



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 10**

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MAR 21 2011

OFFICE OF  
WATER AND WATERSHEDS

DEQ

MAR 25 2011

Water Quality

Ms. Andrea Matzke  
Department of Environmental Quality  
Water Quality Division  
811 SW Sixth Avenue  
Portland, Oregon 97204-1390

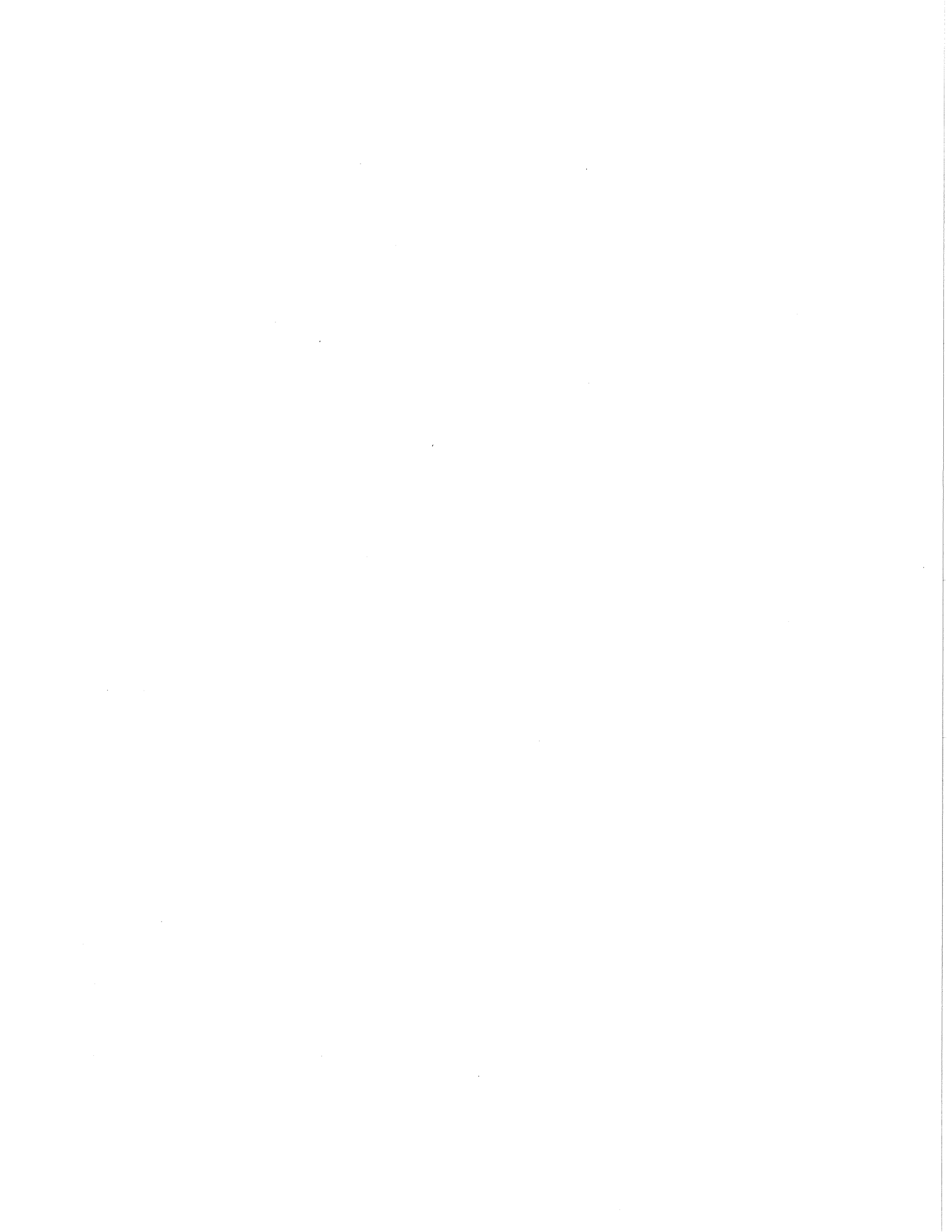
Re: EPA Comments on Proposed Revisions to Oregon's Human Health Criteria and New and Revised Implementation Provisions

Dear Ms. Matzke:

I am writing to submit the U.S. Environmental Protection Agency's (EPA) comments on the Oregon Department of Environmental Quality's (ODEQ) proposed revisions to the State's human health criteria under the Clean Water Act (CWA) and new and revised implementation provisions. If adopted, this proposed rulemaking would revise the following sections of Oregon's water quality standards:

- Human Health Toxics Criteria (OAR 340-041-0033 and associated tables)
- Intake Credits (OAR 340-045-0105)
- Background Pollutant Allowance (OAR 340-041-003(6))
- Variances (OAR 340-041-0059)
- WQS and TMDL Regulations to Address Nonpoint Sources (OAR 340-041-0007(5), OAR 340-041-0061(11) and (12), OAR 340-042-0040, OAR 340-042-0080)

EPA fully supports Oregon's effort to finalize this rule and adopt revised human health criteria. Over the last several years Oregon has undertaken an extensive process to ensure the criteria are based on best available science, will protect the people of Oregon, and will address implementation concerns raised by stakeholders. The proposed criteria are based on data that clearly indicate higher levels of fish are consumed by some populations in Oregon and are established at a level that will protect all populations that consume fish from State waters, including Native Americans and high consumers. We appreciate the efforts of ODEQ to conduct an extensive review of local, national and international fish consumption rate studies and to employ the services of several of the area's top human health scientists to review the studies and recommend an appropriate rate that would be protective of the people of Oregon. We also appreciate your efforts to look seriously at the implementation of these criteria and address, to the best of your ability within the limits of State law and the Clean Water Act, the proposal and revision of several rules that will allow ODEQ flexibility in implementing the revised criteria. We believe that ODEQ has developed a high-quality set of rules that, with limited clarifications



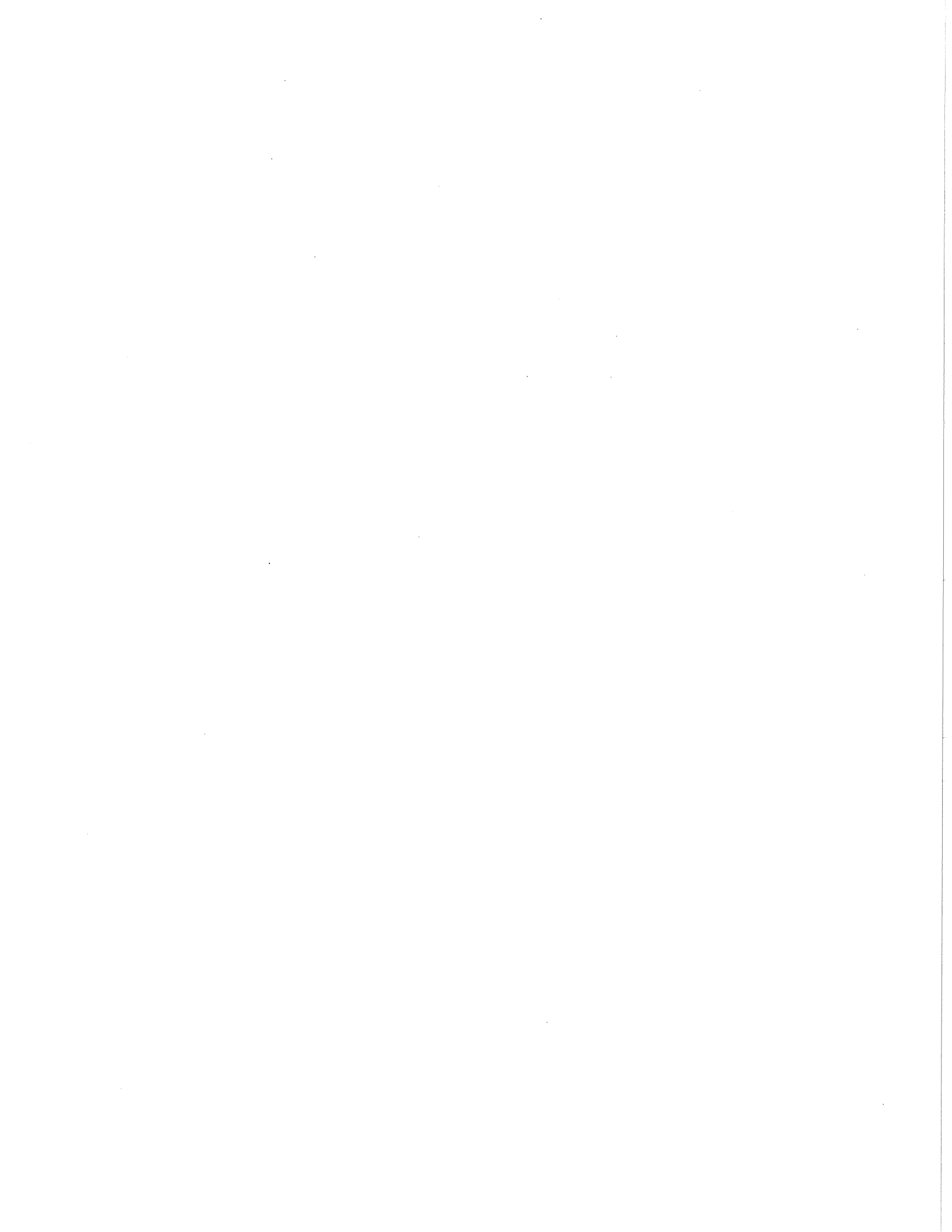
and/or revisions, would be approvable and defensible under the Clean Water Act. As such, we encourage ODEQ to continue to move forward with the actions necessary to present a final rule to the Oregon Environmental Quality Commission (Commission) for adoption this summer.

The proposed revisions to the human health criteria will address EPA's disapproval action dated June 1, 2010, and our concerns regarding the protection of high fish consuming populations in Oregon. The proposed criteria are calculated consistent with EPA's 304(a) guidance for the development of human health criteria. Since local data indicates that some populations in Oregon consume more than the national average of 17.5 grams per day, ODEQ has conducted a thorough review of available data, consulted with local scientists, and engaged the public in a series of collaborative workshops prior to recommending to the Commission that a fish consumption rate of 175 grams per day be used to calculate Oregon's human health criteria. EPA informally reviewed the results of this work and supported this recommendation when ODEQ presented it to the Commission in October 2008. EPA continues to support the use of 175 grams per day as a fish consumption rate that is scientifically sound and protective of people who consume fish from Oregon's waters.

As you are aware, if Oregon does not adopt revised human health criteria pursuant to this proposed rule, EPA is obligated under the Clean Water Act to promulgate revised criteria for Oregon. We believe that the State is in the best position to adopt and implement water quality standards but remain prepared to move forward with a federal rule if the proposed criteria are not finalized. If we were required to take such an action, it is unlikely that the rule would contain any of the implementation provisions currently proposed in the State rule. In addition, EPA may take a more active role in reviewing NPDES permits to ensure that the federal criteria are appropriately being implemented.

Some stakeholders have suggested that the criteria should not become effective upon EPA approval but rather at some point in the future after ODEQ has completed additional work on implementation tools. While we understand that some uncertainty remains, we believe that the time used to discuss these proposals over the last two years has yielded a set of rule revisions and working knowledge of the draft provisions that can serve as a solid framework for implementing these criteria. All the information necessary to implement the proposed rules is currently on the table. Therefore, it is EPA's opinion that it is time to move forward in adopting and implementing the criteria. To allow additional delay through a change in the effective date could be problematic to EPA, would cause delay in EPA's CWA action on the criteria and may be inconsistent with the CWA requirement for states to have criteria protective of all uses.

Due to the stringency of the proposed criteria, much attention has been focused on the large number of pollutants where analytical methods are less precise than the criteria and how ODEQ proposes to implement these criteria in NPDES permits. EPA's review of ODEQ's proposed approach for addressing these criteria found it to be consistent with EPA guidance. We encourage ODEQ to continue to make a list of approved testing methods and quantification limits available to the public and to update the list as EPA's recommended analytical methods are updated and/or new analytical methods become available.



The proposed rule contains several implementation provisions, two of which are likely to require EPA approval under Section 303(c) of the CWA. EPA understands the need to have implementation tools available to assist in implementing water quality criteria and supports the use of these to the extent they are consistent with the CWA. We believe that ODEQ has undergone an extensive process of seeking input from all stakeholders, including the convening of a NPDES workgroup, in developing these provisions and has done an excellent job in sifting through the numerous comments and suggestions in coming up with final proposed rules that balance the need for flexibility with the needs to protect the State's waters and meet the requirements of the CWA. In our detailed comments, we have provided you with some additional recommendations that we believe would help to further clarify your rules or address areas that currently fall short of meeting CWA requirements.

ODEQ and the NPDES workgroup have spent considerable time discussing revisions to Oregon's variance policy. A variance is a very flexible tool that allows a state to address numerous situations in a variety of ways. Variances can be used to address situations where treatment technology is not currently available to treat an effluent stream or the effectiveness of that technology is unknown, the cost of treatment is economically unattainable, and where other sources are causing impairment to a waterbody and the discharger is a relatively limited source. A variance can be used as a stepping stone towards attainment of a water quality criteria and is not a permanent change to the water quality standard. EPA believes that the proposed variance policy is of high quality, addresses the issues outlined in EPA's current guidance and regulations, and is inclusive of requirements that entail recipients of variances to implement actions towards meeting the underlying water quality standard. As such, we believe this policy can serve as a strong foundation for future variances.

While no variance has been requested to date by a discharger in Oregon, the use of variances is not uncharted territory to either Region 10 or many states and regions around the country. Several EPA regions approve variances on a regular basis and do so with little to no delay to the state's processes. As NPDES permits continue to be written to attain more stringent criteria, EPA has seen, and expects to continue to see, an increased need for variances. Several states have already issued numerous variances and have indicated that the practical knowledge gained by the discharger, state staff and EPA staff increases over time, thus allowing for a more fluid and efficient process that does not delay permit issuance. EPA remains committed to work closely with ODEQ's permit and standards programs to ensure a similar outcome in Oregon. As you proceed with the first variances issued under this revised rule and/or a pilot variance, we are ready to commit the staff resources necessary to make these efforts successful.

Where multiple facilities of similar type are constrained in a similar manner, variances for multiple facilities could possibly be bundled together and use a similar justification, thus reducing the workload for all involved. If ODEQ identifies a situation where multiple dischargers face a similar problem, EPA remains open to exploring the most efficient process available to address these situations, including the bundling of variances or a multiple discharger variance.

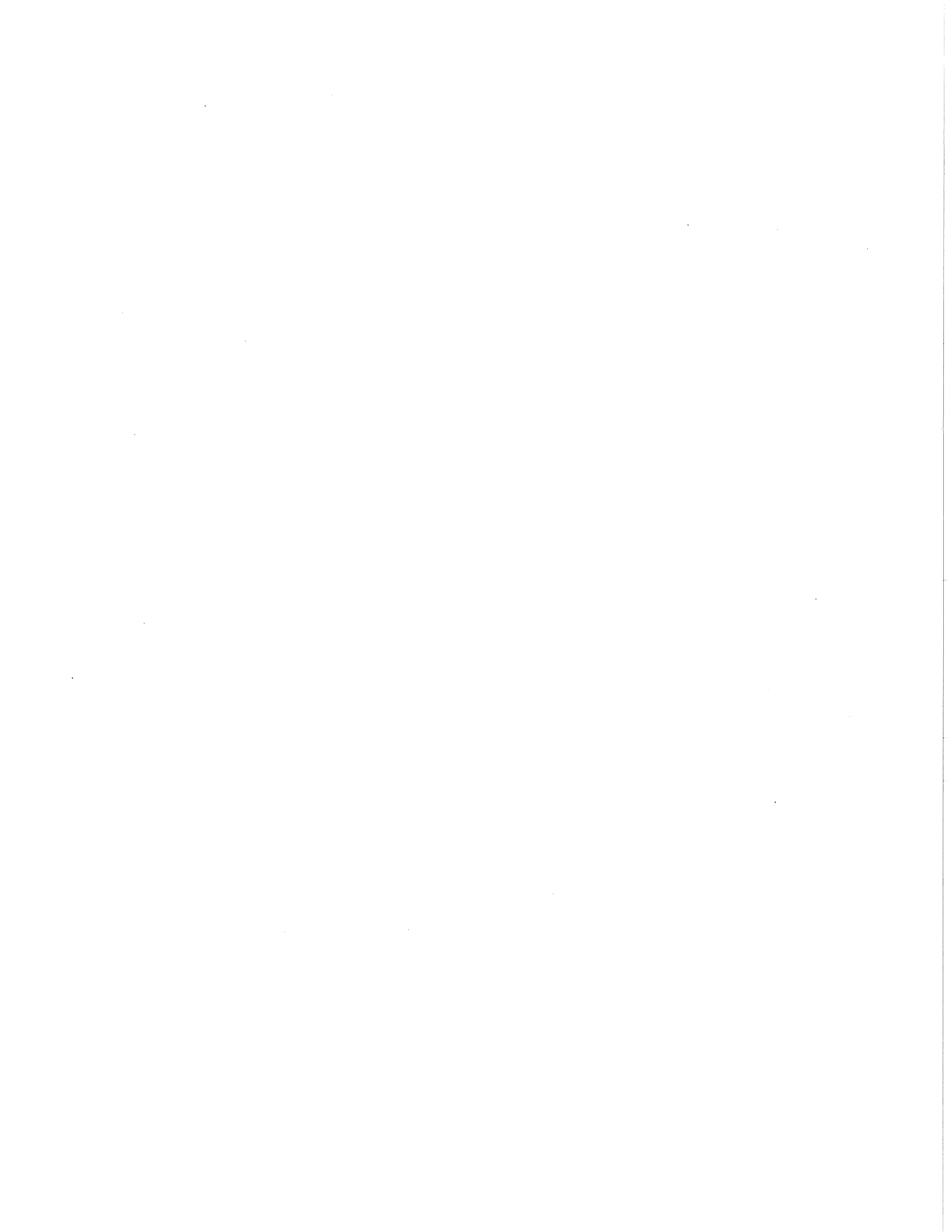


ODEQ's proposal to apply the revised variance process for all criteria has also been a matter of concern to some stakeholders. EPA believes that it is preferable to have a single variance process that applies to all criteria in the State in order to provide for clarity and consistency. As each variance must be assessed for protectiveness, receive public notice and comment, and be approved by EPA prior to becoming effective, any issues relative to protectiveness of individual criteria that may not have been thoroughly reviewed during the workgroup process will be evaluated by ODEQ, available for public comment and reviewed by EPA on a case-by-case basis. We believe this provides opportunity for all interested parties to provide sufficient input into the process while maintaining clarity in the process.

ODEQ and the NPDES workgroup have also spent a considerable amount of time discussing potential approaches to address situations where a discharge is a relatively small contributor of a pollutant; yet, upstream pollutant sources impair the waterbody, thus, limiting the options available to a discharger. While this is a situation found throughout the country, due in part to the limited monitoring of many surface waters, an efficient way to address the situation has yet to be addressed by other states or by EPA on a national level. We applaud Oregon and its stakeholders for looking down the road and seeking to develop an efficient solution for a situation that could require significant resources for a minimal environmental benefit. Unfortunately, this has left ODEQ in a position of having to develop a rule that is unlike any other in the country and for which there is no model.

During the workgroup process we have struggled along with ODEQ staff and workgroup members to find a solution that was both consistent with the NPDES permit regulations and could be approved under Section 303(c) of the CWA. We commend ODEQ staff for their continued efforts to create a legally defensible provision. ODEQ staff have repeatedly presented options, listened to feedback, and revised the proposed rule language, up to the time of releasing this final proposal. We fully expect that similar consideration will be given to all comments received during this public notice period; that, ODEQ will continue to refine the provision prior to taking it to the Commission and will only recommend that the Commission adopt the rule if changes are made so that it is consistent with CWA requirements. Towards this end, our detailed comments provide specific suggestions for elements that would need to be addressed for this provision to be approvable by EPA.

The proposed rule and issue papers also address several issues that fall under the Clean Water Act but do not require EPA approval. This includes the adoption of an intake credit rule, discussion on how quantification limits will be used in permitting and clarifications to rule language addressing nonpoint sources through TMDLs and other implementation programs. We have reviewed these components of your proposal and fully support including these revisions in the final rule. The clarifications to the nonpoint source language and TMDL rule are timely and important in ensuring consistency in State regulations and in providing citizens with a clear understanding of ODEQ's role relative to implementing controls for these sources. Consistent with CWA requirements, ODEQ currently includes load allocations to nonpoint sources in TMDLs and makes those as specific to the source as data allows. Clarifying this in rule does not appear to change this practice or be inconsistent with the CWA. Therefore, EPA encourages ODEQ to move forward with these clarifications.





In closing, we would like to thank ODEQ and the Commission for the leadership you have shown in response to issues raised relative to the fish consumption rate used to derive Oregon's human health criteria for toxics. Oregon's work on the Fish Consumption Rate Review Project resulted in a solid foundation to support the development of human health criteria protective of consumers of fish caught in Oregon's waters by the general population as well as tribal and other subsistence fishers in the State. When adopted, this rule will serve as a solid example to other states in the Northwest and throughout the country as they address similar issues. Oregon's work will also serve as a framework for EPA Region 10 as we continue to work with other states and tribes in our Region to ensure that their water quality standards provide an appropriate level of human health protection to all of their citizens.

We have appreciated our work together throughout this process and remain committed to providing technical assistance as you finalize this proposed rule. We have attached detailed comments for your consideration. EPA also views the implementation of these criteria as a high priority and remains committed to assist you during the development of individual variances and on other concerns that may arise during the implementation of other tools contained in this rule.

If you have any questions concerning our comments or desire EPA's assistance, please feel free to contact me at (206) 553-4198 or Jannine Jennings at (206) 553-2724.

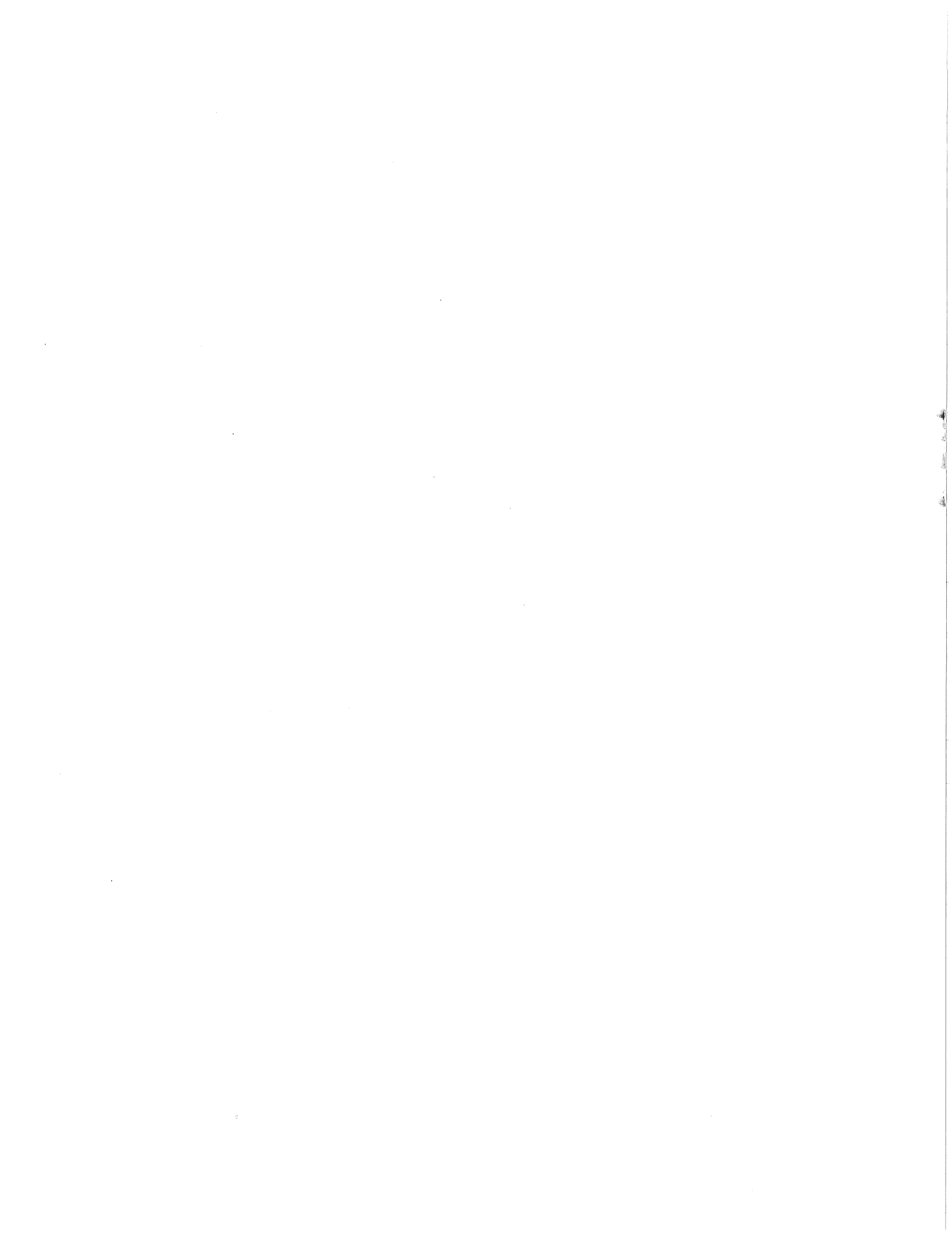
Sincerely,



Michael A. Bussell, Director  
Office of Water and Watersheds

Enclosure:

cc: Neil Mullane, ODEQ  
Jennifer Wigal, ODEQ  
Debra Sturdevant, ODEQ



**DETAILED COMMENTS REGARDING OREGON'S PROPOSED REVISIONS  
TO HUMAN HEALTH CRITERIA, VARIANCE PROVISION, BACKGROUND  
POLLUTANT ALLOWANCE PROVISION, INTAKE CREDIT RULE AND  
NONPOINT SOURCE REGULATIONS**

**March 21, 2011**

**Public Notice of Proposal Dated January 3, 2011**

**U.S. Environmental Protection Agency, Region 10**

According to the January 3, 2011, Public Review Draft of the revised regulations, DEQ is proposing modifications in the following five categories.

- I. Human Health Toxics Criteria (OAR 340-041-0033 and associated tables)
- II. Intake Credits (OAR 340-045-0105)
- III. Background Pollutant Allowance (OAR 340-041-003(6))
- IV. Variances (OAR 340-041-0059)
- V. WQS and TMDL Regulations to Address Nonpoint Sources (OAR 340-041-0007(5), OAR 340-041-0061(11) and (12), OAR 340-042-0040, OAR 340-042-0080)

Each of these five categories are summarized below along with EPA's detailed comments on areas where additional clarity or changes would lead to a more approvable or defensible rule. Due to the size of this rule and the magnitude of excellent work done by ODEQ, these comments speak only briefly to the many positive elements of the proposed rule.

Please note that the positions described in our comments below, regarding the proposed water quality standards, are preliminary in nature and do not constitute an approval, disapproval or determination by EPA under the Clean Water Act (CWA) Section 303(c). Approval and disapproval decisions will be made by EPA following adoption of the new and revised standards by the State of Oregon and submittal of revisions to EPA.

**I. Human Health Toxics Criteria (OAR 340-041-0033 and associated revised tables)**

**1. Summary of Proposed Revisions**

- ODEQ is proposing human health criteria revisions for toxic pollutants based on a fish consumption rate of 175 grams per day, which will serve as the basis for NPDES permit limits and other regulatory decisions. These revised criteria will be placed in a new table called Table 40. ODEQ's intent is that the revised criteria will remedy EPA's June 1, 2010 disapproval of ODEQ's 2004 human health criteria based on 17.5 grams per day.

Third, to apply the performance-based approach, ODEQ needs to share with EPA a scientific or technical justification that adequately demonstrates that criteria changes resulting from this provision are protective of human health. In order to consider approval of this provision under the performance-based approach, EPA would need to understand why ODEQ thinks that an increase in concentration of a pollutant up to 3% does not constitute “significant change in human health protection”. Furthermore, EPA would need an explanation of the scientific basis for calculating the background concentrations based on the harmonic mean flow values of 25% for the Willamette and Columbia Rivers and 100% for all other waters and how using these would ensure protection of the use. These numbers appear arbitrary and to require a less rigorous analysis than would occur for a mixing zone analysis under a typical permit issuance.

Finally, for either approach, the rule language needs to be clear that the rule will be implemented on a facility-by-facility basis in association with a NPDES permit and identify the extent to which the criteria apply to the remainder of the waterbody. Although this is arguably implied from the current language, it must be clearly stated in the rule language itself. Additional clarifications in the rule language should include a statement in the introductory provision of section (6) that states the 3% increase will not exceed the  $10^{-4}$  risk level for carcinogenic human health criteria. The language in section (6)(b)(C) should be revised to clarify that the waterbody value shall not exceed a  $10^{-4}$  risk level. As written, it could be interpreted that a discharger is allowed a 3% increase in concentration beyond the  $10^{-4}$  risk level which EPA understands is not ODEQ’s intent.

### ***B. Implementation Concerns***

In addition, we request that ODEQ consider the implementation concerns outlined in this section.

ODEQ limits the use of the background pollutant allowance provision to carcinogens up to a risk level of  $10^{-4}$ . It is possible that a similar situation will occur for non-carcinogens or discharges that would exceed the  $10^{-4}$  limit and will need to be addressed by ODEQ. For this reason, EPA recommends using other implementation tools already in the CWA, such as a variance, for both carcinogens and non-carcinogens since a variance could be used for all pollutants and allows short term flexibility while requiring incremental improvement toward meeting the underlying water quality criteria. The background pollutant allowance does not require such consideration and therefore a facility granted the allowance would not be required to work toward meeting underlying water quality standards.

The implementation of the background pollutant allowance provision leads to numerous concerns regarding its interaction with other water programs, namely NPDES permitting, TMDLs, and 303(d) impaired waters listing. A general concern across all water programs is whether this provision would be applicable to new sources and, if so, whether measures will be used to ensure the facility evaluates all potential alternatives prior to using this provision. In addition, how will ODEQ address cumulative impacts in a manner that the protection of human health is ensured?

## NPDES

What water quality criteria will ODEQ use to write NPDES permits? ODEQ should clarify how the increase in concentration will be implemented in NPDES permits. It is not clear if a facility that is given authorization to use the background pollutant allowance provision will automatically be given a three percent increase (not to exceed  $10^{-4}$ ) or ODEQ will issue permits that only allow as much increase as the facility needs (i.e., somewhere between a 0-3% increase).

Potentially, different water quality criterion would apply to the same waterbody based on either a  $10^{-4}$  or  $10^{-6}$  risk level in individual NPDES permits. It is unclear when permits will be written to the values contained in Table 40 versus the values that could be authorized through the background pollutant allowance provision. ODEQ needs to explain how this process would work when writing NPDES permits.

In addition, ODEQ should clarify that the background pollutant allowance requires that the mass of the specified pollutants contributed from the discharger result solely from its presence in the discharger's intake water. As written, the provision requires a "no net increase" and therefore a discharger could add mass of a pollutant to its wastestream as long as its discharge contains no more mass of the pollutant than was contained in the intake water.

ODEQ should also clarify what instream criteria will need to be met by dischargers that are not eligible to use the background pollutant allowance provision but located nearby a facility that is given the authorization to use the allowance. A multiple discharger implementation issue that ODEQ should clarify is how the three percent allowance will be allocated among dischargers in the same area that are eligible and ask to use the allowance.

Finally, EPA recommends that ODEQ revise the background pollutant allowance provision to ensure a facility does not alter the identified intake pollutant chemically or physically in a manner that would cause adverse water quality impacts to occur that would not otherwise if the pollutants were left in the waterbody. Furthermore, the timing and location of a facility's discharge should not cause adverse water quality impacts to occur that would not otherwise if the pollutants were left in the waterbody.

## TMDLs

Similar to NPDES permits, what value will ODEQ use to write TMDLs in areas that the background pollutant allowance is being utilized? As written, the background pollutant allowance provision discourages the use of a TMDL, even though a TMDL could also be used to address this situation while leading to reductions in other sources. Unlike a TMDL, using a permit based adjustment for intake pollutants imposes an allocation scheme without the assurance that other sources contributing to an exceedance of the water quality standards will be controlled so that the standard is attained.

### 303(d) Impaired Waters Listing

How will ODEQ implement this provision in the context of the 303(d) impaired waters listing? It is unclear which values the waterbody would be assessed against. In addition, implementing the background pollutant allowance provides a disincentive for impaired waters to be cleaned up since facilities given authorization to use the provision would not need to meet water quality standards. Instead, any increase in concentration allowed would exacerbate the non-attainment of water quality standards by allowing further degradation of impaired waters.

## **IV. Variances (OAR 340-041-0059)**

### **1. Summary of Proposed Revisions**

- ODEQ is proposing to remove the current variance language found at OAR 340-041-0061(2) and replace it with new language which would ensure progress toward meeting underlying water quality standards, streamline the administrative process, require pollutant reduction plans with milestones that will result in water quality improvement and add general clarification to the rule.

### **2. EPA Comments**

EPA has worked closely with ODEQ as it has developed these proposed revisions to the State's variance provision. In general, EPA is supportive of the proposed language. In particular, EPA recognizes that this provision adds more definition to what is required as part of a variance, streamlines the process so that it can more efficiently align with the NPDES program and issuance of permits, and requires the applicant to develop a schedule for improvements by implementing a pollution reduction plan. These all will assist in meeting the goal of making improvements in water quality standards to attain the underlying criteria.

The comments regarding sections (1) and (4) are minor clarifications. However, our concerns under section (3) are more significant and ODEQ should consider clarifying and/or revising the language accordingly.

As ODEQ continues to develop internal guidance for implementing this provision and begins to address variance applications, EPA remains available to provide assistance. We view the successful implementation of variances to be key to the success of this rule and remain committed to dedicating the resources needed to make that happen. We are ready to assist in the review of individual variances, work in partnership with ODEQ and a discharger on a pilot variance, and/or develop an efficient method to address multiple facilities with similar needs relative to a specific pollutant. We believe this proposed rule and ODEQ's work to date provide a solid foundation for implementing the provision once a variance is requested by a discharger.

### Section (1)

Section (1)(b)(D) allows the department or commission to consider granting variances for new dischargers. EPA believes this may be appropriate under very specific and limited circumstances and that analysis would need to be done on an individual variance basis.

In general, caution should be used in issuing variances for new sources. The variance request would need to meet the requirements in section (1)(b)(D) and other alternatives for addressing the pollutant should be considered before beginning the variance process.

### Section (3)

The purpose of adding this new section is unclear. It appears to provide that if an applicant for a variance can satisfy the terms of the provision, the applicant will automatically be deemed to have established one component of the variance submittal requirements: the showing, under (5)(a), that “attaining the water quality standard . . . is not feasible,” either under the rubric of (2)(b)(A) or (2)(b)(C). Is this the intent of the rule, or is ODEQ simply stating that it *might* conclude that (5)(a) has been satisfied, under the rubric of (2)(b)(A) or (2)(b)(C), if (3) is satisfied? If the intent of (3) is not to automatically satisfy (5)(a) under certain defined circumstances, why does ODEQ believe it is necessary? Does ODEQ intend that satisfying the terms of section (3) would automatically establish any of the other variance submittal requirements under section (5)? For purposes of the following discussion, EPA assumes that satisfying section (3) would automatically establish that (5)(a) has been met, but would not automatically satisfy the other components of the variance analysis.

ODEQ should clarify whether the language “background concentration” in sections (3)(a) and (3)(b) refers to natural condition or ambient condition. Does the language “background concentration” include anthropogenic contributions? If ODEQ does define “background concentration” to include anthropogenic contributions, it is unclear how a variance based on (2)(b)(A), “naturally occurring pollutant concentrations prevent the attainment of the use,” would be applicable.

In addition, EPA has concerns about how section (3) can be reconciled with the phrase “cannot be remedied” in (2)(b)(C), which is the same language found in 40 CFR 131.10(g)(3). If section (3) is applied using anthropogenic background concentration and not natural conditions, it embodies a conclusion that if enforceable controls are not likely to achieve water quality standards by controlling upstream nonpoint sources out of the discharger’s control, than ODEQ can conclude that water quality standards exceedances from nonpoint sources “cannot be remedied.” EPA is concerned that this interpretation would weaken the meaning of “cannot be remedied” in (2)(b)(C), and that it would be inconsistent with EPA’s interpretation of the same phrase in 40 CFR 131.10(g)(3).

From an implementation standpoint, EPA also has concerns regarding the manner in which section (3) will apply to NPDES dischargers in impaired waters. For example, if a facility is discharging to a waterbody that is impaired for nutrients, would section (3) allow the facility to avoid installing advance treatment for nutrients? This scenario exemplifies the same concerns above regarding the interpretation of “background concentration” and “cannot be remedied” which ODEQ should clarify and address appropriately.

In addition, EPA suggests the following clarifications. First, ODEQ should clarify the meaning of the phrase “are not likely to” in section (3)(c)? EPA recommends replacing

this phrase with “will not” for clarity. Secondly, does ODEQ consider State BMPs to be included as part of “enforceable controls” in section (3)(c)?

#### Section (4)

EPA supports the language in section (4) regarding the duration of variances. Although we realize this is ODEQ’s intent, EPA would like to note that individual variances submitted by ODEQ for approval will need to specify the duration of the variance.

### **V. WQS and TMDL Regulations to Address Nonpoint Sources (OAR 340-041-0007(5), OAR 340-041-0061(11) and (12), OAR 340-042-0040, OAR 340-042-0080)**

#### **1. Summary of Proposed Revisions**

- ODEQ is proposing 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 Act (AgWQM).
- ODEQ is also proposing changes to the Total Maximum Daily Load (TMDL) regulations to clarify ODEQ’s authority to identify and assign individual load allocations to significant air and land sources in TMDLs.

#### **2. EPA Comments**

EPA is not reviewing these revisions as water quality standards since they are nonpoint source and TMDL provisions and not water quality standards under CWA section 303(c). However, EPA has reviewed these revisions and finds that they are helpful in clarifying how nonpoint sources will be addressed in TMDLs and how ODEQ will interact with the Departments of Forestry and Agriculture to ensure needed programs are in place to address these sources of pollution. Therefore, EPA encourages Oregon to adopt the changes.