Revisions to Washington's Surface Water Quality Standards: Human Health Criteria and Implementation Tools

(Washington Administrative Code 173-201A)

Public Workshop and Public Hearings
March 2015

Proposed Rule Withdrawn on August 4, 2015

DEPARTMENT OF ECOLOGY
State of Washington

Webinar Instructions
Public Hearing for Water Quality Standards

You will need to join the audio conference and the web conference to be fully connected to the webinar.

- When it is time to ask a clarifying question or give formal testimony, you will be instructed by the conference operator to Press *** then 1** on your phone to place you in a queue to be heard. When it is your turn, you will be un-muted and you can give your question or comment directly.
- The chat feature should be used only if you are having technical problems (e.g. you cannot hear the speaker).
- If you have other problems, send an email to swqs@ecy.wa.gov and we will respond immediately.

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- You will need to join the audio conference and the web conference to be fully connected to the webinar.
- Press *** then 1** to get in the queue to be heard.
- If you no longer need clarification or your question has been answered, pressing the **# key** will take you out of the queue.
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Overview of meeting

Sign-in

Public Meeting:

- Poster session (available on website for webinar participants)
- Introduction and ground rules/logistics
- Presentation on proposed rule
- Clarifying questions and answers

Break

Public Hearing

Workshop Presentation

Cheryl Niemi
Water Quality Program
SWQS@ecy.wa.gov
360-407-6440

What is this rule-making about?

A Public Hearing on amendments to Water Quality Standards (WQS) for Surface Waters of Washington - Chapter 173-201A WAC.

Focus of the amendments:

- Development and adoption of NEW Human Health Criteria (HHC) for toxic chemicals; and
- Revisions to language for three regulatory tools used to implement the standards.

This meeting is NOT about:

Adoption of updated aquatic life criteria for toxics.

The Water Quality Assessment, sometimes called the “303(d) listing process,” which has its own separate public involvement process.

What are Water Quality Standards?

WQS are the foundation of state/tribal water quality-based pollution control programs under the Clean Water Act.

WQS are to protect public health or welfare, enhance the quality of the water and serve the purposes of the Clean Water Act.

See 40 CFR 131.2

Why are we updating the WQS?

- Since 1992, Washington has had human health criteria applied through a federal rule issued by EPA.* The federal rule was not based on Washington state or PNW regional data.

- For several years there has been discussion about the current water quality standards not providing enough health protection for people who eat fish and shellfish in Washington.

- The Clean Water Act requires that states adopt updated criteria when new information is available, including for toxics.

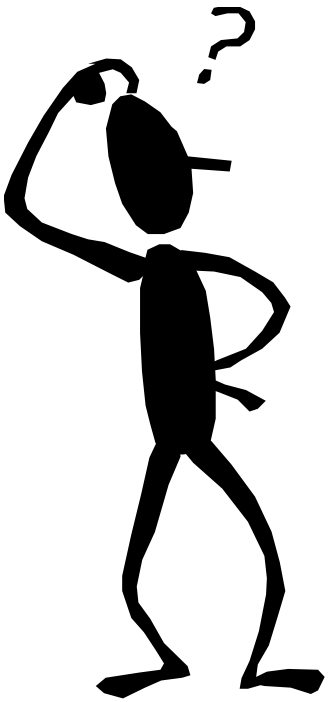
*1992 Federal rule : *The National Toxics Rule (NTR) (40CFR131.36).*

Why is Ecology updating some variables in the criteria calculations?

The federal regulation contains some outdated science and does not address local Washington information and concerns. For example:

- Local information showing that some groups eat a lot more fish than what is currently assumed for fish consumption.
- Data from Washington showing that the local average body weight has increased.

What have we heard from the public?



- Desire from many groups/people that the state adopt its own standards to protect for consumption of local fish and shellfish, using local information.
- We also heard concerns from the regulated community that new water quality standards might be very difficult to meet in the short term.

What are the goals of this rule-making?

Starting in 2011, Ecology took a comprehensive look at how the standards in the federal regulation were developed and implemented with an aim of developing new standards and implementation tools that would meet our current needs.

Goals of this rule-making process include:

- Develop protective water quality standards so our fish, shellfish, and drinking waters (surface) remain clean and healthy to consume.
- Address realistic timeframes to allow dischargers to reduce pollutants and to still be in compliance while they are doing the work.
- Acknowledge that there are technology limitations and give recognition that non-permitted sources are a significant part of the problem with being able to meet the standards.

How did we get to this point in the process?

- Ecology conducted an extensive public process from 2011 to present with discussion about:
  - The policy and science decisions.
  - The use of new science and local fish consumption information.
- We took a comprehensive look at the math used to calculate the new standards in order to protect Washingtonians.
- We used new science and regional or local inputs where possible (fish consumption and body weight).

Where are we now?

Ecology is proposing:

- NEW Human Health Criteria (HHC) for toxic chemicals in Washington's Surface Water Quality Standards.
- Revision to language for three regulatory tools used to implement the standards.
  - Variances
  - Compliance schedules
  - Intake credits (new section)

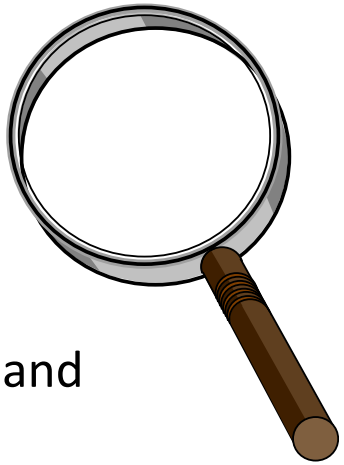
What are Human Health Criteria?

A human health criterion is the highest concentration of a pollutant in surface water that is not expected to pose a significant risk to human health.

In this proposed rule we are considering **new criteria for toxic pollutants** that will protect the human uses of ingesting fish/shellfish and drinking untreated surface water.

What materials are available for the public to review for this rule proposal?

- Proposed rule language
- Draft Environmental Impact Statement prepared under the state Environmental Policy Act
- Preliminary Cost-Benefit and Least Burdensome Analysis
- Draft Implementation Plan
- Draft citation list
- Supporting Documents:
  - Overview of the key decisions in rule amendments for HHC and implementation tools
  - Others – spanning 2011 to present



Rule-making materials available at:
http://www.ecy.wa.gov/programs/wq/ruledev/wac173201A/1203docs.html

The proposal includes the following new HHC:

For 96 toxic pollutants, new criteria to address ingestion of **fish/shellfish and untreated drinking water**:

- Apply to most fresh waters in Washington.
- Called “freshwater HHC” throughout this presentation.

For 94 new criteria to address ingestion of **fish/shellfish only:**

- Apply to marine/estuarine and 6 freshwater areas.
- Called “marine HHC” throughout this presentation.

A human health criterion (HHC) is the highest concentration of a pollutant in surface water that is not expected to pose a significant risk to human health.

Steps to Arrive at the Proposed HHC

1. Do the math: Calculate the proposed HHC by putting information for each chemical through both the freshwater and marine HHC equations.
2. Make the comparison: Compare the calculated HHC with the HHC in the federal rule.
3. Decide on the proposed HHC:
   - If the calculated HHC is a **higher concentration (= less protective)** than the HHC in the federal regulation, we "hold the line" and propose the current HHC.
   - If the calculated HHC is a **lower concentration (= more protective)** than the HHC in the federal regulation, we propose the calculated HHC.

Example of HHC Equation for fresh water carcinogen

$$\frac{RL \times BW}{CSF \times [(FCR \times BCF) + DI]}$$

Note: Copper, asbestos, and arsenic were not calculated using the HHC equations. Arsenic will be discussed later in the presentation.

How do the proposed criteria compare with the federal rule?

There are 96 freshwater HHC and 94 marine HHC being proposed.

- 70% of the proposed HHC are lower concentrations than NTR.
- 30% of the proposed HHC are equal in concentration to NTR values.
- 2 criteria are a higher concentration—these are for arsenic.

Would the proposed criteria provide *less* protection than the current criteria?

No.

30% **equally** protective

70% **more** protective

Exception: The **proposed** HHC for arsenic are a higher concentration than the federal rule.*

- We are proposing to use a criteria developed by EPA to protect drinking water supplies. Several other states have adopted similar criteria for arsenic that have been approved by EPA as HHC.
- This change acknowledges naturally-occurring high concentrations of arsenic.
- Includes specific pollutant reduction requirements for dischargers.

* These criteria will drive more pollutant reduction efforts than the current NTR values.

Why are we revising implementation tools?

- It might take a long time to achieve standards for some pollutants.
  - Ecology needs a pathway for dischargers to come into compliance with their permit limits while they are reducing pollution.
  - There are challenges with limited technology to measure these pollutants in surface waters and to remove them from discharges.
  - Non-permitted sources are a significant part of the problem in achieving standards and should be included in solutions where possible.

Three Proposed Implementation Tools

3 Tools: Compliance Schedules, Variances, Intake Credits

What important factors were considered as the tools were developed?

Accountability:

- Facilities are required to address their contribution of pollutants.
- Timelines and measurable requirements are part of permits.

Enforceability:

- Requirements will be in permits so they are clearly enforceable.

Public Process:

- There is a public review process through rule-making or permit issuance to use the tools.

Proposed Implementation Tool #1: Compliance Schedules

Existing tool, modified language

Definition: A compliance schedule is a regulatory tool used in a permit, order, or directive to achieve compliance with applicable effluent standards and limitations, water quality standards, or other legally applicable requirements

Current and continuing requirements in the WQS:

- Apply only to existing discharges.
- Require final limits based on WQ to meet the standards.
- Requires the **shortest timeframe on a case-specific basis**.

New Proposed Language:

Allows compliance schedules to extend beyond the maximum of 10 years in the current WQS.

Proposed Implementation Tool #2: Variances

Existing tool, modified language

Definition: A variance is a temporary waiver of existing water quality standards.

Current Requirements in the WQS:

- Variances can be granted for up to 5 years, and may be renewed.
- **Requires a WQS rule-making and USEPA CWA review and approval** (including ESA consultation if applicable).

New Proposed Language:

The timeframe of a variance will not be limited at 5 years—instead it will be geared to the specific situation for each variance.

Proposed Implementation Tool #2: Variances (continued)

Existing tool, modified language

The proposed language does not grant variances. Future variances must be adopted into rule and approved by EPA.

The proposed language **defines requirements of a variance**:

- Public process;
- Time period when variance is in effect;
- Interim numeric and narrative requirements;
- Application requirements;
- Required interim public reviews; and
- Conditions under which a variance would be shortened or terminated.

Proposed Implementation Tool #3: Intake Credits

New tool, new language

An intake credit is a procedure for establishing effluent limits in waste discharge permits issued pursuant to the National Pollutant Discharge Elimination System (NPDES) that takes into account the amount of a pollutant that is present in public waters, at the time water is removed from the body of water by the discharger or other facility supplying the discharger with intake water.

New proposed intake credit language:

- Applies to water quality-based effluent limits;
- Accounts for pollutants already present in intake water;
- "No net addition" of the pollutant: Used only when discharger does not add mass or increase the concentration of the pollutant; and
- Proposed language similar to language adopted and approved for the Great Lakes and in Oregon.

Next Steps

- Public hearings March 3 (Spokane), March 4 (Yakima), and March 12 (Lacey), 2015.
- Public comment period ends March 23, 2015.
- Ecology considers comments and finalizes rule.
- Ecology prepares a responsiveness summary for all of the public comments that are submitted.
- Last date to adopt under this rule proposal is August 3, 2015.

Rule-making materials available at:
http://www.ecy.wa.gov/programs/wq/ruledev/wac173201A/1203docs.html

This concludes the workshop presentation.

Clarifying Questions and Answer Session

Note: This Q & A section of the meeting is NOT the Public Hearing.

- Information shared during this part of the meeting will not be recorded as a Public Comment.
- Please wait for the Public Hearing to start before making your formal public comments.
- **For webinar participants, press *1 to ask a clarifying question.**

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For webinar participants, press *1 to ask a question or comment.

Adjourn for Break followed by Public Hearing

Webinar Participants: When instructed by the Conference Operator, hit ***1** to indicate you want to testify.

Public Hearing Session

Webinar Participants: Hit ***1** to indicate you want to testify.

Before beginning your testimony remember to state:

1. Your name
2. Your address
3. Name of the organization you represent