

## ADMINISTRATIVE RULES

**Rule Caption:** Corrections and Clarifications to Toxics Water Quality Standards

**Adm. Order No.:** DEQ 17-2013

**Filed with Sec. of State:** 12-23-2013

**Certified to be Effective:** 4-18-14

**Notice Publication Date:** 9-1-2013

**Rules Amended:** 340-041-0033

**Subject:** The EQC amended water quality standards rules for toxic substances to correct and clarify the standards. Revisions to water quality standards require EPA approval before the revisions become effective for Clean Water Act programs.

The rules include the following:

Correct several toxic pollutant criteria that EPA recently disapproved and address other minor revisions to the Toxic Substances rule. EPA disapproved criteria for 11 pesticides based on potentially conflicting information in regards to how the frequency and duration components of these criteria are expressed. DEQ expects that clarifying this aspect of the criteria will lead to EPA approval of 36 pesticide criteria values associated with 11 pesticides.

Correct an error in the expression of freshwater selenium criteria.

Re-propose freshwater and saltwater arsenic criteria and chromium VI saltwater criteria that were inadvertently left off the criteria table during a 2007 rulemaking.

Correct typographical errors made during the 2011 Human Health Toxics Rulemaking.

Move all effective aquatic life criteria from Tables 20, 33A, and 33B into a new aquatic life criteria table, Table 30, and to refer to the new table in the Toxic Substances rule language. As a result, Tables 20, 33A, and 33B are no longer needed and would be repealed under this proposal.

Delete aluminum from Table 30 to reflect EPA's disapproval of the freshwater criteria for aluminum because the disapproval renders the criteria ineffective and there are no other criteria for aluminum. DEQ anticipates adopting revised freshwater criteria for aluminum in a future rulemaking process.

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### 340-041-0033

#### Toxic Substances

(1) Amendments to sections (1-5) and (7) of this rule (OAR 340-041-0033) and associated revisions to Tables 20, 33A, 33B, 33C, and 40 become effective on April 18, 2014. The amendments do not become applicable for purposes of ORS chapter 468B or the federal Clean Water Act, however, unless approved by EPA pursuant to 40 CFR 131.21 (4/27/2000).

(2) Toxic Substances Narrative. Toxic substances may not be introduced above natural background levels in waters of the state in amounts, concentrations, or combinations that may be harmful, may chemically change to harmful forms in the environment, or may accumulate in sediments or bioaccumulate in aquatic life or wildlife to levels that adversely affect public health, safety, or welfare or aquatic life, wildlife, or other designated beneficial uses.

(3) Aquatic Life Numeric Criteria. Levels of toxic substances in waters of the state may not exceed the applicable aquatic life criteria listed in Table 30.

(4) Human Health Numeric Criteria. The criteria for waters of the state listed in Table 40 are established to protect Oregonians from potential adverse health effects associated with long-term exposure to toxic substances associated with consumption of fish, shellfish, and water.

(5) To establish permit or other regulatory limits for toxic substances for which criteria are not included in Table 30 or Table 40, the department may use the guidance values in Table 31, public health advisories, and other published scientific literature. The department may also require or conduct bio-assessment studies to monitor the toxicity to aquatic life of complex effluents, other suspected discharges, or chemical substances without numeric criteria.

(6) Establishing Site-Specific Background Pollutant Criteria: This provision is a performance based water quality standard that results in site-specific human health water quality criteria under the conditions and procedures specified in this rule section. It addresses existing permitted discharges of a pollutant removed from the same body of water. For waterbodies where a discharge does not increase the pollutant's mass and does not increase the pollutant concentration by more than 3%, and where the

water body meets a pollutant concentration associated with a risk level of  $1 \times 10^{-4}$ , DEQ concludes that the pollutant concentration continues to protect human health.

(a) Definitions: For the purpose of this section (OAR 340-041-0033(6)):

(A) "Background pollutant concentration" means the ambient water body concentration immediately upstream of the discharge, regardless of whether those pollutants are natural or result from upstream human activity.

(B) An "intake pollutant" is the amount of a pollutant that is present in public waters (including groundwater) as provided in subsection (C), below, at the time it is withdrawn from such waters by the discharger or other facility supplying the discharger with intake water.

(C) "Same body of water": An intake pollutant is considered to be from the "same body of water" as the discharge if the department finds that the intake pollutant would have reached the vicinity of the outfall point in the receiving water within a reasonable period had it not been removed by the permittee. This finding may be deemed established if:

(i) The background concentration of the pollutant in the receiving water (excluding any amount of the pollutant in the facility's discharge) is similar to that in the intake water;

(ii) There is a direct hydrological connection between the intake and discharge points; and

(I) The department may also consider other site-specific factors relevant to the transport and fate of the pollutant to make the finding in a particular case that a pollutant would or would not have reached the vicinity of the outfall point in the receiving water within a reasonable period had it not been removed by the permittee.

(II) An intake pollutant from groundwater may be considered to be from the "same body of water" if the department determines that the pollutant would have reached the vicinity of the outfall point in the receiving water within a reasonable period had it not been removed by the permittee, except that such a pollutant is not from the same body of water if the groundwater contains the pollutant partially or entirely due to past or present human activity, such as industrial, commercial, or municipal operations, disposal actions, or treatment processes.

(iii) Water quality characteristics (e.g., temperature, pH, hardness) are similar in the intake and receiving waters.

(b) Applicability

(A) Site-specific criteria may be established under this rule section only for carcinogenic pollutants.

(B) Site-specific criteria established under this rule section apply in the vicinity of the discharge for purposes of establishing permit limits for the specified permittee.

(C) The underlying waterbody criteria continue to apply for all other Clean Water Act programs.

(D) The site-specific background pollutant criterion will be effective upon department issuance of the permit for the specified permittee.

(E) Any site-specific criteria developed under this procedure will be re-evaluated upon permit renewal.

(c) A site-specific background pollutant criterion may be established where all of the following conditions are met:

(A) The discharger has a currently effective NPDES permit;

(B) The mass of the pollutant discharged to the receiving waterbody does not exceed the mass of the intake pollutant from the same body of water, as defined in section (6)(a)(C) above, and, therefore, does not increase the total mass load of the pollutant in the receiving water body;

(C) The discharger has not been assigned a TMDL wasteload allocation for the pollutant in question;

(D) The permittee uses any feasible pollutant reduction measures available and known to minimize the pollutant concentration in their discharge;

(E) The pollutant discharge has not been chemically or physically altered in a manner that causes adverse water quality impacts that would not occur if the intake pollutants were left in-stream; and,

(F) The timing and location of the pollutant discharge would not cause adverse water quality impacts that would not occur if the intake pollutant were left in-stream.

(d) The site-specific background pollutant criterion must be the most conservative of the following four values. The procedures deriving these values are described in the sections (6)(e) of this rule.

(A) The projected in-stream pollutant concentration resulting from the current discharge concentration and any feasible pollutant reduction measures under (c)(D) above, after mixing with the receiving stream.

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(B) The projected in-stream pollutant concentration resulting from the portion of the current discharge concentration associated with the intake pollutant mass after mixing with the receiving stream. This analysis ensures that there will be no increase in the mass of the intake pollutant in the receiving water body as required by condition (c)(B) above.

(C) The projected in-stream pollutant concentration associated with a 3% increase above the background pollutant concentration as calculated:

(i) For the mainstem Willamette and Columbia Rivers, using 25% of the harmonic mean flow of the waterbody.

(ii) For all other waters, using 100% of the harmonic mean flow or similar critical flow value of the waterbody.

(D) A criterion concentration value representing a human health risk level of  $1 \times 10^{-4}$ . This value is calculated using EPA's human health criteria derivation equation for carcinogens (EPA 2000), a risk level of  $1 \times 10^{-4}$ , and the same values for the remaining calculation variables that were used to derive the underlying human health criterion.

(e) Procedure to derive a site-specific human health water quality criterion to address a background pollutant:

(A) The department will develop a flow-weighted characterization of the relevant flows and pollutant concentrations of the receiving waterbody, effluent and all facility intake pollutant sources to determine the fate and transport of the pollutant mass.

(i) The pollutant mass in the effluent discharged to a receiving waterbody may not exceed the mass of the intake pollutant from the same body of water.

(ii) Where a facility discharges intake pollutants from multiple sources that originate from the receiving waterbody and from other waterbodies, the department will calculate the flow-weighted amount of each source of the pollutant in the characterization.

(iii) Where intake water for a facility is provided by a municipal water supply system and the supplier provides treatment of the raw water that removes an intake water pollutant, the concentration and mass of the intake water pollutant shall be determined at the point where the water enters the water supplier's distribution system.

(B) Using the flow weighted characterization developed in Section (6)(e)(A), the department will calculate the in-stream pollutant concentration following mixing of the discharge into the receiving water. The resultant concentration will be used to determine the conditions in Section (6)(d)(A) and (B).

(C) Using the flow weighted characterization, the department will calculate the in-stream pollutant concentration based on an increase of 3% above background pollutant concentration. The resultant concentration will be used to determine the condition in Section (6)(d)(C).

(i) For the mainstem Willamette and Columbia Rivers, 25% of the harmonic mean flow of the waterbody will be used.

(ii) For all other waters, 100% of the harmonic mean flow or similar critical flow value of the waterbody will be used.

(D) The department will select the most conservative of the following values as the site-specific water quality criterion.

(i) The projected in-stream pollutant concentration described in Section (6)(e)(B);

(ii) The in-stream pollutant concentration based on an increase of 3% above background described in Section (6)(e)(C); or

(iii) A water quality criterion based on a risk level of  $1 \times 10^{-4}$ .

(f) Calculation of water quality based effluent limits based on a site-specific background pollutant criterion:

(A) For discharges to receiving waters with a site-specific background pollutant criterion, the department will use the site-specific criterion in the calculation of a numeric water quality based effluent limit.

(B) The department will compare the calculated water quality based effluent limits to any applicable aquatic toxicity or technology based effluent limits and select the most conservative for inclusion in the permit conditions.

(g) In addition to the water quality based effluent limits described in Section (6)(f), the department will calculate a mass-based limit where necessary to ensure that the condition described in Section (6)(c)(B) is met. Where mass-based limits are included, the permit shall specify how compliance with mass-based effluent limitations will be assessed.

(h) The permit shall include a provision requiring the department to consider the re-opening of the permit and re-evaluation of the site-specific background pollutant criterion if new information shows the discharger no longer meets the conditions described in subsections (6)(c) and (e).

(i) Public Notification Requirements.

(A) If the department proposes to grant a site-specific background pollutant criterion, it must provide public notice of the proposal and hold a

public hearing. The public notice may be included in the public notification of a draft NPDES permit or other draft regulatory decision that would rely on the criterion and will also be published on the water quality standards website;

(B) The department will publish a list of all site-specific background pollutant criteria approved pursuant to this rule. A criterion will be added to this list within 30 days of its effective date. The list will identify: the permittee; the site-specific background pollutant criterion and the associated risk level; the waterbody to which the criterion applies; the allowable pollutant effluent limit; and how to obtain additional information about the criterion.

(7) Arsenic Reduction Policy: The inorganic arsenic criterion for the protection of human health from the combined consumption of organisms and drinking water is 2.1 micrograms per liter. While this criterion is protective of human health and more stringent than the federal maximum contaminant level (MCL) for arsenic in drinking water, which is 10 micrograms per liter, it nonetheless is based on a higher risk level than the Commission has used to establish other human health criteria. This higher risk level recognizes that much of the risk is due to naturally high levels of inorganic arsenic in Oregon's waterbodies. In order to maintain the lowest human health risk from inorganic arsenic in drinking water, the Commission has determined that it is appropriate to adopt the following policy to limit the human contribution to that risk.

(a) The arsenic reduction policy established by this rule section does not become applicable for purposes of ORS chapter 468B or the federal Clean Water Act unless and until the numeric arsenic criteria established by this rule are approved by EPA pursuant to 40 CFR 131.21 (4/27/2000).

(b) It is the policy of the Commission that the addition of inorganic arsenic from new or existing anthropogenic sources to waters of the state within a surface water drinking water protection area be reduced the maximum amount feasible. The requirements of this rule section (OAR 340-041-0033(7)) apply to sources that discharge to surface waters of the state with an ambient inorganic arsenic concentration equal to or lower than the applicable numeric inorganic arsenic criteria for the protection of human health.

(c) The following definitions apply to this section (OAR 340-041-0033(7)):

(A) "Add inorganic arsenic" means to discharge a net mass of inorganic arsenic from a point source (the mass of inorganic arsenic discharged minus the mass of inorganic arsenic taken into the facility from a surface water source).

(B) A "surface water drinking water protection area," for the purpose of this section, means an area delineated as such by DEQ under the source water assessment program of the federal Safe Drinking Water Act, 42 U.S.C. § 300j 13. The areas are delineated for the purpose of protecting public or community drinking water supplies that use surface water sources. These delineations can be found at DEQ's drinking water program website.

(C) "Potential to significantly increase inorganic arsenic concentrations in the public drinking water supply source water" means:

(i) to increase the concentration of inorganic arsenic in the receiving water for a discharge by 10 percent or more after mixing with the harmonic mean flow of the receiving water; or

(ii) as an alternative, if sufficient data are available, the discharge will increase the concentration of inorganic arsenic in the surface water intake water of a public water system by 0.021 micrograms per liter or more based on a mass balance calculation.

(d) Following the effective date of this rule, applications for an individual NPDES permit or permit renewal received from industrial dischargers located in a surface water drinking water protection area and identified by DEQ as likely to add inorganic arsenic to the receiving water must include sufficient data to enable DEQ to determine whether:

(A) The discharge in fact adds inorganic arsenic; and

(B) The discharge has the potential to significantly increase inorganic arsenic concentrations in the public drinking water supply source water.

(e) Where DEQ determines that both conditions in subsection (d) of this section (7) are true, the industrial discharger must develop an inorganic arsenic reduction plan and propose all feasible measures to reduce its inorganic arsenic loading to the receiving water. The proposed plan, including proposed measures, monitoring and reporting requirements, and a schedule for those actions, will be described in the fact sheet and incorporated into the source's NPDES permit after public comment and DEQ review and approval. In developing the plan, the source must:

(A) Identify how much it can minimize its inorganic arsenic discharge through pollution prevention measures, process changes, wastewater treat-

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ment, alternative water supply (for groundwater users) or other possible pollution prevention and/or control measures;

(B) Evaluate the costs, feasibility and environmental impacts of the potential inorganic arsenic reduction and control measures;

(C) Estimate the predicted reduction in inorganic arsenic and the reduced human health risk expected to result from the control measures;

(D) Propose specific inorganic arsenic reduction or control measures, if feasible, and an implementation schedule; and

(E) Propose monitoring and reporting requirements to document progress in plan implementation and the inorganic arsenic load reductions.

(f) In order to implement this section, DEQ will develop the following information and guidance within 120 days of the effective date of this rule and periodically update it as warranted by new information:

(A) A list of industrial sources or source categories, including industrial stormwater and sources covered by general permits, that are likely to add inorganic arsenic to surface waters of the State.

(i) For industrial sources or source categories permitted under a general permit that have been identified by DEQ as likely sources of inorganic arsenic, DEQ will evaluate options for reducing inorganic arsenic during permit renewal or evaluation of Stormwater Pollution Control Plans.

(B) Quantitation limits for monitoring inorganic arsenic concentrations.

(C) Information and guidance to assist sources in estimating, pursuant to subsection (e)(C) of this section, the reduced human health risk expected to result from inorganic arsenic control measures based on the most current EPA risk assessment.

(g) It is the policy of the Commission that landowners engaged in agricultural or development practices on land where pesticides, fertilizers, or soil amendments containing arsenic are currently being or have previously been applied, implement conservation practices to minimize the erosion and runoff of inorganic arsenic to waters of the State or to a location where such material could readily migrate into waters of the State.

[ED. NOTE: Tables referenced are available from the agency.]

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 3-2004, f. & cert. ef. 5-28-04; DEQ 17-2010, f. & cert. ef. 12-21-10; DEQ 8-2011, f. & cert. ef. 6-30-11; DEQ 10-2011, f. & cert. ef. 7-13-11; DEQ 17-2013, f. 12-23-13, cert. ef. 4-18-14

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**Rule Caption:** Updates to OAR Chapter 340, Divisions 11, 12 and 200

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**Rules Repealed:** 340-011-0605, 340-012-0027

**Subject:** The EQC adopted the following changes to chapter 340 of the Oregon Administrative Rules.

Division 011 amendments:

- Align with the Oregon Attorney General Model Rules under OAR 340-003-0501 through 0690. The Model Rules that apply to Environmental Quality Commission proceedings became effective Jan. 31, 2012.

- Address procedures for filing and serving documents in contested cases and other general contested case proceedings.

- Establish a new fee for onsite septic system program public records requests. This would allow DEQ to recover the costs of fulfilling such requests.

- Repeal OAR 340-011-0605 that became obsolete in 2007 with the passage of Measure 49. Measure 49 substantially reduced the impact of Measure 37 and the required director's review.

- Make minor housekeeping changes, including clarification of the lay representative rule at OAR 340-011-0510(1).

Division 012 amendments implement 2009 Oregon legislation that increased DEQ's civil penalty statutory maximums, many last updated in 1973. Other proposed changes include aligning violation classification and magnitudes with DEQ program priorities, providing greater mitigating credit for correcting violations, and housekeeping that includes eliminating duplicative text.

Division 200 amendments update the Oregon Clean Air Act State Implementation Plan. Section 110 of the Clean Air Act, 42 U.S.C. §7410 requires state and local air

Oregon Department of Environmental Quality pollution control agencies to adopt federally-approved control strategies to minimize air pollution. The resulting body of regulations is a State Implementation Plan or SIP. By incorporating updated civil penalties and violations, these proposed rules would be a revision to Oregon's SIP. DEQ must submit rule changes to EPA and EPA must approve the rules as meeting the requirements of the Clean Air Act. If the Oregon Environmental Quality Commission amends the proposed rule, DEQ will submit SIP revisions to EPA for approval.

Key Amendments

Civil penalty matrices (OAR 340-012-0140)

- Increase the top base penalty in the current \$8,000 penalty matrix to \$12,000

- Increase the top base penalty in the current \$6,000 penalty matrix to \$8,000

- Increase the top base penalty in the current \$2,500 penalty matrix to \$3,000

- No changes to the current \$1,000 penalty matrix

Change to factors in the civil penalty formula (OAR 340-012-0145) by:

- Increasing credit for the "C" factor to apply mitigating credit for a violator's efforts to correct violations

- Expanding the use of the "M" factor to assign a broader range of penalty aggravation when considering the mental state of the violator

Increase additional or alternate penalties for violations that pose an extreme hazard to public health or cause extensive environmental damage (OAR 340-012-0155)

- Base penalties in this category would increase from \$50,000 to \$100,000 to a new range of \$100,000 to \$200,000 depending on whether violations are caused intentionally, recklessly or flagrantly.

Increase administrative penalty maximums to \$100,000 for certain spill violations of oil or hazardous materials

- Penalties for intentionally or negligently spilling hazardous materials into waters of the state, or intentionally or negligently failing to clean up spills of oil or hazardous materials would increase from a maximum of \$10,000 per day to a maximum of \$100,000 per day. Penalties for intentionally or negligently spilling oil into waters of the state would increase from a maximum of \$20,000 per day to a maximum of \$100,000 per day. Final penalties would be determined according to a new formula and additional factors not in the current rule.

Establish a base fee for onsite septic system program public records requests

Regulated parties

The rules do not impose new requirements upon regulated entities. Division 011 includes rules that supplement the Oregon Attorney General Model Rule for administrative procedures. Division 011 applies to any person involved in a contested case proceeding in front of the Environmental Quality Commission. The rules outline the contested case hearings processes. Division 012 outlines the processes