



STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

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C.L. "Butch" Otter, Governor
Toni Hardesty, Director

August 3, 2007

Jannine Jennings
Water Quality Standards Manager
USEPA – Region 10
1200 Sixth Avenue
Seattle, WA 98101

Re: Idaho's interpretation of its Special Resource Waters rule language (IDAPA 58.01.02 sections 011.085, 056 and 400.01.b)

Dear Ms. Jennings:

This letter follows up on conversations and meetings between DEQ and EPA with regard to waters in Idaho designated as Special Resource Waters (SRWs) and several recent proposals for new or increased discharges to a SRW under NPDES permits issued by EPA. From our discussions it has become apparent that EPA's interpretation of Idaho's rule is not entirely consistent with DEQ's and I would like to, for the record, provide Idaho's interpretation. Attachment A provides the relevant sections of Idaho's Water Quality Standards for convenient reference.

It is DEQ's understanding that EPA views SRWs as equivalent to Tier II antidegradation, per a 1996 water quality standards approval letter. This is not DEQ's view.

Unlike waters covered by Tier II of the antidegradation policy, waters need not have high water quality to be designated as a SRW. For example, a water may be designated as a SRW if intensive protection of the quality of the water is necessary to maintain an existing, but jeopardized beneficial use (IDAPA 58.01.02.056.01.f) or because intensive protection of the quality of the water is in the paramount interest of the people of Idaho (IDAPA 58.01.02.056.01.d). Currently designated special resource waters range in quality from poor (e.g. Lake Lowell) to some of the best in Idaho (e.g. Middle Fork Salmon River). While Idaho has not specifically placed any waters into antidegradation tiers, the quality of SRWs clearly ranges from Tier I (at or below standards) to Tier III (waters exceeding standards).

More importantly, Idaho's SRW provisions are different than Tier II antidegradation in providing more stringent protection and in specificity to point sources. Unlike Tier II antidegradation, the SRW provisions at IDAPA 58.01.02.400.01.b makes no allowance for a public process to justify degradation based on socio-economic need. But the limitations in IDAPA 58.01.02.400.01.b for SRWs are directed only at point sources of pollutants. Thus for point sources an SRW is more restrictive than Tier II antidegradation.

The SRW provision at §400.01.b must be read as a whole, with all its qualifiers and contingencies to avoid misinterpretation.

The SRW provision treats existing and new discharges differently. New discharges are prohibited if they would cause measurable reductions in receiving water quality, while existing sources are allowed to discharge within their current “design capacity” before this additional test comes into force. In both cases the change in ambient water quality of interest is that measured at the downstream edge of any mixing zone granted by the state. Not all new or increased discharges are prohibited.

For discharges governed by §400.01.b, Idaho interprets design capacity for existing sources to be the load limit in their current permit. Thus an existing wastewater treatment facility may discharge a greater volume of higher quality effluent within their design load. Only when dischargers are proposing to increase their design load is the limitation in §400.01.b triggered.

For new discharges to SRW waters the test of significance and measurability come into play. The SRW provisions in the WQS allow for new dischargers to be permitted if they can demonstrate that the new discharge will not result in a measurable decrease in water quality at the edge of the mixing zone.

Spatially, the limitation on discharges causing reduction in water quality extends to sources located upstream of the SRW. It will take a case by case analysis of how far downstream effects on water quality can be detected. Because restricted discharges are those that would reduce the quality of the receiving special resource water and be measurable at the edge of a mixing zone, it is likely only upstream discharges in close proximity to a SRW would need restriction

The limitation on point source discharges in §400.01.b speaks to “pollutants significant to designated beneficial uses” and then a measurable reduction in water quality. DEQ views reduction in water quality as synonymous with adverse change in water quality, i.e. a decrease in dissolved oxygen, or an increase in temperature or concentration of toxic substances. It is a two part question, first are pollutants that are or will be discharged significant to the designated use(s), then, if so, will there be an adverse change in receiving water quality (i.e. concentration of a pollutant) that is measurable.

DEQ believes that test of “pollutants significant to the designated beneficial uses” is a low threshold. Generally significance exists if there is a water quality criteria for a pollutant, and the pollutant is present in the effluent. In this case measurability should be evaluated.

Measurability is a many faceted question. DEQ does not at this time have a definitive answer to what is measurable. We believe it involves questions of variability; both natural and due to sampling and measurement errors; measurement capabilities, such as analytical detection limits and method sensitivity; and statistical considerations. Thus measurability will be to some degree pollutant and waterbody specific.

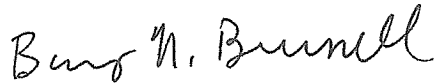
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Although a reduction in water quality must be measurable to be restricted by §400.01.b, DEQ does not believe that means it must actually be measured. Indeed, forecast calculations of water quality changes at the edge of the mixing zone must be used in order to evaluate new sources not yet discharging.

DEQ foresees developing a guidance document that addresses measurability and related issues of sampling and calculation for SRWs, possibly as a chapter in a broader document on antidegradation implementation.

Finally, DEQ wants to note that a TMDL could impose more stringent limitations than §400.01.b on point sources to SRWs, particularly for discharge to SRWs which are water quality limited.

Sincerely,



Barry N. Burnell
Water Quality Division Administrator

BNB:DE:bmm

Attachment

c: Adriane Allen, EPA
Mike Lidgard, EPA
Lisa Macchio, EPA
Jim Wertz, EPA
Doug Conde, DEQ
Michael McIntyre, DEQ
Pete Wagner, DEQ

ATTACHMENT A

SRW Provisions from Idaho Water Quality Standards (IDAPA 58.01.02)

010.DEFINITIONS. For the purpose of the rules contained in IDAPA 58.01.02, "Water Quality Standards," the following definitions apply:

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85. Special Resource Water. Those specific segments or bodies of water which are recognized as needing intensive protection:

- a. To preserve outstanding or unique characteristics; or
- b. To maintain current beneficial use.

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056.SPECIAL RESOURCE WATERS.

01. Designations. Waters of the state may be designated as special resource waters. Designation as a special resource water recognizes at least one (1) of the following characteristics:

- a. The water is of outstanding high quality, exceeding both criteria for primary contact recreation and cold water aquatic life;
- b. The water is of unique ecological significance;
- c. The water possesses outstanding recreational or aesthetic qualities;
- d. Intensive protection of the quality of the water is in paramount interest of the people of Idaho;
- e. The water is a part of the National Wild and Scenic River System, is within a State or National Park or wildlife refuge and is of prime or major importance to that park or refuge; or
- f. Intensive protection of the quality of the water is necessary to maintain an existing, but jeopardized beneficial use.

02. Designated Waters. Those waters of the state determined to be special resource waters are listed in Sections 110 through 160.

03. Restrictions of Point Source Discharges to Special Resource Waters and Their Tributaries. Point source discharges to special resource waters and their tributaries shall be restricted as specified in Subsection 400.01.b.

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400.RULES GOVERNING POINT SOURCE DISCHARGES.

01. Implementation Policy.

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b. Except as noted in Section 400, no new point source can discharge pollutants, and no existing point source can increase its discharge of pollutants above the design capacity of its existing wastewater treatment facility, to any water designated as a special resource water or to a tributary of, or to the upstream segment of a special resource water: if pollutants significant to the designated beneficial uses can or will result in a reduction of the ambient water quality of the receiving special resource water as measured immediately below the applicable mixing zone.