State of Oregon

Department of Environmental Quality Memorandum

**To:**Neil Mullane **Date:** May 13, 2010

Water Quality Division Administrator

**From:** Andrea Matzke, Standards and Assessment Section

Jennifer Wigal, Water Quality Standards & Assessment Section

**Subject:** Toxics Rulemaking: DEQ recommendations on addressing work group issues associated with revised variance regulatory language.

**Purpose**

DEQ staff have been developing and exploring various implementation tools for permitting with the rulemaking work group as part of the human health toxics rulemaking. Variances as an implementation tool has been extensively discussed with work group members. DEQ currently has authority in our water quality standards rules to issue variances, but we have not utilized this option to date. The purpose for reviewing the variance rule language is to improve the usefulness of this tool in appropriate circumstances. As part of these discussions, there have been a number of concerns expressed by several of the stakeholders relating to proposed variance regulatory language. In order to finalize language, DEQ staff is providing recommendations in response to major concerns raised by these work group members.

**Issues Raised from Rulemaking Work Group and DEQ Recommendation**

1. **Aquatic Life Criteria Eligibility for Variances**

Description

The current variance rule and proposed revised language allows facilities to apply for variances for any water quality criteria, including toxics criteria for human health and aquatic life criteria, as long as certain criteria are met. Participants from the work group representing Columbia Riverkeeper and NW Environmental Advocates have concerns about facilities applying for variances based on an aquatic life criteria exceedence.

*Columbia Riverkeeper*

The rationale for revising variances for human health criteria pollutants does not apply to the unchanged aquatic life criteria.  Moreover, DEQ has not vetted the implications of revising Oregon's variance language for aquatic life criteria.  At this time, the revisions to the variance language reflect an implementation tool for adopting an accurate fish consumption rate in Oregon.  The rationale for revising, and in turn easing the accessibility to, variances are in no way associated with aquatic life criteria.  In the context of this rulemaking, DEQ is obligated to follow the EQC's directive.  That directive does not address increasing the accessibility to and ease in obtaining variances for water quality standards that protect aquatic life.

*NW Environmental Advocates*

I think this is a mistake. (1) we have not discussed how this applies to a wide range of pollutants, (2) this will require ESA consultation on EPA’s action on the rule, (3) the existing use protection requirement will be harder to address for aquatic life than for human health and (4) it does not appear that DEQ has thought about how this will work for aquatic life.

Recommendation

The existing variance rule provision is broadly applicable, including aquatic life criteria. Consequently, we do not see a compelling reason to exclude criteria associated with aquatic life in the proposed variance regulations. The proposed variance language has been developed to set up a framework for how variance requests are assessed and processed. In addition, variances must be approved by EPA. EPA’s approval action will trigger an ESA consultation for a variance from an aquatic life criterion if that variance may affect a threatened or endangered species. DEQ acknowledges that an ESA consultation could pose a challenge to the administrative process; however, that should not preclude a discharger’s ability to request a variance. Facilities should have the opportunity to provide documentation in support of a variance request.

1. **Variance Duration**

Description

In the existing variance regulation, a variance may not exceed three years or the term of the NPDES permit, whichever is less. The Department proposes changing the duration to coincide with the duration of a NPDES permit. Participants from the work group representing Columbia Riverkeeper and NW Environmental Advocates have concerns with extending a variance beyond a 5 year permit term which may occur if a permit is administratively extended.

*Columbia Riverkeeper*

CRK appreciates that DEQ is proposing to align the term of a variance with, at most, a permit term.  CRK requests that DEQ remove any language that would allow a variance to stay in effect for longer than one permit term.

*NW Environmental Advocates*

Even the GLI does not allow variances longer than 5 years or the term of a permit. 40 CFR Pt. 132, App. F Procedure 2 B. “…shall not exceed five years or the term of the NPDES permit.” Plain language. Why does DEQ think that GLI even applies to Oregon? Why does DEQ think that it can go beyond GLI?

Recommendation

We recommend changing the duration of the variance to coincide with the duration of a NPDES permit. This alignment allows a variance to stay in effect until a new permit is reissued. This dovetailing fosters efficiency in the administrative process for granting variances and provides the opportunity to satisfy the public notice and comment requirements for both the variance and NPDES permit at the same time. If a permit is not reviewed within the 5 year timeframe, the variance will remain in effect until the permit is reissued or revoked, as long as the discharger submits to the Director an application for renewal of the NPDES permit and variance at least one hundred eighty days prior to the date of expiration of the NPDES permit. We propose revising language to the variance provision to reflect this clarification:

*(3) Variance Duration.*

*(a) The duration of the variance period must be specified as part of each variance and shall not exceed the term of the NPDES permit. The variance shall remain in effect in the event that a NPDES permit is administratively extended, as long as the discharger submits to the Director an application for renewal of the NPDES permit and variance at least one hundred eighty days prior to the date of expiration of the NPDES permit. The permittee must be in compliance with the effluent limitation sufficient to meet the underlying water quality standard upon the expiration of the variance.*

Permits may be administratively extended for several reasons, including limited staff resources, aligning permit issuance on a watershed basis, insufficient data, or legal challenges. In these cases, it would not be practical for DEQ to revise or revoke the variance and modify the permit accordingly for that purpose alone. Rather, in these situations, DEQ would work to resolve all the issues with the permit and get it renewed, including making a decision about whether or not the variance should be renewed or modified.

Generally, from an environmental standpoint, it is very unlikely water quality conditions resulting from dischargers who receive variances will change significantly in a time period of less than 5 years. Requirements under an existing pollutant minimization plan for a variance would still continue to apply in the event that a permit was administratively extended. In addition, dischargers will be required to submit an annual status report of their approved PMP to the Department for review. Any inadequacies will be rectified.

In addition, if information is made available during a triennial review process that circumstances have changed and the variance is no longer appropriate, the variance could be terminated.

Supporting Information

There are no specific regulations which have addressed the duration of a variance, nor has there been policy guidance documentation from EPA limiting the duration of a variance. The most relevant [memo](http://www.epa.gov/waterscience/standards/library/variancememo.pdf) regarding duration of variances was written in 1992 from EPA’s Office of General Counsel to EPA Region 8, where it was concluded that variances were not required, by regulation, to be limited to 3 years.

Section 303(c) of the CWA requires states to conduct a triennial review of their water quality standards. If the state adopts new or revised water quality standards, they must be submitted to EPA for approval. A variance is considered a temporary change to a water quality standard, so would fall under this three year review requirement. However, section 303(c) does not require an expiration and re-adoption of standards every three years, rather it is an opportunity to identify what standards need to be revised based on updated science or other circumstances. If during a triennial review process information is submitted to the Department showing that the conditions on which the variance was based and/or the justification for the variance are no longer valid, the variance could be terminated by the Department.

DEQ’s proposed regulatory language for duration of a variance is similar to language found in Ohio’s[[1]](#footnote-1) multiple discharger variances for mercury regulations. Michigan[[2]](#footnote-2) allows variances to remain in effect, as long as the NPDES permit is in effect.

1. **Existing Use Protection**

Description

40 CFR 131.10(g)[[3]](#footnote-3) and (h)(1) address existing uses and removal of a use. Essentially, a variance cannot be granted if it results in a removal of an existing use. However, the degree to which an existing use must be protected has not been clearly defined by EPA. Before making a determination of whether or not a variance results in a removal of an existing use, the existing use must also be identified. Existing use is defined by whether or not the use has actually been attained in the water body on or after November 28, 1975, as well as determining the highest level of water quality that has been achieved since that date. Several participants representing the Columbia Riverkeeper and NW Environmental Advocates have concerns that DEQ is not sufficiently addressing this requirement as part of revising the variance regulations.

*NW Environmental Advocates (Columbia Riverkeeper concurs)*

As will be repeated elsewhere in comments, a variance cannot waive existing use protection. See 40 CFR 131.10(g) and (h)(1). This simply must be discussed in this paper. In order to not waive existing use protection, first the existing uses must be identified. Second, it has to be made clear that this is a real requirement.

Recommendation:

We agree that existing uses cannot be waived when determining whether or not to grant a variance request from a discharger; however, the scale of this determination needs to be considered as part of this analysis. Removal of an existing use per 40 CFR 131.10(g) specifically relates to removing a designated use when conducting a Use Attainability Analysis. When applied to a variance, the analysis is most appropriately related to whether or not the discharge under a variance scenario results in a removal of an existing use for that waterbody. One way of evaluating whether or not the existing use is protected is by examining any changes to discharge loads. For example, if the discharge pollutant load proposed under a variance scenario is the same as (or lower than) the load under the previous permit, we conclude that it is reasonable to assume that there would not be a corresponding removal of an existing use. We cannot envision a scenario where a variance would be given to a facility seeking to increase their load. Proposed variance permit conditions require that dischargers have a permit which represents the best effluent quality that they can achieve and can be no less stringent than that achieved under the previous permit.

To affirm the applicability of the existing use requirement when determining whether or not to grant a variance, we propose adding language to the variance provision:

*(2) Conditions to Grant a Variance. Before the Commission or Department may grant a variance, the permittee must demonstrate that a loss of an existing use would not result from the granting of the variance and that attaining the water quality standard is not feasible for one of the following reasons:*

1. **Applicability of NPS BMPs**

Description

40 CFR 131.10(h)(2)[[4]](#footnote-4) addresses the evaluation of whether or not a use could be attained in a water body if the water body were not being impacted by point or nonpoint sources of pollution. The state must demonstrate that a designated use (identified in CWA section 101(a)) is not attainable before the use can be removed. NW Environmental Advocates has expressed concern regarding how DEQ intends to apply this requirement, given that a variance request is discharger-specific, and is not a request for removal of a designated use for a waterbody. NWEA proposes that DEQ interpret the federal requirement at 40 CFR 131.10(h)(2) to apply to BMPs both within the immediate control of the discharger and those activities outside of its control.

*NW Environmental Advocates*

Along the same lines, DEQ may not remove designated uses if they can be attained by cost effective and reasonable NPS BMPs. See 40 CFR 131.10(h)(2). This language shows up in the DEQ rule language but is otherwise completely ignored by DEQ in this paper.

A variance must demonstrate that implementation of all cost-effective and reasonable best management practices for nonpoint sources cannot correct the underlying water quality problem: It would be my suggestion that DEQ look at creating a mechanism to evaluate what it knows about the BMPs in force at the time of the variance application, devise a method of evaluating whether the BMPs improve, require collection of data to demonstrate an improvements in water quality as a result, etc. The fact is that DEQ has given no consideration to this provision and that this provision is not only federal law but it dovetails perfectly with the Commission’s charge no. 3.

[Also refer to NWEA’s memo of 2/10/10, *Proposed Method of Addressing Non-Point Source Requirements of 40 C.F.R. § 131.10(h)(2) When Considering Variance Requests.]*

Recommendation:

We do not agree that 40 CFR 131.10(h)(2) applies to cost effective and reasonable BMPs which are outside the control of the discharger applying for a variance. Although DEQ could choose to broaden the definition of this language, the practical implementation of a variance as a compliance tool would be jeopardized by placing an unreasonable burden on both the discharger and DEQ staff to conduct the rigorous BMP analysis.

EPA has previously interpreted this requirement to mean that BMPs required to be implemented prior to granting a variance should be limited to those BMPs that may be implemented by a particular discharger (*See* *Water Quality Guidance for the Great Lakes System: Supplementary Information Document (SID)* (EPA-820-B-95-001, March 1995). Part of this rationale relates to the applicability of the variance request. Variances, as described by DEQ’s regulations, are facility-specific, and do not result in removing the designated use on a waterbody segment. Rather, the effect of the variance is to change the water quality standards applicable to the facility, and keep the underlying water quality standards in effect for all other purposes. Nonetheless, we agree that if the permittee can implement cost-effective and reasonable BMPs for nonpoint sources over which it has control, the permittee should implement those BMPs either before requesting a variance for its point source discharge or as part of the requirements the facility would implement as part of its variance. Requiring a discharger to implement all BMPs to address NPSs of pollutants upstream should not be a prerequisite for DEQ to grant a variance request. For example, if a discharger owned and/or controlled large tracts of land which contributed to nonpoint sources of pollution impacting its point source discharge, it would be incumbent upon the discharger to implement BMPs to reduce pollutant levels as part of its approved PMP. However, DEQ envisions BMP implementation occurring as part of the PMP in the variance request, rather than as a prerequisite for variance approval.

NW Environmental Advocates developed a memo[[5]](#footnote-5) which proposed a method of addressing nonpoint source requirements when considering a variance request. The “BMP Analysis” described in the memo is similar to the extensive types of analyses that may be performed in the context of a TMDL or in evaluating the effectiveness of individual BMPs. Given the likely scenario of a discharger requesting a variance prior to TMDL development, it is likely that an analysis performed (pre or post TMDL) would conclude that the BMPs currently in place would not be sufficient to reduce the pollutant level needed for the discharger to meet WQBELs. If the “BMP Analysis” described in the memo is followed, the discharger would then be responsible for funding and implementing BMPs on public and private lands to achieve load reductions needed for the waterbody to meet water quality standards, or at the very least, reduce loads to the maximum extent practical prior to requesting a variance. We anticipate that facilities are likely to request a variance prior to TMDL completion. As a result, the kind of analysis described in this memo would most likely not be completed yet.

There is also uncertainty about what the status of compliance would be for the discharger while the BMP analysis was being performed by DEQ staff. Dischargers could be vulnerable to third party lawsuits if WQBELs were exceeded and a compliance mechanism was not in place. This requirement would also add a significant burden to DEQ staff in the variance request process and would render this tool as too burdensome to implement. The “BMP Analysis” or something similar could be appropriate in a TMDL context where Designated Management Agencies are accountable for load reductions and assessing effectiveness of BMPs, but this rigorous analysis should not be applicable to an individual discharger’s request for a variance.

Supporting Information

In the Great Lakes Initiative Supplementary Information Document, EPA received comments regarding the interpretation of 40 CFR 131.10(h)(2) means in the context of issuing variances. The following is an excerpt from the Great Lakes Initiative Supplementary Information Document in response to this:

Comment: Several commenters suggested that EPA should eliminate the requirement of Best Management Practices as a condition for obtaining a variance. Other commenters stated that the BMP requirement should be clarified, or that BMPs should be limited to those that may be implemented by a particular discharger on a reasonable and cost‑effective basis.

Response: EPA disagrees that the BMP requirement should be eliminated. EPA agrees, however, that the BMPs that must be implemented before a variance may be granted should be limited to those that may be implemented by a particular discharger. WQS variances are not intended to allow water quality that is already below standards to be further degraded. In addition, as stated in procedure 2.F.1, the purpose of variances are to improve water quality as much as possible by requiring effluent limitations that represent the level of water quality achievable by the permittee. If the permittee can implement cost effective and reasonable BMPs for nonpoint sources, over which it has control, that will attain water quality standards, the permittee should implement those BMPs rather than requesting a variance for its point source discharge. If implementing such BMPs will improve water quality but not meet the standards, implementation by the permittee will result in a reduced variance request and an overall improvement in water quality.

**5) Applicability of Variances to New Facilities and Expanded Industrial Activities**

Description

In the proposed variance regulations, variances would not generally be granted to new facilities. This rationale is based on the assumption that new facilities should be able to mitigate and implement compliance strategies before discharging to a waterbody, in keeping with the overall objectives of the CWA. However, there may be circumstances in which a new facility may be allowed a variance based on social or environmental benefits. For example, leaking septic systems may be impacting a nearby waterbody. An analysis is completed and is determined that building a POTW to centrally treat wastewater from homes is more environmentally preferable than retaining individual septic systems. Industry and members representing municipalities support these exceptions for new facilities, however, the Columbia Riverkeeper representative has concerns about its inclusion. The comments below were submitted previous to the work group discussion in January 2010.

*Columbia Riverkeeper*

RWG members have raised the question of whether the variance rule could apply to new facilities.  This issue had not been discussed at any meeting.  For example, DEQ had not explained why it is appropriate to authorize a new facility to discharge pollution that exceeds a WQS, but obtain a variance to make the discharge "legal."  This is an important point: at its core, how does DEQ justify allowing variances for new facilities given CWA sec. 101(a) ("The objective of this Act is to **restore** and **maintain** the chemical, physical, and biological integrity of the Nation's waters")?   Similarly, the purpose of the rulemaking is to protect human health and improve water quality.  While implementation tools are part of the rulemaking package, DEQ is not obligated to reach so far as to allow additional water quality degradation in the form of new facilities with new pollutant discharges that exceed WQS.

Recommendation

In principle, DEQ does not intend to grant variances for new facilities, however, DEQ does recommend including several exceptions to new facilities that wish to apply for a variance. Below is proposed language to address such circumstances:

*(1) Applicability. The Commission or Department may grant point source variances from the water quality standards in this Division where the requirements in sections (1) through (8) of this Rule are met.*

*(a) The water quality variance may apply only to the point source for which the variance is requested and only to the pollutant or pollutants specified in the variance; the underlying water quality standard otherwise remains in effect.*

*(b) A water quality standard variance may not be granted if:*

*(A) The standard will be attained by implementing technology-based effluent limits required under sections 301(b) and 306 of the federal Clean Water Act, and by the discharger implementing cost-effective and reasonable best management practices for nonpoint source control;*

*(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;*

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

*(D) A source requesting a variance is a new facility, unless a proposed variance for a new facility:*

1. *Prevents or mitigates a threat to public health or welfare;*
2. *Provides a net environmental benefit; or*
3. *Remediates 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).*

Rulemaking Work Group members discussed this issue fairly extensively at the January 2009 meeting in which variances were discussed. Many members were concerned with applying a blanket disallowance on new facilities which could apply for variances and requested that DEQ identify situations where variances could be allowed. The language above was developed in response to this request. If appropriate, DEQ would prefer to use a compliance schedule for new facilities where needed to achieve water quality standards. However, allowing a compliance schedule for new sources and dischargers may only occur on a limited basis. DEQ may issue compliance schedules for new sources or new dischargers that are under construction and have not begun discharging if all of the following are true:

* This is the first NPDES permit to be issued for the source,
* A new, revised or newly interpreted water quality standard was issued less than three years before commencement of the relevant discharge (see 40 CFR § 122.47(a)(2)), and
* The new, revised or newly interpreted standard was issued or revised after commencement of construction.

Staff would closely analyze any requests from expanding facilities or newly permitted facilities to determine if a variance was warranted.

1. “Maximum time frame for variances. A WQS variance shall not exceed five years or the term of the NPDES permit, whichever is less, with the exception that a WQS variance may remain in effect beyond the term of the NPDES permit if, at least one hundred eighty days prior to the date of expiration of the NPDES permit, the applicant submits to the director an application for renewal of the NPDES permit, in accordance with Chapter 119. of the Revised Code and paragraph (C) of rule 3745-33-04 of the Administrative Code, and an application for renewal of the variance in accordance with paragraph (D)(8) of this rule. Such a variance shall remain in effect until the director issues a final action on the NPDES permit renewal application unless the application for renewal of the variance is not substantially complete or not submitted within the time required in this paragraph, or unless the permittee did not substantially comply with the 3745-33-07 9 conditions of the existing variance. The director shall review and modify as necessary WQS variances as part of each WQS review pursuant to section 303(c) of the act.”

   [↑](#footnote-ref-1)
2. "The duration of a water quality variance shall not exceed the term of the NPDES permit. If the time frame of the variance is the same as the permit term, then the variance shall stay in effect until the permit is reissued or revoked." [↑](#footnote-ref-2)
3. 40 CFR 131.10(g) States may remove a designated use which is not an existing use, as defined in §131.3, or establish sub-categories of a use if the State can demonstrate that attaining the designated use is not feasible because: [↑](#footnote-ref-3)
4. 40 CFR 131.10(h) States may not remove designated uses if: …(2) Such uses will be attained by implementing effluent limits required under sections 301(b) and 306 of the Act and by implementing cost-effective and reasonable best management practices for nonpoint source control. [↑](#footnote-ref-4)
5. Nina Bell. Proposed Method of Addressing Non-Point Source Requirements of 40 C.F.R. § 131.10(h)(2) When Considering Variance Requests. February 10, 2010. [↑](#footnote-ref-5)