



UNITED STATES ENVIRONMENTAL PROTECTION
AGENCY

REGION 10

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OFFICE OF
WATER AND
WATERSHEDS

May 21, 2014

Paula Wilson
Idaho Department of Environmental Quality
1410 N. Hilton
Boise, Idaho 83706

Re: EPA comments on Idaho Mixing Zone Rule Draft Sections 060.01 (b), (e), (f), and (h)

Dear Ms. ~~Wilson:~~ *Paula*

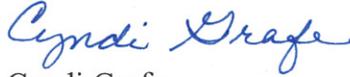
EPA appreciates the opportunity to provide comments on the Idaho Mixing Zone Rule Draft Sections 060.01 (b), (e), (f), and (h), which the Idaho Department of Environmental Quality (DEQ) issued on March 31, 2014 in advance of its May 1, 2014 negotiated rulemaking meeting. DEQ requested written comments from the public by May 22, 2014 only for the above-referenced sections. We understand that DEQ intends to present the remaining draft rule sections on June 12, 2014, and will provide a public comment period on those sections after that negotiated rulemaking meeting.

We understand that DEQ plans to finalize the mixing zone rule and then develop implementation guidance that will provide greater specificity for authorizing mixing zones. We certainly appreciate DEQ's rationale for this approach, particularly given timing, staff resources, and workloads. However, further details in the anticipated implementation guidance are important to understanding the draft rule implications, and would help ensure consistent interpretation and predictability as well as provide clarity for the regulated community. In addition, this level of information would be helpful for the Endangered Species Act (ESA) consultation, which involves an assessment of potential impacts to threatened and endangered species. EPA is required to complete an ESA consultation to support an approval of the mixing zone rule. Without additional specificity, either in the regulatory language or in guidance, it will be more challenging for EPA to consult effectively with the Services and meet its ESA obligations.

Our detailed comments are provided in the attachment and include input from both EPA Region 10 and EPA Headquarters. We are available if you would like to discuss our comments further,

and we look forward to continued work with DEQ on this effort. Please contact me at (208) 378-5771 if you have any questions.

Sincerely,



Cyndi Grafe
Idaho Mixing Zone Rulemaking Liaison

cc: Barry Burnell (electronic copy only)
Administrator Water Quality Programs
Idaho Department of Environmental Quality

Mary Anne Nelson (electronic copy only)
Water Quality Standard
Idaho Department of Environmental Quality

Enclosure:

Attachment 1. *Summary of EPA Comments – Idaho Department of Environmental Quality (DEQ) Mixing Zone Draft Sections 060.01 (b), (e), (f), and (h)*

Attachment 1. Summary of EPA Comments – Idaho Department of Environmental Quality (DEQ) Mixing Zone Draft Sections 060.01 (b), (e), (f), and (h)

General Comment:

- EPA's guidance on mixing zones (Water Quality Standards Handbook) regarding in-zone quality (i.e. within the mixing zone water quality) states, "A mixing zone is an allocated impact zone where acute and chronic water quality criteria can be exceeded as long as a number of protections are maintained, including the freedom from the following: (1) Materials in concentrations that will cause acutely toxic conditions to aquatic life (EPA's guidance defines acutely toxic conditions as those lethal to aquatic organisms that pass through the mixing zone); (2) materials that settle to form objectionable deposits; (3) floating debris, oil, scum, and other material in concentrations that form nuisances; (4) substances in concentrations that produce objectionable color, odor, taste, or turbidity; and (5) substance in concentrations that produce undesirable aquatic life or result in a dominance of nuisance species." EPA recommends including language that addresses in-zone quality and makes clear that although acute and chronic water quality criteria can be exceeded in a mixing zone, the narrative free-from protections are to be maintained.

1. Exceeding Criteria – Draft section 060.01(b) - currently section 060.01(g)

b. Water quality within an authorized mixing zone is allowed to exceed water quality criteria. If approved by the Department, acute water quality criteria may be exceeded within the zone of initial dilution inside the mixing zone. Water quality criteria must be met at the boundary of any mixing zone under its design conditions.

- EPA recommends the following edits to (b) to clarify that allowable criteria exceedances are limited to those parameters approved by DEQ and to clarify where acute and chronic criteria may be exceeded within a mixing zone:

Water quality within an authorized mixing zone is allowed to exceed chronic water quality criteria for those parameters approved by the Department. If approved by the Department, acute water quality criteria for one or more parameters may be exceeded within the zone of initial dilution inside the mixing zone. All waterWater quality criteria must be met at the boundary of any mixing zone under its design conditions.

2. Multiple Discharge Points – Draft section 060.01(e) – currently section 060.01(c)

e. Multiple mixing zones can be established for a single activity with multiple points of discharge, but their combined area and volume shall not exceed that which would be allowed if there was a single point of discharge.

- While EPA agrees with the concept represented in this initial proposed language by DEQ, this situation could become complicated if there are multiple discharge points to more

than one waterbody from a single facility, which has occurred. In this case, one of those waterbodies will invariably be larger than the other. EPA recommends making this draft provision specific to multiple discharges to the same waterbody, or clarifying how this first draft provision will apply to facilities that discharge to more than one waterbody.

- In the May 1, 2014 rulemaking, DEQ proposed the following language to clarify multiple points of discharge. “If a single permitted activity has multiple points of discharge, each point of discharge will need its own mixing zone analysis and authorization. When these multiple points of discharge are to the same water body the combined area and volume shall not exceed that which would be allowed if there were a single point of discharge” (Mixing Zones DOCKET 58-0102-1401 Power Point Presentation Slide #15). This proposed language is one way to provide the clarification EPA recommends in our comment above.

3. Multiple Mixing Zone – Draft section 060.01(f) – currently section 060.01(d)

f. Multiple mixing zones can be established for a single discharge, each being specific for one (1) or more pollutants contained within the discharged wastewater;

- EPA recommends reversing the order of the draft provisions 060.01(e) and 060.01(f), since “f” speaks to the simpler and more common situation of a facility with a single point of discharge, whereas “e” speaks to the more complicated and less common situation of a facility with multiple points of discharge.

4. Mixing Zone Restrictions – Draft section 060.01(h)

h. Mixing zones shall meet the following restrictions; provided, however, that the Department may authorize mixing zones that vary from the restrictions under the circumstances set forth in Subsection 060.01.i. below:

- EPA understands the intent of section 060.01(h) to be that all mixing zones, whether they are within the size restrictions of section 060.01(h), or are proposed to vary from those restrictions according to section 060.01(i), must be evaluated on a case-by-case basis to ensure consistency with the overall provisions of section 060.
- Section 060.01(i) involves establishing the discharger’s need for a mixing zone that would exceed the restrictions of section 060.01(h). EPA recommends that DEQ provide more clarity concerning the demonstration a discharger must make to obtain a mixing zone that varies from the restrictions in draft section 060.01(h). Adding the following language in section 060.01(h), for example, would be beneficial during the ESA consultation process and help ensure consistent interpretation of section 060.01(i).
 - Dischargers must utilize all economically achievable siting, technological, and managerial options which would minimize the need for mixing zones before an exemption to the size criteria may be allowed.

5. Stream Width – Draft section 060.01(h)i – currently section 060-01(e)ii

i. The width of a mixing zone is not to exceed twenty-five percent (25%) of the stream width.

- A provision in DEQ's current mixing zone regulation, "Cumulative width of adjacent mixing zones not to exceed 50% of the stream width," was deleted in the draft revision. EPA recommends DEQ address the cumulative effect of adjacent mixing zones in the rule.

6. Shoreline Proximity – Draft section 060.01(h)ii – currently section 060.01(e)iii

ii. The mixing zone shall be no closer to the ten (10) year, seven (7) day low-flow shoreline than fifteen percent (15%) of the stream width;

- EPA recommends that DEQ revise the text to clarify that the purpose of this provision is to prevent shore hugging plumes that exceed water quality criteria.

7. Volume – Draft section 060.01(h)iii – currently section 060.01(e)iv

iii. The mixing zone shall not include more than twenty-five percent (25%) of the critical volume of the stream flow as set forth in section 210.03.b of these rules; (x-xx-15)

- If using dynamic instead of steady-state modeling for mixing zone analysis and wasteload allocation, there is no "critical" stream flow volume; this is a construct that is specific to steady-state modeling using critical conditions. Thus, EPA recommends that DEQ explain how this provision would apply to a mixing zone analysis using dynamic modeling. Perhaps dynamic modeling could be used to evaluate site-specific mixing characteristics to ensure that the overall requirements for mixing zones would be met, particularly where there is a request to modify the size restriction of not using more than 25% of critical volume of stream flow.
- To reduce confusion surrounding the term "critical volume of the stream flow," EPA recommends that DEQ change the phrase to "low flow design discharge conditions," which would be consistent with the terminology cited in section 210.03.b.