NORTHWEST ENVIRONMENTAL ADVOCATES

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Re: **Proposed Revised Water Quality Standards for Human Health Toxic Pollutants and Revised Water Quality Standards Implementation Policies**

Dear Andrea:

This letter constitutes Northwest Environmental Advocates' comments on the proposed rule revisions developed in the 2004-2011 triennial review of water quality standards.

We are disappointed that after a time period that will be at least seven and a half years by the date of its completion there is so little in these rules that will protect human health and restore water quality in Oregon. The media hook of these water quality standards revisions is that they will be the most stringent toxic criteria in the country. The reality is they will amount to very little, if any, additional protection for the people, fish, and wildlife of this state. The reason is simple: while the Department followed the Commission's October 2008 admonition to create methods of regulatory relief for NPDES permitted sources from the new toxic criteria, the Department completely ignored the Commission's directive to address nonpoint sources. The combination of those two facts along with the Department's announcement that it will not use the new criteria in stormwater permits, a position with no basis in law, means that the criteria will have little impact on the regulatory mechanisms that control pollution in Oregon.

There is much stated in the Issue Papers that DEQ developed for these proposed rules to which we object. However, the sheer volume of DEQ commentary precludes our response other than on the proposed rule changes themselves.

I. Proposed Revisions to Division 41

A. Proposed Revisions to OAR 340-041-0007(5) – Statewide Narrative Criteria

Oregon's water quality standards currently contain impermissible conditions that are not consistent with federal requirements. Specifically, federal law requires that "criteria must be

based on sound scientific rationale and must contain sufficient parameters or constituents to protect the designated use."[1] The designated use in question is the "most sensitive use."[2] Oregon's current narrative criterion at OAR 340-041-0007(5) states that logging must be conducted in accordance with the Oregon Forest Practices Act (FPA) and must "minimize" adverse effects on water quality. The current criterion fails to fully protect designated uses for three reasons. First, the criterion requires only that FPA practices be met. FPA practices do not meet other water quality criteria that are established for the protection of designated uses.[3] Therefore, such practices have no place in Oregon's water quality standards. Second, this narrative criterion acts as a limitation to the other requirements of Oregon's water quality standards, in essence shielding logging pollution sources from those requirements and limiting what it means for a source to meet water quality standards to only meeting FPA requirements. Third, this narrative criterion requires only that logging pollution sources "minimize" their contributions of pollution and adverse effects, which is not synonymous with meeting otherwise applicable water quality standards. As such, it serves as a limitation to the applicability of Oregon's other water quality standards and criteria.

DEQ proposes to revise a statewide narrative criterion that currently limits the protection provided to Oregon's waters in the following way:

> Logging and forest management activities must be conducted in accordance with the ~~Oregon Forest Practices Act to minimize adverse effects on water quality~~. water quality standards and implementing rules established by the Environmental

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[1] 40 C.F.R. § 131.11(a).

[2] *Id*.

[3] *See, e.g.*, NOAA and EPA Preliminary Decisions on Information Submitted by Oregon to Meet Coastal Nonpoint Program Conditions of Approval, June 12, 2008 at 10. ("Based on Oregon's recent submittal and our understanding of Oregon's Forestry Program, EPA and NOAA still believe that Oregon lacks adequate management measures under the Oregon Forest Practices Act (FPA) rules for protecting water quality and the degradation of beneficial uses from forestry activities. EPA and NOAA's primary concerns, stated in the 1998 conditional findings and reiterated in the 2004 interim decision document, remain. Oregon still lacks adequate measures for protecting riparian areas of medium, small and non-fish bearing streams, high risk landslide areas, and for addressing the impacts of legacy roads. A broad body of science continues to demonstrate that the FPA rules do not adequately protect water quality.")

> Quality Commission. Nonpoint sources of pollution from forest operations on state and private forest lands are subject to best management practices and other control measures established by the Oregon Board of Forestry as provided in ORS 527.765 and 527.770 and must not cause violation of water quality standards. Forest operations conducted in good faith compliance with best management practices and control measures established under the Forest Practice Act are generally deemed not to cause violations of water quality standards as provided in ORS 527.770. Forest operations may be subject to load allocations established under ORS 468B.110 and OAR division 340-042, however, to the extent needed to implement the federal Clean Water Act.[4]

DEQ's proposed language addresses some of the ways in which the current narrative criterion offers inadequate protection to designated uses, contrary to the requirements of 40 C.F.R. § 131.11(a). However, even correct statements of state law are impermissible as a water quality standards. The language of this "narrative criterion" limits or negates the applicability of all of Oregon's other water quality standards to logging activities. By limiting the applicability of Oregon's water quality standards to some significant pollution sources, that in some instances are the only pollution sources causing or contributing to violations of otherwise applicable criteria, Oregon cannot meet the requirements of 40 C.F.R. § 131.11(a) to fully protect designated uses.

Finally, the proposed language states that logging operations "may be subject to load allocations . . . to the extent needed to implement the federal Clean Water Act." This proposed language introduces two limitations to the notion that logging activities would be limited to load allocations under this narrative criterion. First, the rule uses the word "may" rather than "shall" or "must," rendering an operation's compliance with load allocations discretionary. Second, the logging operations are subject to load allocations only "to the extent necessary to implement" the CWA. It is unclear what this phrase means precisely. If it means to the extent necessary to meet otherwise applicable water quality standards and TMDLs it would be acceptable. This phrase is ambiguous and results in a narrative criterion that may, or may not, limit the reach of Oregon's otherwise applicable water quality standards. Reading these two ambiguities in the same sentence together suggests that even if a TMDL concludes that load allocations given to logging operations are necessary, DEQ retains the discretion to find that they *may* not apply. This is nonsensical and provides no assurance of full support for designated uses that is required by federal law.

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[4] Proposed OAR 340-041-0007(5).

B. Proposed Revisions to OAR 340-041-0061 – Other Implementation of Water Quality Criteria

DEQ has also proposed revising a similar provision that describes controls over logging:

> Forestry on state and private lands. Nonpoint sources of pollution from ~~For~~ forest operations on state or private lands are subject to~~, water quality standards are intended to be attained and are implemented through~~ best management practices and other control measures ~~mechanisms~~ established by the Oregon Department of Forestry under the Forest Practices Act (ORS 527.610 to 527.992) and must not cause violation of water quality standards~~. and rules thereunder, administered by the Oregon Department of Forestry. Therefore,~~ Such forest operations, when conducted in good faith ~~that are in~~ compliance with the Forest Practices Act requirements are generally deemed not to cause violations of water quality standards as provided in ~~(except for the limits set out in~~ ORS 527.770). Forest operations on state and private lands may be subject to load allocations under ORS 468.110 and OAR 340, Division 42 to the extent necessary to implement the federal Clean Water Act. ~~deemed in compliance with this division. DEQ will work with the Oregon Department of Forestry to revise the Forest Practices program to attain water quality standards.~~[5]

This revised rule suffers from the same problems as the proposed OAR 340-041-0007(5) discussed immediately above. In fact, it is unclear why DEQ proposes to have completely redundant rules.

Likewise, DEQ proposes to revise its rules regarding control of agricultural pollution as follows:

> In areas subject to the Agricultural W~~w~~ater Q~~q~~uality M~~m~~anagement Act ~~plans to reduce agricultural nonpoint source pollution are developed and implemented by~~ the Oregon Department of Agriculture (ODA) ~~through a cooperative agreement with the department to implement applicable provisions of~~ under ORS 568.900 to 568.933 and 561.191 develops and implements agricultural water quality management area plans and rules to prevent and control water pollution from agricultural activities and soil erosion on agricultural and rural lands. Area plans and rules must be designed to achieve and maintain water quality standards. If the department ~~has reason to believe~~ determines that the area plan and rules are not adequate to ~~agricultural discharges or activities are contributing to water quality problems resulting in~~ achieve and maintain water quality standards, the

[5] Proposed OAR 340-041-0061(10).

> department will provide ODA with comments on what would be sufficient to meet WQS or TMDL load allocations. In addition, the department may request the Environmental Quality Commission (EQC) to petition ~~violations, the department may consult with the~~ ODA for a review of part or all of ~~. If water quality impacts are likely from agricultural sources and the department determines that a~~ water quality management area plan and rules. If a person subject to an ODA area plan and implementing rules causes or contributes to water quality standards violations, the department will refer the activity to ODA for further evaluation and potential requirements. The department may also require remedies of a person causing pollution or contributing to water quality standards violation if ODA does not take action. ~~is necessary, the director may write a letter to the director of the ODA requesting that such a management plan be prepared and implemented to reduce pollutant loads and achieve the water quality criteria.~~[6]

It is an improvement for DEQ's regulations to state that "[a]rea plans and rules must be designed to achieve and maintain water quality standards" but the rule goes on to indicate that DEQ will not take any enforcement action nor withhold any approval of any ODA action or inaction based on a determination that water quality standards are not being or will not be met. This proposed rule undermines Oregon's otherwise applicable standards by, first, stating that DEQ "will" provide comments to ODA. Statements of alleged facts ("will") are not the same as requirements ("must") and have little place in water quality standards and rules. Second, the proposed rule states the obvious, that DEQ "may request" that the Commission petition the ODA for changes. Again, this adds nothing. Finally, DEQ makes clear that it will never take enforcement action directly against an agricultural source because it states that it "will refer" any potential to ODA. Even in the event that ODA fails to take action, DEQ continues to provide itself with the discretion to do nothing ("may also require remedies"). In each case in which DEQ might take direct action to stop a pollution problem, DEQ has used the word "may" to indicate that it has no intention of doing so. In any case involving the possibility that it might complain to ODA, it has used the word "will" which is not a requirement but a statement of alleged fact. DEQ's word choices here are transparent; the agency intends to do nothing to control agricultural nonpoint source pollution.

C. Proposed Revisions to OAR 340-041-0033 -- Toxic Substances

In its efforts to ensure that the new stringent toxic criteria apply to no point sources, DEQ has included a provision that would make a mockery of those criteria and if EPA approved it would establish a precedent that would likely be used across the country, making Oregon a leader in undermining the Clean Water Act. The text of this proposed addition to Oregon's water quality

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[6] Proposed OAR 340-041-0061(11).

standards is the following new provision:

(6) An increase of 3% or less in the background pollutant concentration of a water body that approaches or exceeds an applicable human health criterion for a carcinogen does not result in a significant change in human health protection and may be allowed under the conditions established in subsection (b) of this section.

(a) Definitions: For the purpose of this section:

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

(B) "Approaches or exceeds an applicable human health criterion" means that the background pollutant concentration is equal to or greater than the applicable numeric criterion or would equal or exceed the criterion if it increased by 3%.

(C) The mass of pollutant in the facility's intake water is from the "same water body" if it is taken into the facility from the receiving water body or a hydrologically connected water such that the intake pollutant would have reached the vicinity of the outfall in the receiving water within a reasonable period had it not been removed by the permittee. This definition is intended to be the same as and is further explained in the 'intake credits" rule in OAR 340-045-105.

(b) Conditions for a background pollutant allowance:

(A) The mass of the pollutant in the discharge does not exceed the mass of the pollutant in the facility's intake water taken from the same water body that receives the discharge and, therefore, does not increase the mass load of the pollutant in the receiving water body.

(B) The 3% increase above the background pollutant concentration is calculated:

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

(ii) For all other waters, using 100% of the harmonic mean flow of the water body.

(C) The background pollutant concentration is less than 97% of the value that represents a 1×10^{-4} human health risk level. This value is calculated using EPA's human health criteria derivation equation for carcinogens (EPA 2000).

(c) The Department may require the discharger to use any technologically

> and economically feasible pollutant reduction measures that are known to be available to prevent or minimize a pollutant concentration increase in the receiving water body, provided that the measures do not have adverse environmental effects that outweigh the benefits of the reduction in pollutant concentration.[7]

1. Legal and Policy Problems with the Proposed Background Concentration Rule

There are a variety of federal rules that restrict the addition of pollutants by NPDES-permitted sources to waters that are already impaired for those pollutants. The underlying policy is clear and simple: the goal of the Clean Water Act is to ensure that pollution is cleaned up, not made worse. The proposed rule applies to waters that are known to be impaired by the pollutant that is of concern in the NPDES permit. In that it sanctions increases in the concentration of toxic pollutants in impaired waters, it is inconsistent with the law and poor public policy. To the extent that some mechanism is required to provide regulatory relief, the Clean Water Act and EPA rules and guidance provide three clear options that, unlike the proposal, are consistent with existing regulatory mandates: site-specific criteria, variances, and compliance schedules.

a. *The Proposed Rule's Pre-Determination of No Significance is False*

The proposed rule is based on a false premise, namely that an increase of risk by two orders of magnitude "does not result in a significant change in human health protection."[8] It is difficult to imagine what level of change in protection the DEQ believes *is* significant if it isn't a risk level that goes from one in a million chances of cancer to one in ten thousand. This rationalization appears to be founded more on the maximum level of cancer risk that EPA allows a state to adopt rather than any actual analysis of significance. In its issue paper, DEQ rationalizes further that the rule "would not be reasonably likely to increase human health risk" because people who eat large amounts of fish obtain them from multiple water bodies, only a small portion of the fish eaten would be affected by the rule, and the risk is based on lifetime exposure.[9] DEQ does not, however, apply these very same rationales to its adoption of the other numeric criteria based on 175 grams/day of fish consumption as a justification for *not* adopting criteria derived from that

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[7] Proposed OAR 340-041-0033(6).

[8] Proposed OAR 340-041-0033(6).

[9] ODEQ Issue Paper: Implementing Water Quality Standards for Toxic Pollutants in NPDES Permits, Human Health Toxics Rulemaking, December 29, 2010 at 46.

level of consumption. Yet it easily could. It is inconsistent to use competing rationales for two actions. In addition, DEQ has not established that the geographic extent of the proposed rule will be as limited as it states. It simply has not established *any* indication of the geographic extent of the rule and its relationship with the use of fish consumption. And the rule has no limitations on the degree to which waters of the state can go from one risk level to another. Finally, DEQ has not acknowledged that the increased risk it considers insignificant does not include the yet higher risk associated with the discharges prior to their being fully mixed with the receiving waters. Again, the geographic extent of these yet higher risk waters has not and will not be revealed, even after the rule is applied, but they are an integral part of the proposed rule.

b. ***The Proposed Background Concentration Rule Impermissibly Applies to New Sources***

DEQ's proposed background concentration rule would cover new as well as existing sources. DEQ has not explained why, as a matter of policy, the state would want to allow new sources to increase the concentration of a toxic pollutant for which a waterbody is already impaired. As most numeric water quality criteria are expressed as concentrations – an amount of pollutant in an quantity of water – the resulting concentration in the state's waters are of key concern in evaluating the protection provided by the standards. In fact, at present, the concentration is the sole concern of Oregon's water quality standards. The background concentration rule by definition would allow a new source to *increase* the concentration of a pollutant in a waterbody that is already at levels that are inadequate to protect human health. Not only would this action not result in cleaning up an impaired water but it would make it more difficult to accomplish this goal. DEQ has adjusted the proposed rule from its original draft in order to allow discharges from sources if they can demonstrate their discharges will not cause an exceedance of cancer risks at 10^{-4}. This change allows DEQ to appear to be attempting to conform to EPA policy but it does not alter the underlying policy and legal problems with the rule. Those remain the same. The proposed rule promotes a policy that is at odds with the Commission's desire to protect human health and is contrary to the Clean Water Act and EPA policy.

DEQ's proposed rule is clearly an attempt to avoid the constraints that EPA's NPDES permitting regulations already place on new sources that seek to discharge a pollutant into a waterbody that is impaired for that same pollutant. Using Oregon's water quality standards to avoid the permitting regulations is both impermissible and poor public policy. EPA's regulations prohibit the agency's issuing an NPDES permit "when the conditions of the permit do not provide for compliance with the applicable requirements of the CWA, or regulations promulgated under the CWA" or "when the imposition of conditions cannot ensure compliance with the applicable water quality requirements of all affected states."[10] Specifically, EPA's regulations prohibit the

[10] 40 C.F.R. §§ 122.4(a), (d).

issuance of an NPDES permit for a new discharge where the discharge may "cause or contribute to the violation of water quality standards."[11] EPA NPDES regulations allow for *one* limited exception to this prohibition of discharges into impaired waters. In order for a discharge of the pollutant at issue to be allowed, the regulations require strict assurances that the receiving water can handle the new discharge and meet water quality standards and that specific plans are in place to ensure that it will be restored from its condition of impairment. Specifically, the EPA regulations require that:

> The owner or operator of a new source or new discharger proposing to discharge into a water segment which does not meet applicable water quality standards or is not expected to meet those standards even after the application of effluent limitations required by 301(b)(1)(A) and 301(b)(1)(B) of CWA and for which the State or interstate agency has performed a pollutants load allocation for the pollutant to be discharged, must demonstrate before the close of the [NPDES permit] public comment period that:
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> (1) There are sufficient remaining pollutant load allocations to allow for the discharge; and
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> (2) The existing dischargers into that segment are subject to compliance schedules designed to bring the segment into compliance with applicable water quality standards.[12]

In *Friends of Pinto Creek v. U.S. E.P.A.*, 504 F.3d 1007 (9th Cir. 2007), *cert. denied*, 129 S. Ct. 896 (2009), the Ninth Circuit Court of Appeals held that without a plan to achieve water quality standards, a permitting agency cannot allow new discharges that will exacerbate the existing water quality standards violations. The court held that all existing dischargers must be subject to compliance schedules[13] and that "[i]f there are no adequate point sources to do so, then a permit cannot be issued unless the state or the [discharge permit applicant] agrees to establish a schedule to limit pollution from a nonpoint source or sources sufficient to achieve water quality standards."[14] In other words, a TMDL is a necessary condition for a source to use the exception provided in EPA rules to the general prohibition on new sources into impaired waters but a

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[11] 40 C.F.R. § 122.4(i).

[12] *Id.*

[13] *Pinto Creek* at 1012-13.

[14] *Id.* at 1014.

TMDL by itself is not sufficient. Sources under compliance schedules are also necessary.

DEQ's proposal intends to incorporate an end-run around this prohibition into its water quality standards by somehow waiving the otherwise applicable water quality standards on a source-by-source basis. Allowing a new source through the proposed mechanism will, in fact, exacerbate the existing water quality standards violations because it will result in a more concentrated pollutant level in the downstream waters. That it adds no mass is no comfort because the numeric criteria the proposed rule would by-pass are based on pollutant concentrations. Nothing in the proposed rule will reverse the conditions causing the impairment as there are no requirements for TMDLs and compliance schedules that mirror the federal regulations.

c. *The Proposed Rule is Inconsistent with Antidegradation Requirements*

Allowing a new source to increase the concentration of a pollutant causing an impairment is also contrary to the antidegradation policy. Tier I of the antidegradation policy, as framed by federal rules,[15] applies to all water bodies regardless of their quality and requires a level of protection to assure that "[e]xisting instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected."[16] Existing uses are defined as "those uses actually attained in the waterbody on or after November 28, 1975, whether or not they are included in the water quality standards."[17] By definition, an increase in the concentration of a pollutant causing an impairment is decreasing the level of water quality necessary to protect existing uses and likely impairing those existing uses. This violates the mandate of Tier I protections. DEQ has not explained why it believes that it can embed a violation of Tier I protections of the antidegradation policy into narrative water quality standards or general policies that implement standards. The proposed rule would allow unlimited degradation by new sources of an impaired water up to the maximum permitted risk level of 10^{-4} (and beyond that risk level in the area prior to complete mix) despite Oregon's having adopted a risk for carcinogens of 10^{-6}. This, in essence, changes the definition of an existing use human health protected at 10^{-6} to human health protected at a risk level of 10^{-4} without any public process or evaluation. In doing so, it also would affect the level of protection provided to aquatic life and wildlife by the human health criteria where there are no other applicable numeric criteria, including threatened and endangered species. Such a change in allowable levels of toxic constituents might jeopardize

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[15] NWEA does not believe that Oregon's antidegradation requirements comport with federal rules, a matter in current litigation.

[16] 40 C.F.R. § 131.12(a)(1).

[17] 40 C.F.R. § 131.3(e).

those existing uses. There is no provision in the rules, however, to ensure that this would not be the outcome. The proposed rule simply ignores Tier I of the antidegradation policy, thereby rendering it inconsistent with EPA requirements.

Likewise, Tier I does not only apply to new sources; it applies to all waters of all quality. Allowing multiple unknown levels of exceedance of the otherwise applicable numeric criteria in an already impaired water is highly likely to be contrary to the Tier I requirements, as set out immediately above. As such, the proposed rule is inconsistent with the antidegradation policy with regard to existing sources as well as new ones. The proposed background concentration rule would embed into Oregon's water quality standards a provision that would otherwise be impermissible because it is directly contrary to federal antidegradation requirements. Doing so does not alter its fundamentally illegality.

d. ***The Proposed Rule's De Minimis Exception is Impermissible***

Industrial sources originally sought a provision in the new standards that would allow so-called *de minimis* increases in water pollution. Nationally, the concept of *de minimis* has been used primarily if not exclusively in the context of Tier II of the antidegradation policy. The rationale for using a *de mimimis* rule in applying Tier II protections is to limit the analysis required when evaluating whether a source should be allowed to use remaining assimilative capacity in a waterbody. While we do not support it, we understand the notion of husbanding administrative resources where there is insufficient benefit to be derived from a full-blown socioeconomic analysis of the costs and benefits of decreasing the remaining assimilative capacity by a small amount. This, however, is not the context of the background concentration rule because, by definition, the waters affected by this proposal are impaired waters, not waters with assimilative capacity.

While the *de minimis* phrase is not included in the background concentration rule, that is its general intent and that is how DEQ describes the intent of the rule.[18] As discussed below, NWEA does not believe that this rule is limited to authorizing very small increases in pollutant concentrations. Assuming for the moment that it only did authorize very small amounts, as a *de minimis* increase, there is no basis for this provision. To our knowledge, EPA has only authorized *de minimis* exceptions to Tier II antidegradation requirements where the increases

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[18] "This rule would allow a 3% increase in the ambient concentration of the pollutant in the receiving water under specified conditions, which are described below. The allowed increase is considered "*de minimis*" in these circumstances because it does not result in a significant added human health risk as a result of the discharge." DEQ Issue Paper: Implementing Water Quality Standards for Toxic Pollutants in NPDES Permits: Human Health Toxics Rulemaking, December 29, 2010, at 37.

were to non-impaired (i.e., "high quality") waters. We are not aware of EPA's having ever authorized increases of pollutants by any amount, small or not, into waters that are already deemed unsafe for human health or aquatic life. We are not aware of any EPA-approved rule that automatically alters the risk level associated with a pollutant from its adopted risk to one that is two orders of magnitude greater or likely even more, considering the risk level is measured after the discharge is "fully mixed" with the receiving water.[19] Moreover, there is no NPDES permitting provision that allows *de minimis* exceptions to the general rule that sources shall not cause or contribute to violations of water quality standards. In other words, allowing a provision that automatically adjusts the numeric criteria to accommodate new or existing pollution sources that would otherwise be deemed to cause or contribute to violations of numeric criteria would be precedent-setting and undermine the fundamental principles of NPDES permitting.

e. ***The Proposed Rule Would Establish Water Quality Standards Without the Requisite Rulemaking and EPA Review***

In its proposed rule DEQ suggests that it may derive new water quality criteria on a source-specific basis without conducting a site-specific analysis of the level of protection provided by the result, without producing a site-specific criterion to replace the otherwise applicable statewide standards, without clarifying where and when the new criterion applies, and without the opportunity for a public hearing and satisfying the public notice requirements required for revising water quality standards. For this reason, the background concentration rule is wholly inconsistent with EPA requirements.

The proposed background concentration rule adjusts the level of acceptable pollutant concentration in a waterbody at an individual site based on the existing ambient concentration plus 3 percent with a cap of a risk level of 10^{-4}. Each time DEQ would apply this provision it would constitute a revision to Oregon's water quality standards and would be subject to EPA action. Therefore, EPA cannot approve this provision in advance of its application and cannot approve it as an acceptable methodology because it does not contain any of the provisions that apply to actions that are subject to water quality standards revisions, such as public notice and comment under 40 C.F.R. §131.20(b) of its regulations. For example, EPA requires that prior to removing any use, the state must provide notice and comment under this provision.[20] That section calls for a public hearing "for the purpose of reviewing water quality standards." Similarly, variances, as changes to water quality standards, are subject to the extensive and

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[19] *Id.*

[20] 40 C.F.R. § 131.10(e).

complete Part 25[21] public participation requirements of its regulations.[22] EPA states that "[b]efore removing or modifying any use or changing criteria, the Clean Water Act requires the State to hold a public hearing."[23] In contrast, DEQ proposes to make automatic adjustments to applicable criteria – based on allowable increases over ambient conditions that far exceed those criteria – with only a 10^{-4} limit on the amount of a pollutant that would be considered allowable, no analysis, no justification, no public process, no clarity as to the resulting criterion, no geographic location of the extent of the new criterion, and no submission to EPA.

EPA rules contain minimum requirements for the submission of water quality standards, one of which is that the water quality be "sufficient to protect the designated uses."[24] Similarly, EPA rules require that criteria adopted by states "shall support the most sensitive use."[25] States must also submit to EPA the "[m]ethods used and analyses conducted to support water quality standards revisions."[26] DEQ cannot submit any information demonstrating that the criteria proposed under the background concentration rule will be sufficient to protect human health because it has absolutely no information on the ambient concentrations to which it would be allowing a 3 percent increase per NPDES-permitted source. All it can say is that the resulting unknown "criterion" would be limited to something less than a risk level of 10^{-4} although, based on the proposed rule, it would not establish what the resulting criterion was now would it establish the geographic extent of this superseding "criterion." DEQ has no information on how many 3 percent increases might be allowed in any waterbody, another factor that would alter the extent of the risk level protection at 10^{-4}. Moreover, in light of the relatively few aquatic life criteria that apply to Oregon's waters and the total absence of any wildlife criteria, the human health criteria provide protection for non-human species. DEQ's rule does not propose to

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[21] 40 C.F.R. Part 25, Public Participation in Programs Under the Resource Conservation and Recovery Act, the Safe Drinking Water Act, and the Clean Water Act.

[22] Memorandum from Michele Beigel Corash, EPA OGC, to Donald P. Dubois, Region X RA, Re: Applicability of the Part 25 "Public Participation" Regulations to the Approval of Variances from Water Quality Standards, September 4, 1980. EPA notes that NPDES permit applications actions are not covered by Part 25 while water quality standards revisions are.

[23] EPA, Water Quality Standards Handbook – Second Edition, 1993 at 6-7.

[24] 40 C.F.R. § 131.6(c).

[25] 40 C.F.R. § 131.11(a).

[26] 40 C.F.R. § 131.6(c).

evaluate how changing the human health criteria to a risk level of 10^{-4} will or will not ensure the protection of the most sensitive uses in a given waterbody to which it intends to apply this provision. Some piscivorous birds and mammals, including threatened and endangered species and species that have been affected by toxic contamination in Oregon, may not be protected by this moving, and unknown, target. With this total lack of identification and analysis, this provision cannot constitute an approvable water quality standard consistent with the statute and EPA's implementing regulations.

f. *The Proposed Rule Creates an Ever-Changing "Criterion"*

The proposed rule creates an automatic change to the allowable concentration of a pollutant in a waterbody with only the provision that the concentration, after waiving the otherwise applicable criteria, is capped at a risk level of 10^{-4} after full mix. As such, it appears to be a quasi-variance provision, except that the Department is seeking to have and use this "variance" without the public participation requirements, three-year review, distinction between existing and designated uses, reasonable further progress, use attainability analysis, control of pollution sources, EPA review and action, etc. that are required provisions of a variance policy. See *infra* at 22-46. Instead, it seeks to automatically change a criterion with a risk level of 10^{-6} to one with a risk level as high as 10^{-4} without any review of that change as an alteration to a water quality standard. As such, it neither meets the requirements of a criterion nor of a variance.

This provision is not approvable as either a criterion or a variance because it seeks to circumvent the requirements that are associated with any change in water quality standards, namely public participation, state submission, and EPA action.[27] The provision quite clearly changes the level of protection afforded by state water quality standards – namely to a lower level of protection – without going through the Clean Water Act's mandatory approval process. EPA cannot allow such advance approvals as demonstrated by the court's decision in *Ohio Valley Environmental Coalition v. Horinko*, 279 F.Supp.2d 732, 764 (S.D.W.Va. 2003) ("*OVEC*"). In *OVEC*, EPA approved a state water quality standard provision that allowed the state to change its antidegradation policy in the future without EPA approval. *Id*. Just as in *OVEC*, Oregon would be asking EPA to violate the Clean Water Act by approving a criterion, general policy, or variance provision that allows Oregon to remove and replace approved water quality criteria, and to change the level of protection provided by Oregon's water quality standards, without going through the mandatory review and approval process. This is simply prohibited by the statute and by EPA's implementing regulations.

Moreover, based on the absurd statement that a change in risk level of two orders of magnitude does "not result in a significant change in human health protection," the provision would allow

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[27] 40 C.F.R. §§ 130.11(a), 131.20(b), (c), 131.6, 131.13, 131.21.

an increase of 3 percent in the concentration of a pollutant in a waterbody that is already impaired for that pollutant for each individual source seeking to use its provisions. The 3 percent increase is defined as an increase over the "ambient water body concentration immediately upstream of the discharge."[28] In other words, the rule defines the acceptable concentration by its location; each individual NPDES permittee would be allowed a 3 percent increase over the ambient concentration immediately upstream of the facility with the only limit placed on the number of these 3 percent increases based on whether upstream pollution sources had already reached the risk level of 10^{-4}. The proposed rule is unsupportable as a provision to Oregon's water quality standards.

Finally, as mentioned above, the rule would not produce an alternative superseding criterion. Instead, it would be unclear what the applicable criterion was for any given part of a waterbody. Establishing unknown criteria for unknown parts of waterbodies is inconsistent with the statute and implementing regulations.

g. *The Proposed Rule Would Impermissibly Sanction Mixing Zones in Impaired Waters*

The proposed rule allows for a 3 percent increase above the ambient concentration immediately upstream of the source that is calculated on 25 percent of the Willamette and Columbia rivers and 100 percent of all other waters. Although DEQ has not responded for further information about exactly what this means, it is clear that the 3 percent increase is calculated *after* the discharge has been "fully mixed" by the respective flows. This means that in the unknown length of a waterbody before the discharge is diluted or mixed, the concentration will actually be higher than the 3 percent increase over the risk level of 10^{-4}. It is impossible for the public to know now how much higher that risk will be or for what length of the receiving stream it will apply under the proposed rule. DEQ's issue paper sheds no light on either of these matters. However, it certainly throws into question how DEQ can conclude at the outset of the rule that its 3 percent increase is a *per se* insignificant change in human health protection. It is certain, however, that the result will be a plume (of unknown length) of an even higher than 3 percent concentration. There is little if any discernable distinction between such a plume and a mixing zone, other than the fact that a mixing zone generally allows an addition of mass. Despite the prohibition in this rule for sources adding mass, the rule's *de facto* mixing zones are impermissible. In fact, the distinction between the provisions of this rule and approved mixing zone policies may be that the plume authorized by the background concentration rule is not limited by any need to protect designated or existing uses, by its ability to dissipate quickly, by any site-specific analysis usually known as a mixing zone study, or by virtue of its being prohibited in an impaired water. In other words, this provision would authorize a mixing zone

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[28] Proposed OAR 340-041-0033(3)(a).

that no state mixing zone general policy could endorse.

EPA has described a mixing zone as "an allocated impact zone in the receiving water which may include a small area or volume where acute criteria can be exceeded provided there is no lethality (zone of initial dilution), and a larger area or volume where chronic water quality criteria can be exceeded if the designated use of the water segment as a whole is not impaired as a result of the mixing zone."[29] EPA policy "recommends that mixing zone characteristics be defined on a case-by-case basis after it has been determined that the assimilative capacity of the receiving system can safely accommodate the discharge."[30] Moreover, emphasizing the site-specific nature of the evaluation, EPA states that the "assessment should take into consideration the physical, chemical, and biological characteristics of the discharge and the receiving system; the life history and behavior of organisms in the receiving system; and the desired uses of the waters."[31] Mixing zones should be authorized with care, according to EPA, "so as to not impede progress toward the Clean Water Act goals of maintaining and improving water quality."[32] With regard to human health and toxic pollutants, EPA finds that "[m]ixing zones might be denied . . . where such denial is used as a device to compensate for uncertainties in the protectiveness of the water quality criteria or uncertainties in the assimilative capacity of the water body."[33] EPA further states that

> [c]areful consideration must be given to the appropriateness of a mixing zone where a substance discharged is bioaccumulative, persistent, carcinogenic, mutagenic, or teratogenic. Denial should be considered when bioaccumulative pollutants are in the discharge. . . . Where unsafe fish tissue levels or other evidence indicates a lack of assimilative capacity in a particular water body for a bioaccumulative pollutant, care should be taken in calculating discharge limits for this pollutant or the additivity of multiple pollutants. In such instances, the ecological or human health effects may be so adverse that a mixing zone is not

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[29] Memorandum from Robert Perciasepe, Assistant Administrator, to Water Program Directors, EPA Guidance on Application of State Mixing Zone Policies in EPA-Issued NPDES Permits, August 6, 1996.

[30] Handbook at 5-1.

[31] *Id.*

[32] *Id*. at 5-2.

[33] *Id*. at 5-8. *See also* EPA, Technical Support Document for Water Quality-based Toxics Control, EPA/505/2-90-001, March 1991 at 34.

appropriate.[34]

Mixing zones are prohibited in impaired waters. In its own draft issue paper DEQ agrees, stating:

> Intake credits, however, are not available for facilities which concentrate pollutants in their discharge above that which is found in the intake water. This increase in concentration occurs because some facility processes reduce the volume of water through evaporation (e.g. non-contact cooling), and thus, the same mass is mixed in a smaller volume of water, thereby increasing concentration. Due to this increase in concentration and because the background pollutant levels already exceed the water quality criteria (i.e., no dilution is available through mixing zones), the point source would be required to meet the water quality criterion for that pollutant at the "end-of-pipe."[35]

As EPA Region 9 has explained,

> If a waterbody is listed as impaired, and that listing is based on exceedances of water column criteria, a zone of mixing may be inappropriate. The permit writer should allow for dilution only when background concentrations are below the criteria, since no dilution would be available if the receiving water already exceeded the objective. Since there is no assimilative capacity a dilution factor (i.e., a mixing zone) is clearly not appropriate, and the final [water quality based effluent limit] should be the numeric objective applied end-of-pipe unless a Total Maximum Daily Load (TMDL) analysis has been performed and the Wasteload Allocation (WLA) assigns an alternative limit.[36]

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[34] *Id*. at 5-8 through 5-9.

[35] Oregon DEQ, Implementing Water Quality Standards for Toxic Pollutants in Clean Water Act Permits, Draft Issue Paper Human Health Toxics Rulemaking, August 10, 2010 at 14. *See also*, *id*. at 5 ("In instances where the water body contains concentrations of pollutants in excess of the water quality criteria, there would be no assimilative capacity and all comparisons are made at the point of discharge ("end of pipe"). This is of particular concern on stream segments that are listed as "impaired" on the 303(d) list, severely limiting the allowable amount of pollutant discharge.")

[36] EPA Region 9, Draft Guidance for Permitting Discharges into Impaired Waterbodies in Absence of a TMDL, May 9, 2000. EPA Region 9 has addressed the difficulties in re-issuing permits for existing sources that discharge to waters that have been identified as

Standing EPA's policies on their head, the Department's proposed rule seeks to sanction plumes of highly concentrated toxic chemicals – i.e., mixing zones – where there is no remaining assimilative capacity whatsoever. That is the primary intent of the rule. Moreover, the proposed rule seeks to allow this unacceptable and tortured version of mixing zones without even the site-specific analysis that is required for mixing zones into waters that actually have assimilative capacity. Here, DEQ proposes no site-specific analysis at all. DEQ's response to the need to not further impair already impaired waters is that there are other mechanisms (TMDLs) to clean them up. But this fails to address the fact that the proposed rule would sanction making the waters more polluted and would, in fact, impede whatever progress Oregon might make some day in cleaning up its impaired waters. It also ignores the fact that until a TMDL is developed and it is implemented, DEQ's proposed rule allows an increase in pollution levels and risk to designated and existing uses. Given DEQ's track record on implementing TMDLs, which could be fairly established as there is no implementation, it is certain that any decreases in water quality are likely to linger, if not worsen, over a period of decades before, if ever, the water pollution is restored to acceptable levels. DEQ's proposed rule would further increase the uncertainty of protection provided by its standards by allowing increases of toxic concentrations in impaired waters and, for the 50 percent of the criteria that will be superseded by quantitation limits, will actually allow far in excess of the numeric criteria the Commission proposes to adopt.

In addition to its other qualities, DEQ's proposed rule is actually a mixing zone superimposed on yet another mixing zone. First, the rule would allow a discharger to increase the level of toxic pollution from a risk level of 10^{-6} to a risk level of 10^{-4} in an stretch of waterbody of an unknown length. As this source-specific high carcinogen risk plume would be authorized in the water quality standards and would not affect the underlying standards it meets the definition of a mixing zone. Then, because the rule would only cap the additional risk at the point after the discharge has "fully mixed" with the already-impaired receiving stream, it sanctions a plume of unknown length at a risk level higher than 10^{-4} prior to the point of full mixing. Thus, the rule proposes two mixing zones to the otherwise applicable standards. EPA has never sanctioned a water quality standard that itself automatically changes to reflect a mixing zone plus an additional mixing zone with none of the protections that approved mixing rules contain, namely any site-specific analysis, information, and protections.

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impaired prior to the development of a TMDL. *Id*. Unlike DEQ's policy rationale for the proposed rule, Region 9 has noted that "any discharger contributing to the impairment, at whatever level, shares in the burden of bringing the water body back into attainment of beneficial uses. Effective implementation of this guidance will ensure that reasonable progress will be made towards attainment of water quality standards or, at a minimum, prevent increased of the impairment." *Id*. Recognizing TMDL development can take years, Region 9's policy combines water quality-based expectations and compliance schedules to give dischargers the opportunity to achieve the necessary reductions in the basin-wide context provided by the TMDL.

h. ***The Proposed Rule is Inconsistent with Oregon's Mixing Zone Rules***

The proposed mixing zone known as a background pollution concentration allowance is also inconsistent with Oregon's existing mixing zone rules set out at OAR 340-041-0053. First, unlike Oregon's existing mixing zone rules, the proposed rule makes a determination that in no instance does a source discharging consistent with its terms represent a "significant change in human health protection" despite its allowing concentrations in Oregon waters that are over two magnitudes beyond otherwise applicable criteria.[37] While the proposed rule goes on to say that, based on this advance determination, DEQ "may" allow an allowance pursuant to the rule, the discretion to disallow the applicable conditions of the rule has already been waived by the determination's having been embedded in the rule itself. In contrast, Oregon's existing mixing zone rules create the discretion for DEQ to allow – or not allow – a mixing zone.[38]

The proposed rule contains no limits other than the risk level cap, requires no findings by the Department, makes no restrictions on the risks that can be created within the allowable plume, requires no information from the permittee, and requires that no information be provided to the public in the applicable NPDES permit. In contrast, Oregon's existing mixing zone rules allow DEQ to require information upon which to assess whether a plume of pollution will harm beneficial uses.[39] Likewise, the existing mixing zone rules establish numerous conditions that cannot be allowed in or immediately outside mixing zones, such as limits on toxicity[40] and a requirement to meet a variety of narrative criteria.[41] The existing rules call for the Department to "assess the biological, physical, and chemical character of receiving waters, effluent, and the most appropriate placement of the outfall, to protect instream water quality, public health, and other beneficial uses."[42] The existing mixing zone rules require that the limits of a mixing zone be described in the wastewater discharge permit, including the location, surface area, and volume

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[37] Proposed OAR 340-041-0033(6).

[38] OAR 340-041-0053(1) ("The Department may allow a designated portion . . . ."); (2) ("The Department may suspend all or part of the water quality standards, or set less restrictive standards in the defined mixing zone . . . .")

[39] OAR 340-041-0053(2)(e)(A-E) & (2)(f).

[40] *See, e.g.,* OAR 340-041-0053(2)(a)(A) & (2)(b)(A).

[41] *See, e.g.*, OAR 340-041-0053(2)(a)(B-D), (2)(c)(A-E).

[42] *See, e.g.,* OAR 340-041-0053(2)(c).

of a mixing zone area.[43] In short, Oregon's existing mixing zone rules provide a far greater assurance of information, analysis, environmental protection, and public disclosure than the proposed rule which does not even require that DEQ establish the location of the plume allowed by the rule. Finally, as a water quality standard, DEQ would retain the discretion to allow a mixing zone suspending the levels allowed by the proposed rule because nothing in the proposed rule precludes the application of OAR 340-041-0053 to a source discharging pursuant to it.

2. Lack of Technical Analysis

DEQ has not provided an analysis, as required by EPA regulations governing the revision of water quality standards, explaining why an increase of 3 percent per source over the ambient concentrations of toxic pollutants up to a risk level of 10^{-4} is not a "significant change in human health protection" that has an unacceptable and adverse effect on human health. Nor has DEQ addressed the fact that for most toxic pollutants, the human health criteria function as the *de facto* aquatic life criteria. It has simply concluded that there is no significant risk. This is not a sufficient basis for the Commission to proceed to rulemaking on a proposal that so clearly undermines key provisions of federal law.

a. *DEQ's Evaluation of the Risk to Human Health Posed by the Provision is Inadequate*

In the July 8, 2010 draft of its issue paper for this proposed rule, DEQ states that it "believes that a 1% or less additional increase in concentration for a spatially limited section of river where there is no increase in the mass load of the pollutant in the water body would not be reasonably likely to increase human health risk."[44] The remaining rationale concerns the various health-conservative aspects of calculating human health criteria, e.g., lifetime exposure. DEQ does not explain why it can come to this conclusion that the additional increases will be "spatially limited" since it has not been able to explain the spatial extent of the concentration increases. It does not explain why the increase which is an addition to the ambient levels, not the criteria levels, does not pose a threat to human health. Instead, it concludes that "[t]he human health risk that is present [is] due to the fact that the river exceeds the criteria and the sources of the pollutant contributing to the exceedence should be addressed. If a community water supply intake is present in the reach of the stream that exceeds the criteria, they should take appropriate action. The insignificant incremental increase that would be allowed under this provision would not

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[43] *See, e.g.,* OAR 340-041-0053(2)(c).

[44] Oregon DEQ, draft NPDES Permitting Tools for Human Health Toxics Rulemaking, July 8, 2010 at 26. This version predated the change from 1 to 3 percent.

change the need for the water source to address the issue."[45] This is a nonsensical analysis. DEQ is essentially saying, it doesn't matter what criteria we pick because we have to do a TMDL and clean up the impaired waters some day anyway. In the meantime, what's a little more risk? Or, even a lot? And, why do we have to calculate the additional risk anyway? And, by the way, if some source of drinking water doesn't like the pollution levels, it's up to them to do better treatment, not us to protect the quality of the water in Oregon's streams. This discussion demonstrates a level of arrogance better suited to Oregon's industrial dischargers than Oregon's water quality protection agency.

In a previous paper given to the advisory committee,[46] DEQ made some calculations based on flows, criteria (not superseding quantitation limits), and projected concentration increases based on 1 and 3 percent allowable increases. DEQ apparently sought to demonstrate that the increases would be negligible. DEQ chose for its illustration the pollutant dieldrin, with a criterion of 0.000052 µg/L. DEQ started by noting that if the ambient water concentration were 0.007 µg/L, a 1 percent increase would be 0.00707 µg/L and a 3 percent increase would be 0.00721 µg/L as "final in-stream concentrations." (It is unclear how far downstream one would have to go to find these final concentrations.) It then calculated for three stream scenarios, effluent concentrations of 0.041 µg/L, 6 µg/L, and 0.020 µg/L as results for a 1 percent concentration increase and 0.11 µg/L, 18 µg/L, and 0.054 µg/L for a 3 percent concentration increase. Looking first at the "final in-stream concentrations," the numbers *appear* to be negligible: concentrations of 0.00707 and 0.00721 – a difference of 0.00014 µg/L separating 1 and 3 percent increases. These are all *small-looking* numbers. However, what DEQ fails to do is to evaluate these numbers in relationship to the criterion the Commission proposes to adopt to protect human health, which is its definition of safety: 0.000052 µg/L. That is a much smaller number. Likewise, DEQ says nothing about the predicted effluent concentrations in comparison to the criterion – 0.11 µg/L for small streams compared to a criterion of 0.000052 µg/L. That comparison demonstrates the significance of the concentrations this rule would sanction as not posing a threat to human health. Nor does DEQ mention how far downstream it will be before the higher-than-3-percent effluent concentrations become the "final in-stream concentrations."

In advisory committee meetings the example of the Columbia Slough was raised as a possible location where there could be numerous applications of this provision. DEQ provided no answers but merely states in its updated issue paper that "[o]nly a very small portion of the fish

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[45] *Id.*

[46] Issue paper draft dated June 22, 2010 at 18-20. It is unclear how much of this analysis is consistent with changes made to the rule language.

eaten, if any, would be affected by the 3% allowed increase."[47] DEQ has not demonstrated that all people who consume fish from Oregon waters actually move around and obtain those fish from many different waterbodies. Certainly, NWEA efforts to learn about fish consumption in the Columbia Slough would suggest otherwise. For example, some people fishing there were consuming large amounts of carp, returning with regularity. Likewise, NWEA located a person with a commercial crayfish license who was catching large amounts of crayfish from the Willamette River immediate downstream of the McCormick and Baxter superfund site which he fed to an extended family of foster children. People with limited means and therefore limited means of transportation would be more likely to return to convenient fishing grounds than to roam the state looking for new places to fish.

DEQ also claims people who eat a large amount of fish and who might be, but will not be, affected by this proposed rule, obtain them "*often* [from] marine waters."[48] DEQ does not provide any information to support that claim. Moreover, the claim is at odds with DEQ's supporting rationale set out in its recent arsenic proposal. There, in choosing its BCFs for freshwater and saltwater, DEQ argued that "people eat a mixture of finfish and shellfish from marine waters" and "mollusks (oyster and mussel) comprise a *small portion* of the 175 g/d fish consumption rate."[49] As we pointed out in our comments on that proposal[50], DEQ provided no support for this claim. However, DEQ applied an opposite logic when it evaluated the appropriate arsenic BCF for the freshwater criterion. For freshwater, DEQ assumed that people who must be protected from arsenic in consuming fish from freshwater consumed *no* saltwater organisms whatsoever.

b. *The Proposed Provision Provides Even Less Protection When Current Quantitation Limits are Factored In*

DEQ's analysis is even more flawed in light of the quantitation limits that actually determine how the numeric criteria will be applied. The quantitation limits will dictate whether a waterbody is deemed to be in an impaired state to begin with and whether there will be water

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[47] DEQ Issue Paper: Implementing Water Quality Standards for Toxic Pollutants in NPDES Permits: Human Health Toxics Rulemaking, December 29, 2010, at 46.

[48] *Id.* (emphasis added).

[49] ODEQ, Draft Water Quality Standards Review and Recommendations: Arsenic, February 1, 2011 at 12 (emphasis added).

[50] NWEA Comments to ODEQ Re: Proposed Rule Amendment OAR 340-041-0033 Toxic Substances (Arsenic), February 16, 2011.

quality-based effluent limits for NPDES permittees. For the roughly half the criteria where the quantitation limit is higher and therefore for all practical purposes supersedes the adopted numeric criteria based on fish consumption, the human health criteria chosen by the Commission will not be used to list waters as impaired nor will permit limits be based on them. The difference between the criteria and the quantitation limits can be significant. For example, the quantitation limit for dieldrin, the pollutant in the previous example, is 0.01 µg/L compared to the proposed human health criterion of 0.000052 µg/L. For all practical purposes, the criterion for dieldrin will be the quantitation limit, a far cry from the human health criterion based on 175g/day of fish consumption. If a waterbody is listed as impaired because it has concentrations at or over the quantitation limit, those concentrations may be – as the example with dieldrin illustrates – *many orders of magnitude above* the adopted criterion. As a result, for those carcinogens with quantitation limits that exceed the criteria, NPDES-permitted sources will already be allowed to discharge far above the acceptable levels.

DEQ has not taken into consideration that half the toxic pollutants regulated under the new proposed numeric criteria will not be regulated at those levels but instead will be regulated at risk levels far in excess of 10^{-6} for carcinogens and acceptable human health impacts of noncarcinogens. As a result, the risk to human health from the cumulative impact of these toxic pollutants will be greater than if all the pollutants were regulated at their associated numeric criteria. Creating an overlay of additional risk – carcinogens at the 10^{-4} risk level – over and above the under-regulated toxic pollutants results in a yet greater risk, one DEQ has not acknowledged or evaluated even for the most ubiquitous of these toxic pollutants.

Moreover, there is no indication from the proposed rule language how DEQ intends the rule to apply to pollutants for which the quantitation limits are higher than the numeric criteria. Given that DEQ makes up rules as it goes along – for example that it believes numeric criteria for the protection of human health are inapplicable for stormwater sources, or that it has not in the past set limits for permittees based on human health criteria – one is left with only one's imagination as to how DEQ might interpret this rule in the future. DEQ should state unambiguously what the policy will be.

What DEQ fails to see is that the lack of adequate monitoring technology already provides a large cushion between NPDES sources and meeting water quality standards. For the half of the new criteria where the quantitation limits are higher than the criteria, waters that are not listed as impaired may very well be impaired by levels of pollution that defy detection. In all of those instances, NPDES permittees can discharge pollutants with virtual impunity without even obtaining coverage under this background concentration provision.

D. Proposed Revisions to OAR 340-041-0059 – Variances

DEQ proposes to delete its existing variance rule and replace it with the following:

(1) Applicability. Subject to the requirements and limitations set out in sections (2) through (8) below, a point source may request a variance. The director of the department will determine whether to issue a variance for a source covered by an existing NPDES permit. The commission will determine whether to issue a variance for a discharger that does not have a currently effective NPDES permit.

(a) The variance applies only to the specified point source permit and pollutant(s); the underlying water quality standard(s) otherwise remains in effect.

(b) The department or commission may not grant a variance if:

(A) The effluent limit sufficient to meet the underlying water quality standard can be attained by implementing technology-based effluent limits required under sections 301(b) and 306 of the federal Clean Water Act, and by implementing cost-effective and reasonable best management practices for nonpoint sources under the control of the discharger; or

(B) The variance would likely jeopardize the continued existence of any threatened or endangered species listed under section 4 of the Endangered Species Act or result in the destruction or adverse modification of such species' critical habitat; or

(C) The conditions allowed by the variance would result in an unreasonable risk to human health; or

(D) A point source does not have a currently effective NPDES permit, unless the variance is necessary to:

(i) prevent or mitigate a threat to public health or welfare;

(ii) allow a water quality or habitat restoration project that may cause short term water quality standards exceedances, but will result in long term water quality or habitat improvement that enhances the support of aquatic life uses;

(iii) provide a widespread socioeconomic benefit that is demonstrated to outweigh the environmental cost of lowering water quality. This analysis is comparable to that required under the antidegradation regulation contained in OAR-041-0004(6)(b); or

(iv) remediate water contamination pursuant to the Comprehensive Environmental Response Compensation and Liability Act (CERCLA, 42 U.S.C. 9601 et seq. as

amended through July 1, 2006), or the Resource Conservation and Recovery Act (RCRA, 42 U.S.C. 6901 et seq. as amended through July 1, 2006); or

(E) The information and demonstration submitted in accordance with section (5) below does not allow the department or commission to conclude that a condition in section (2) has been met.

(2) Conditions to Grant a Variance. Before the commission or department may grant a variance, it must determine that:

(a) no existing use will be impaired or removed as a result of granting the variance and

(b) attaining the water quality standard during the term of the variance is not feasible for one or more of the following reasons:

(A) Naturally occurring pollutant concentrations prevent the attainment of the use;

(B) Natural, ephemeral, intermittent, or low flow conditions or water levels prevent the attainment of the use, unless these conditions may be compensated for by the discharge of sufficient volume of effluent discharges to enable uses to be met without violating state water conservation requirements;

(C) Human-caused conditions or sources of pollution prevent the attainment of the use and cannot be remedied or would cause more environmental damage to correct than to leave in place;

(D) Dams, diversions, or other types of hydrologic modifications preclude the attainment of the use, and it is not feasible to restore the water body to its original condition or to operate such modification in a way which would result in the attainment of the use;

(E) Physical conditions related to the natural features of the water body, such as the lack of a proper substrate, cover, flow, depth, pools, riffles, and unrelated to water quality preclude attainment of aquatic life protection uses; or

(F) Controls more stringent than those required by sections 301(b) and 306 of the federal Clean Water Act would result in substantial and widespread economic and social impact.

(3) Sections (2)(b)(A) and (2)(b)(C) of this rule include, but are not limited to, circumstances in which the department determines that all the following are demonstrated to be true:

(a) The background concentration of the pollutant to which the variance applies exceeds the underlying water quality standard for that pollutant;

(b) The background concentration of the pollutant would exceed the underlying water quality standard without pollutant loadings from sources regulated by the NPDES permit program; and

(c) Enforceable controls on other pollutant sources are not likely to achieve the underlying water quality standard within the term of the variance.

(4) Variance Duration.

(a) The duration of the variance shall not exceed the term of the NPDES permit. If the permit is administratively extended, the permit effluent limits and any other requirements based on the variance and associated pollutant reduction plan will continue to be in effect during the period of the administrative extension. DEQ will give priority to NPDES permit renewals for permits containing variances and where a renewal application has been submitted to the director at least one hundred eighty days prior to the NPDES permit expiration date.

(b) When the duration of the variance is less than the term of the permit, the permittee must be in compliance with the specified effluent limitation sufficient to meet the underlying water quality standard upon the expiration of the variance.

(c) A variance is effective only after EPA approval. The effective date will be specified in a NPDES permit or order of the commission or department.

(5) Variance Submittal Requirements. To request a variance, a permittee must submit the following information to the department:

(a) A demonstration that attaining the water quality standard for a specific pollutant is not feasible for the requested duration of the variance based on one or more of the conditions found in section (2)(b) of this rule;

(b) A description of treatment or alternative options considered to meet the applicable underlying water quality standard, and a description of why these options are not technically or financially feasible;

(c) Sufficient water quality data and analyses to characterize ambient and discharge water pollutant concentrations;

(d) A proposed pollutant reduction plan that includes any actions to be taken by the permittee that would result in reasonable progress toward meeting the underlying water quality standard. Such actions may include proposed pollutant offsets or trading or other proposed pollutant reduction activities, and associated milestones for implementing these measures. Pollutant reduction plans will be tailored to address the specific circumstances of each facility and to the extent pollutant reduction can be achieved; and

(e) If the discharger is a publicly owned treatment works, a demonstration

of the jurisdiction's legal authority (such as a sewer use ordinance) to regulate the pollutant for which the variance is sought. The jurisdiction's legal authority must be sufficient to control potential sources of that pollutant that discharge into the jurisdiction's sewer collection system.

(6) Variance Permit Conditions. Effluent limits in the discharger's permit will be based on the variance and not the underlying water quality standard, so long as the variance remains effective. The department shall establish and incorporate into the discharger's NPDES permit all conditions necessary to implement and enforce an approved variance and associated pollutant reduction plan. The permit must include, at minimum, the following requirements:

(a) an interim permit limit or requirement representing the best achievable effluent quality based on discharge monitoring data and which is no less stringent than that achieved under the previous permit;

(b) a requirement to implement any pollutant reduction actions approved as part of a pollutant reduction plan submitted in accordance with section (5)(d) above and to make reasonable progress toward attaining the underlying water quality standard(s);

(c) any studies, effluent monitoring, or other monitoring necessary to ensure compliance with the conditions of the variance; and

(d) an annual progress report to the department describing the results of any required studies or monitoring during the reporting year and identifying any impediments to reaching any specific milestones stated in the variance.

(7) Public Notification Requirements.

(a) If the department proposes to grant a variance, it must provide public notice of the proposal and hold a public hearing. The public notice may be included in the public notification of a draft NPDES permit or other draft regulatory decision that would rely on the variance;

(b) The department will publish a list of all variances approved pursuant to this rule. Newly approved variances will be added to this list within 30 days of their effective date. The list will identify: the discharger; the underlying water quality standard the pollutant reduction plan was developed to achieve; the waters of the state to which the variance applies; the effective date and duration of the variance; the allowable pollutant effluent limit granted under the variance; and how to obtain additional information about the variance.

(8) Variance Renewals.

(a) A variance may be renewed if the permittee:

(A) makes a renewed demonstration pursuant to section (2) of this rule that attaining the water quality standard continues to be

> infeasible,
> (B) demonstrates that all conditions and requirements of the previous variance and actions contained in the pollutant reduction plan are being met, and
> (C) meets all other requirements of this rule.
> (b) A variance renewal must be approved by either the department director or the commission, and by EPA.
> (c) Renewal of the variance shall be denied if the permittee is not in compliance with the conditions of the previous variance, including those specified in section (6) of this rule, or
> otherwise does not meet the requirements of this rule.[51]

DEQ has proposed a rule that has some environmentally-protective attributes but also some provisions that meet its needs for administrative convenience and protection of permittees. In doing so, it has provided considerably less protection for human health and the environment than the law requires. As it is likely that many permittees will be seeking variances over the years to come, and likely for many permitting cycles into the future, this rule needs to be clear and ensure the highest level of public health protection.

1. The Proposed Time Period of Variances is Impermissible and Undercuts the Statutory Requirements of Triennial Review

DEQ's proposed variance rule contains a provision that allows the duration of a variance to be as long as "the term of the NPDES permit," which normally could not be in excess of five years. However, DEQ has also added that "[i]f the permit is administratively extended, the permit effluent limits and any other requirements based on the variance and associated pollutant reduction plan will continue to be in effect during the period of the administrative extension."[52] DEQ is clearly providing for a variance the terms of which run with any administrative extension of an NPDES permit for an unlimited period of time. Allowing a variance to remain in effect for five years without other necessary provisions discussed below is inconsistent with the statute and EPA regulations and guidance. Allowing a variance to have an *unlimited time frame*, as DEQ has proposed, is not only inconsistent, it is absurd.

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[51] Proposed OAR 340-041-0059.

[52] Proposed OAR 340-041-0059(4).

EPA has consistently defined variances as lasting for three years, sometimes up to five.[53] Where it has allowed variances to exceed three years, EPA has not allowed them to be longer than five years.[54] Where a variance is allowed to go beyond three years, a three-year review from the date of the last triennial review submission to EPA is required.[55] The reason for this is simple; it corresponds to EPA's requirement that water quality standards that do not support the Act's uses must be reviewed every three years.[56] As a variance is the equivalent to a determination that a

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[53] *See, e.g.,* EPA, Guidance: Coordinating CSO Long Term Planning with Water Quality Standards Reviews, EPA-833-R-01-002, July 31, 2001 [hereinafter "CSO Guidance"] at 34; EPA, Guidance for State Implementation of Water Quality Standards for CWA Section 303(C)(2)(B), December 1988 [hereinafter "Guidance for Implementation"] at 6; EPA, Memorandum from Kenneth M. MacKenthun, EPA Re: Definition of Water Quality Standards Terms, July 3, 1979 [hereinafter "Definition"] at 1; EPA, National Assessment of State Variance Procedures, November 1990 [hereinafter "National Assessment"] at 1; EPA NPDES Permit Writers' Manual, EPA-833-B-96-003, December 1996 at 177. In its Guidance for Implementation, EPA noted that "[w]ithout a short term variance procedure, there is a danger that permits may contain excessively long compliance dates which don't force the attainment of water quality standards." *Id.* at 6. Here EPA is speaking specifically about attainment of standards for *toxic contaminants* and expressing concern that use of compliance schedules – which are perceived by permittees as more onerous than variances – will allow the passage of too much time before point sources comply with toxic criteria.

[54] *See e.g.*, Great Lakes Initiative [hereinafter "GLI"] Pt. 132, App F, Procedure 2 §B; CSO Guidance at 34.

[55] 40 C.F.R. § 131.20(a); GLI Pt. 132, App F, Procedure 2 §B; CSO Guidance at 34; EPA Water Quality Standards Handbook, 1985 [hereinafter "Handbook"] at 5.3; GLI Supplementary Information Document, EPA-820-B-95-001, March 1995 [hereinafter "GLI SID"] Sec. VIII.B.2.c; Water Quality Standards Regulation Proposed Rule, Advance Notice of Proposed Rulemaking, 63 Fed. Reg. 36741, July 7, 1998 [hereinafter "ANPRM"] at 36759; EPA Memorandum from Patrick Tobin, EPA, to Regional Water Division Directors Re: Three-Year Water Quality Standards Reviews, September 6, 1983 [hereinafter "Three-year Reviews"] at 1; EPA Memorandum from Catherine A. Winer to Dale Vodehnal Re: Request for Views on Allowable Duration of Water Quality Standards Variances, January 24, 1992, [hereinafter "Request for Views"] at 2.

[56] "The State shall from time to time, but at least once every three years, hold public hearings for the purpose of reviewing applicable water quality standards and, as appropriate, modifying and adopting standards. *Any water body segment with water quality standards that do not include the uses specified in 101(a)(2) of the Act shall be re-examined every three years* to

source is not meeting and will not be required to meet water quality standards, it is similar to or the same as a determination that the Act's uses are not intended to be met. Where five year variances have been allowed, such as the Great Lakes Initiative (GLI) rules, EPA has additionally required a re-opener clause in associated NPDES permits to ensure that the triennial review is meaningful.[57] In 2007, EPA Region I disapproved Vermont's proposed variance procedures because "it does not ensure that a waiver from meeting criteria is reviewed at a minimum of once every three years consistent with 40 C.F.R. § 131.20," finding that this omission, *inter alia*, rendered the variance provision "inconsistent with federal law."[58] Likewise, for the same reason, the variance holder should be required to obtain information that can be used in that review, as discussed further in the "reasonable progress" discussion below. So, for example, EPA's policy on conditions of a variance for CSO-affected waters emphasizes the importance of obtaining new information.[59] In a similar vein, the GLI also explicitly notes that a renewal of a variance is subject to all of the same findings and procedures as an original variance.[60] In this way, the GLI rules ensure that more, rather than less, information is the basis upon which any extensions to variances will be allowed.

In contrast, DEQ's variance policy proposes to allow variances to run potentially forever because *nothing* compels a state to issue a permit renewal for an administratively extended permit. In addition, unfortunately we are not aware of any way in which a third party can compel the termination of an administratively extended NPDES permit. The Department can *only* administratively extend an NPDES permit for which the permittee has properly and timely submitted an application for renewal, thus rendering the provisions in proposed section (4)(a) superfluous.[61] (This provision appears to have been inserted to make the Department look as if

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determine if any new information has become available." 40 C.F.R. § 131.20(a) (emphasis added).

[57] GLI Pt. 132, App F, Procedure 2 §F.4, GLI SID" Sec. VIII.B.2.c.

[58] Letter to Peter Young, Chair, Vermont Natural Resources Board, from Stephen S. Perkins, Office of Ecosystem Protection, EPA Region I, Re: Limited Duration Activities Provision of the Vermont Water Quality Standards, June 11, 2007.

[59] CSO Guidance at 34.

[60] GLI Pt. 132, App F, Procedure 2 §H; ANPRM at 36759.

[61] Proposed OAR 340-041-0059(4)(a) ("DEQ will give priority to NPDES permit renewals for permits containing variances and where a renewal application has been submitted to the director at least one hundred eighty days prior to the NPDES permit expiration date.")

it's being tough on permittees' submitting timely applications for renewal.) After the permittee has made that submission for renewal and the staff has granted an administrative extension, there is no time period at which the administrative extension terminates and there is no legal action that can terminate the permit. In other words, an administratively extended permit is unlimited. Therefore, a variance that runs with an administrative extended permit is equally unlimited, giving the lie to the notion that such a variance is "temporary."

In addition to this gaping hole in the proposed rule, the rule (1) does not require triennial re-evaluation, (2) it does not include a permit re-opener specific to triennial review findings, and (3) it does not require the permittee to gather information that could ensure a triennial review – or even a renewal of a variance – was meaningful. The lack of these three items renders the proposed variance rule inconsistent with the Clean Water Act, EPA's implementing regulations, and previous EPA policy. It also makes a mockery of Oregon's claim to be protecting public health and the environment by issuing new stringent numeric criteria for toxics.

2. The Proposed Variance Rule is Incorrectly Limited in its Requirement for All Cost-Effective and Reasonable Nonpoint Source Controls

a. *DEQ Incorrectly Reads Federal Restrictions that Establish When a Variance is Prohibited*

Despite the Commission's directive to DEQ to include nonpoint source controls in its proposals to implement the new human health toxic criteria, DEQ has proposed a variance rule that limits the requirement for cost-effective and reasonable best management practices for nonpoint sources to those under the control of the discharger seeking the variance.[62] This approach is partially consistent with the GLI rules but wholly inconsistent with the EPA rules that apply to non-GLI states such as Oregon. As temporary changes to water quality standards, variances are issued pursuant to the provisions in EPA's rules that apply to removing or altering use designations.[63] While these designated use removal provisions require the use of "all cost-effective and reasonable nonpoint source controls,"[64] DEQ has chosen to use *part* of the language from the GLI rules instead; these rules only require pollution controls on nonpoint sources over

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[62] Proposed OAR 340-041-0059(1)(b)(A).

[63] 40 C.F.R. § 131.10.

[64] 40 C.F.R. § 131.10(h)(2).

which the discharger has control.[65]

EPA has stated repeatedly that variances are subject to the "same substantive and procedural requirements as removing a designated use."[66] This use provision applies to issuance of a variance as a temporary removal of designated uses governed by the same EPA regulations.[67] In the GLI rules, this requirement was changed to mean that BMPs must be implemented (1) *by the discharger (2) before* a variance is granted, two requirements that are specific to the GLI, one of which is arguably less stringent (the scope) and one of which is arguably more stringent (the timing). In contrast, the national regulations that apply to Oregon are consistent with, and identical to, the Tier II antidegradation protection language which requires all "cost-effective and reasonable nonpoint source controls" for nonpoint sources – *not* limited to those outside the control of any individual point sources.[68] Because the use removal provisions apply to water bodies and variances apply only to the specific discharger seeking the temporary suspension of one or more standards, DEQ cannot suspend requirements of the water quality standards on other sources – point or nonpoint – as an outcome of the variance. Therefore, the BMP requirements of 40 C.F.R. §131.10(h)(2) apply to all nonpoint sources in the consideration of a variance application, not just those under the control of the applicant. EPA has supported this position by noting that in issuing variances, the economic impacts that can be considered are only those that result from treatment beyond that required by technology-based regulations. This includes both technology-based limits on point source discharges *as well as BMPs to nonpoint sources*.[69]

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[65] GLI Pt. 132, App F, Procedure 2 §A.3.

[66] Handbook at 5.3; EPA Interim Economic Guidance Workbook, EPA-823-B-95-002; March 1995 [hereinafter "Economic Guidance"] at 1-3; CSO Guidance at 34.

[67] ANPRM at 36760.

[68] EPA Memorandum from Tudor Davies, EPA, to Water Management Division Directors, February 22, 1994, Re: Interpretation of Federal Antidegradation Regulatory Requirement [hereinafter "Interpretation"] at 2.

[69] Economic Guidance at 1-1. ("This workbook provides guidance for those seeking to . . . obtain a variance based on economic considerations, or to lower water quality in a high-quality water. In addition, it provides guidance to States and EPA regions responsible for reviewing requests for variances and modifications to designated uses, and for approval of antidegradation analyses.

. . .

The economic impacts considered are those that result from treatment beyond that required by technology-based regulations. Since water quality cannot be lower than that resulting from

In addition, while the GLI's more limited BMP requirements for permittees seeking variances must be met *prior* to issuance of the variance, the clear language of the non-GLI language that applies to Oregon discusses the State's finding that designated uses "*will be* attained . . . by implementing [nonpoint source controls],"[70] a finding related to *future* attainability. To the extent Oregon has enforceable controls on nonpoint sources, they must be implemented as part of the Tier II protections. Likewise, to the extent that Oregon has enforceable controls on nonpoint sources, they must be implemented when the Department or a source seeks to remove designated uses through the provisions of 40 C.F.R. § 131.10, including a temporary removal in a variance.

In claiming to follow the GLI, however, the Department jettisons the more stringent GLI requirement that the nonpoint source controls be achieved by the discharger *before* the variance is granted. Instead, DEQ's proposed language is at best ambiguous as to the timing of such controls and could be read to be concurrent or in the future.[71] Thus, DEQ has proposed to be less protective than either the GLI or the nationally-applicable regulations by narrowing the scope of nonpoint sources to be controlled and by allowing those controls to happen concurrently or in the future. Given, in addition, DEQ's reluctance to specify what types of management practices are cost-effective or reasonable for nonpoint sources, one can only come to the reluctant conclusion that DEQ intends to ignore this provision of its rules. In fact, the way in which the proposed rule has been drafted does naturally lead to that conclusion. First, there is nothing in the variance application submittal requirements in subsection (5) that requires the permittee to submit information to DEQ when seeking a variance concerning the nonpoint sources under its control, what practices are currently in place for those sources, and what additional practices might be considered reasonable and cost-effective. Without the information's having been submitted, it is not clear how DEQ will make the initial determination required by OAR 340-041-0059(1)(b)(A). Likewise, there is nothing in subsection (6) that requires DEQ to issue a variance to a permittee that contains the requirements to control the nonpoint sources under the permittee's control. There is nothing in the rule proposal that explains how Oregon will determine whether practices for nonpoint sources under the control of the permittee are sufficient to meet the rule's requirements that would otherwise preclude the Department from issuing a variance.

In addition to the legal reasons why DEQ should not issue the proposed language that restricts the nonpoint source controls to those under the control of the discharger are the policy reasons.

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technology-based limits applied to direct and indirect point source discharges and reasonable Best Management Practices (BMP) applied to nonpoint sources, these are considered to be the baseline.")

[70] 40 C.F.R. §131.10(h)(2) (emphasis added).

[71] Proposed OAR 340-041-0059(1)(b)(A) ("by implementing . . . practices").

Despite the Commission's October 2008 directive, DEQ plans to take no actions that will control the release of toxics from nonpoint sources, while it proceeds to issue variances and other forms of regulatory relief to point sources. As demonstrated above, EPA regulations link the fate of point and nonpoint sources together. When DEQ proposes to separate their fate, it can be sure that the result will be a continuation of the existing ineffective and nonexistent nonpoint source practices and the dirty water those sources create. The perpetuation of the same approach used by DEQ in its TMDLs – pretending that nonpoint sources are or will reduce loads – is now proposed to be incorporated into the variance rules, from which no good will come.

b. *The Proposed Rule Misconstrues the Conditions Under Which the State Can Grant a Variance*

The proposed rule mirrors the use attainability provisions at 40 C.F.R. § 131.10(g), which the exceptions discussed in these comments, by setting out six provisions which might prevent a permittee from attaining water quality standards.[72] In subsection (3) of the proposed rule, the Department then elaborates on the meaning of these federal limitations that, together, address naturally occurring concentrations or human sources that cannot be remedied or would cause more environmental damage to remedy. DEQ proposes that three circumstances in combination meet both of these tests. The circumstances are, that the background concentration exceeds the standard, it would exceed the standard without any contributions from point sources, and "[e]nforceable controls on other pollutant sources are not likely to achieve the underlying water quality standard within the term of the variance." In other words, human sources that cannot be remedied or would cause more damage to remedy are the equivalent of nonpoint sources where enforceable controls are not likely to achieve the standard within the term of the variance. This leaves completely open what the Department means by "enforceable controls" on nonpoint sources, making it impossible to comment on what the agency intends. Is DEQ going to find that there are no enforceable controls on nonpoint sources thereby waiving a magic wand over all variance applications where nonpoint sources are the contributing source? Will DEQ make a finding as to the timeframe that enforceable controls are likely to achieve the underlying standards or will it merely assume they will not? Will DEQ point to its own regulations that cap the requirements of logging and agricultural polluters as a demonstration that nonpoint source-caused pollution cannot be remedied?

3. Variances Cannot Be Allowed for New Sources

DEQ has proposed that variances be allowed for new sources under four circumstances.[73] It has

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[72] Proposed OAR 340-041-0059(2)(b)(A-F).

[73] Proposed OAR 340-041-0059(1)(b)(D)(i-iv).

not explained why, as a matter of policy, the state would not want to require new sources to either comply at the date of initial discharge or be subject to compliance schedules. With a compliance schedule, a permittee is held to a date certain to meet an effluent limit certain. Surely this is the standard to which Oregon would want to hold new pollution sources. Instead, DEQ proposes to allow new sources to discharge into impaired waters, contributing additional loading that will make clean-up and restoration of water quality yet more difficult, by giving them a "temporary" alteration to water quality standards through a variance. This is clearly an attempt to avoid the constraints that EPA's NPDES permitting regulations already place on new sources in just this situation. Using Oregon's standards to avoid the permitting regulations is both impermissible and poor public policy.

EPA's regulations prohibit the agency issuing an NPDES permit to do so "when the conditions of the permit do not provide for compliance with the applicable requirements of the CWA, or regulations promulgated under the CWA" or "when the imposition of conditions cannot ensure compliance with the applicable water quality requirements of all affected states."[74] Specifically, EPA's regulations prohibit the issuance of an NPDES permit for a new discharge where the discharge may "cause or contribute to the violation of water quality standards."[75] EPA regulations allow for one limited exception to this prohibition of discharges into impaired waters. In order for a discharge of the pollutant at issue to be allowed, the regulations require strict assurances that the receiving water can handle the new discharge and meet water quality standards and that specific plans are in place to ensure that it will be restored from its condition of impairment. Specifically, the EPA regulations require that:

> The owner or operator of a new source or new discharger proposing to discharge into a water segment which does not meet applicable water quality standards or is not expected to meet those standards even after the application of effluent limitations required by 301(b)(1)(A) and 301(b)(1)(B) of CWA and for which the State or interstate agency has performed a pollutants load allocation for the pollutant to be discharged, must demonstrate before the close of the [NPDES permit] public comment period that:
>
> (1) There are sufficient remaining pollutant load allocations to allow for the discharge; and
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> (2) The existing dischargers into that segment are subject to compliance schedules designed to bring the segment into compliance with applicable

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[74] 40 C.F.R. § 122.4(a), (d).

[75] 40 C.F.R. § 122.4(i).

water quality standards.[76]

In *Friends of Pinto Creek v. U.S. E.P.A.*, 504 F.3d 1007 (9th Cir. 2007), *cert. denied*, 129 S. Ct. 896 (2009), the Ninth Circuit Court of Appeals held that without a plan to achieve water quality standards, a permitting agency cannot allow new discharges that will exacerbate the existing water quality standards violations. The court held that all existing dischargers must be subject to compliance schedules[77] and that "[i]f there are no adequate point sources to do so, then a permit cannot be issued unless the state or the [discharge permit applicant] agrees to establish a schedule to limit pollution from a nonpoint source or sources sufficient to achieve water quality standards."[78] In other words, a TMDL is a necessary condition for a source to use the exception provided in EPA rules to the general prohibition on new sources into impaired waters but a TMDL by itself is not sufficient. Sources under compliance schedules are also necessary.

Instructively, EPA's GLI rules *prohibit* the application for variances to new or recommencing sources.[79] However, again, DEQ's proposes to leave on the table any aspects of the GLI that do not further its goal of administrative convenience and accommodation to dischargers.

The Department has not provided a sufficient policy rationale for the four exceptions to the general proposal that a source without a "currently effective NPDES permit" will not be allowed to obtain a variance. The first exception proposed is for sources that are necessary to "prevent or mitigate a threat to public health or welfare."[80] It is unclear what this would encompass because the Department does not discuss this section of the proposed rule in its issue paper. NPDES permits are not generally associated with urgent actions to protect the public health or welfare leaving the reader to believe that this provision would be used to justify granting variances to new or expanded sewage treatment facilities. There is no justification for such facilities' not having to meet water quality standards at the time of construction when the best technology can be used to assure sufficient treatment. Likewise, it is not clear that an NPDES permit would ever be needed to address the condition posited in subsection (ii) for a water quality or habitat restoration project.

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76 *Id.*

77 *Pinto Creek* at 1012-13.

78 *Id.* at 1014.

79 GLI Pt. 132, App F, Procedure 2 §A.1.

80 Proposed OAR 340-041-0059(1)(b)(D)(i).

4. Contrary to Oregon DEQ's Belief, the Great Lakes Initiative Does Not Apply to Oregon

As discussed above, DEQ has proposed some provisions it has gleaned from the GLI, despite the fact that Oregon clearly is not a GLI state. In doing so, Oregon has left behind most of the provisions of the GLI that do not fall into its category of being administratively convenient and protective of permittees but which do provide protection to public health and the environment. In doing so, Oregon runs afoul of EPA policy.

EPA has specifically cautioned against using portions of the GLI without considering the appropriate context.[81] The reason becomes clear when one compares the proposed provisions of Oregon's variance procedure with the GLI. The GLI provisions related to variances include aspects that Oregon is not proposing to include in its rules, such as: (1) a mandatory three-year review;[82] (2) a permit reopener provision;[83] (3) a requirement that the permittee characterize the extent of any increased risk to human health and the environment from granting the variance compared to the underlying water quality standards;[84] (4) a requirement that the State conclude that such an increased risk is consistent with protection of public health, safety, and welfare;[85] (5) a requirement for reasonable progress towards attaining standards;[86] (6) an explicit reference to meeting the antidegradation policy;[87] and (7) a prohibition against variances for new or recommencing dischargers.[88] Instead, Oregon has cherry picked portions of the GLI that would make issuing variances less onerous, without concurrently ensuring appropriate environmental and human health protections.

Moreover, under the GLI, point sources face a host of restrictions that are a backdrop to the GLI variance procedures. DEQ certainly has not considered adopting any of these provisions. Of

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81 ANPRM at 36759.

82 GLI Pt. 132, App F, Procedure 2 §B.

83 GLI Pt. 132, App F, Procedure 2 §F.4.

84 GLI Pt. 132, App F, Procedure 2 §C.2.b.

85 GLI Pt. 132, App F, Procedure 2 §C.2.b.

86 GLI Pt. 132, App F, Procedure 2 §F.2.

87 GLI Pt. 132, App F, Procedure 2 §C.2.a.

88 GLI Pt. 132, App F, Procedure 2 §A.1.

considerable relevance and importance, the GLI limits the expected load reductions from nonpoint sources that states can assume in issuing TMDLs. The GLI requires that these nonpoint load allocations be set at existing pollutant loadings if changes, i.e. reductions, are not expected to occur.[89] In other words, TMDLs issued under the GLI are not allowed to factor unrealistic and unexpected pollutant load reductions from nonpoint sources, thereby increasing expected load reductions from point sources. In contrast, Oregon TMDLs *routinely assume significant and unwarranted reductions by nonpoint sources* in establishing waste load allocations, reductions that have no basis in reality. Similarly, TMDLs in GLI states must account for accumulation of toxics in sediments[90] and there are severe restrictions on mixing zones for bioaccumulative chemicals of concern[91] among other stringent provisions that apply to NPDES dischargers.

5. A Variance Must Include a Replacement Criterion

DEQ has proposed to issue an alternative effluent limitation to a permittee seeking a variance without also identifying a replacement criterion that is the temporary water quality standard applicable to that source. As noted above, EPA has made it clear a variance is a change to water quality standards. It is not an alteration to an NPDES permit. Therefore, it must include a criterion that applies during the pendency of the variance, not just a water quality based effluent limit (WQBEL) that is incorporated into the relevant NPDES permit.[92] In fact, according to EPA, it is contrary to the requirements of sections 301(b)(1)(C) and 402(a)(1) of the CWA to issue a variance to an effluent limit.[93] DEQ has also proposed that it will establish the end date of the variance in the NPDES permit, not the water quality standards.[94] This is similarly incorrect.

6. Variances Must Include a Requirement to Maintain and Protect Existing Uses and the Water Quality Necessary to Support Them

The Department agreed to include in its proposed variance policy a provision related to existing

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89 GLI Pt. 132, App F, Procedure 3 §B.3.b.i & ii.

90 GLI Pt. 132, App F, Procedure 3 §B.7.

91 GLI Pt. 132, App F, Procedure 3 §C.1.

92 ANPRM at 36759.

93 National Assessment at 7.

94 Proposed OAR 340-041-0059(3)(b).

use protection. This provision states that before a variance can be granted, "no existing use will be impaired or removed as a result of granting the variance."[95] This provision falls short of what is necessary to meet EPA's implementing regulations because: (1) it does not explicitly require variances to meet the antidegradation policy, and to the extent that it functions as a prohibition it falls short of the full protection of existing uses that is required, (2) it makes no reference to the water quality that is required to maintain and protect existing uses, (3) DEQ has no implementation methods for Tier I of the antidegradation policy which it could use to ensure that this provision is followed and to demonstrate precisely what protects this provision provides, and (4) the Department is unlikely to enforce this provision without explicit Commission demands to do so because it has *consistently over 35 years* failed to acknowledge that existing use protection is a required aspect of water quality standards in its TMDLs, its NPDES permits, its 303(d) lists of impaired waters, and its 401 certifications.

EPA has stated repeatedly that variances are subject to the "same substantive and procedural requirements as removing a designated use."[96] The requirement to protect existing uses in the issuance of variances derives from several sources. First, existing use protection is the "floor" of water quality, below which State standards may not go.[97] Because variances are changes to water quality standards they too may not go below that floor. This is encoded in the requirement to classify existing uses[98] as well as the antidegradation provisions to protect those uses,[99] which must be read together.[100] Existing use protection is specifically noted – *twice* – in EPA regulations concerning the removal of designated uses, the same provision that is used for variances.[101] EPA notes that the protection of existing uses is a site-specific exercise, which is wholly consistent with the issuance of variances.[102] EPA considers protection of existing uses as

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[95] Proposed OAR 340-041-0059(2)(a).

[96] Handbook at 5.3; Economic Guidance at 1-3.

[97] Handbook; EPA Questions & Answers on Antidegradation, August 1985 [hereinafter "Questions and Answers"]; 48 Fed. Reg. 51402 (November 8, 1983)..

[98] 40 C.F.R. § 131.10.

[99] 40 C.F.R. § 131.12.

[100] ANPRM at 36752.

[101] 40 C.F.R. §§ 131.10(g) & (h)(1).

[102] ANPRM at 36752.

essential in issuing variances.[103] EPA notes that it is the necessity of preserving existing uses, as well as making reasonable progress towards ultimate attainment, that requires the conditions of a variance to be set as close as possible to the designated uses and "always retained at the level needed to preserve the existing use."[104] These conditions include various prohibitions, control requirements, monitoring, and evaluation.[105] The requirement to protect existing uses pursuant to the antidegradation policy applies during triennial reviews and water quality standards revisions, of which a variance is one,[106] as well as the issuance of NPDES permits.[107] Last, the six factors of 40 C.F.R. § 131.10(g) cannot be read outside the context of the text of 40 C.F.R. § 131.10(g), of § 131.10(h), and of the antidegradation policy, all of which specify the protection of existing uses. Similarly, the GLI rules explicitly require that in addition to the six factors governing use attainability, the variance seeker show the antidegradation requirements have been met.[108] Consistent with these policies, EPA has also held that permits issued pursuant to variances must still comply with antidegradation requirements, including existing use protection.[109] A variance applies to the applicable criterion and does not modify the application of the existing use and designated use provisions of the water quality standard.[110]

In addition, the antidegradation policy, of which the Tier I protections for existing uses and level of water quality necessary to protect them is one, require a state to "identify the methods for implementing such policy."[111] Oregon has no implementation methods identified for Tier I protections and, in this rulemaking, has declined to engage in a discussion concerning the need

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[103] CSO Guidance at 34, citing 40 C.F.R. § 131.10(h)(1); ANPRM at 36759, 36760.

[104] CSO Guidance at 34.

[105] *Id*. at 35.

[106] Questions and Answers.

[107] Handbook.

[108] GLI Pt. 132, App F, Procedure 2 §C.2.a; GLI SID Sec. VIII.B.3.c.

[109] Guidance for Implementation at 6.

[110] EPA Memorandum, from Kenneth Mackenthun to Regional WQS Coordinators, Re: Definition of WQS Terms, July 3 1979 at 1.

[111] 40 C.F.R. § 131.12(a).

for or the content of such methods.[112] Inclusion of a reference to protecting existing uses in the proposed variance rule is of no meaning whatsoever because Oregon has no intention of implementing this provision. DEQ inserted the language concerning existing use protection merely to insulate its rule from charges that the proposed variance rule is inconsistent with federal law.

In contrast to EPA's regulations, guidance, and policies, DEQ's proposed rule only prohibits the impairment or elimination of an existing use, but does not set out how this end will be achieved. EPA's regulations require much more than this. Second, the existing use protection in EPA regulations does more than prohibit elimination or impairment of existing uses. It states that "[e]xisting instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected."[113] In other words, on the continuum between eliminating existing uses and full support of existing uses, the language "shall be maintained and protected" requires full support. There is no legal or policy reason to countenance anything less than full support of those uses that constitute the floor of water quality in this nation. Merely not entirely eliminating or impairing existing uses is inadequate protection. Additionally, DEQ's proposed rule makes no reference to the "level of water quality" necessary to protect and maintain the existing uses. Last, the Department's issue paper on this issue demonstrates that it simply does not understand that existing uses are a part of water quality standards. This document describes the content of a future internal management directive (IMD) in the following fashion:

> 4. Water quality standards at issue.
>
> - designated uses,
> - water quality criterion that cannot be fully attained, and
> - 303(d) listing status and other related information.[114]

This entry describes water quality standards as containing designated uses but not existing uses despite their being a requirement of federal law and the proposed rule's specific inclusion of protection for them. There is no reference to an applicant's need to identify existing and designated uses that are federally-listed as threatened or endangered, despite the provisions of the

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[112] ODEQ Issue Paper: Evaluating the Antidegradation Policy as a Means to Reduce Nonpoint Sources of Toxic Pollutants to Oregon Waters, Human Health Toxics Rulemaking, December 29, 2010.

[113] 40 C.F.R. § 131.12(a)(1).

[114] ODEQ Issue Paper: Implementing Water Quality Standards for Toxic Pollutants in NPDES Permits, December 29, 2010 at 64.

rule that precludes likely jeopardy to their existence. These omissions, along with the information that would be necessary to evaluate the risks to these species and uses discussed elsewhere in these comments, make clear that the Department has no intention of following the requirements of its own rule when it comes to evaluating the level of protection a variance would or would not provide. To do so would impede its goal of administrative convenience.

7. Variances Must Include Substantive Requirement for Reasonable Progress Towards Attainment and Variance Renewal Must be Based on Substantial Information

EPA believes that variances can be used to implement protection actions, assess their results, and study the water quality problem to better understand it.[115] Likewise, DEQ has stated that the only difference between a source with a compliance schedule and a source with a variance should be that the latter is not able to commit to a date certain by which it can meet waste load allocations. We support this general policy. In order that this policy may be carried out, however, conditions for pollution control and monitoring must be included in the variance and incorporated into the applicable NPDES permit. This gives meaning to the stated notion that variances are "short-term" exemptions from meeting standards. Likewise, this approach ensures that renewal is not automatic but, rather, requires a new affirmative showing by the applicant.[116] The required triennial review is a time when the public should be able to evaluate whether the conditions of the variance have been met and the conditions the variance was based upon still apply.[117]

DEQ's proposed rule contains a requirement that permittees seeking variances must submit a "proposed pollutant reduction plan that includes any actions to be taken by the permittee that would result in reasonable progress toward meeting the underlying water quality standard"[118] and that DEQ "shall establish and incorporate into the discharger's NPDES permit all conditions necessary to implement an approved variance and associated pollutant reduction plan."[119] Such permit conditions must include "a requirement to implement any pollutant reduction actions approved as part of a pollutant reduction plan submitted in accordance with section (5)(d) above

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[115] Handbook at 5.3; ANPRM at 36758-60.

[116] ANPRM at 36759; *see also* GLI.

[117] ANPRM at 36759.

[118] Proposed OAR 340-041-0059(5)(d).

[119] Proposed OAR 340-041-0059(6).

and to make reasonable progress towards attaining the underlying water quality standards."[120] The rule loses steam, however, in the next section which limits the required studies to those "studies, effluent monitoring, or other monitoring necessary to ensure compliance with the conditions of the variance."[121] While these provisions are a good start, the key importance of the "reasonable progress" requirement to ensuring that variances are, indeed, temporary, requires that these provisions be significantly strengthened. The studies and monitoring required should not be limited to ensuring compliance with the variance conditions but also so that DEQ, and the public, can determine in the likely event of an application for renewal whether the water quality is improving or deteriorating and whether any reasonable progress has been achieved. The reality is that DEQ permit writers will be under significant pressure to agree to as little as permittees want to do. This is particularly true in the case of asking permittees to do in-stream monitoring. The only way to strengthen the position of those permit writers is to make the requirements for measuring any reasonable progress or lack thereof more clear and certainly mandatory.

In addition, with regard to municipal sources, it is clear that there are some significant ways in which source control can be achieved – through controls on discharges to municipal sewage collection systems from un- and under-regulated industries beyond federal pretreatment requirements, unregulated commercial sources, and from runoff that could be controlled by municipal ordinances. Without clear direction from DEQ concerning the degree to which these unpopular restrictions would need to be taken by municipal NPDES permittees, they will likely seek to avoid them as much as possible for political and budgetary reasons. Pretreatment coordinators who participated in the Source Control committee for this review made it clear they were opposed to doing anything beyond federal requirements.

8. The Proposed Rule Does not Include Sufficient Public Notice and Process for Variances to Conform to Requirements that Apply to Water Quality Standards

NWEA appreciates the changes DEQ has made to the provisions governing public notice requirements. The proposal now requires that a public hearing be held consistent with EPA regulations. DEQ continues, however, to propose that it may provide its public notice by including the notice of the variance in the "public notification of a draft NPDES permit or other draft regulatory decision that would rely on the variance."[122] These provisions are inconsistent

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120 Proposed OAR 340-041-0059(6)(b).

121 *Id*. (emphasis added).

122 Proposed OAR 340-041-0059(7)(a).

with EPA requirements which are different, under the Clean Water Act, for NPDES permits and water quality standards revisions.

As noted above, EPA considers variances to be revisions to water quality standards. EPA requires that prior to removing any use, the state must provide notice and comment under section 131.20(b) of its regulations. That section calls for a public hearing "for the purpose of reviewing water quality standards." In addition, EPA has concluded that variances, as changes to water quality standards, are subject to the extensive and complete Part 25[123] public participation requirements of its regulations.[124] Instead, DEQ proposes that it will bury the variance proposals in the NPDES permit notices.[125] While this may reduce the public attention to the process, thereby lessening DEQ's administrative inconvenience, it is patently unfair to the public and inconsistent with EPA policy to not alert the public to the "temporary" suspension of water quality standards. Likewise, while the proposed variances can and should be issued along with the draft NPDES permits, notice of a change – worse, a suspension of unknown duration – to water quality standards should not be "includ[ed]" in the draft NPDES permit notice but rather alongside or concurrent with the permit renewal notice. In short, it is not clear that DEQ has given Part 25 requirements sufficient attention.

9. There is Almost No Likelihood that DEQ will Implement Environmentally Protective Provisions of the Variance Rule Rendering its Provisions Not Supportable

DEQ has included some provisions in its proposed variance rule which look good on paper but which raise serious questions about the Department's interest in ensuring they are applied and its ability to actually implement them. For example, the rule includes the requirement that the Department publish a list of all variances and pollutant reduction plans that have been granted pursuant to the rule.[126] However, DEQ committed to a similar outcome when it told EPA in

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[123] 40 C.F.R. Part 25, Public Participation in Programs Under the Resource Conservation and Recovery Act, the Safe Drinking Water Act, and the Clean Water Act.

[124] Memorandum from Michele Beigel Corash, EPA OGC, to Donald P. Dubois, Region X RA, Re: Applicability of the Part 25 "Public Participation" Regulations to the Approval of Variances from Water Quality Standards, September 4, 1980. EPA notes that NPDES permit applications actions are not covered by Part 25.

[125] Not calling variances by their name was under consideration and it is unclear if this proposed provision is intentional or if it is an artifact of that earlier proposal.

[126] Proposed OAR 340-041-0059(7)(b).

2004 that it would post all the Natural Conditions superseding criteria to the numeric temperature criteria on its website[127] yet, to date, it has not posted a single reference, despite sweeping determinations in temperature TMDLs that the numeric criteria no longer apply. Likewise, DEQ has agreed to include in the rule the requirement that "no existing use will be impaired or removed."[128] Yet 35 years after the date by which existing uses required protection, DEQ has yet to issue a single guidance document or a single regulatory document that explains how it will protect existing uses, demonstrating that it has ever applied Tier I protections to existing uses.

Similarly, DEQ has included a provision that would preclude a variance if it would "likely jeopardize the continued existence of any threatened or endangered species listed under section 4 of the Endangered Species Act or result in the destruction or adverse modification of such species' critical habitat."[129] Yet DEQ has a similar provision in its temperature standard and every single TMDL that the Department has issued for temperature is completely silent on whether the staff interpretation of the narrative aspects of the standard has any impact whatsoever on threatened or endangered species. There is certainly no indication that DEQ has the expertise to make such an evaluation concerning adverse impacts to threatened or endangered species. This is the same agency, after all, that refused to evaluate whether EPA recommended aquatic life criteria for toxics were adequate to protect threatened and endangered species in the last triennial review on toxic criteria.

Likewise, DEQ has included a provision that no conditions allowed by a variance "would result in an unreasonable risk to human health,"[130] as an apparent nod to the GLI. It certainly is unclear how DEQ has the expertise to evaluate this provision. DEQ has already proposed to issue a rule, the Background Concentration Allowance rule, that makes a determination that a change in carcinogenic risk level from 10^{-6} to 10^{-4} is not "significant." Of what value is DEQ's assurance that it will not issue variances that result in an "unreasonable risk to human health" when it cannot even see a significance in a change in risk that is two orders of magnitude? What does it take to trigger a Department finding of significance? What does it take to trigger a Department finding of unreasonable risk? Under the circumstances we would guess that no level is high

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[127] Letter from Michael Llewellyn, ODEQ, to Randy Smith, EPA Region X, Re: Oregon Responses to EPA Questions re the State's water quality temperature standards, February 4, 2004 ("DEQ will list the water bodies where 'natural conditions' findings have been made on our standards web page to ensure that the public is aware and notified of natural conditions.").

[128] Proposed OAR 340-041-0059(2).

[129] Proposed OAR 340-041-0059(1)(b)(B).

[130] Proposed OAR 340-041-0059(1)(b)(C).

enough to preclude the issuance of a variance because DEQ would simply trot out the same rationale used to support the Background Concentration Allowance: people don't eat fish from the same streams, people will not be exposed for an entire lifetime, etc.

While these provisions about protecting human health and threatened and endangered species make the Department's rule look better on paper, they are likely to have very little if any real world effect. In fact, the staff's repeated references to "administrative convenience" during the rulemaking development process in all likelihood means that any guidance that may be developed to implement these provisions will result in a meaningless whitewash, a lot of paperwork signifying nothing. And that is if the Department goes as far as to prepare guidance on these provisions. We believe that DEQ should establish what these comforting assurances really mean prior to asking the public to comment on the rulemaking package as a whole.

Finally, bearing in mind that this variance provision applies to all pollutants not just the stringent toxic criteria that are the subject of this proposed rulemaking, DEQ has established an extremely low bar for impacts to federally-listed threatened and endangered species. Not that it is clear to us how DEQ will make a determination that a proposed variance will not cause "jeopardy" – a term of art under federal law and a finding reserved to certain federal agencies – to threatened or endangered species, but the proposed rule only would protect such species from *extinction* ("jeopardize the continued existence"[131]). In other words, the rule would not prohibit a variance if it would cause a "take" of threatened or endangered species or prevent the recovery of threatened or endangered species or perpetuate the continuation of these species' threatened or endangered status. It would only prohibit a variance if the species were likely to be obliterated from existence. A very low bar indeed.

In addition, DEQ has incorporated no protections for species that are federal candidate species, in other words those species that might be threatened or endangered and on the verge of extinction but which have not yet been listed. Nor has DEQ incorporated any provisions that would protect species that nationally are not threatened with extinction but which are an Oregon threatened, endangered, or candidate species[132] or species that have been identified as a "sensitive" species under Oregon's Sensitive Species Rule.[133] This latter category, according to the Oregon Department of Fish and Wildlife (ODFW), "refers to naturally-reproducing fish and wildlife species, subspecies, or populations which are facing one or more threats to their populations and/or habitats. Implementation of appropriate conservation measures to address the threats may

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131 Proposed OAR 340-041-0059(1)(b)(B).

132 *See* ORS 496.171-496.192.

133 OAR 635-100-040.

prevent them from declining to the point of qualifying for threatened or endangered status."[134] ODFW considers many factors for designating a species "sensitive," including: "imminent or active deterioration of primary habitat; limited population numbers or survival due to parasites, disease, predation, contaminants, disturbance, or other natural or human-caused factors; over-utilization; and inadequate existing state or federal programs for management or conservation of species and/or primary habitats. These factors may also include impacts from invasive non-native species that threaten native species through hybridization, disease introductions, predation, competition, or habitat alteration."[135] Clearly pollution in excess of otherwise applicable water quality standards and allowed through variances could have adverse effects on threatened, endangered, candidate, and sensitive species. Yet none of these species is identified for special protection under the proposed variance rule.

10. The Proposed Rule Vests Too Much Authority in the Director, It Might Impermissibly Allow for Expanded Loads, and it Fails to Include Needed Reporting to the Commission

DEQ's proposed variance rule places all authority to issue variances for existing NPDES sources with the Director.[136] Under the proposal, the Commission would only make variance decisions for new sources. The reason for resting most of the authority to make these changes to water quality standards with the Director is to reduce agency resources in letting point sources off the hook for the new stringent human health criteria for toxics. However, the variance rule applies to all pollutants and, particularly as DEQ and EPA Region X gain experience with issuing variances, it is likely to be used more broadly. Specifically, given the ubiquitous problem of excess heat in Oregon's waters, we would not be surprised to see numerous variances issued for temperature in the future. Likewise, given continuing growth of municipalities, it would not be surprising to see variances issued for a number of pollutants that are found in sewage discharges. There is nothing in the variance rule that is proposed that limits the issuance of variances to dischargers' existing loads or to the loads permitted by existing NPDES permits. Therefore, municipal and industrial dischargers seeking to increase loads, even into impaired waters, may choose to use a variance as a low technology work-around to meeting water quality standards and permitting rules that require that sources not cause or contribute to violations of water quality standards. At a minimum, such dischargers should have to apply to the Commission, rather than

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[134] Oregon Department of Fish and Wildlife, Sensitive Species: Frequently Asked Questions and Sensitive Species List, 2008, available at http://www.dfw.state.or.us/wildlife/diversity/species/sensitive_species.asp at 1.

[135] *Id.* at 2.

[136] Proposed OAR 340-041-0059(1).

the Director, for a variance. We urge, preferably, that the rule prohibit the issuance of a variance to a source seeking to increase its loading.

While the proposal is intended to remove the Commission from decision-making on the majority of variances, it will likely have the effect of removing the Commission from any awareness about how water quality standards are being suspending on a case-by-case basis throughout the state. Therefore, in addition to the rule's call for DEQ to catalogue all of the variances it issues, the rule should also include a requirement that the staff provide a report to the Commission on the issuance of variances. This report should include the same content as required by the proposed OAR 340-041-0059(7)(b) so that the Commission can judge on a regular basis the degree to which the variance provision is being used. In addition, the report should also include: (1) a reference to the original date of the variance if the variance is a renewal, (2) information about the success or lack thereof in variances' making "reasonable progress" towards meeting the underlying water quality standards measured against the permittees' loads and instream monitoring, and (3) conclusions drawn from the annual reports made to DEQ pursuant to OAR 340-041-0059(6)(d). These reports to the Commission should be issued on at least a triennial basis as part of Oregon's triennial review of water quality standards, consistent with 40 C.F.R. § 131.20(a).

Finally, we urge that the Commission be responsible for issuing all variances. Letting a permittee not meet otherwise applicable water quality standards for an unknown and potentially extensive period of time is a significant regulatory action that we do not think should be delegated to the Director.

11. The Rule Does not Contain Requirements for Sufficient Information from Applicants for Variances to Support DEQ Decision Making

The proposed variance rule contains a variety of limitations, some that would prohibit the Department from issuing a variance, that imply that the Department will issue a finding, and which involve the conditions of any variance that is issued. Thus, the Department cannot issue a variance if it finds that (1) nonpoint sources under the control of the permittee applicant do not or will not have cost-effective and reasonable best management practices[137], (2) the variance would likely jeopardize threatened or endangered species or result in destruction or adverse modification of critical habitat[138], (3) the variance would result in an unreasonable risk to human

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[137] Proposed OAR 340-041-0059(1)(b)(A).

[138] Proposed OAR 340-041-0059(1)(b)(B).

health[139], and (4) no existing uses will be impaired or removed.[140] In addition, where EPA has not issued technology-based effluent limits, DEQ should apply its best professional judgment as to what technology should apply under OAR 340-041-0059(1)(b)(A) for which information will likely be needed. Yet the application submittal requirements of subsection (5) make no reference to the information needed to make any of these findings. There is, for example, no requirement for a permittee to seek and disclose information on existing uses, which may be more sensitive than designated uses, which may be site-specific, which may be on the verge of extirpation but not listed as threatened or endangered under federal law, which may be identified as on the brink of extinction in Oregon, or which may even be locally extirpated but still require protection, to mention some examples of types of information DEQ would need. There is no requirement that the applicant provide any information regarding federally-listed threatened or endangered species let alone to provide information upon which Department staff could arrive at a conclusion that the proposed variance would not jeopardize their continued existence or any designated critical habitat. There similarly are no requirements for applicants to even identify the nonpoint sources under their control, let alone the practices that apply to them, or information upon which the Department could base a finding that a variance would not cause unreasonable risk to public health. In other words, not only does the rule not assure that the Department would have sufficient information upon which to evaluate a variance application but it appears that the Department has no interest in obtaining this information because it included these provisions for the sake of appearance not environmental protection.

In a similar vein, while the rule contains various prohibitions and conditions, there are no provisions in the proposal for DEQ to issue findings pursuant to the rule. This is an omission that should be corrected for a number of reasons, not the least of which is the public's right to know the basis for the Department's suspension of otherwise applicable water quality standards and EPA's need to be able to demonstrate that DEQ adhered to the variance rule that is part of its water quality standards.

12. The Rule is Neither Sufficiently Clear nor Sufficiently Stringent in its Technology-Based Requirements

The proposed rule precludes the issuance of a variance if "[t]he effluent limit sufficient to meet the underlying water quality standard can be attained by implementing technology-based effluent limits required under sections 301(b) and 306 of the federal Clean Water Act.[141] Given the lack

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[139] Proposed OAR 340-041-0059(1)(b)(C).

[140] Proposed OAR 340-041-0059(2)(a).

[141] Proposed OAR 340-041–0059(1)(b)(A).

of clarity concerning technology-based requirements, i.e., the obligations of DEQ to identify using best professional judgment (BPJ) the technology required for NPDES sources, DEQ must be more specific as to the meaning and intent of this provision. We urge DEQ to clarify the rule language in two ways. First, the Department should commit to using BPJ to update technology-based effluent requirements established by EPA when those are clearly outdated. Second, the Department should clarify that it intends to use BPJ when EPA has not yet issued such national effluent guidelines. The Department should not issue variances based on inadequate technology when the technology is readily available but EPA has not taken the steps to update its requirements.

13. The Variance Rule Must Require Controls Over a Broad Range of Pollutant Sources Entering Municipal Sewage Collection Systems

We appreciate DEQ's inclusion of the provision that municipal sewage treatment plans must provide "a demonstration of the jurisdiction's legal authority (such as a sewer use ordinance) to regulate the pollutant for which the variance is sought. The jurisdiction's legal authority must be sufficient to control potential sources of that pollutant that discharge into the jurisdiction's sewer collection system."[142] We concur that this is an important first step. It falls short, however, of requiring that this required legal authority be put to use in the pollution reduction plan. What use is there to having the authority if it is not going to be used as the *quid pro quo* of having a variance? First, the rule should clarify two ways in which this legal authority will be judged. It must require that this legal authority extend to both indirect dischargers of the pollutant, including commercial and industrial sources not regulated under the federal pretreatment program as well as the authority to regulate pretreaters to a greater degree, in other words, sources that would require NPDES permits if they discharged directly to Oregon waters. And the rule must specify that this authority must extend to nonpoint sources which contribute runoff to the sewage collection system. Second, and missing entirely from the proposed rule, the rule must specify that the pollution reduction plans control all sources of the pollutant at issue including commercial and industrial sources and, if relevant, through the use of local ordinances. Local ordinances are methods of controlling urban nonpoint sources and contributions from the residential sector of pollutants that otherwise are uncontrolled. An example of a local government ordinance is attached.[143] Other examples are discussed in the attached letter to the Commission regarding Source Control.[144]

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[142] Proposed OAR 340-041-0059(5)(e).

[143] Metro Code section 3.05 (Phosphorus Ban - expired Dec. 31, 1994).

[144] Letter from NWEA to Bill Blosser et al., Re: Rulemaking Needed to Protect Oregon's Waters: Municipal Source Control, September 13, 2010.

II. Proposed Revisions to Division 42

A. Proposed Revisions to OAR 340-042-0040 – Establishing Total Maximum Daily Loads (TMDLs)

In response to efforts by NWEA and municipal representatives to convince DEQ to take at least the most rudimentary of steps to control air deposition sources of toxics, DEQ has proposed a rule change that will have no impact whatsoever. NWEA proposed that the rules would require DEQ to identify significant sources of air deposition when it set load allocations in a TMDL. In order for this first step to translate into environmental protection, DEQ's Air Division would eventually have to establish new rules on turning such load allocations into air emission reductions. Until that point, the TMDL requirements would have no practical impact on levels of toxics in Oregon's waters but would only demonstrate the importance of DEQ's taking that next step. Instead, DEQ proposed the following language:

> Load allocations. This element determines the portions of the receiving water's loading capacity that are allocated to existing nonpoint sources, including runoff, deposition, soil contamination and groundwater discharges, or to background sources. Load allocations are best estimates of loading, and may range from reasonably accurate estimates to gross allotments depending on the availability of data and appropriate techniques for predicting loading. Whenever reasonably feasible, natural background, long-range transport and anthropogenic nonpoint source loads will be distinguished from each other.[145]

The proposed revisions merely broaden the potential definition of pollution sources included in load allocations. The revisions do not require DEQ to include the newly-listed items in load allocations nor to specifically issue an individual load allocation to any one of those sources. In other words, DEQ staff can and likely will continue to issue load allocations that bundle air deposition sources with "background." Therefore, this revision is meaningless rhetorical nonsense. While refusing to require DEQ to identify even *significant* air deposition sources, DEQ did accept the industrial representatives' addition that "long-range transport" – i.e., international sources of air deposition – be identified wherever reasonably feasible. In other words, if it is feasible DEQ staff must try to ("will be") identify the international sources of deposition but with regard to taking an action that might actually result in cleaning up a pollution source, DEQ need only group the Oregon-specific air deposition sources in with background and a myriad other nonpoint sources of pollution. This change is both meaningless from an environmental standpoint and a clear political signal from DEQ that it cares more for the needs of air polluting Oregon industries than it does to clean up Oregon's waters that have been

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[145] OAR 340-042-0040(h).

contaminated by those very industries. It is an ironic conclusion to a process intended to address the Commission's directive that DEQ do something to address nonpoint sources of toxics.

B. Proposed Revisions to OAR 340-042-0080 – Implementing a Total Maximum Daily Load

In addition to its proposed revisions of water quality standards revisions concerning nonpoint sources, DEQ has also proposed to amend Division 42 rules as follows:

> Nonpoint sources of pollution from forest operations on state or private lands are subject to best management practices and other control measures established by t~~T~~he Oregon Department of Forestry under ~~will develop and enforce implementation plans addressing state and private forestry sources as authorized by~~ ORS 527.610 through 527.992 and according to OAR chapter 629, divisions 600 through 665. Such forest operations, when conducted in good faith compliance with the Forest Practices Act requirements, are generally deemed not to cause violations of water quality standards as provided in ORS 527.770. The department may also assign sector or source specific load allocations needed for nonpoint sources of pollution on state and private forestlands to implement the load allocations. In areas where a TMDL has been approved, site specific rules under the Forest Practices Act rules may need to be revised to meet the TMDL load allocations. If the department determines that the generally applicable Forest Practices Act rules are not adequate to implement the load allocation, the department may request the Environmental Quality Commission to petition the Board of Forestry for a review of part or all of Forest Practices Act rules implementing the TMDL.
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> In areas subject to the Agricultural Water Quality Management Act t~~T~~he Oregon Department of Agriculture (ODA) ~~will develop implementation plans for agricultural activities and soil erosion and enforce associated rules as authorized by~~ under ORS 568.900 through 568.933 and according to OAR chapter 603, divisions 90 and 95 develops and implements agricultural water quality management area plans and rules to prevent and control water pollution from agricultural activities and soil erosion on agricultural and rural lands. The department may also assign sector or source specific load allocations needed for agricultural or rural residential nonpoint sources to implement the load allocations. In areas where a TMDL has been approved, agricultural water quality management area plans and rules must be sufficient to meet the load allocations. If the department determines that plans and rules are not adequate to implement the load allocations, the department may request the Environmental Quality

> Commission to petition ODA for a review of part or all of water quality management area plan and rules implementing the TMDL.[146]

Neither of these provisions advance DEQ's role in cleaning up unsafe levels of pollution from nonpoint sources including but not limited to toxic pollutants. The majority of these rules' text are redundant to those Division 41 rules upon which we have commented above. Subsection (2) concerning logging adds that DEQ "may" assign sector or source specific load allocations. This does not commit DEQ to assigning such specific load allocations even if they are "needed" but merely allows DEQ to do so, a discretion it already has. In other words, the revision is without any practical or legal meaning. It then goes on to make a statement of fact that FPA rules "may need to be revised" and that DEQ "may request" the Commission to petition the Board of Forestry to have the FPA rules revised. Likewise, subsection (3) states that DEQ "may" assign specific load allocations to agricultural nonpoint sources and that it "may request" the Commission to petition for a change in ODA rules and plans. These references as to what the Department *may* do are all statements of existing statutory provisions and therefore add nothing to DEQ's rules. Stopping short of making any commitment that the Department *will* do something renders these rules the equivalent of guidance – actually less helpful than guidance – and they should be removed. Cluttering up Oregon rules with statements of possible discretionary acts makes a mockery of calling them "rules." Most important, these revisions provide absolutely no assurance to the Commission or to the public, whose waters are being polluted, that the Department intends to make any change whatsoever in the unacceptable status quo.

III. Use of Quantitation Limits in Lieu of Otherwise Applicable Numeric Criteria

DEQ has established that implementation of a full 48 percent of the toxic criteria will be governed by quantitation limits (QL) rather than the proposed numeric criteria. Scanty information concerning this limitation is set out in a Department issue paper but there is no reference whatsoever in the proposed revisions to the water quality standards. The issue paper explains that

> Approximately 48 percent of the proposed human health criteria have Quantification Limits (QLs) that are higher than criteria. For this reason, pollutants may occur in Oregon's waterbodies at concentrations greater than the proposed criteria that cannot be measured given limitations in analytical methods. As a point of reference, approximately 40 percent of the currently effective criteria have QLs higher than criteria. For permitting purposes, the QL becomes the compliance point for dischargers. Consequently, if the criterion for a particular

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[146] OAR 340-042-0080(2)&(3).

> chemical becomes more stringent, but the QL remains higher than the criterion, there would be no effective change in the point of compliance until and unless analytical methods improve. Historically, the pace of change in laboratory methods has not been rapid. However, when methods do improve, there will likely be additional toxic pollutant impairment listings and more stringent water quality based effluent limits (WQBELs) for permit holders.[147]

In each of these cases, the QL is above the level established by the proposed numeric criterion. As a result, the QLs will be used for the purpose of establishing water quality-based effluent limits (WQBEL) in NPDES permits, as referenced in the issue paper. The Department is silent on how it will determine compliance with water quality standards in other regulatory activities such as identification of impaired waters pursuant to CWA 303(d) and issuing 401 certifications for federal activities and actions. Nonetheless, it is clear DEQ will not be using the numeric criteria where technology limitations preclude their applicability. As such, the QL *is* the effective criterion for 48 percent of the toxic contaminants for which DEQ is revising criteria.

A. Use of Quantitation Limits in Lieu of Otherwise Applicable Numeric Critiera Must be Established by Rule

To support the process of establishing new toxic criteria for Oregon, EPA Region X prepared a document setting out what may or may not be a water quality standard.[148] The substance of this document has been posted on EPA Region X's website.[149] The website states that "[w]ater quality standards (WQS) are legally binding norms that describe the desired ambient condition

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[147] ODEQ, Issue Paper: Human Health Toxic Criteria: Human Health Toxics Rulemaking, December 29, 2010, at 22. The same material is set out in the ODEQ Chapter 340 Proposed Rulemaking Statement of Need and Fiscal and Economic Impact, Revised Water Quality Standards for Human Health Toxic Pollutants and Revised Water Quality Standards, Implementation Policies, Fiscal and Economic Impacts, http://www.deq.state.or.us/ wq/ standards/docs/toxics/humanhealth/rulemaking/StmtNeedFiscalImpact.pdf at 6, 23, 52. Quantitation limits currently used by the ODEQ lab are set out in 62, Appendix B, Table 1, Comparison of Current and Proposed Human Health Toxics Criteria and Quantitation Limits.

[148] EPA Region X, Water Quality Standards - Authorities, Definitions, and Considerations, January 13, 2009.

[149] What are Water Quality Standards? http://yosemite.epa.gov/r10/water.nsf/ Water+Quality+Standards/Whats-a-WQS/ (viewed January 18, 2011).

(i.e., level of protection) for a waterbody. . . ."[150] Among the elements of a standard are, of course, the numeric criteria which EPA notes "include any one or more of three components: magnitude, duration, and frequency."[151] While QLs fall short – and sometimes far short – of meeting the definition for criteria that they protect the most sensitive designated uses[152], the QLs chosen by the Department will function as the *de facto* numeric criteria for many toxic constituents. As EPA notes, any provision that "[m]ay be [c]onsidered" a water quality standard includes:

> legally binding rules that define, change, or establish . . .
>
> - the magnitude (e.g., concentration), duration, or frequency that the State would use to determine whether a waterbody is attaining any applicable water quality criteria
> - assessment thresholds (for listing purposes) to implement narrative water quality criteria (i.e., "translators")
> - antidegradation requirements
> - general policies relating to uses (e.g., variances), criteria (e.g., mixing zones, low flows), or antidegradation.[153]

Use of a QL in lieu of an otherwise applicable numeric criterion changes the level of protection provided by the water quality standard, specifically by altering the magnitude of the criterion. Therefore, even under EPA's crabbed definition of a water quality standard, the proposed QLs are, in fact, water quality standards because they alter the level of protection provided. Alternatively, the QLs may also be viewed as the result of a general policy[154] that alters the otherwise applicable numeric criteria. Whether as superseding criteria or as a general policy (that is not currently proposed to be in Oregon's water quality standards) the QLs and the use of the Qls must be incorporated into the water quality standards adopted by Oregon if it wants to be able to sue them to override the otherwise applicable numeric criteria. There is currently no such provision.

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150 *Id.*

151 *Id.*

152 40 C.F.R. § 131.11(a).

153 *Id*.

154 *See* 40 C.F.R. § 131.13.

As water quality standards or general polices that relate to criteria, therefore, the QLs that the Department proposes to use in lieu of 48 percent of the otherwise applicable numeric criteria must be set out in rule. DEQ may not rely exclusively on using a guidance document in which the QLs are set out as a method of overriding numeric criteria. Second, the QLs themselves must be subject to the public participation requirements associated with the rulemaking, including that "[t]he proposed water quality standards revision and supporting analyses shall be made available to the public prior to the hearing."[155] Here, DEQ has not made them available because they are included in only two places. First, they are buried in the Internal Management Directive section of the Water Quality Publications section of the DEQ website,[156] where they are not readily available to the public reviewing the proposed revisions to Oregon's toxic criteria. Second, they are included in the "Statement of Need and Fiscal and Economic Impact" which is not where members of the public would go to find information on how DEQ intends to supersede its otherwise applicable proposed criteria. Nor has DEQ asked the public to review them.

DEQ has not even mentioned the location of the now-existing QLs in its issue paper on the proposed criteria, the flimsy discussion of which is set out *in its entirety* above. Therefore, the QLs are not part of the proposed revision currently out for public comment. In addition, the QLs must be submitted to EPA including "any supporting analysis . . . [and] any general policies applicable to water quality standards and any revisions of the standards. . . ." [157] Presumably this supporting analysis had DEQ included it would have presented some indication of how current the QLs are, how they vary from those used elsewhere in the country (the current QLs are based on the capacity of Oregon laboratories), whether there are other programs (e.g., hazardous waste clean-up) that use better QLs, and whether improved QLs could be attained through other mechanisms than DEQ assumes are available (e.g., use of laboratories outside of Oregon, use of methods to improve detection as described below). As a general policy or as superseding criteria that are likely not protective of designated uses, Oregon would need to demonstrate how it will update its QLs immediately upon changes in detection and quantification technology. DEQ's statement that QLs do not change frequently is unsupported and we believe may be incorrect. And, as any submitted standards would be, the QLs and QL provisions (which are not included in this rule) must be subject to EPA action.[158] Only by addressing these, and the provisions

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[155] 40 C.F.R. § 131.20(b).

[156] ODEQ, Memorandum to Water Quality Staff Re: Addendum to Reasonable Potential IMD to revise Quantitation Limits November 16, 2007 http://www.deq.state.or.us/wq/pubs/imds/rpaammend.pdf (Viewed January 18, 2011).

[157] 40 C.F.R. § 131.20(c).

[158] CWA § 303(c)(2)(A).

discussed below, can ensure that the *de facto* numeric criteria for 48 percent of Oregon's toxic criteria for the protection of human health will achieve the highest possible protection for the designated uses.

B. Oregon's Water Quality Standards Require Clarity, a Review Process, Public Disclosure, and Scientific Integrity in Their Use of Quantitation Limits In Lieu of Numeric Criteria

As overriding numeric criteria or the result of a general policy with the same effect, the QLs cannot be arbitrary choices, they must be evaluated in the public eye, and DEQ must provide supporting information to EPA to justify them. Currently, the proposed water quality standards revisions, both text and table, make no reference to the overriding QLs.[159] There is no general policy established in the water quality standards that allows the use of the QLs in lieu of the otherwise applicable numeric criteria. There is no indication in the record or the proposed revised rules which numeric criteria will not be used for regulatory purposes but instead will be superseded by the QLs. Therefore, there is no basis for DEQ to use the QLs in lieu of the numeric criteria it proposes to adopt. We propose that the rule language include appropriate references.

By hiding the QLs from public disclosure and EPA review and action, DEQ not only precludes their use to supersede criteria but it fails to engage with the spirit of the law, making the standards nearly as obscure as they could possibly be. But failing to make clear the existing 2007 QLs that DEQ has established will be used for NPDES permitting purposes is just the tip of the iceberg. DEQ has also failed to commit to a mechanism to ensure that the QLs that supersede the numeric criteria really are the best that technology can render. Given the orders of magnitude difference between some of the proposed (or current) numeric criteria and the associated QLs, it is imperative that the QLs come as close to the proposed criteria as possible. Therefore, DEQ must include in its rules a process by which it regularly evaluates the applicable QLs. We suggest that this review process must not exceed the three year cycle required by the Clean Water Act for the review of water quality standards.[160] Beyond the three year restriction, the choice of reviewing time period must be based on the likelihood of changes in the QLs that can be attained by water quality laboratories. DEQ must provide more than an assertion that these changes

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[159] ODEQ, Proposed Revisions to Toxics Criteria Tables 20, 33A, and 33B and Addition of New Human Health Toxics Table 40, December 15, 2010.

[160] CWA § 303(c)(1); 40 C.F.R. § 131.20(a) ("The State shall from time to time, but at least once every three years, hold public hearings for the purpose of reviewing applicable water quality standards. . . .)"

"[have] not been rapid"[161] but upon a factual record that demonstrates that they are not currently rapidly changing and will not in the foreseeable future be rapidly changing. If there is any likelihood that they will change more rapidly than once every three years, the rule should be based on incorporating that timeframe.

This process of review must be as transparent as other water quality revisions that are made pursuant to the Clean Water Act and its implementing regulations. In other words, the establishment of QLs must be an open public process, subject to all of the requirements associated with any other rulemaking. It is simply not good enough for DEQ to say "trust us." One only need reflect on the fact that DEQ has not used the existing human health criteria in the NPDES permits it issues to know that the agency is simply not trustworthy. In addition, because the most knowledgeable people prepared to provide DEQ with relevant information on establishing appropriate QLs are scientists working in the field, we recommend that DEQ commit to establishing a technical review body to ensure the best outcome of this review process.

In addition, DEQ should clarify how the QLs are, or are not, used for other regulatory purposes as all existing information relates to their use for issuance of NPDES permits exclusively. There are other regulatory programs in which numeric criteria are used, such as issuance of lists of impaired waters, TMDLs, and 401 certifications. DEQ has been silent as to how it intends to address these programs in light of the criteria that cannot be measured. For example, how might DEQ use detection limits in lieu of QLs? How might DEQ use and require the use of monitoring data and methods that use media that *concentrate* toxics thereby making detection and quantification more feasible (e.g., use of tissue, sediment, lipid-containing semi-permeable membrane devices, mussel boxes). It is not sufficient to spend over seven years on the process of adopting the most stringent numeric criteria in the country only to have half of them inapplicable and then not to consider alternatives to get closer to making them relevant in regulatory processes.

In addition to revising tables that set out the criteria to indicate which criteria are superseded by the QLs currently used by the Department in establishing WQBELs,[162] the proposed rule must include language to address the deficiencies noted above. In addition, we suggest that at a minimum such rule language also addresses the following issues:

- The Department must use the best achievable quantitation limit because it is the only

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[161] ODEQ, Issue Paper: Human Health Toxic Criteria: Human Health Toxics Rulemaking, December 29, 2010, at 22.

[162] These are set out in the Revised RPA IMD, Appendix B Quantitative Limits Tables at http://www.deq.state.or.us/wq/pubs/imds/rpaammend.pdf.

justifiable replacement of an adopted numeric criterion;

- The Department must consult outside technical advisors to support its findings in this triennial review including but not limited to staff of federal agencies.
- The Department must revise its quantitation limits no less frequently than every three years.
- The Department must establish a method by which it can identify and revise any applicable quantitation limit within six months if it becomes aware that the best achievable quantitation limit for any parameter is lower by some degree, such as an order of magnitude or more than the then-existing quantitation limit.
- The Department must list the analytic methods approved by the department and the applicable quantitation limits on its website with its water quality standards.
- DEQ rules must require NPDES permits and 401 certifications with water quality-based effluent limits or conditions based on quantitation limits to report both the quantitation limit and the Method Detection Level associated with any required monitoring samples; state clearly which quantitation limit is applicable, and include a reopener provision to update any quantitation limit that is changed by the Department prior to one year before the expiration of the permit or certification.
- For the purpose of establishing whether numeric criteria have been attained or waters are impaired in preparing its 30b(b) reports and 303(d) listings, the Department must establish detection limits in lieu of quantitation limits for any criteria where the quantitation limit is higher than the otherwise applicable numeric criteria. Such detection limits shall be the minimum concentration of a pollutant that can be measured and reported with a 99 percent confidence that the pollutant is greater than zero.

IV. Failure to Propose Revisions

The most stunning aspect of this entire proposal is what is missing, namely anything that will result in environmental improvements and real protections for human health. The Department has rejected the idea of increasing source controls over discharges and runoff entering municipal sewage collection systems. The Department has rejected the idea of revising Tier I of the antidegradation policy to include implementation methods that will result in control of nonpoint sources. In lieu of preparing extensive comments on these and related serious omissions, we fully incorporate by reference the following documents:

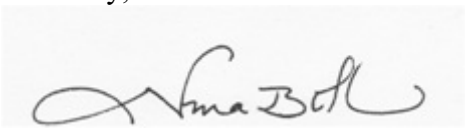
- Letter from NWEA to Bill Blosser et al., Re: Rulemaking Needed to Protect Oregon's Waters: Antidegradation Tier I, September 13, 2010;
- Memorandum "Using Tier I Antidegradation Policy Requirements to Address Gaps in Water Quality Protection for Oregon's Waters," from Nina Bell to DEQ Staff, June 7, 2010;
- Letter from NWEA to Bill Blosser et al., Re: Rulemaking Needed to Protect Oregon's

Waters: Municipal Source Control, September 13, 2010;
- Memorandum from Nina Bell, NWEA, to Source Control Small Group, "Municipal Source Control ** Revised **," May 26, 2010;
- Metro Code section 3.05 (Phosphorus Ban - expired Dec. 31, 1994);
- Letter from NWEA to Bill Blosser et al. Re: Human Health Toxics Rulemaking; Proposed Non-NPDES Actions.

Conclusion

Considering that DEQ took over seven years to get to the point of proposing these rules, the entire package is a disappointment. Point sources will be allowed, if not encouraged, to avoid new water quality-based limits based on the new criteria and nonpoint sources will continue to pollute with impunity. As a result, it is unclear what little human health and environmental benefit may accrue as the result of this effort. This statement is not to be construed as NWEA's objection to finalizing these long-overdue criteria. To the contrary. But it is clear that to do so is a paper gesture.

Sincerely,



Nina Bell
Executive Director

cc: Dick Pederson, Director, Oregon DEQ
Neil Mullane, Administrator, Water Quality Division
Jannine Jennings, Manager, Region X Water Quality Standards Unit
Christine Psyk, Associate Director, Region X Office of Water and Watersheds
Mike Bussell, Director, Region X Office of Water and Watersheds
Dennis McLarren, Regional Administrator, Region X
Ephraim King, Director, EPA OST

Attachments: Letter from NWEA to Bill Blosser et al., Re: Rulemaking Needed to Protect Oregon's Waters: Antidegradation Tier I, September 13, 2010.

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Letter from NWEA to Bill Blosser et al. Re: Human Health Toxics Rulemaking; Proposed Non-NPDES Actions

NORTHWEST ENVIRONMENTAL ADVOCATES

March 18, 2011

Andrea Matzke,
Oregon DEQ, Water Quality Division
811 SW 6th Ave
Portland, OR 97204

Via E-Mail: ToxicsRuleMaking@deq.state.or.us

Re: **Proposed Revised Water Quality Standards for Human Health Toxic Pollutants and Revised Water Quality Standards Implementation Policies – ADDENDUM – Quantitation Limits**

Dear Andrea:

This letter is Northwest Environmental Advocates' addendum to previously-submitted comments dated March 17, 2011 on the proposed rule revisions developed in the 2004-2011 triennial review of water quality standards.

In section III of our previous comment letter we discussed the use of quantitation limits (QL) in lieu of otherwise applicable numeric criteria for toxics, as is mentioned briefly in the DEQ Issue Paper. As DEQ has pointed out, 48 percent of the proposed human health criteria, and 40 percent of the currently effective human health criteria, have QLs that are higher than the proposed or current numeric criteria, respectively. Given that the difference between the proposed criteria and the QLs can be many orders of magnitude, the technological limitations related to detection and quantification have the effect of seriously undermining the human health benefits of the proposed adoption of criteria. From a practical perspective, these QLs will become the *de facto* criteria, thereby providing far less protection to human health than intended by the new criteria for almost half the toxic contaminants.

In our previous letter, we discussed this undermining effect of the QLs and, therefore why it is of the utmost importance that Oregon determine the best possible technology to detect and quantify toxic pollutants regulated under the numeric criteria, update those QLs on a regular and timely basis, make them readily available to the public, etc. In short, we made the case that *Oregon needs to establish that it will use QLs that come as close to the proposed criteria as possible*, both at adoption and over time. In this letter we want to briefly supplement those comments by pointing out an example of the problem and the opportunities to address the problem.

Oregon's current PCB criteria for human health are both 0.000079 µg/L (79.0 pg/L). EPA sets out minimum requirements for NPDES compliance monitoring in 40 C.F.R. Part 136. For PCBs, EPA recommends use of EPA Method 608, from which DEQ has derived the QL for PCBs set out in its Statement of Need and Fiscal and Economic Impact.[1] The level of detection for PCBs under EPA Method 608 is 0.5 µg/L (500,000 pg/L).[2] The difference between the current numeric PCB criteria and the level of detection is *four orders of magnitude*. Similarly, the proposed revised numeric criteria for PCBs, using 175 grams/day fish tissue, is 0.0000064 µg/L (6.4 pg/L). The difference between the proposed revised criteria for PCBs and the level of detection is *five orders of magnitude*.

In contrast, PCB monitoring by the Delaware River Basin Commission (DRBC) is conducted using Method 1668, Revision A.[3] As the DRBC states, there are "substantial differences in . . . both the type of results and detection limits achieved" between EPA Methods 608 and 1668A.[4] EPA Method 608 has a detection limit of 0.065 µg/L (65,000 pg/L).[5] In contrast, EPA Method 1668A has "detection limits in the single pg/L range," namely 1-3 pg/L per congener as demonstrated in over 1,000 samples collected from over 90 NPDES dischargers.[6] *The difference between these detection limits is four orders of magnitude*.

EPA Method 608 has other drawbacks in addition to its high detection limit. For example, it does not analyze for all PCB congeners,[7] whereas, in contrast, EPA Method 1668A provides results for all 209 PCB congeners.[8] The DRBC points out that this ability to identify individual

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[1] ODEQ Statement of Need and Fiscal and Economic Impact, Revised Water Quality Standards for Human Health Toxic Pollutants and Revised Water Quality Standards Implementation Policies, Appendix B, Table 1 Comparison of Current and Proposed Human Health Toxics Criteria and Quantitation Limits, undated.

[2] *Id.* at 65.

[3] Gregory J. Cavallo, Thomas J. Fikslin, Delaware River Basin Commission, Powerpoint: An Evaluation of Methods to Quantify PCB Concentrations, February 16, 2011.

[4] *Id.* at 4.

[5] *Id.* at 6.

[6] *Id.* at 9, 11.

[7] *Id.* at 7.

[8] *Id.* at 9.

PCB compounds is "[c]ritical when evaluating weathered samples."[9] The DRBC points out several other major benefits of the Method 1668A over Method 608, including the ability to compare the results across all media sampled.[10]

Elsewhere, states have been able to use much more sensitive detection limits than assumed by Oregon. For example, in Washington, recent work has achieved detection limits in fish tissue at 0.04 ug/kg for total PCBs and 0.01-0.1 ug/kg for some congeners, 100 pg/L total PCBs (Yakima River) using semi-permeable membrane devices (the use of which was discussed in our previous comments), 5 pg/L for individual congeners (Puget Sound Water Column Study), 10-200 pg/L for individual congeners (Puget Sound Surface Runoff Study), and 10 pg/L (Yakima River TMDL/wastewater treatment plant effluent). All of these results are two to four orders of magnitude better than the current EPA Method 608 upon which DEQ seeks to rely.

EPA too appears to be distancing itself from Method 608. In 2010, EPA proposed to remove Method 608 from Table 1C of 40 C.F.R. Part 136.[11] EPA notes in the preamble to the proposed rule that Method 1668 "is being used in several environmental applications, including NPDES permits."[12] EPA is proposing use of Method 1668C in its revised Table 1C for 209 PCB congeners.[13] As the agency states, "EPA developed Method 1668 for use in wastewater, surface water, soil, sediment, biosolids, and tissue matrices."[14]

Oregon should not wait for EPA to changes its requirements before the state uses better detection

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[9] *Id.* at 10.

[10] *Id.* at 7 (single calibration standard added at 50 µg/L) vs. *id*. at 9 (multiple point calibration standard with lowest calibration point equivalent to 5 pg/L). Likewise whereas Method 608 applies only to wastewater, *id*. at 6, Method 1668A can be used for water, sediment, and tissue analysis. As a result of its many superior attributes, Method 1668A has multiple advantages including "reduced analytical uncertainty,"and better "comparability between samples and across media." *Id*. at 10.

[11] EPA, Proposed Rule Guidelines Establishing Test Procedures for the Analysis of Pollutants Under the Clean Water Act; Analysis and Sampling Procedures, 75 Fed. Reg. 58024, 58036 (September 23, 2010), http://water.epa.gov/scitech/methods/cwa/update_index.cfm.

[12] *Id.* at 58028-9.

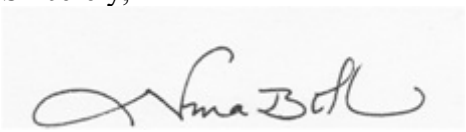
[13] *Id.* at 58058.

[14] *Id.* at 58027.

and quantification methods to identify and control the very toxic pollutants the state claims to want to protect the public from. Given DEQ's unwillingness to control nonpoint sources and indirect discharges to municipal sewage collection systems or to use its numeric criteria to control stormwater sources, it has left only municipal and industrial NPDES-permitted sources from which to wrest reductions in toxic discharges. Therefore, DEQ should do the utmost to ensure that it realizes this outcome by using the best possible detection and quantification limits. Or, in the event that DEQ also does not desire to control NPDES-permitted sources, which its actions suggest is the case, it could at least use the Clean Water Act to more precisely identify the degree of toxic pollution in Oregon so that its citizens can know the extent of the pollution the State government intends to willfully ignore. In either case, using the most technologically advanced methods of detection and quantification should be Oregon's goal so as to not expose the state to charges that it has adopted "the most stringent criteria in the nation" while at the time deliberately choosing not to find those very toxics in the environment and the pollution streams it allegedly regulates.

Proceeding on the basis of existing QLs as DEQ has to date reminds one of the three wise monkeys who see no evil, hear no evil, and speak no evil. When, however, the evil is toxic contamination, it is both unwise and misleading to fail to see what is there.

Sincerely,



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