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Idaho Conservation League

PO Box 844, Boise, ID 83701
208.345.6933

September 17, 2014

Paula Wilson
DEQ State Office
Attorney General's Office
1410 N. Hilton
Boise, ID 83706

Submitted via email: paula.wilson@deq.idaho.gov

Re: Docket No. 58-0102-1401 – Proposed Rule

Dear Ms. Wilson;

Since 1973, the Idaho Conservation League (ICL) has been Idaho's voice for clean water, clean air and wilderness—values that are the foundation for Idaho's extraordinary quality of life. The Idaho Conservation League works to protect these values through public education, outreach, advocacy and policy development. As Idaho's largest state-based conservation organization, we represent over 25,000 supporters, many of whom have a deep personal interest in protecting Idaho's water quality and fisheries.

Thank you for providing us an opportunity to review and comments on DEQ's proposed rule regarding mixing zones.

Our greatest concern about the proposed language is DEQ's inclusion of language that allows the DEQ to authorize the use of mixing zone that are larger than the receiving water volume, width and/or surface area limitations stated in the rule. DEQ needs to develop some metrics to differentiate between when a larger mixing zone is 'needed' vs merely desired. There is virtually no situation where the size of a mixing zone could not be decreased via the application of additional resources for treatment. How will DEQ determine when a discharger actually 'needs' a larger mixing zone vs the discharger has just decided that they do not want to spend the money that is required to clean up their effluent? The lack of any metrics for what is, or is not, necessary make the application of this rule inherently arbitrary.

Further, because the DEQ has included language that allows mixing zones to be of an unknown size – without any limitation beyond the also arbitrarily determined provision that states that mixing zones not cause 'unreasonable interference' – the proposed rule language will be very difficult for the EPA to approve and for the Services to undertake ESA consultation.

ICL comments re: Docket No. 58-0102-1401 - Preliminary Draft Negotiated Rule -

Our comments are attached.

Please contact me if you have any questions at 208-345-6933 x 24 or jhayes@idahoconservation.org

Sincerely,

A handwritten signature in blue ink, appearing to read "Justin Hayes".

Justin Hayes
Program Director

General Comments

ICL does not support the use of mixing zones. We do not believe that it is appropriate to authorize the violation of water quality standards in portions of a water body. If a discharger wishes to discharge at levels that will violate current water quality standards, we believe that the discharger should seek a variance or a site-specific water quality standard. If the discharger is able to demonstrate that the receiving water and the designated uses can be protected by the application of a site-specific criteria less stringent than the regular water quality standard then they should proceed in this manner, rather than operate under a 'mixing zone' construct. If they are not able to successfully apply for and receive a variance or a site-specific criteria for the area in which they discharge, they should comply with existing water quality standards (WQS).

Additionally, we believe that it is never appropriate for the *acute* water quality standards to be violated within a waterbody. With regard to this proposed rule language, we do not believe that the violation of acute WQS should be allowed in a zone of initial dilution.

Notwithstanding our objection to the use of mixing zones and zones of initial dilutions, we provide the following comments to DEQ's proposed rule language. We are providing our comments in the order of the document. The ordering of our comments is not meant to infer their order of importance.

Section 010.119

The definition of 'zone of initial dilution' (ZID) provides that the ZID "shall be no larger than necessary" and provides some guidance about the potential maximum size of a ZID, based on limiting exposure to drifting or swimming organisms. However, DEQ has failed to provide any guidance as to how to judge what shall be deemed to be "no larger than necessary." By what metric will the DEQ judge that a ZID is necessary at all – or that a ZID is some specific size is necessary as compared to a ZID of some smaller size?

As discussed further down in our comments, the DEQ should develop a means of judging necessity akin to the demonstration of socioeconomic need for an action per the antidegradation rules.

Section 0.60.01.a

If a MZ is to be utilized, we favor the provision that states that mixing zones shall not be authorized for a given pollutant when the receiving water does not meet water quality standards for that pollutant. This prohibition on a mixing zone in a 303d waterbody is necessary because such a waterbody has no assimilative capacity to dilute the pollutant concentration back down to a concentration that meets water quality standards. And, as a result, authorizing a mixing zone into a 303d waterbody results in, or contributes to, an exceedance of water quality standards in the receiving water.

If an MZ is to be used for a pollutant when the receiving water does not meet water quality standards for that pollutant, that could be allowable provided that discharge is consistent with a TMDL and the germane WLA for the discharger. However, the notion that some other 'applicable plans or analyses' should be allowed to justify a mixing zone as a substitute for a TMDL is misplaced. TMDLs go through a defined, rigorous development process that includes public comment and EPA approval. These 'other' plans and analyses do not necessarily receive the same scrutiny and effort and thus should not be held up as equal. Because the EPA does not review and approve these "other" plans, it would be inappropriate for the EPA to approve a mixing zone rule that provided that future plans not reviewed and approved by the EPA could be relied upon in this manner.

The above statements notwithstanding, we think that DEQ should seek to make its mixing zone policy implementation similar to its antidegradation implementation.

DEQ's antidegradation policy adheres to a 'waterbody by waterbody' approach. However, DEQ's mixing zone policy seeks to take advantage of a 'pollutant by pollutant' approach. To this end, mixing zones should not be authorized for any pollutants when a receiving water is not in compliance for any pollutant; even if the pollutant in the discharge is different than the pollutant that is exceeding water quality criteria. This inconsistency needs to be resolved to ensure constant water quality protection.

Section 0.60.01.b

We do not believe that it is ever appropriate for a portion of a waterbody to be allowed to exceed an acute water quality standard. We do not believe that zones of initial dilution should be authorized if the ZID will violate an acute water quality standard. Doing so would, by definition, cause 'unreasonable interference' with aquatic organisms.

Section 0.60.01.c

It is unclear to us how DEQ will judge whether or not a mixing zone is larger than 'necessary.' How does DEQ judge what is necessary? Will 'necessity' be judged by what is technologically possible, economically possible, or if economically desired by the applicant? What if a smaller mixing zone was technologically and economically feasible – but the operator did not wish to implement needed changes to reduce the size of the mixing zone and they thought that a larger MZ was 'necessary' to accommodate their desire to perpetuate the status quo? Judging what is, or is not, necessary will be inherently arbitrary and subjective if DEQ does not develop some metrics or framework to guide decision-making on these issues.

To accomplish this, we recommend that DEQ adopt a socio economic analysis required similar to the test that DEQ utilizes in the antidegradation policy.

Section 0.60.01.d.iv

This section prohibits the authorization of a mixing zone that causes lethality to aquatic life passing through the mixing zone. This appears to conflict with prior sections which authorize ZIDs that violate the chronic WQS for a pollutant. We

believe that the protections that this section is attempting to secure should negate the authorization of ZID that violates acute WQs and as such, the prior section authoring ZIDs should be stricken.

Section 0.60.01.g

This section prohibits overlapping mixing zones for independent activities. We believe that this section should be strengthened by providing some minimum distance between two such mixing zones. This minimum distance between mixing zones will lessen the impact on aquatic life and will also ensure that the mixing zones do not inadvertently overlap as stream channel morphology, flow volume and stream temperature change.

Section 0.60.01.h

This section provides that mixing zones shall meet certain restrictions, then states that DEQ may authorize mixing zones that vary from these restrictions per 0.60.01.i. We do not believe that DEQ should be authorized to approve any mixing zones that vary from the restrictions in 0.60.01.h. There needs to be a clear understanding and certainty about the maximum size of a potential mixing zone. Ensuring a maximum limit on size will make DEQ's job more practical and consistent when DEQ is asked to judge what size mixing zone is 'necessary'. Further, it may prove very difficult EPA to approve this mixing zone language and for the NMFS and the FWS to undertake ESA consultation if there is no hard limit on mixing zone size.

Section 0.60.01.h

This section limits the size of mixing zones – then it provides that larger mixing zones may be authorized.

It is our belief that it is not appropriate to allow mixing zones that are larger than authorized in Section 0.60.01.h.i.1 or Section 0.60.01.h.i.2. To do so interjects the arbitrary judgment of what is 'necessary' as described in other portions of our comments.

Further, by failing to place a hard cap on the size of a mixing zone, the DEQ is making it virtually impossible for the USFWS and for the NMFS/NOAA to conduct the required ESA consultation on these rules. The Services only recourse will be to issue a jeopardy decision for mixing zones in ESA fish bearing waters because DEQ has failed to limit impacts to a known size.

Section 0.60.01.h.i.1

What is the justification for allowing a mixing zone to extend to up to 25% of the width of the stream? Why not 10%?

Also, the width of a stream is often dependent on the amount of water in the stream at any particular time. Section 0.60.01.h.i.2 contains provisions that base certain aspects of mixing zones on various low flow conditions. We believe that 0.60.01.h.i should similarly contain some means of determining which stream width DEQ is talking about – does DEQ mean the width of the stream at flood stage or at the width observed when the low flow design discharge condition occurs? In the name of

consistency, it would seem reasonable to utilize the stream width that would be present when the low flow design discharge condition is observed.

0.60.01.h.i.2.

What is the justification for allowing a mixing zone to include up to 25% of the “low flow design discharge condition” of the stream flow? Why not 10%?

0.60.01.h.ii.

We do not believe that mixing zones should be allowed in ‘nonflowing waters’ as this is likely to result in a relatively stationary zone in which the WQS is violated. Aquatic organisms may inadvertently spend too much time in this stationary mixing zone and be exposed to pollutants for periods of time that ultimately prove harmful to the organism. Mixing Zones (with and without ZIDs) in nonflowing waters also have the potential to settle or hug the bottom of the nonflowing waterbody. In such circumstances, the lack of flow or current could result in a stagnant area with elevated pollutant concentration blanketing the bottom of the waterbody and causing impairment to relatively stationary life forms – such as plants, mussels and crawfish. We would argue that a Mixing Zone does not belong in nonflowing water because species may occupy the mixing zone for sufficient time to cause mortality and/or result in a portion of the waterbody that causes unreasonable interference to organisms.

This section does not speak to whether or not a ZID would be allowed in a nonflowing water. We would argue that a ZID does not belong in nonflowing water because species may occupy a ZID for sufficient time to cause mortality and/or result in a portion of the waterbody that causes unreasonable interference to organisms.

0.60.01.h.ii.1

What is the justification for allowing a mixing zone to occupy 5% of the surface area of the waterbody? What is the justification for allowing the mixing zone to occupy an area up to 100 meters? Why not 1% and 10 meters?

0.60.01.h.ii.3

DEQ should state what the intent of using a diffuser is – this way DEQ can be sure that the diffuser is designed to achieve the desired effect.

0.60.01.h.iii

What is the justification for saying a reservoir with a mean detention time of 15 days or greater is considered ‘nonflowing water?’ From a water quality perspective, what is the difference between 15 days and 14 days? Or 10 days?

0.60.01.i.i

Language in this section implies that DEQ needs to justify the authorization of a mixing zone that is smaller than the 25% width and volume criteria. This seems backwards to us. The mixing zone should be presumed to be “0” and any increase above this should need to be justified.

0.60.01.i.ii

It is unclear how DEQ will judge when a larger mixing zone, or any mixing zone, is 'needed.' As discussed in our comments above, DEQ needs to develop some metrics to differentiate between when a larger mixing zone is 'needed' vs merely desired. There is virtually no situation where the size of a mixing zone could not be decreased via the application of additional resources for treatment. How will DEQ determine when a discharger actually 'needs' a larger mixing zone vs the discharger has just decided that they do not want to spend the money that is required to clean up their effluent?

Also, as discussed above, these provisions authorizing larger mixing zones will make it very challenging EPA to approve this language and for the Services to conduct ESA consultation on these rules.

Additional Comments

It is not clear how Idaho's antidegradation rules and this proposed mixing zone rule will work together. DEQ may want to consider adding a section that discusses the use of mixing zones in Tier 2 water.