

Revised Proposed Rulemaking Announcement

Revised Water Quality Standards for Human Health Toxic Pollutants and Revised Water Quality Standards Implementation Policies

Background

The Oregon Department of Environmental Quality proposes, through this rulemaking, to revise the water quality standards regulation to address the human health criteria for toxic pollutants. DEQ also proposes to adopt new and revised water quality standards rules on implementing water quality standards through various water quality control programs, including National Pollutant Discharge Elimination System (NPDES) permits and nonpoint source pollution programs.

Why are rule changes needed?

DEQ uses water quality standards as the basis to regulate the discharge of pollutants to Oregon water bodies, to evaluate whether water bodies support beneficial uses, such as fishing and household water supply, and to implement other programs to prevent and control water pollution from point (end-of-pipe) and nonpoint sources.

DEQ's currently effective human health toxics criteria are based on a fish consumption rate that does not provide adequate protection for the amount of fish and shellfish consumed by Oregonians. On June 1, 2010, the Environmental Protection Agency (EPA) disapproved human health toxics criteria which Oregon submitted for approval in 2004 and which were based on a fish consumption rate of 17.5 grams per day. EPA disapproved the human health toxics criteria because the fish consumption rate is not considered protective of many Oregonians. DEQ is addressing EPA's disapproval by proposing to use a higher fish consumption rate of 175 g/day to calculate more protective human health toxics criteria. If DEQ does not establish revised criteria, EPA must conduct rulemaking to develop human health toxics criteria for Oregon.

This rulemaking also proposes new rule language and revisions to existing rule language for various NPDES permit implementation tools developed to assist dischargers in complying with revised standards. Further, revisions to the water quality standards and Total Maximum Daily Load (TMDL) rules are intended to make DEQ's rules consistent with state statutes affecting nonpoint sources of pollution and for DEQ to assign pollution load allocations to significant land and air sources in TMDLs.

What is the objective of this rulemaking?

The objective is to adopt water quality standards for Oregon that will protect people from adverse health effects as a result of consuming fish and water from Oregon streams and lakes. In addition, the objective of the rulemaking is to allow DEQ and other agencies to implement the water quality standards in a manner that is cost effective and achieves meaningful environmental results.

Who may be affected?

Cities and businesses that discharge to state waters will be affected by this rulemaking if their discharge contains one or more of the regulated pollutants. Forest and agricultural land managers, transportation and other construction projects and other parties subject to programs that control point and nonpoint sources of pollution could also be affected if their activity results in the transport of regulated toxic pollutants into surface waters. Tribal people and other Oregonians who eat fish and shellfish will benefit from the health protections provided.

How was this proposal developed?

DEQ worked with several advisory committees throughout this process. In developing the revised fish consumption rate, DEQ worked with the *Human Health Focus Group*, a group of public health specialists and toxicologists who advised DEQ in its review of available fish consumption studies. DEQ also assembled the *Fiscal Impact and Implementation Advisory Committee*, a group of affected stakeholders and two economists, to provide input on the fish consumption rate development and on a cost analysis conducted for DEQ by an EPA contractor.

During the development of the revised human health criteria and the implementation tools, DEQ worked with a *Toxics Standards Rulemaking Workgroup* and a *Non-NPDES Workgroup*, both comprised of affected stakeholders. Agendas and meeting summaries for these two workgroups are available on DEQ's website at: <http://www.deq.state.or.us/wq/standards/humanhealth.htm>.



State of Oregon
Department of
Environmental
Quality

Water Quality Division
Standards and Assessment
Program
811 SW 6th Avenue
Portland, OR 97204
Phone: (503) 229-5384
(800) 452-4011
Fax: (503) 229-6037
Contact: Andrea Matzke
ToxicsRuleMaking@deq.state.or.us
www.oregon.gov/DEQ/

DEQ and the EQC have the statutory authority to address this issue under ORS 468B.010, 468B.020, 468B.035, 468B.110, and 468.020. These rules implement ORS 468B.048

Rulemaking materials available

- Proposed Rule Changes
- Statement of Need and Fiscal Impact
- Land Use Evaluation Statement
- Relationship to Federal Requirements

The above documents are available for public comment and provide information about this proposed rulemaking. The documents can be viewed at:

<http://www.deq.state.or.us/regulations/rulemaking.htm>.

Additional materials available

Principal documents DEQ used to develop and support this rulemaking include a set of issue papers. DEQ has also developed draft Internal Management Directive (IMD) outlines for several implementation components of the proposed rulemaking. Other supporting documents include EPA criteria recommendations and the Human Health Focus Group report. These may be found on DEQ's website at:

<http://www.deq.state.or.us/wq/standards/toxics.htm>.

DEQ will post issue papers and draft IMD outlines to the above website by Monday, Jan. 3, 2011. These documents are not for public comment.

The public may review copies of the documents described above at DEQ's headquarters office at 811 S.W. 6th Ave. in Portland. Please contact Andrea Matzke at 503-229-5384, or toll-free in Oregon at 1-800-452-4011, ext. 5384 for times when the documents are available for review.

How to comment

People may submit comments on the proposed rulemaking in writing via mail, fax or e-mail at any time prior to the comment deadline of 5 p.m. Wednesday, Feb. 23, 2011. Written and oral comments can be submitted during any of the public hearings specified below. It is not necessary to attend a hearing in order to comment. Written comments received prior to the deadline are treated equally with oral comments.

Mail written comments to Andrea Matzke, Oregon DEQ, Water Quality Division, 811 SW 6th Ave, Portland, OR 97204. Contact Andrea Matzke at 503-229- 5384, or toll-free in Oregon at 1-800-452-4011, ext. 5384.

Fax comments to Andrea Matzke at 503-229-6037, or e-mail comments to:

ToxicsRuleMaking@deq.state.or.us.

(DEQ will acknowledge e-mail comments immediately. Limit comments and attachments to 10 MB. If you do not receive an automatic response, or your comments and attachments will exceed this limit, please contact Andrea Matzke at the number listed above.)

If there is a delay between servers, e-mails may not be received before the deadline.

Public hearings

DEQ will hold public hearings in seven cities throughout the state in February. Each hearing will begin with a brief overview of the proposed rule changes, followed by the opportunity for members of the public to provide oral and written comment. DEQ will record and review all comments.

- **Bend**
1 p.m. Tuesday, Feb. 1, 2011
Oregon Department of Transportation
Office, Deschutes River Room
63055 N. Highway 97
Bend, OR 97701
- **Eugene**
9 a.m. Wednesday, Feb. 2, 2011
DEQ Eugene Office
Willamette Conference Room
165 East 7th Ave., Suite 100
Eugene, OR 97401
- **Medford**
6 p.m. Wednesday, Feb. 2, 2011
DEQ Medford Office
Large Conference Room
221 Stewart Ave., Suite 201
Medford, OR 97501
- **Coos Bay**
1:30 p.m. Thursday, Feb. 3, 2011
City Hall, Council Chambers
500 Central Ave.
Coos Bay, OR 97420
- **Ontario**
2:30 p.m. Mountain Standard Time
Monday, Feb. 7, 2011
Ontario City Hall
Council Chambers (2nd floor)
444 SW 4th St.
Ontario, OR 97914

- **Pendleton**
2 p.m., Tuesday, Feb. 8, 2011
St. Anthony's Hospital
Cascade Room (1st floor)
1601 SE Court Ave.
Pendleton, OR 97801
- **Portland**
6 p.m., Thursday, Feb.10, 2011
DEQ Headquarters, Rm EQC-A (10th floor)
811 SW 6th Ave.
Portland, OR 97204
- **Portland**
EQC Meeting
1:30 p.m., Wednesday, Feb.16, 2011
DEQ Headquarters, Rm EQC-A (10th floor)
811 SW 6th Ave.
Portland, OR 97204

Comment deadline is Feb. 23, 2011

All comments are due to DEQ by 5 p.m. Wednesday, Feb. 23, 2011. DEQ cannot consider comments from any party **received** after the deadline for public comment.

How will rules be adopted?

DEQ will prepare a response to all comments received during the public hearing and comment period and may modify the proposed rules. DEQ plans to recommend that the Oregon Environmental Quality Commission adopt the rules at the commission's June 2011 meeting. DEQ will notify persons of the time and place for final EQC action if they submit comments during the hearing or comment period or request to be placed on DEQ's mailing list for this rulemaking.

Accessibility information

DEQ is committed to accommodating people with disabilities. Please notify DEQ of any special physical or language accommodations or if you need information in large print, Braille or another format. To make these arrangements, contact DEQ Communications and Outreach office, Portland, at 503-229-5696 or call toll-free in Oregon at 800- 452-4011, ext. 5696; fax to (503) 229-6762; or e-mail deqinfo@deq.state.or.us. People with hearing impairments may call 711.



Draft Rulemaking Timeline

Human Health Toxics Criteria and Implementation Rulemaking

Milestone	Deliverables	Completion Date
Develop draft proposed rules, supporting documents, implementation plan & fiscal impact statement.	Draft proposed rules supporting documents implementation plan statement of need and fiscal impact	Oct 27, 2010
Draft rule package for internal, EPA, and AG review	Draft rule package for Secretary of State (SOS)	Nov 17, 2010
Final rule package for internal review	Final rule package for SOS	Dec 8, 2010
Prepare for public comment	Rulemaking documents sent to SOS Notice published in SOS bulletin	Dec 15, 2010 Jan 3, 2011
Public comment and hearings	Public comment period (est.) Public hearings (est.)	Jan 3 - Feb 24, 2011 Jan 18 - Feb 15, 2011
Response to public comment and final proposed rules	Response to public comment final proposed rules supporting documents implementation plan	April 29, 2011
EQC informational presentation	staff report and presentation EQC Meeting	March 22, 2011 April 29 – 30, 2011
EQC action item	Staff report and presentation EQC meeting and rule adoption	May 10, 2011 June 16 -17, 2011
Submit revised standards to EPA for approval	AG certification of rule adoption rules filed with SOS submittal package to EPA	July 22, 2011

Water Quality Standards Rulemaking: Revising Human Health Toxics Criteria

Questions and Answers

1. What are water quality standards?

Water quality standards establish goals for Oregon's surface waters such as protecting communities of fish and other organisms that live in the water, sources of drinking water and helping ensure that the fish we eat from Oregon waters is safe. DEQ's proposed revisions set levels of toxic pollutants within the waters (also known as the human health criteria) that allow the state to meet the goals of eating fish and drinking water.

2. How does DEQ ensure that Oregon waters meet the water quality standards?

DEQ ensures these levels are met by putting in place requirements for sources of these pollutants. Two important ways DEQ accomplishes this is by issuing permits to facilities that discharge treated wastewater, also known as National Pollutant Discharge Elimination System (NPDES) permits, and by developing clean water plans, also known as Total Maximum Daily Loads (TMDLs), when data or information indicate the water body does not meet its goal. In addition, DEQ works with land management agencies such as the U.S. Forest Service and Oregon Department of Transportation, as well as regulatory agencies such as the state Departments of Forestry and Agriculture, to prevent nonpoint source pollution.

3. What will this rulemaking do?

This rulemaking revises the state's toxics water quality criteria to protect the ability of Oregonians to consume fish as a regular part of their diet and the ability of communities to obtain drinking water from Oregon streams and lakes without adverse health effects caused by toxic pollutants. This rulemaking also proposes several new and revised implementation tools to assist wastewater and industrial dischargers in complying with new water quality standards. Because toxic pollutants also come from nonpoint sources of pollutants such as agricultural, forestry and construction activities, DEQ is revising elements of the water quality standards and pollution load allocation (Total Maximum Daily Load) rules to clearly state that best management practices and other control measures established by the Oregon Department of Forestry must not violate water quality standards. Further, state Agricultural Water Quality Management Act plans must be designed to achieve and maintain water quality standards. These changes make DEQ's rules consistent with existing state statutes.

4. What are toxic water pollutants? Which toxic pollutants is DEQ concerned about?

Toxic water pollutants are chemicals discharged into waters in amounts that can be harmful to fish, wildlife or people. They can come from "point" discharge sources such as municipal wastewater treatment plants and industrial facilities, or "nonpoint" activities such as agriculture, forestry and construction activities. Some toxic pollutants are naturally occurring, but many were manufactured for use in industry or agriculture, or for personal uses such as hygiene and medical care. These synthetic and naturally occurring chemicals can be concentrated to toxic levels and transported to streams through human activities such as mining or wastewater treatment and through natural processes such as erosion.

Toxic pollutants of concern addressed by this rulemaking include methylmercury (produced from the burning of fossil fuels), bis (2-ethylexyl) phthalate (a plasticizer), benzo (a) pyrene, chlordane, toxaphene, dioxin, and now-

banned pollutants such as PCBs, the pesticide aldrin and insecticide DDT, which remain in the environment as persistent and bioaccumulative toxics. These “PBTs” can build up in the food chain to levels that are harmful to human and ecosystem health. They can also be transported long distances and can move between land, air and water. Because of their persistent and bioaccumulative properties, these pollutants do not break down easily and are particularly difficult to clean up. Many of these substances are human-made and have only been in existence for a relatively short period of history. Others are natural elements, such as mercury. It is the refinement and concentrated human use of these substances that creates the problem.

5. What are the human health effects of toxic contaminants?

Many of the toxics criteria pollutants cause cancer. Others can cause adverse health effects on the immune system, reproductive system, nervous system or endocrine system. Mercury can affect the nervous system and the brain; even low doses can impair the physical and mental development of human fetuses and infants exposed via their mother’s diet. DDT has been linked to neurological and developmental disorders in birds and other animals. Additional information on the health effects of toxic substances may be found in the Human Health Focus Group report (available on DEQ’s water quality standards/toxics web page) and on EPA’s water quality criteria websites.

6. Why is DEQ proposing this rule?

DEQ’s current human health toxics criteria do not provide adequate protection for Oregonians who eat fish and shellfish on a regular basis. These proposed revisions will address concerns expressed by Tribes and the U.S. Environmental Protection Agency about previous criteria DEQ adopted in 2004, which were not protective because they were based on a low fish consumption rate (17.5 grams per day or 2.3 8-ounce fish or shellfish meals per month).

In June 2010, EPA disapproved the 2004 criteria based on these concerns, causing Oregon to revert back to an even less-protective fish consumption rate of 6.5 g/day. This rule addresses EPA’s disapproval by proposing to adopt significantly more protective human health toxics criteria based on a higher fish consumption rate of 175 g/day (23 8-ounce meals per month). If DEQ does not revise the criteria, EPA must adopt human health toxics criteria for Oregon.

7. Will this rule result in the reduction of toxic pollutants?

Not all pollutants addressed by this rulemaking will need reduction, although there are some that DEQ is aware of that will likely need further reduction (see Question #4). For many pollutants, actions are already occurring to reduce these pollutants. This rulemaking will result in requirements to continue those efforts and, where the pollutants are found at high levels, additional actions may be needed to reduce levels of those pollutants.

8. When do the new criteria become effective?

The proposed rules would become effective upon EPA approval. DEQ will request that the Oregon Environmental Quality Commission adopt the rule in June 2011. EPA would likely complete its review by fall 2011 or early 2012.

9. Who is affected by these rules?

Oregonians who eat fish and shellfish on a regular basis will benefit from the health protections provided by the revised human health criteria. Cities, businesses and other facilities that discharge to state waters will be affected by this rulemaking if their discharge contains one or more of the regulated toxic pollutants. Forest and agricultural land managers, transportation and other construction projects and other parties subject to programs that control point and nonpoint sources of pollution could also be affected if their activity results in the transport of regulated

toxic pollutants to surface waters. Residents and consumers may also be affected in cities that implement pollution reduction programs or enhance their wastewater treatment.

10. How much will the new rules cost?

The potential cost of the new rules will vary widely depending on the pollutants, the source of the pollutants and whether additional actions are needed to help achieve the new standards. DEQ has compiled a “Fiscal and Economic Impact Statement” that is available on its website and describes potential fiscal impacts and estimated costs, where known.

Additional water bodies in Oregon may be listed as “impaired” for toxic pollutants in the future, leading to an increase in the subsequent number of TMDLs developed to meet toxics load allocations. Entities identified to participate in the TMDL may include Oregon Department of Agriculture, Oregon Department of Forestry, the U.S. Bureau of Land Management, U.S. Forest Service, municipalities and irrigation districts. These agencies may need additional resources in order to conduct TMDL implementation monitoring and best management practice effectiveness monitoring. It is difficult to quantify the potential costs to these agencies or other significant pollutant sources until data is collected and analyzed. It is likely that many of the management practices to control toxics from nonpoint sources will be the same under the new criteria as they would be to meet current criteria.

11. How did DEQ develop the fish consumption rate of 175 grams/day, and how does it protect all Oregonians?

Between 2006 and 2008, DEQ conducted an extensive outreach and information gathering project in collaboration with EPA and the Confederated Tribes of the Umatilla Indian Reservation. It held seven public workshops to solicit broad public input and consulted with two advisory groups; one focused on evaluating public health data and information and the other focused on evaluating economic impacts and implementation strategies.

From these workgroup discussions and analysis of fish consumption studies, DEQ concluded that a fish consumption rate of 175 g/d, or about 23 8-oz fish meals per month, is a reasonable and protective rate to use as the basis for Oregon’s human health criteria.

The EPA, CTUIR, and DEQ issued a joint [recommendation](#) to the Environmental Quality Commission on Oct. 23, 2008 to revise Oregon’s toxics criteria for human health based on a fish consumption rate of 175 g/d. The commission agreed with this recommendation and directed DEQ to proceed with a rulemaking process to revise the criteria.

175 grams per day represents the 95th percentile value from a comprehensive study of Columbia River Tribes (the Columbia River Inter-Tribal Fish Commission study) and is within the range of the 90th percentile values from other Northwest studies. The 175 g/d rate is consistent with public health experts’ recommendations to:

- use 90th or 95th percentile values to represent the proportion of the population the criteria should be designed to protect,
- use a fish consumption rate that represents fish consumers, rather than a per capita rate derived from the overall population including both consumers and non-consumers of fish, and
- include salmon and other marine species in the rate.

12. Does the fish consumption rate vary geographically? If not, why?

No, the fish consumption rate does not vary geographically across the state. Although DEQ and stakeholders discussed the idea of applying different consumption rates for different geographic areas within the state, DEQ did

not pursue this option because nearly all the major river basins in Oregon are usual and accustomed fishing areas for an Oregon tribe. In addition, people may catch fish in many locations around the state and not just in the river basin in which they live. Another factor in applying the fish consumption rate to all waters of the state is that having different criteria in different basins can create complexities in the regulations and its implementation.

13. Why were salmon and other marine fish included in the fish consumption rate?

Salmon and other marine fish spend the majority of their life cycle in the ocean, where they have the potential to be exposed to toxic pollutants accumulated over their lifetime. However, DEQ and stakeholders recommended that salmon and marine fish be included in the fish consumption rate because these fish are an important part of the fish diet in the Northwest. Also, these fish spend some portion of their life in Oregon fresh and coastal waters and thus may be exposed to contaminants.

14. Do any other states use this fish consumption rate?

No other state is using this fish consumption rate. As a result, Oregon will have the most stringent human health toxics criteria of any state in the country. Other states with fish consumption rates that are higher than the EPA nationally recommended rate of 17.5 g/day are in the 30 - 33 g/day range. The EPA has approved a fish consumption rate of 389 g/day for the Confederated Tribe of the Umatilla Indian Reservation and a rate of 170 g/day for the Warm Springs Indian Reservation. Both tribes are in Oregon.

15. Not everyone eats this much fish from Oregon waters. Why is it set so high?

A fish consumption rate of 175 g/day protects 90 to 95 percent of Oregon's population who regularly eat fish and shellfish. DEQ acknowledges that not all Oregonians eat fish, or eat less fish than this population. The Oregon Environmental Quality Commission agreed with this rate and directed DEQ to use a fish consumption rate of 175 g/day to protect all Oregonians, rather than using a per capita consumption rate of the total population and including people who do not eat fish or eat it rarely.

16. How can dischargers meet these very low toxic criteria?

Some dischargers may already be able to meet requirements based on the revised criteria; other dischargers may use pollutant source reduction or treatment technologies, or a combination of these approaches to comply with new requirements. The options available will vary depending on the pollutant and the source of that pollutant. In some cases, if treatment technologies or other approaches are not available that would result in meeting the new requirements, DEQ will pursue with the source other approaches that will allow the facility to comply with its requirements while continuing to make progress toward meeting the standards (e.g., compliance schedules, variances with pollutant reduction plans—see question #10).

17. What if a discharger cannot meet revised criteria for a toxic pollutant?

In some cases, a discharger will need time to implement pollution reduction programs or to install new treatment systems. DEQ can put a schedule of actions in a permit that allows the discharger to operate until these actions can be put in place and result in reducing pollutant concentrations.

In some cases, a discharger may find that there are no options that will lead to meeting the criteria, or that the options available are not affordable. DEQ is proposing two administrative tools to assist dischargers in this position. The first, a variance, is a tool that is already available in Oregon and has been used many times in other states. DEQ is proposing rule revisions to clarify the variance procedures and make this a more usable alternative. This approach will allow a discharger to put in place affordable treatment technologies and actions that will result in progress toward meeting the pollutant goals, but not require the use of prohibitively expensive treatment. DEQ will use this tool where appropriate and has EPA support for this approach. The second tool is a background

pollutant allowance water quality standard. This rule allows a very small incremental increase in the concentration of pollutants in the water body in situations where the pollutant was taken into the facility in its water supply and the facility does not add more of the pollutant to its discharge.

18. How will DEQ manage the anticipated workload associated with permit compliance and enforcement?

Reducing toxic pollutants in Oregon waters is a DEQ priority. DEQ will continue to manage its resources and priorities to address increased workloads where they occur. These revised rules will result in changes in requirements and actions over time (e.g., upon permit expiration and renewal). In some cases, the resource requirements will not result in differences from DEQ's implementation of the current rules. By clarifying the variance provision and adopting the background pollutant allowance, permit writers will have clearer direction and guidance to address these situations. In addition, DEQ anticipates that EPA will be able to assist with some aspects of implementation, such as the economic analysis required for some variances. EPA has provided this assistance for other states.

19. Will landowners be given load allocations to comply with a TMDL?

DEQ anticipates that it will work with ODF for non-federal forests, ODA for agricultural lands, and other designated management agencies to implement TMDLs. Although DEQ has authority under Oregon Administrative Rule 340-042 to assign load allocations to sources, including individual landowners, DEQ believes it is more efficient to use existing programs such as Oregon Forest Practices Act rules and Agricultural Water Quality Management area plans and rules to meet load allocations for nonpoint sources. DEQ will provide opportunities for ODA and ODF to develop implementation strategies for landowners to meet load allocations.

20. Do the revisions related to forestry and agriculture best management practices and other control measures provide DEQ with additional authority?

No. The revisions to the water quality standards and pollution load allocation (Total Maximum Daily Load) rules makes more clear how DEQ will interact with the state Departments of Agriculture and Forestry to use the agencies' respective authorities to achieve water quality standards. In addition, the rules make clear that best management practices and other control measures established by the Oregon Department of Forestry must not violate water quality standards. Further, the rules state that Agricultural Water Quality Management Act plans must be designed to achieve and maintain water quality standards. These changes make DEQ's rules consistent with existing state statutes.

21. What happens if implementation of Best Management Practices established by ODF or implementation strategies for Agricultural Water Quality Management Area plans do not show progress toward the water bodies to meet water quality standards?

TMDL implementation is a developing, often phased-in process and DEQ expects that adjustments will be needed over time to attain water quality standards. If TMDL milestones and timelines are not being met, DEQ will work with sources, including ODF or ODA, to determine whether additional measures or resources are needed to meet TMDL milestones and load allocations and to attain water quality standards in the water body.

22. What is EPA's role in this rulemaking?

EPA will review and approve or disapprove Oregon's water quality standards, as required by the federal Clean Water Act. DEQ anticipates that EPA will act within approximately six months of adoption by the Environmental Quality Commission. EPA must ensure that the criteria protect fishing, swimming and other uses of the nation's waters and serve the act's goal "to restore and maintain the physical, chemical and biological integrity of the

nation's waters." EPA sets national water quality criteria recommendations for toxic pollutants and has published guidance for how states should establish human health criteria.

Because EPA disapproved most of the human health toxics criteria that DEQ submitted in 2004, it must set criteria for the state if Oregon does not revise the disapproved criteria within a reasonable time frame (Summer 2011).

23. Will EPA approve these new standards?

DEQ has worked closely with EPA at all levels in developing these new criteria and standards. EPA is supportive of DEQ's efforts and prefers that Oregon adopt revised toxics criteria for human health rather than EPA acting on behalf of the state. EPA has provided feedback throughout the toxics criteria review and development project; that feedback is reflected in the proposed rule revisions.

24. I understand there is a lawsuit related to this rulemaking. What effect does it have on Oregon's rulemaking efforts and timeline?

In 2006, Northwest Environmental Advocates filed suit against EPA because EPA had not acted on the toxics water quality standards DEQ adopted in 2004. EPA and Northwest Environmental Advocates entered into an agreement that required EPA to approve or disapprove Oregon's 2004 standards. EPA did not immediately act since DEQ was already underway with revisions to those standards. EPA expressed a strong preference for Oregon to complete their work to adopt more protective toxics criteria. The Clean Water Act gives primary responsibility for setting water quality standards to the states. In June 2010, EPA disapproved the majority of DEQ's human health criteria for toxic pollutants. They concluded that the fish consumption rate used to set the 2004 criteria was inadequate to protect all Oregonians based on the amount of fish and shellfish some are known to consume. EPA's June action addressed their obligation under the litigation.

The proposed human health criteria for toxic pollutants will address EPA's disapproval. Without revisions to Oregon's water quality standards to address EPA's disapproval, EPA must develop establish standards for Oregon.

25. What happens if DEQ does not complete this rule in a timely fashion?

The proposed human health criteria for toxic pollutants will address EPA's disapproval. In addition to revising the numeric human health criteria, DEQ is proposing rules that will be used to implement these criteria. Oregon is working to adopt the more protective fish consumption rate and toxics criteria by summer 2011. This is a critical deadline. If it is not met, EPA is prepared and required to step in and adopt protective toxics criteria for Oregon. If this occurs, it is likely that EPA would include in its rule only the numeric criteria values. DEQ feels it is important to complete this rulemaking on its stated schedule in order to adopt its own criteria and to address the key implementation issues. While EPA is ready to step in if needed, EPA strongly supports Oregon's efforts to adopt state rules by summer 2011.

26. How does this rulemaking relate to the separate DEQ water quality rulemakings to revise human health criteria for arsenic, iron and manganese?

DEQ expedited revisions to the arsenic, iron and manganese criteria, adopting final revisions for iron and manganese in December 2010. DEQ will reopen the public comment period on arsenic by the end of January 2011. The expedited rulemakings for arsenic, iron and manganese human health criteria will result in criteria that continue to protect health and address the naturally-occurring concentrations of these pollutants. DEQ withdrew the iron and manganese human health criteria that are not necessary to protect human health. Proposed revisions to the arsenic criteria incorporate the same higher fish consumption rate being used to revise the other toxics criteria in order to protect fish consumers. In addition, the proposed arsenic criteria are based on other scientific information and policy considerations to account for the presence of natural sources of arsenic in Oregon waters

and to balance the goals of human health protection and a program that is cost effective and will achieve environmental results.

27. What else is DEQ doing to address toxic pollutants in Oregon?

DEQ is developing an agency-wide toxics reduction strategy using a comprehensive and integrated approach to determine how to most effectively and efficiently reduce the release of priority toxics to Oregon's air, land and water. Recommendations from this agency-wide strategy could include enhancing existing toxics programs; adding new voluntary, incentive or regulatory programs; and improving the alignment/coordination of all toxics reduction programs. Additional information is on DEQ's website: <http://www.deq.state.or.us/toxics/index.htm>.

DEQ also has several programs already underway that contribute to controlling and reducing toxics in Oregon's environment, including the water quality standards rulemaking, water quality's Priority Persistent Pollutants project, the Portland Air Toxics Solutions project, Clean Diesel initiatives, product stewardship initiatives (e.g., electronic and paint waste recycling), household and small business hazardous waste collection events, the watershed-based Pesticide Stewardship Partnership Program, the state drinking water source protection program, the Toxics Use and Hazardous Waste Reduction Program, hazardous waste management compliance activities, the contaminated site cleanup program and others.

December 29, 2010

Executive Summary

Human Health Toxics Rulemaking



2008 - 2011

1. Introduction

DEQ is proposing revisions to Oregon's water quality standards and related regulations. Water quality standards establish goals for Oregon's surface waters such as protecting communities of fish and other organisms that live in the water, sources of drinking water and helping ensure that the fish we eat from Oregon waters is safe. DEQ's proposed revisions set levels of toxic pollutants (also known as the human health criteria) that allow the state to meet the goals of eating fish and drinking water.

DEQ ensures these levels are met by putting in place requirements for sources of these pollutants. Two important ways DEQ accomplishes this is by issuing permits to facilities that discharge treated wastewater, also known as National Pollutant Discharge Elimination System or NPDES permits, and by developing clean water plans, also known as Total Maximum Daily Loads or TMDLs, when data or information indicate the water body does not meet its goal. In addition, DEQ works with land management agencies such as the U.S. Forest Service and ODOT, as well as regulatory agencies such as Departments of Forestry and Agriculture to prevent nonpoint source pollution.

The proposed rules, if adopted, will affect requirements for sources of toxic pollutants including cities and businesses that discharge wastewater if their discharge contains one or more of the regulated pollutants. Forest and agricultural land managers, transportation and other construction projects and other parties subject to programs that control point and nonpoint pollution sources could also be affected if their activity results in the release of regulated toxic pollutants into surface waters. DEQ is proposing changes to its water quality standards regulation as well as some targeted changes to its NPDES and TMDL regulations to address how these new standards would be implemented by sources.

DEQ initiated this work in 2006 in response to U.S. Environmental Protection Agency's and many Tribes' concerns that DEQ's 2004 regulations addressing toxic pollutants did not adequately consider the amounts of fish people eat when setting criteria to protect the goal of safely eating fish. Since that time, DEQ has been working with EPA, Tribes, particularly the Confederated Tribes of the Umatilla Indian Reservation, interested members of the public, and experts in the public health field. DEQ's first objective was to identify the appropriate fish consumption level, or rate, and then develop regulations that would establish that rate as part of its water quality goals. The proposed rules represent the work done over the past four years to meet these objectives.

2. Background

The Federal Clean Water Act

The federal Clean Water Act requires states to develop and, from time to time, revise state water quality standards. While the Act requires states to develop and adopt the regulations, EPA retains an oversight role and must approve the regulations before states can implement them.

Water quality standards contain three major components: (1) the uses (or goals) assigned to the state's waters, such as recreation, protection of fish and other aquatic organisms, and public water supply (the

terms “designated uses” or “beneficial uses” are frequently used to describe the goals); (2) the pollutant concentrations associated with protection of the assigned uses (e.g., water quality criteria); and (3) procedures to ensure water quality is maintained and that also govern how and in what circumstances DEQ may allow a source to degrade water quality (known as the “antidegradation policy”). DEQ implements these water quality standards components and places requirements on sources where needed to achieve the state’s water quality goals.

Oregon’s water quality standards predate the 1972 federal Clean Water Act, and over the years, DEQ has revisited them to reflect new science and information. Frequently, EPA is the source of new information. With regard to criteria specifically, EPA continuously reviews scientific data and information used to establish criteria for human health protection and to protect communities of fish and other organisms that live in the water. Based on these reviews, EPA publishes criteria recommendations and the values used to calculate the criteria. The types of values EPA publishes include a fish consumption rate as well as values accounting for the amount of water people may drink, body weights, and, for pollutants that are known to be cancer-causing, a risk rate (e.g., one excess cancer case in one million people). States, including Oregon, typically use these EPA recommended criteria and values when adopting their own water quality standards.

While water quality standards express the desired water quality of the state’s waters, DEQ works to achieve these goals through a number of other Clean Water Act programs. First, DEQ administers the NPDES permitting program. DEQ places requirements in NPDES permits to ensure that the discharged wastewater is clean enough to meet water quality standards. In instances where DEQ does not issue a permit to a discharger or for an activity (for example, when the Army Corps of Engineers issues permits to entities that dredge river sediments), DEQ must “certify” that the permit being issued by the other regulatory authority contains sufficient requirements to meet the state’s water quality standards. In cases where DEQ looks at data and information and concludes a stream or lake’s water quality does not meet water quality standards, DEQ must develop a pollutant budget, or TMDL, that allocates allowable pollutant loads to sources within the water body or watershed.

Other State Requirements and Programs

In addition to the activities that DEQ carries out, other agencies within Oregon also have a responsibility to carry out activities to meet water quality standards. The Oregon Department of Agriculture must revise and implement Agriculture Water Quality Management Plans and rules. These plans provide guidance, while the rules provide an enforceable backstop to resolve water quality issues. The Oregon Department of Forestry implements the state’s Forest Practices Act by providing guidelines and management practices to operators managing state and private forest lands to prevent water quality issues through administrative rules.

DEQ works closely with the other state agencies in implementing the state and federal laws governing water quality.

DEQ's Efforts on Toxic Pollutants

The rules DEQ is proposing to address toxic pollutants through water quality standards and its implementing programs is only one area in which DEQ is working to address sources of toxic pollutants. Concurrent to this effort, DEQ is developing an Agency-wide Toxics Reduction Strategy. DEQ is identifying priority pollutants and opportunities for pollutant reduction efforts and will align resources and programs within the Agency to address those priority actions. The toxic pollutants directly addressed by this water quality standards rulemaking have also been identified as priority pollutants for the entire Agency. As a result, some of the actions proposed in the Toxics Reduction Strategy will help achieve the goals of the rulemaking.

DEQ anticipates completing a draft strategy in April 2011. This draft will outline specific actions DEQ proposes to reduce toxic chemicals and pollutants in Oregon's water, land and air. These actions will involve all of DEQ's divisions, as well as partnerships with other agencies and organizations. Development of revised water quality standards regulations is one component of DEQ's overall efforts to address and reduce toxic pollutants. Please see Figure 1 below which illustrates DEQ's Toxics Reduction Strategy.

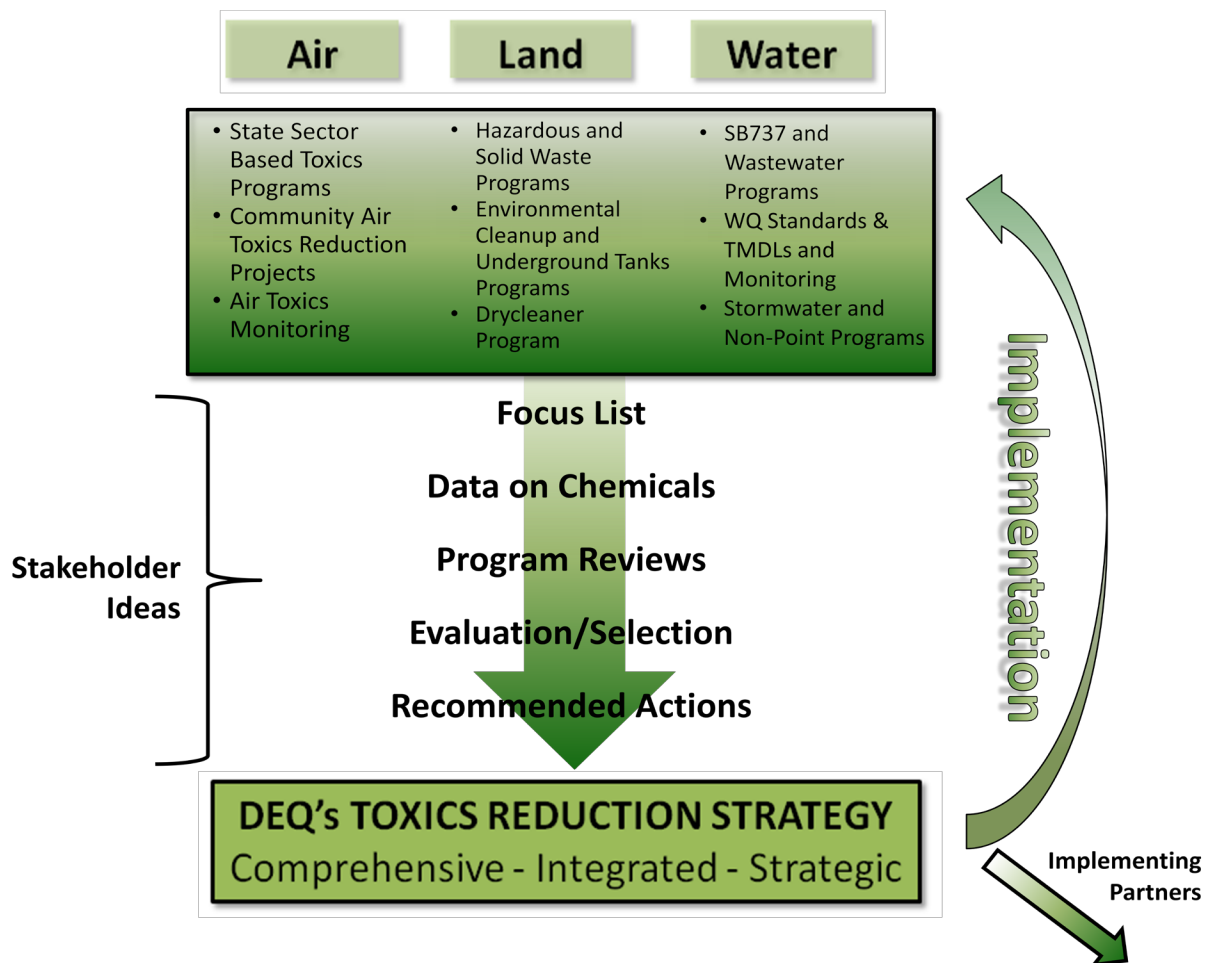


Figure 1: DEQ's Toxics Reduction Strategy

3. The Road to Proposed Rulemaking

Criteria adopted in 2004

Prior to DEQ's current efforts to develop proposed rules addressing human health criteria for toxic pollutants, DEQ developed and adopted rules in 2004. DEQ based these criteria on EPA's recommended criteria at the time, which used an assumed 17.5 grams per day fish consumption rate, which is approximately the amount of fish that fits on a cracker.

Tribes and EPA both expressed concerns about the protectiveness of criteria based on this value would, given the amount of fish that Oregonians consume. While DEQ adopted criteria based on EPA's national recommendations, EPA also pointed out its policy directing states to use local consumption information where available. They both pointed out Pacific Northwest studies documenting the consumption of greater amounts of fish by many populations.

Based on these concerns, DEQ agreed to revisit its water quality standards regulation addressing human health criteria for toxic pollutants.

In June 2010, EPA disapproved the majority of DEQ's human health criteria for toxic pollutants. They concluded the fish consumption rate used would be inadequate to protect Oregonians based on the amount of fish and shellfish they are known to consume. EPA's disapproval caused the majority of the 2004 water quality criteria to no longer be effective, leaving in place the previously effective criteria adopted in the late 1980's. The proposed human health criteria for toxic pollutants will address EPA's disapproval. Without revisions to Oregon's water quality standards to address EPA's disapproval, EPA must develop federal regulations for Oregon addressing their disapproval.

Developing the Proposed Rulemaking

In 2006, DEQ initiated work to relook at fish consumption information and any necessary rule revisions. From that time, DEQ's effort to evaluate fish consumption information and to develop rules has involved many partners, interested stakeholders, and experts. Early in the process, DEQ formed a "Three Governments" partnership with EPA and the Confederated Tribes of the Umatilla Indian Reservation (CTUIR). During the first phase of this effort, the three governments co-hosted seven workshops around the state with the objectives of sharing information and discussing stakeholders' views regarding an appropriate fish consumption rate. Simultaneously, DEQ convened a public health expert advisory workgroup and charged them with evaluating the available and relevant fish consumption data and information. The [Human Health Focus Group Report: Oregon Fish and Shellfish Consumption Rate Project](#) contains the Human Health Focus Group's findings and is posted on DEQ's website. DEQ also convened a Fiscal Impact and Implementation Advisory Committee and requested that the group provide input on the potential fiscal impacts associated with selecting a greater fish consumption rate and evaluate potential implementation approaches DEQ could consider when implementing any revised criteria. The committee wrote a memo to DEQ summarizing the committee's perspectives ([FIIAC Memo to the Environmental Quality Commission](#)), which DEQ also posted on its website.

The workshops and input gathered through that process culminated in a joint three government recommendation to DEQ's Environmental Quality Commission (EQC) in October 2008. The three governments recommended DEQ pursue water quality standards revisions based on a 175 grams per day fish consumption rate. This rate represents a ten-fold increase from the fish consumption rate used in the 2004 water quality standards, and equates to approximately 23 eight-ounce meals per month. The EQC agreed with this recommendation and further directed DEQ to:

1. Revise Oregon's toxics criteria for human health based on a fish consumption rate of 175 grams per person per day;
2. Propose rule language that will allow DEQ to implement the standards in National Pollutant Discharge Elimination System (NPDES) permits and other Clean Water Act programs in an environmentally meaningful and cost-effective manner;
3. Propose rule language or develop other implementation strategies to reduce the adverse impacts of toxic substances in Oregon's waters that are the result of non-point source (not via a pipe) discharges or other sources not subject to section 402 of the Clean Water Act;
4. Develop a proposed rule and implementation methods that carefully consider the costs and benefits of the fish consumption rate and the data and scientific analysis already compiled or that is developed as part of the rulemaking proceeding.

In December 2008, DEQ convened a stakeholder advisory Rulemaking Workgroup, comprised of eight members representing municipal and county governments, industry, and environmental organizations, in addition to representatives from EPA and the Confederated Tribes of the Umatilla Indian Reservation. DEQ charged the group to help DEQ develop innovative NPDES implementation options, provide input on rule language development, and identify issues beyond the scope of the rulemaking.

Based on discussions occurring during that year and the interest of the group in discussing pollutant sources that do not receive an NPDES permit, DEQ expanded the workgroup to add five stakeholder advisory members representing nonpoint source interests, including the forestry and agricultural industry. Oregon Departments of Agriculture and Forestry also participated in workgroup discussions.

The stakeholder advisory workgroups met approximately once a month. Through these discussions, DEQ developed a series of issue papers containing DEQ's recommended approach to addressing identified issues, DEQ's accompanying analysis, and documenting the workgroup discussions and concerns, including any issues the stakeholders identified as significant. DEQ published these issue papers on its website as supporting information for the proposed rulemaking.

4. Proposed Rulemaking

Actions Considered

In developing this rulemaking, DEQ considered proposed revisions for many areas of its water quality standards and implementing regulations. DEQ discussed the following areas of potential revisions with its stakeholder advisory workgroups and used the issue papers to evaluate rule revisions or other actions that could be taken.

- Revisions to human health criteria for toxic pollutants;
- Revisions to water quality standards and NPDES permitting rules to address high levels of background pollutants;
- Revisions to water quality standards to address circumstances where facilities may not have treatment technologies available to meet calculated limits in the NPDES permits;
- Revisions to TMDL regulations addressing the inclusion of air or land sources in the development of TMDLs;
- Revisions to water quality standards rules to allow the criteria revisions to be phased in over time or other revisions allowing time specifically for sources to comply;
- Revisions to water quality standards or other rules to address toxic pollutants that may adhere to sediment and transported through soil erosion;
- Revisions to water quality standards and TMDL rules to clarify how actions under the Agriculture Water Quality Management Act and Forest Practices Act meet water quality standards;
- Revisions to water quality standards and Internal Management Directives addressing how DEQ implements antidegradation;
- Revisions to NPDES permitting rules to address indirect discharges of toxic pollutants to municipal wastewater treatment facilities that are currently not included as part of the federal pretreatment program; and

Rules Being Proposed

DEQ is proposing revisions to its water quality standards regulation, as well as targeted changes to its NPDES permitting and TMDL regulations to address how these new standards would be implemented by sources. The proposed rules, if adopted, will be implemented alongside current regulations governing water quality standards and their implementation.

The proposed human health criteria revisions constitute the core of DEQ's proposed rules. DEQ is proposing human health criteria revisions for toxic pollutants based on a fish consumption rate of 175 grams per day. This revision will serve as the basis for NPDES permit limits and other regulatory decisions. Revising the criteria will address EPA's disapproval of DEQ's 2004 criteria and obviate the need for EPA to put in place federal rules for Oregon.

In addition to the proposed criteria revisions, DEQ is proposing new and revised rules addressing the implementation of these revised criteria. In some instances, the proposed rules will be used for more than just the human health criteria. For example, some revisions could also be used to implement criteria that protect fish and other organisms that live in surface waters of the state. These revisions add to or, in some cases, revise current rules governing water quality standards implementation and may be used in a variety of situations. Some rules are intended to be used in situations where the water quality standards are being met; others target situations where water quality standards are not being met and sources may not be able to feasibly meet the necessary pollutant concentrations. The list below provides a brief description of each proposed rule item, including the circumstances in which DEQ or the source may use the regulation.

Intake Credits

DEQ is proposing a new “intake credit” provision in its NPDES regulation. DEQ would use this provision during the development of a facility’s NPDES permit where DEQ finds that background pollutants in a discharger’s intake water at high levels. As long as the discharger does not increase the mass or concentration of the background pollutants found in its intake water, DEQ would not require the facility to further reduce the pollutants in its discharge. This rule would apply to a relatively narrow set of situations and consequently, may not be widely used. The issue paper titled, “Implementing Water Quality Standards for Toxic Pollutants in Clean Water Act Permits” contains a further description of this rule.

Background Pollutant Allowance

DEQ is proposing a new “Background Pollutant Allowance” provision in its water quality standards regulation. This provision complements the proposed intake credit provision, also addressing the presence of high background pollutant concentrations in a discharger’s intake water. DEQ would implement the rule during the development of a facility’s NPDES permit when the facility can’t avoid increasing the pollutant concentration that comes in from their intake water. In that instance, DEQ would allow the facility to discharge its concentrated effluent as long as the receiving surface water pollutant concentration did not increase by more than a small amount (up to 3%). The provision would prohibit adding more of the pollutant to the surface water than is present in the intake water, would be limited to carcinogenic pollutants, and would constrain the surface water concentration increase to within the EPA-accepted cancer risk level of one in 10,000. DEQ may use this provision for facilities that concentrate process water through the cooling water evaporation, a process that increases the concentration of pollutants already present in their intake water. The issue paper titled, “Implementing Water Quality Standards for Toxic Pollutants in Clean Water Act Permits” contains a further description of this rule.

Variances with Pollutant Reduction Plan Requirement

DEQ is proposing significant revisions to its current water quality standards provision governing variances. DEQ and facilities interested in requesting a variance would use the revised provision when a facility could not immediately meet its permit limits based on water quality standards and where some uncertainty exists regarding when or if the requirements could be met. The revised provisions would allow NPDES permitted facilities to seek a short-term exemption from meeting water quality standards-based limits for a specific pollutant(s) and require a pollutant reduction plan to ensure progress toward meeting the water quality standards in the interim. While DEQ envisions the variance development and approval would most efficiently occur during the development and issuance of an NPDES permit, variance development and approval could also be used at any time during the term of the permit. The issue paper titled, “Implementing Water Quality Standards for Toxic Pollutants in Clean Water Act Permits” contains a further description of this rule.

Revisions to the Water Quality Standards and Total Maximum Daily Load Regulations to Address Nonpoint Sources

DEQ is proposing water quality standards regulation revisions to explain how the mechanisms for forestry and agricultural nonpoint sources work to meet water quality standards and the TMDL load allocations under the Forest Practices Act (FPA) and Agriculture Water Quality Management (AgWQM) Act. FPA rules are meant to be reviewed for their adequacy to meet TMDL load allocation when TMDLs are issued. AgWQM Area plans and rules are reviewed and revised every two years to ensure that the TMDL load allocations are met when area plans and rules are implemented.

DEQ proposes accompanying changes to the Total Maximum Daily Load regulations to clarify DEQ's authority to identify and assign individual load allocations to significant air and land sources in TMDLs. DEQ anticipates additional rulemaking since the mechanism for addressing TMDL allocations through other media programs will need to be defined and described in the administrative rules affecting air and land quality programs.

Other Approaches Available Under Current Regulations

Meeting Water Quality Standards

DEQ currently uses a number of approaches to implement water quality standards in its Clean Water Act programs and to put requirements in place to meet water quality standards. The proposed rules would add to these current approaches and may, in some cases, be used in conjunction with these approaches.

DEQ issues NPDES permits that require dischargers to meet water quality standards. If a discharger can't immediately comply with water quality-based requirements, DEQ can use a compliance schedule as part of the permit to identify enforceable requirements and milestones the permittee must implement to achieve water quality standards-based requirements.

DEQ also develops Total Maximum Daily Loads (TMDLs) to bring impaired waterbodies into compliance with water quality standards and to support beneficial uses.

Further, the Oregon Department of Agriculture implements and revises Agriculture Water Quality Management Plans that provide guidance and rules to land owners and producers and provide an enforceable backstop to resolve water quality issues. The Oregon Department of Forestry implements the state's Forest Practices Act by enforcing management practices and guidelines to operators managing state and private forest lands to prevent water quality issues.

DEQ also has in place a current regulation addressing situations when the lowering of water quality may occur. The current water quality standards require that water quality achieves standards or is better than the water quality standards. No lowering of water quality may occur, except in specified circumstances and after involving the public in a decision as to whether the lowering of water quality is "necessary."

When information indicates that the water quality standards aren't being met

DEQ routinely reviews data from throughout the state to identify waters that don't meet water quality standards. In those instances, Oregon's current water quality standards prohibit further degradation of water quality as part of its antidegradation requirements. In addition, where DEQ identifies waters that don't meet water quality standards, it must prepare a TMDL. The objective of the TMDL is to calculate the assimilative capacity of water bodies, also referred to as the loading capacity. Designated Management Agencies (DMAs) are then responsible for implementing TMDLs for nonpoint sources under their jurisdiction to meet standards. Point sources are responsible for implementing TMDLs through permits. In addition, when DEQ writes permits for discharges to these waters, DEQ puts in place appropriate requirements to support this objective both in advance of the TMDL development, which allocates pollutant loads, and in the writing of permits to reflect the TMDL after it's developed.

When information indicates the water quality standards can't be achieved

DEQ expects that in some circumstances a water body may not be able to achieve water quality standards. In these cases, DEQ may look at the water quality standards and evaluate whether the water body goals are the correct ones. In addition, DEQ may evaluate whether natural or other conditions make it a priority for DEQ conduct further evaluation of relevant scientific information. DEQ followed this approach in its recent proposed rulemaking addressing the iron, manganese, and arsenic criteria, where natural conditions resulted in widespread exceedances of the human health criteria. DEQ can use approaches authorized by the current water quality standards to change the water body goals or uses or to change the criteria based on an evaluation of scientific data and information. DEQ has not frequently made these types of changes to its water quality standards in the past, but recognizes that these types of changes may need to be considered in the future.

5. Implementation Strategies

In addition to the proposed rule revisions, DEQ is developing Internal Management Directives to address additional details regarding the implementation of the proposed rules. DEQ routinely develops these types of documents to provide direction to its staff regarding how the rules should be implemented in its programs. These documents can also provide information that would be helpful to interested parties about how the rules would be implemented, including how DEQ intends to make decisions and the data and information DEQ would use in the rules' implementation.

Based on the rules proposed, DEQ plans to develop or amend current Internal Management Directives to address the following proposed rules:

- **Variances with pollutant reduction plans** – DEQ will describe the types of data and analysis facilities will need to submit, how it will evaluate the information in deciding to approve a request for a variance, the necessary elements of pollutant reduction plans, and how variances would be evaluated and approved in conjunction with the permit issuance process.

- **Intake credits** – DEQ will describe how it will conduct its evaluation of whether a facility needs water quality-based limits in instances where a facility is eligible for an intake credit.
- **Background pollutant allowances** – DEQ will describe how it will establish water quality-based limits in instances where the background pollutant allowance applies.
- **TMDL implementation** – DEQ will clarify how it will develop and ensure more effective implementation of TMDLs, including the possibility of assigning load allocations to significant land and air sources.

To provide additional information to interested stakeholders regarding how DEQ may implement the proposed rule revisions, DEQ published detailed outlines of the Internal Management Directives (with the exception of intake credits, since DEQ expects the guidance to simply describe calculations) on its website to accompany the proposed rules. Over the next several months, DEQ will continue discussions with interested parties about the implementation of the proposed rules and adding detail to how the proposed rules will be implemented. DEQ will further develop the Internal Management Directives as it works on finalizing the proposed regulations and intends to complete the final draft Internal Management Directives at the time of the Environmental Quality Commission adoption of the regulations, anticipated in June 2011. Through this process, DEQ will develop a clearer picture of how the proposed rules will be implemented.

6. Rule Revisions DEQ is Not Pursuing

DEQ evaluated a number of potential rule revisions that it did not include as part of the proposed rules. The revisions not pursued include:

- Revisions to water quality standards or other rules to address toxic pollutants that may adhere to sediment and transport through soil erosion;
- NPDES permitting rule revisions to address indirect toxic pollutant discharges to municipal wastewater treatment facilities currently not included in the federal pretreatment program;
- Revisions to water quality standards and Internal Management Directives addressing how DEQ implements antidegradation;
- Water quality standards rule revisions to allow the criteria revisions to be phased in over time or other revisions allowing time specifically for sources to comply;

DEQ evaluated several different factors in concluding that it would not pursue rule revisions specifically targeting these areas at this time. These factors included whether federal and state regulations would allow the approach, whether the approach would achieve the desired environmental outcome, whether DEQ has the appropriate authority and resources to implement the revisions, and whether the scientific information currently available supports the approach contemplated. DEQ evaluated these factors with input from the stakeholder advisory committees, EPA, DEQ staff and management, and other state agencies that share regulatory oversight of nonpoint source activities to protect water quality. The issue papers published on DEQ's website in conjunction with the proposed rules describe the specific rule revisions considered, DEQ's evaluation of the potential revisions, and why it recommends not pursuing regulations at this time.

In several instances, DEQ has actions underway or is proposing actions related to the areas discussed. Specifically, DEQ recommends the following alternative approaches:

- **Toxic pollutants associated with sediments.** DEQ recommends continuing its efforts to implement current water quality standards provisions related to this issue. DEQ will continue its efforts to address excess sedimentation as it assesses and develops TMDLs for waters identified as having sedimentation issues. DEQ will also continue to work with the Departments of Forestry and Agriculture regarding the control of sediment and prevention of erosion to keep sediment-bound mercury (deposited from the air onto the soil) and legacy pollutants (e.g. DDT) out of water bodies. DEQ's Pest Management and Pesticide Stewardship Partnership efforts will continue its focus on keeping current use pesticides out of water bodies through ongoing Integrated Pest Management as well as erosion control.
- **Implementation of Antidegradation for Nonpoint Sources.** DEQ will review the current antidegradation policy and implementation plan and evaluate what actions or measures are needed to implement the antidegradation policy for nonpoint sources. DEQ proposes to add a chapter to its existing internal management directive describing the process or actions the department will take to implement the antidegradation policy for nonpoint sources, including actions that involve working with other state, federal and local agencies.
- **Toxic pollutant discharges to municipal wastewater treatment facilities.** As part of the variance proposed rule language, a POTW must demonstrate that it has the legal authority (such as a sewer use ordinance) to regulate the pollutant for which the variance is sought. In addition, DEQ will continue to support municipalities in implementing the federal pretreatment rules and encourage any POTW efforts to adopt sewer use ordinances or other pollution control practices.

7. Conclusion

The proposed water quality standards revisions represent a significant improvement in the protecting Oregonians. The fish consumption rate used more accurately represents the fish known to be consumed by Oregonians. In addition, this rulemaking will remove the need for EPA to put in place regulations for Oregon. DEQ has worked to incorporate feedback from interested parties for over four years, and will continue to do that with this proposed rulemaking.

DEQ heard from cities and businesses that are likely to be affected by this proposed rulemaking. DEQ performed an evaluation of the existing data and information to try to evaluate the potential impacts of this rule, but in many cases, the data and information are not available to reach solid conclusions. DEQ will put in place regulatory requirements stemming from these rules, once adopted by the Environmental Quality Commission and approved by EPA, as permits are renewed, water quality data collected and evaluated, and TMDL analyses done to further evaluate pollutant sources within watersheds. Some of these actions will occur soon after EQC adoption and EPA approval, others will occur over time as data and information become available. DEQ and sources will have more information

and gain more knowledge through this process in addition to gaining more experience implementing the proposed rules. DEQ may conclude that it would prefer alternative regulatory approaches, which may include proposals discussed during this rulemaking but not pursued, or other regulatory approaches altogether. In this case, DEQ may need to develop further revisions to its water quality standards rules.

Throughout DEQ's development of these proposed rules, DEQ has continued its efforts to prevent toxic pollutants from entering Oregon's environment, recognizing the toxic pollutants do not respect typical boundaries DEQ and others typically set through its programs. Many of DEQ's programs target toxic pollutants that may originate as releases into the air, into the soil and into the waters of the state. DEQ continues to implement these programs and pursue new approaches it finds can be effective as reducing and preventing toxic pollutants in our environment. DEQ also recognizes that where toxic pollutants exist at high levels, the most effective approaches to reducing the pollutants result from comprehensive programs and collaborative efforts. The Toxics Reduction Strategy is one such comprehensive effort that will evaluate many of the proposals brought to the table through this rulemaking process as well as many others that have been suggested that are broader than what DEQ evaluated as part of this process. DEQ expects the recommended actions to build upon not just DEQ's efforts and programs, but to look build upon other groups' efforts to result in the most effective actions.