

Status of Human Health Toxics Rulemaking and Use, Costs of Variances

Submitted to:

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Oregon Legislative Assembly
Oregon Environmental Quality Commission**

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DEQ is a leader in restoring, maintaining and enhancing the quality of Oregon's air, land and water.



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Executive Summary

The Oregon Legislature directed the Oregon Department of Environmental Quality to provide by Feb. 15, 2013 an update on the status of updated state rules addressing water quality standards for human health and toxic pollutants. The legislature also directed DEQ to provide information on variances and variance-associated costs, numbers and permitting conditions.. A variance is a water quality permitting tool industrial or municipal dischargers to waterbodies may use under specific circumstances when they can't comply with permit limits based on water quality standards.

On June 16, 2011, following a multi-year rulemaking to revise toxic pollutant standards for the protection of human health, the Oregon Environmental Quality Commission adopted more stringent human health toxics standards based on a fish consumption rate that is more protective of Oregonians than the previous fish consumption rate. The commission's adoption of the standards addressed the U.S. Environmental Protection Agency's disapproval of Oregon's previous standards based on the lower fish consumption rate. EPA subsequently approved revisions to the human health toxics standards on Oct. 17, 2011, rendering these standards effective for DEQ state programs under the federal Clean Water Act.

As of December 2012, DEQ has not received any applications for variances from any discharger in Oregon. More detail on costs, number and types of variances may become available at the time of the next legislative report on variances that is due Feb. 15, 2015, if any variances are sought by that date.

DEQ has been engaged in numerous activities to ensure the department is prepared to process an industry or city's request for a variance, including developing guidance for implementing variances. DEQ has also provided information and trainings on variances to various groups affected by the rules. DEQ is committed to working with each discharging facility to determine compliance options in addition to variances and provide assistance in meeting any requirements associated with the revised human health toxics standards.

Chapter 1: Purpose

1.1 Legislative Direction

The Oregon Department of Environmental Quality developed this report in response to an Oregon Legislature directive:

By February 15, 2013, DEQ shall report to the Seventy-Seventh Legislative Assembly on the status of the water quality standards rules proposed for adoption in June 2011, including whether the rules were adopted by the Environmental Quality Commission (EQC) and approved by the Environmental Protection Agency (EPA). If the standards are adopted and approved, the report shall also include, but need not be limited to:

- *The number and types of variances granted;*
- *A summary of the conditions contained in the variances;*
- *For each variance application received by DEQ, the cost incurred by a permittee to prepare the variance application as made available by the applicant; and,*
- *Information provided by permittees who applied for a variance on the estimated costs associated with implementing the pollution prevention plan required by the variance and othe related fiscal impacts*

By February 15, 2015, DEQ shall report to the Seventy-eighth Legislative Assembly on the status and implementation of the human health toxics standards and any related standards adopted by the EQC and approved by EPA after June 2011. The report shall also include but not be limited to the information listed above.

In response to the legislative request, this report provides an update on the status of the toxics water quality standards rulemaking and information on variances. A variance is a water quality permitting tool industrial or municipal dischargers to waterbodies may use under specific circumstances when they can't comply with limits based on water quality standards.

1.2 Status of Human Health Toxics Rulemaking

On June 16, 2011, following a multi-year rulemaking process to revise toxics criteria affecting human health, the Oregon Environmental Quality Commission adopted more stringent human health toxics criteria based on a fish consumption rate (175 grams/day, which is approximately equivalent to 23 eight-ounce fish servings a month) that is more protective of Oregonians than the previous fish consumption rate (17.5 grams/day or about 2.3 eight-ounce fish servings a month). The EQC adoption addressed the federal Environmental Protection Agency's disapproval of Oregon's previous criteria based on the 17.5 gram-per-day fish consumption rate. EPA subsequently approved revisions to the human health toxics criteria on Oct. 17, 2011, rendering these criteria effective for the state's water quality programs under the Clean Water Act. These standards establish goals for Oregon's surface waters, including protecting sources of drinking water and helping ensure that fish from Oregon's waters are safe to eat. Because these standards may affect industrial facilities and larger municipal sewage treatment facilities operating under wastewater discharge permits in Oregon, the rulemaking also included new and revised permitting

tools, including variances, to comply with more stringent toxics criteria. The adopted rules also included revisions to address DEQ's coordination with the state Departments of Agriculture and Forestry in carrying out the agencies' roles related to nonpoint sources of pollution, such as farming and forestry activities that result in runoff.

1.3 Variance Rule Description

The human health toxics rulemaking made significant revisions to the previous rule for variances in order to streamline the variance approval process and added a requirement for additional protective measures, such as a pollutant reduction plan. A permit holder that can't meet a permit limit due to specific circumstances described in the variance rule, such as when available treatment technologies are prohibitively expensive or when human-caused or naturally-occurring pollutant levels preclude meeting water quality standards, can apply for a variance. Variances are applicable to all types of pollutants and point sources, although DEQ anticipates that variances for toxic pollutants will comprise the majority of variance requests and approvals. Under the previous rule, no permit holder had requested a variance.

For DEQ to grant a variance, a city or business that discharges to a waterbody must develop a pollutant reduction plan describing how the facility will continue to make progress toward meeting the water quality standards. Pollutant reduction plans may include alternatives to traditional end-of-pipe treatment, such as pollution prevention or source control measures, to reduce pollution and improve water quality. Underlying water quality standards remain in effect for the waterbody and for all other Clean Water Act purposes. Use of the variance provision for individual permits is subject to public notice and review, in addition to DEQ and EPA approval. An approved variance is effective for the duration of the permit (i.e. five years) and must be renewed and approved at each permit renewal. A variance may be renewed multiple times as long as permit conditions are met and the permit holder demonstrates that the discharge cannot meet effluent limits for reasons specified in the rule.

Chapter 2: Use of Variances

2.1 Current Status of Variances

At this time, DEQ hasn't received any requests from permit holders to apply for a variance. This may be due in part to the fact that relatively few permits have expired and required renewal since the revised human health criteria became effective. For permits renewed since the effective date of the revised criteria, there've been instances where data has been insufficient to adequately characterize effluent pollutant concentrations to determine whether or not the discharge meets effluent limits for toxic pollutants. In these cases, DEQ renews the permit and includes specific data collection requirements in the permit to better characterize the effluent quality. Permit holders are further directed to work with DEQ permit writers to develop compliance solutions ahead of permit expiration if data collected indicates that the discharge will not meet effluent limits. DEQ is working with several communities on various compliance issues with several of the toxics criteria. It anticipates that variances will remain a viable compliance option for dischargers as additional data is collected and evaluated.

2.2 Costs of Variances

The Legislature requested information on costs incurred by permittees in preparing variance applications, estimating costs associated with implementing the pollution prevention plan required by the variance, and other related fiscal impacts. Due to the fact that permittees have not requested or applied for variances, this information does not exist. DEQ will provide this information in its February 2015 legislative report if variances are sought and cost information is available by that date.

2.3 Variance Training

In anticipation of future applications for variances, DEQ developed guidance in implementing variances¹ and provided information at several trainings, meetings and other opportunities with the Oregon Association of Clean Water Agencies and Associated Oregon Industries. In addition, as part of DEQ's rulemaking commitments, DEQ staff sent letters to industries and cities offering additional technical and analytical resources to facilities that may pursue a variance. DEQ didn't receive any specific responses to this inquiry. Regardless of whether an industry or city pursues a variance, DEQ is committed to working with each facility to determine compliance options and provide assistance in meeting revised human health toxics criteria.

¹ DEQ. Internal Management Directive: Implementing Water Quality Standards Variances for NPDES Permit Holders Version 1.0. Feb. 6, 2012. See: <http://www.deq.state.or.us/wq/pubs/imds/VarianceIMD.pdf>