UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
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WATER
DIVISION

May 15, 2020

Michelle Dale
Idaho Department of Environmental Quality
1410 N. Hilton
Boise, Idaho 83706

RE: The EPA's Comments on Idaho's Water Quality Standards/Implementation – Bacteria, Docket No. 58-0102-2001

Dear Michelle:

Thank you for the opportunity to provide comments to the Idaho Department of Environmental Quality on its water quality standards and implementation requirements for bacteria criteria (Docket No. 58-0102-2001). The EPA appreciates the DEQ's efforts to address the stakeholders' concerns with the 2019 rule associated with Docket No. 58-0102-1802 through this negotiated rulemaking before formally submitting the rules to the EPA for review and action under the Clean Water Act section 303(c).

The EPA has reviewed the DEQ's 2019 revised water quality standards and offers the following comments for your consideration. Many of these comments correspond with previous comments the EPA provided for Idaho's proposed rule to revise the recreational use criteria (Docket No. 58-0102-1802).[1]

Bacteria Criteria – IDAPA 58.01.02. 100 and 250

Primary Contact Recreation Activities

The 2019 rule clarifies that the designated use for primary contact recreation includes all activities associated with secondary contact recreation. The EPA understands this change provides clarity and consistency with DEQ's long standing interpretation of PCR and SCR. In addition, the rule is consistent with DEQ's interpretation of PCR and SCR activities as provided in the DEQ Water Body Assessment Guidance.[2] Section 3.2.2 of the document includes the following statement, "Waters used or suitable for PCR are also suitable for SCR activities such as fishing." The EPA supports the rule revision to clarify activities associated with primary contact recreation.

IDAPA 58.01.02.100.02.a

> *Primary contact recreation (PCR): water quality appropriate for prolonged and intimate contact by humans or for recreational activities when the ingestion of small quantities of water is likely to occur.*

[1] Letter to Jason Pappani, Water Quality Standards Coordinator, Idaho Department of Environmental Quality, from Cyndi Grafe, Water Quality Standards Coordinator, USEPA Region 10. The EPA's Comments on Idaho's Proposed Rule – Revision of Recreational Use Criteria and New Aquatic Life Criteria for Acrolein, Carbaryl, and Diazinon, Docket No. 58-0102-1802. October 4, 2018. pp. 3

[2] Water Body Assessment Guidance. 3rd Edition. Idaho Department of Environmental Quality. October 2016. pp. 118.

Such activities include, but are not restricted to, those used for swimming, water skiing, or skin diving. PCR includes all activities associated with secondary contact recreation (SCR).

Enterococci Criteria

The 2019 rule added enterococci criteria consistent with the EPA's 2012 national recommended CWA section 304(a) criteria.[3] Enterococci are good predictors of gastrointestinal illnesses in marine and fresh recreational waters and the inclusion of these criteria improves public health protection. The 2019 rule, like Idaho's previous rule, provides that the bacteria criteria are applicable to both primary and secondary contact recreation, which is consistent with the EPA's national recommendations and guidance.

During the May 31, 2018 negotiated rulemaking meeting, the DEQ verbally noted the department's intent to implement the *E. coli* and enterococci criteria as independently applicable. Further, the DEQ clarified its intent at IDAPA 58.01.08.251.02 by stating that data for either of the indicator criteria would be considered sufficient for determining compliance with the bacteria criteria. The DEQ stated in the 2019 proposed rule notice that allowing use of either indicator would provide dischargers with the option to request an alternative fecal bacteria indicator for monitoring compliance with water quality standards and support a transition period from *E. coli* criteria to enterococci criteria. Based on this reasoning, the EPA supports such a transition approach with two fecal indicators and the rule revision.

IDAPA 58.01.08.251.02

***Fecal Indicators**. Waters designated for recreation must meet criteria for indicator organisms of fecal contamination. Either [underline added] of the following indicator criterion would be considered sufficient for determining compliance with the fecal indicator criteria:*

Geometric Mean and Statistical Threshold Value Criteria Implementation – Independently Applicable

The DEQ added *"or"* to the proposed rule language at IDAPA 58.01.08.251.02.a.i and b.i. The EPA interprets the proposed rule language to mean that for each indicator there are two components, geometric mean and statistical threshold value, and that each are independently applicable. This methodology is consistent with the EPA's criteria recommendations. The EPA requests that DEQ confirm this interpretation.

Geometric Mean and STV Criteria Implementation – Time Period

The DEQ's revised criteria to protect recreation in fresh water at IDAPA 58.01.08.251.02.a.ii and b.ii specify:

a.ii. "Statistical Threshold Value (STV). No greater than ten percent (10%) of valid samples collected over a thirty (30) day period are to contain E. coli bacteria in concentrations exceeding an STV of four hundred and ten (410) E. coli CFU per one hundred (100) ml.; or"

b.ii. "Statistical Threshold Value (STV). No greater than ten percent (10%) of valid samples collected over a thirty (30) day period are to contain enterococci bacteria in concentrations exceeding an STV of one hundred and thirty (130) enterococci CFU per one hundred (100) ml.; or"

[3] Recreational Water Quality Criteria. 2012. USEPA Office of Water 820-F-12-058. pp. 63. Available at: https://www.epa.gov/sites/production/files/2015-10/documents/rwqc2012.pdf

The EPA interprets these proposed rule provisions to mean that the STV and geometric for each 30-day period are calculated from the same data distribution. The EPA requests that DEQ confirm this interpretation.

Additionally in its negotiated rulemaking announcement, DEQ stated it would consider revisions of statistical threshold values (STV) as criteria for beneficial use determinations. Presently, the Idaho 2019 rules regarding STV criteria are consistent with the EPA's guidance. The EPA computed the STV based on the water quality distribution observed during EPA's most recent epidemiological studies. The STV was also derived in a manner similar to how the 1986 criteria single sample maximum (SSM) component was derived by estimating the percentile of the expected water quality distribution around the geometric mean criteria value. For the STV, the EPA selected the estimated 90th percentile of the water quality distribution to allow for the expected variability in water quality measurements, while limiting the number of samples allowed to exceed the STV, before deciding water quality is impaired. The EPA understands that DEQ analyzed the Idaho bacteria data sets and confirmed that the EPA's recommended STV criteria were applicable to Idaho.[4] The EPA supports the 2019 rule revision to include STV criteria and remove previous SSM's to improve assessments of beneficial use support and protection of public health.

Sample Size and Geometric Mean

The language regarding the Geometric Mean Criterion for *E. coli* and enterococci (IDAPA 58.01.08.251.02.a.i and b.i) states, *"based on a minimum of five (5) samples taken every three (3) to seven (7) days over a thirty (30) day period."* In our comment letters of June 5, 2018 and October 4, 2018, the EPA recommended that DEQ not include data sufficiency clauses/statements addressing the sample number in its statement of criteria. Instead, the EPA recommended that Idaho include these statements in its assessment methodology for assessing compliance with the recreational criteria. DEQ responded that including the data sufficiency statements clarified the rule for both DEQ staff and the public.[5] The EPA plans not to take action on the language under section 303(c) of the Clean Water Act as it does not meet the EPA's test for what constitutes a new or revised water quality standard.[6]

Specific Variances – IDAPA 58.01.02.260.02

DEQ proposes to delete Subsection 260.02 relating to specific variances from its water quality standards. These rules were adopted in 2001 (Docket No. 58-0102-0002) and submitted to the EPA on May 29, 2003. The EPA disapproved these specific variances on May 7, 2010 and therefore, Subsection 260.02 is not effective for Clean Water Act purposes.[7] The EPA's disapproval letter provides details regarding the proposed re-routing of the City of Page wastewater treatment plant's discharge from the South Fork Coeur d'Alene River to the West Page Swamp and the ultimate decision not to pursue the re-

[4] Summary of the Basis for Revisions to Idaho's Recreational Water Quality Criteria. Docket No. 58-0102-1802. Idaho Department of Environmental Quality. 2018, p.4.
[5] Negotiated Rulemaking Summary, Docket No. 58-0102-1802. Idaho Department of Environmental Quality. 2018. p.8
[6] *What is a New or Revised Water Quality Standard under 303(c)(3)? Frequently Asked Questions*, EPA No. 820F12017 (Oct. 2012). Available at https://www.epa.gov/sites/production/files/2014-11/documents/cwa303faq.pdf
[7] Letter to Barry Burnell, Water Programs Administrator, Idaho Department of Environmental Quality, from Michael Bussell, Director, Office of Water and Watersheds, USEPA Region 10. EPA Disapproval of a Variance to Water Quality Standards for Ammonia, Chlorine, Cadmium, Lead and Zinc from the Page Wastewater Treatment Plant to the West Page Swamp - Docket No. 58-0102-0002. May 7, 2010. pp. 8

routing project. The EPA's disapproval letter further recommended DEQ delete the specific provisions related to the West Page Swamp variance since the discharge re-routing project was no longer being pursued. Consequently, the EPA supports DEQ's proposal to delete this rule language.

The EPA appreciates and supports the DEQ's ongoing efforts to use all available and appropriate information in updating the water quality standards that provide important protection to aquatic life and public health. If you have any questions or would like to discuss these comments further, please contact me at (208) 378-5771.

Sincerely,

Cyndi Grafe

Cyndi Grafe
Water Quality Standards Coordinator