waste load allocations and load allocations to the point and nonpoint sources in the basin. These allocations are considered interim and may be redistributed based upon the conclusions of the approved program plans.¶¶

(6) Multiple Discharger Variance for Mercury. The following rule is a multiple discharger variance to the fish-tissue based human health criterion for methylmercury. The variance applies to the following facilities:¶¶

Albany-Millersburg WRF (Willamette River); Canby STP (Willamette River); Cascade Pacific - Halsey Mill (Willamette River); City of Molalla (Molalla River); City of Portland Tryon Creek WWTP (Willamette River); City of Sandy (Tickle Creek); Clean Water Services Durham STP (Tualatin River); Clean Water Services Forest Grove STP (Tualatin River); Clean Water Services Hillsboro STP (Tualatin River); Clean Water Services Rock Creek STP (Tualatin River); Corvallis STP (Willamette River); Cottage Grove STP (Coast Fork Willamette River); Dallas STP (Rickreall Creek); Georgia-Pacific Halsey Mill (Willamette River); Gervais STP (Pudding River); International Paper Springfield Paper Mill (McKenzie River); Kellogg Creek WWTP (Willamette River); Lebanon WWTP (South Santiam River); McMinnville WRF (South Yamhill River); Metropolitan Wastewater Management Commission Eugene/Springfield STP (Willamette River); Newberg STP (Willamette River); Oak Lodge Services WRF (Willamette River); Saint Helens/Boise Cascade STP (Multnomah Channel); Salem Willow Lake STP (Willamette River); Siltronic Corporation (Willamette River); Silverton STP (Silver Creek); Stayton STP (North Santiam River); Sweet Home STP (South Santiam River); Teledyne Wah Chang (Willamette River); Tri-City Service District - Blue Heron (Willamette River); Tri-City Water Pollution Control Plant (Willamette River); West Linn Paper Company (Willamette River); Westrock, Newberg Mill (Willamette River); Wilsonville STP (Willamette River); Woodburn WWTP (Pudding River);¶

The variance will also apply to any of the following facilities for which DEQ would otherwise be required to establish mercury effluent limits during the term of the variance:¶

Amity STP (Salt Creek); Aumsville STP (Beaver Creek); Brooks STP (Willamette River); Brownsville STP (Calapooia River); Carlton STP (North Yamhill River); City of Estacada (Clackamas River); City of Scappoose (Multnomah Channel); Coburg WWTP (Unnamed tributary to Muddy Creek); Creswell STP (Unnamed tributary to Camas Swale Creek); Dayton STP (Yamhill River); Dundee STP (Willamette River); Halsey STP (Muddy Creek); Harrisburg Lagoon Treatment Plant (Willamette River); Hubbard STP (Mill Creek); Independence STP (Middle Willamette River); Jefferson STP (Santiam River); Junction City STP (Flat Creek); Lafayette STP (Yamhill River); Lane Community College (Russel Creek); Lowell STP (Middle Fork Willamette River); Monmouth STP (Willamette River); Mt. Angel STP (Pudding River); Oakridge STP (Middle Fork Willamette River); Philomath STP (Mary's River); Tangent STP (Calapooia River); Sheridan STP (South Yamhill River); USDA Forest Service (Clackamas River); Veneta STP (Long Tom River); Willamina STP (South Yamhill River); Yamhill STP (North Yamhill River).¶

(a) Findings. The EQC finds the following:¶

(A) The fishing use and fish-tissue based human health criterion for methyl-mercury cannot be attained within the next 20 years due to mercury from atmospheric deposition and naturally occurring mercury in native soils.

Neither the sources of mercury nor the processes by which the mercury is transported to waterbodies can be remedied to meet the underlying designated use and criterion within the next 20 years.¶

(B) There is no currently feasible mercury treatment technology that would result in achieving water quality-based effluent limits based on the human health criterion for mercury.¶

(C) The requirements of the variance will not result in degrading the currently attained ambient water quality for methyl-mercury in the Willamette Basin.¶

(b) Term of the variance. The term of this variance is 20 years from the date of EPA approval.¶

(c) Application requirements. To implement the variance, a facility must provide to DEQ the following information: ¶

(A) All mercury effluent data from the previous five years, including a minimum of two years of quarterly effluent data.¶

(B) A facility-specific mercury minimization program with minimum elements described in subsection (6)(f) of this rule for municipal facilities or subsection (6)(g) of this rule for industrial facilities. ¶

(d) Highest attainable condition. Permit requirements will reflect the highest attainable condition specified in this variance. The highest attainable condition for this variance is the level currently achievable, as described in sub section (6)(e) below, for all dischargers, and a requirement to develop and implement a mercury minimization program with elements described in subsection (6)(f) of this rule for municipal dischargers and subsection (6)(g) of this rule for industrial dischargers.¶

(e) Highest attainable condition - level currently achievable (LCA). The highest attainable condition for all facilities

covered under this variance will include the level currently achievable. This is a quantifiable expression of the effluent condition achievable with the pollutant control technologies in place at the time this variance is granted when those technologies are well maintained and operated. The LCA for this variance is the 95th percentile value of recent (e.g., two to five years) total mercury effluent data or a previously applicable LCA, whichever is lower. ¶

(f) Highest attainable condition - mercury minimization program for municipal dischargers. The highest attainable condition for municipal dischargers will include implementing a mercury minimization program covering the term of the variance, which must contain the following minimum elements:¶

(A) A monitoring plan to include influent, effluent and biosolids monitoring;¶

(B) Regulating dental offices to ensure installation and maintenance of amalgam separators, including inspection of dental facilities for proper management and disposal of dental waste;¶

(C) Identifying mercury-containing materials at facilities and offices each municipal wastewater treatment facility operates and implementing any recommendations for removing mercury-containing materials;¶

(D) Identifying and inspecting commercial laboratories, schools and healthcare facilities that may have mercury and providing recommendations and outreach materials to these facilities;¶

(E) Distributing outreach materials to commercial and residential sectors;¶

(F) Evaluating new facilities as potential sources of mercury, regulatory oversight of such sources of mercury under the municipality's pre-treatment program where such sources are significant industrial users, and outreach to provide recommendations on activities that would reduce mercury in the facilities' discharges. Priority facilities should include those in the timber, paper, glass, clay, cement, concrete, gypsum, primary and fabricated metal, and electronic instrument sectors; ¶

(G) Cleanup of legacy mercury from collection systems;¶

(H) Facility-specific activities to reduce mercury loading into the waterbody. These may include cost-effective and reasonable best management practices for nonpoint source controls under the control of the discharger that would make progress towards attaining the underlying designated use and criterion; and¶

(I) If a facility has accomplished all activities within its control, the facility may implement or fund mercury reduction activities outside the discharger's control that will make progress toward attaining the underlying designated use and criterion.¶

(g) Highest attainable condition - mercury minimization program for industrial dischargers. The highest attainable condition for industrial dischargers will include implementing a mercury minimization program covering the term of the variance, with the following minimum elements: ¶

(A) A monitoring plan to include influent, effluent and biosolids monitoring;¶

(B) Identifying mercury-containing materials used in the facility, offices and testing laboratories the discharger operates, and developing and implementing recommendations for using substitute materials with less or no mercury;¶

(C) Identifying other potential sources of mercury within the facility and developing and implementing recommendations for reducing these sources;¶

(D) Identifying other activities within discharger's control discharger to reduce mercury loading into the waterbody. These may include cost-effective and reasonable best management practices for nonpoint source controls under the discharger's control that would make progress towards attaining the underlying designated use and criterion; and¶

(E) If a facility has accomplished all activities within its control, the facility may implement or fund mercury reduction activities outside the discharger's control that will make progress toward attaining the underlying designated use and criterion.¶

(h) State mercury reduction activities in Oregon. The state implements numerous programs that will, over time, including over the 20-year term of this variance, reduce mercury loads to Willamette Basin waterbodies, including such programs as:¶

(A) Oregon's Dental Amalgam Law and associated practices as required under ORS 679.520 and ORS 679.525, and subsequent federal regulations.¶

(B) Airborne toxic contaminant reduction from existing or newly permitted industrial sources through the Cleaner

Air Oregon program and other DEQ Air Quality permitting requirements.¶¶

(C) DEQ coordination with the Oregon Department of Forestry on implementing the Forest Practices Act.¶¶

(D) DEQ coordination with the Oregon Department of Agriculture on implementing the Oregon Agriculture Water Quality Management Act.¶¶

(E) DEQ issuing general discharge permits, such as Phase I and Phase II municipal separate storm sewer system permits, industrial stormwater permits, and suction dredge mining permits, in addition to individual wastewater discharge permits.¶¶

(F) DEQ in-water and upland remediation under state laws and rules, and coordination with US EPA on Portland Harbor, Gould, and Black Butte Mine Superfund site cleanups.¶¶

(G) Regulatory and voluntary programs to reduce or recycle products containing mercury, such as automotive light switches, thermostats, and LCD screens and monitors.¶¶

(i) Re-evaluating the Highest Attainable Condition. DEQ will re-evaluate the highest attainable condition for this multiple discharger variance every five years from the date that EPA approves this variance. DEQ will provide a written summary of this re-evaluation to EPA within 30 days of completing the re-evaluation. If DEQ fails to submit the re-evaluation to EPA within the specified timeframe, the variance will no longer be the applicable water quality standard until DEQ completes the re-evaluation and submits it to EPA.¶¶

(A) The re-evaluation will include the following elements:¶¶

(i) A summary of the mercury reduction activities completed and an analysis of mercury reductions facilities covered under this variance achieved, using the data and information provided in their annual reports; and¶¶

(ii) A determination of the feasibility of wastewater treatment technology to attain the water quality standard.¶¶

(B) DEQ will provide public notice on the availability of its draft re-evaluation and provide at least 30 days opportunity for the public to comment on the draft re-evaluation.¶¶

(C) Upon permit renewal for each facility covered under the variance, DEQ will update conditions in the permit based on the re-evaluation of the Highest Attainable Condition, as follows:¶¶

(i) DEQ will re-calculate each facility's level currently achievable, as described in OAR 340-041-0345(6)(e), utilizing the previous five years of data provided by each facility, at the time of their permit renewal. DEQ will adjust permit limits if the data shows that the level currently achievable is lower than the LCA in the previous permit.¶¶

(ii) DEQ will review updates to the facility's site-specific mercury minimization plan and, if necessary, request revisions to ensure that it is consistent with variance requirements.

Statutory/Other Authority: ORS 468.020, 468B.030, 468B.035, 468B.048

Statutes/Other Implemented: ORS 468B.030, 468B.035, 468B.048