



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 10

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OFFICE OF
WATER AND WATERSHEDS

March 9, 2012

Don Essig
Water Quality Division
Department of Environmental Quality State Office
1410 North Hilton
Boise, Idaho 83706-1255

RE: Idaho Antidegradation Implementation Procedures, January 2012 Public Comment Draft

Dear Mr. Essig:

The Environmental Protection Agency (EPA) appreciates the Idaho Department of Environmental Quality's (IDEQ) effort to develop the antidegradation implementation guidance that was published for public comment on January 27, 2012. That draft guidance elaborates on the requirements of the antidegradation implementation methods that have been adopted in Idaho's water quality statute and water quality standards regulation. On August 18, 2011 EPA approved Idaho's antidegradation implementation methods as being consistent with Section 303(c) of the Clean Water Act (CWA) and the federal antidegradation policy at 40 CFR 131.12. EPA offers the following comments, both to ensure that Idaho's antidegradation guidance is consistent with Idaho's approved implementation methods and 40 CFR 131.12, and to clarify certain areas of the guidance.

► Throughout the development and adoption process for Idaho's antidegradation implementation methods; EPA stressed the importance of providing for the protection of existing uses that are not designated in Idaho's water quality standards, and providing for the possibility that the criteria in Idaho's standards may not always ensure the water quality necessary to protect all existing uses. As EPA explained in comments on IDEQ's proposed antidegradation implementation regulation (Christine Psyk, EPA to Barry Burnell, IDEQ, October 1, 2010), this is necessary to be fully consistent with the federal policy for existing use protection and the definition of existing uses, at 40 CFR 131.12(a)(1) and 40 CFR 131.3(e), respectively. Idaho's adopted antidegradation implementation methods regulation includes revisions suggested by EPA to ensure that those methods do not limit IDEQ's ability to provide the necessary existing use protection.

Likewise, it is important that Idaho's antidegradation implementation guidance be consistent with the federal antidegradation regulation and not limit IDEQ's ability to protect existing uses in all instances. While it may be that in most cases, or maybe all cases, the criteria in Idaho's water quality standards will ensure protection of all existing uses, and that the list of potential designated uses at IDAPA 58.0102.100 covers all potential existing uses, the guidance language should be flexible enough to address possible exceptions. One way of accomplishing this in

Idaho's draft antidegradation implementation guidance is to insert "generally" at several points in the discussion at Section 3 "Tier 1 Protecting Existing Uses," such as shown below:

"Existing uses will *generally* fall within the beneficial use choices defined in the Idaho WQS. These uses will *generally* be protected and maintained by applying the numeric and narrative criteria in the Idaho WQS."

EPA notes that the "Executive Summary," of Idaho's draft guidance, under "Three Tiers of Protection," already modifies IDEQ's otherwise anticipated approach to existing use protection with the word "generally," i.e.:

"This tier is the minimum level of protection for any water body and *generally* means ensuring that all applicable water quality criteria are met" emphasis added.

The rest of the guidance addressing existing use protection should be revised accordingly. To assist IDEQ in this effort, Attachment 1 shows all of the points in Section 3 where EPA suggests inserting "generally."

► The first paragraph of the discussion at Section 7 "General NPDES Permits, Dredge and Fill Permits, and FERC Licenses" (page 59) includes the following statements:

"Most of sections 3–6 are specific to individual NPDES permits where a great deal is known about a particular discharge" and "Much less is known about the particulars of pollutant discharge authorized by a general permit, and thus antidegradation review of these permits requires different considerations as discussed in this section."

Section 3 through 6 of the draft guidance address "Tier 1 Review – Protecting Existing Uses," "Evaluating Potential to Degrade," "Tier 2 Analysis—Is Degradation Necessary and Important?," and "Tier 3 Designation—Protecting Outstanding Resource Waters," which encompass the fundamental components of the federal antidegradation policy, as well as Idaho's antidegradation policy. The State and federal antidegradation policies are just as applicable to general NPDES permits, dredge and fill permits, and FERC licenses as they are to individual NPDES permits. EPA understands that general NPDES permits, dredge and fill permits, and FERC licenses may present IDEQ with special challenges for implementing antidegradation, and we believe that this is the intended point of the statements. Nevertheless, the statements are misleading.

To avoid any ambiguity or misunderstanding; IDEQ should either delete the statements identified above, or revise them to clearly distinguish between the applicability of the three tiers of antidegradation to general NPDES Permits, dredge and fill permits, and FERC licenses, and how IDEQ will ensure that the three tiers of antidegradation will be addressed in the context of such permits and licenses.

► The flow chart for Tier 2 Review in Appendix A (page 70) should include the step of ensuring that the water quality necessary to protect existing uses is maintained and protected. Such protection is applicable regardless of the degree of degradation proposed. Currently, the flow

chart only includes ensuring the water quality necessary to protect existing uses if degradation is not significant.

- ▶ The examples of water body tiering, as Tier 1 or Tier 2, in Appendix D (page 106) indicate that in the case where the water is listed as impaired for only temperature, pH, or dissolved oxygen, and no DEQ bioassessment data are available, the water body defaults to Tier 1 for aquatic life. However, the flowchart for determining whether Tier 1 or Tier 2 protection is applicable (Figure 2, page 15) includes a note that in such a situation “DEQ will make an effort to obtain biological or habitat data in order to make an informed decision on the aquatic life use support.” EPA encourages IDEQ to obtain the data necessary to make informed decisions.
- ▶ More detail concerning the decision process and outcomes would be useful in the example of a Tier 2 antidegradation review, Appendix F (pages 109-113). This information could include specifics concerning what degradation was authorized or prevented for each pollutant of concern, and a discussion illustrating why the chosen alternative was the least degrading reasonable alternative in accordance with IDEQ’s regulation.
- ▶ The definition of “affordable” in Idaho’s draft antidegradation implementation guidance (Glossary, page 119) seems to be very much in the context of effluent guidelines development for the technology requirements of the CWA, that are applicable to all discharges within a certain category:

“Affordable: Pollution-control alternatives being within the financial means of most dischargers or activities of the same industrial classification (e.g., Standard Industrial Classification (SIC) code) or size for a publically owned treatment works (POTW) (major or minor). If a wastewater treatment alternative is not affordable, it is not a reasonable alternative for purposes of Tier 2 antidegradation analysis.”

In the water quality permitting context, affordability is discharger specific and expectations for pollution controls to meet water quality standards, including antidegradation, are not limited to what may currently be standard for the discharge type in question. The definition might be useful towards establishing the minimum expectations for what a discharger might reasonably be expected to afford, but it should not be used to determine the limits of affordability in the water quality-based context. In any event, it is unclear how IDEQ would evaluate the financial means of the universe of dischargers or activities, of a common type, in the context of an antidegradation review for a particular discharger or activity in Idaho.

EPA understands that determining what is affordable is not always straight forward, but affordability as used in the antidegradation alternatives analysis should be discharger specific. EPA notes that the discussion at “AA Step 4 – Judging Affordability, (page 52 of the draft guidance) is consistent with this point, notwithstanding “affordable” as defined in the glossary. In that discussion, “affordability” and “standard practice in the industry” are presented as separate considerations. Furthermore, the discussion includes the statement, “A demonstration that an alternative is not affordable should be clearly documented and should show that it would have a *substantial adverse economic impact* that would preclude its use for *the activity/discharge under review*” (emphasis added). The definition of affordable should be revised to reflect the

concept of alternatives that do not present a substantial adverse economic impact to the discharger in question.

► To be consistent with Idaho’s antidegradation implementation methods regulation and the discussion of alternatives analysis in the draft antidegradation implementation guidance, “reasonable” should be deleted from the definitions of “Alternatives Analysis,” “Less-Degrading Alternative,” “Nondegrading Alternative,” and “Tier 2 Protection,” in the Glossary (pages 119-121), for the reasons stated below.

“Alternatives Analysis (AA): An evaluation of ~~reasonable~~ alternatives for regulated activities or discharges that might degrade water quality, including less-degrading alternatives, nondegrading alternatives, and no-discharge alternatives. Examples of such alternatives include treatment process changes, relocated discharge facilities, land application, reuse, and subsurface discharges.”

“Less-Degrading Alternative: A ~~reasonable~~ alternative to a proposed activity or discharge that would result in less degradation to water quality than the minimum level of pollution control.”

“Nondegrading Alternative: A ~~reasonable~~ alternative to a proposed or existing discharge that would not result in degradation of existing water quality.”

“Tier 2 Protection: Policies and procedures that require an analysis of ~~reasonable~~ alternatives and social or economic considerations to justify significant degradation or a determination the degradation is insignificant. Tier 2 protection applies to all surface waters where existing water quality is sufficient to classify them as high quality on a water body by water body basis.”

Section 58.01.02.052.06.b of Idaho’s antidegradation implementation methods regulation provides for the alternatives analysis to include “all technologically feasible alternatives.” (58.01.02.052.06.b.iv.(1)). An alternative may then be eliminated from consideration on the basis that it is not reasonable, through the evaluation at sections 58.01.02.052.06.b.iv.(2) & (3). The goal is to identify the “least degrading alternative that is reasonable” (58.01.02.052.06.b).

This is reflected in the discussion of alternatives analysis in the draft antidegradation implementation guidance. For example, Section 5.3, under “Evaluating Alternatives and Making a Choice,” provides, “While only technologically feasible alternatives should be considered, they will likely vary in their level of pollutant loading and may not all be reasonable. Also, Section 5.3, under “AA Step 4 – Judging Affordability,” provides, “Following an analysis of pollutant-reduction cost-effectiveness and environmental trade-offs, the affordability of the best remaining alternatives will be assessed by the applicant. This assessment may be used to determine if an alternative is too expensive to reasonably implement.” Finally, the definition of “Reasonable” in the Glossary includes, “Generally speaking, nondegrading or less-degrading pollution-control alternatives shall be considered reasonable where the costs of such alternatives are affordable.” This implies that such alternatives may be either reasonable or unreasonable, depending on whether they are affordable, which is to be determined in the course of the alternatives analysis.

Alternatives analysis is not to be limited at the start to alternatives that have been prejudged as being “reasonable,” rather the reasonableness of an alternative is to be determined in the course of a structured alternatives analysis in accordance with Section 58.01.02.052.06.b of Idaho’s antidegradation implementation methods regulation. Such an approach can ensure an objective consideration of potential alternatives. The suggested deletions of “reasonable” also ensure that Idaho’s guidance is internally consistent.

EPA looks forward to continued work with IDEQ on water quality standards issues. If you have any questions, please contact me at 206-553-2495.

Sincerely,

A handwritten signature in black ink, appearing to read "William R. Beckwith". The signature is fluid and cursive, with the first name being the most prominent.

William R. Beckwith

Enclosure

(by email)

3 Tier 1 Review—Protecting Existing Uses

This section describes the review that is performed to ensure existing uses are protected.

Existing uses and the water quality necessary to protect those uses must be maintained. In addition, all activities or discharges must not cause or contribute to a violation of water quality criteria. For NPDES permitting, ensuring the water quality necessary to protect existing uses will *generally* be accomplished through evaluating reasonable potential to exceed (RPTE) water quality criteria. This evaluation is based on the lowest applicable criterion and must protect the most sensitive use, whether or not existing uses are designated. The key in this process is to determine what the existing uses are and whether they are more sensitive than the water body’s designated uses or undesignated presumed use protections.

3.1 What is an Existing Use?

The regulatory definition of an existing use is as follows...

The following two questions regularly come up when discussing existing uses:

- What does it mean for a use to be “actually attained?”
- Is the suite of possible use choices limited to those described in the Idaho WQS?

It is not the purpose of this guidance to fully explore these questions, so as a practical matter the following answers are provided for purposes of antidegradation:

- A use may be determined as existing as described in Chapter 3 of Idaho’s WBAG (Grafe et al. 2002). DEQ will use all available information to make this determination, including information in any completed subbasin assessment (SBA).
- Existing uses will *generally* fall within the beneficial use choices defined in the Idaho WQS. These uses will *generally* be protected and maintained by applying the numeric and narrative criteria in the Idaho WQS.

Once the applicable uses are determined—for most water bodies there are several uses—a Tier 1 review is *generally* a matter of ensuring that an activity or discharge will not cause or contribute to a failure to meet applicable criteria for the most sensitive use in the receiving water, which may mean at the edge of any authorized mixing zone.

Beneficial Uses...

3.2 Determining Applicable Criteria

Uses are protected by criteria, which are specifications of two types...

Achieving the water quality necessary to protect existing uses in a Tier 1 review will *generally* come down to ensuring that the applicable criteria for the most sensitive existing use, designated or not, will not be exceeded by the proposed activity or discharge.