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Ref: EPR-EP

Tracy Stone-Manning, Director
Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901

Re: EPA Comments on Montana's Nutrient Proposals (New Rule 1 Nutrient Standards Variances; Circular DEQ-12B; and Montana's Numeric Nutrient Standards Implementation Guidance)

Dear Ms. Stone-Manning:

This letter provides the comments of the Environmental Protection Agency (EPA) Region 8 on Montana Department of Environmental Quality's (MDEQ) draft nutrient rules contained in: 1) New Rule 1 Nutrient Standards Variances; 2) Circular DEQ-12B; and 3) Montana's Numeric Nutrient Standards Implementation Guidance (Version 1.3).

MDEQ has spent the last decade developing the scientific rationale behind the proposed numeric nutrient criteria for wadeable streams to ensure they are protective of designated uses. MDEQ recognized that meeting the protective criteria could be challenging for dischargers, initiating a stakeholder workgroup to develop implementation tools that would allow dischargers to make incremental progress towards achieving the stringent criteria. As described in the following comments, the Agency is supportive of MDEQ's approach to setting water quality standards for nutrients for the State's rivers and streams, including the adoption of protective numeric nutrient criteria and the accompanying variance regulations. The EPA has worked collaboratively with the State to ensure that not only are MDEQ's criteria protective of applicable designated uses and based on sound scientific rationale, but also that the State's general and individual variance approaches are consistent with the Clean Water Act and the EPA's implementing regulations. As a general matter, the EPA supports the use of variances, as appropriate and consistent with 40 CFR §131.10, to provide time to meet designated uses and associated criteria in certain situations. MDEQ's variance approaches will allow the State and its stakeholders time to implement a phased approach to improve water quality, while retaining the currently applicable designated uses as the long-term goal for the State's rivers and streams. The EPA specifically

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supports the use of multiple discharger variances[1], similar to MT's general variance provision, by States and authorized tribes that want to find ways to improve the efficiency of both their WQS adoption and the EPA's review and approval process.

Please note that the positions described in our comments, regarding both existing and proposed water quality standards, are preliminary in nature and should not be interpreted as the final EPA decisions under Section 303(c) of the Clean Water Act (CWA).

The EPA looks forward to discussing any outstanding issues or concerns as the rulemaking process continues. We greatly appreciate the years of hard work by MDEQ and its considerable expertise on this topic. Our detailed comments are summarized below.

EPA COMMENTS

1) Limits of Technology-Based Variances. Section 3 of New Rule I Nutrient Standards Variances (New Rule I) authorizes individual variances if attainment of the criteria is "precluded due to economic impacts or limits of technology, or both."

Under the EPA's water quality standards regulation, adoption of variances may be granted if it can be demonstrated based on site-specific facts and circumstances that the otherwise applicable designated use and criterion or criteria are not feasible to attain during a certain temporary time frame. 40 CFR §131.10(g) sets forth the limited factors that may be used to justify variances. While none of the EPA's 131.10(g) factors include the phrase "limits of technology," such technology limits may be relevant to a demonstration provided under 40 C.F.R. §131.10(g) where water quality-based controls would "result in substantial and widespread economic and social impacts" or if it can be demonstrated that "human caused conditions or sources of pollution prevent the attainment of the use and cannot be remedied or would cause more environmental damage to correct than to leave in place."

With respect to each of the factors MDEQ has proposed, there may be site-specific circumstances in Montana where it would be reasonable for the Department to consider adoption of discharger-specific individual variances provided the demonstration also shows that a 40 CFR §131.10(g) factor has been met. The decision to issue such an individual variance can only be made by completing a rulemaking to revise the WQS for an individual segment based on review of site-specific information. Each individual variance will be a Montana WQS rule change that must be submitted to the EPA for review and approval pursuant to 40 CFR §131.20(c).

[1] EPA-820-F-13-012. Discharger-specific variances on a broader scale: Developing credible rationales for variances that apply to multiple dischargers. March 2013.

2) Variance Limits Reflective of the Highest Attainable Condition. Department Circular DEQ-12B (DEQ-12B) establishes the following variance limits that apply through May 31, 2016:

Table 12B-1. General variance end-of-pipe treatment requirements per §MCA 75-5 -313(5)(b), through May 2016.

Discharger Category	Monthly Average	
	Total P (µg/L)	Total N (µg/L)
≥ 1.0 million gallons per day	1,000	10,000
< 1.0 million gallons per day	2,000	15,000
Lagoons not designed to actively remove nutrients	Maintain current performance	Maintain current performance

MDEQ has documented that the limits proposed in Table 12B-1 represent "starting point concentrations" that "may not be the lowest concentrations that could economically be achieved by every discharger today."[2] This perspective is further supported by the nutrient reduction steps outlined in MDEQ's Numeric Nutrient Standards Implementation Guidance that suggest further nutrient reductions are feasible. (Implementation Guidance, page 7).

The EPA's position is that variances should specify the interim use(s) and water quality criteria that reflect the highest attainable effluent conditions that require the point source discharge concentration and load to be minimized to the maximum extent attainable so that the highest degree of protection for use classification is achieved. This approach is consistent with the "wherever attainable" caveat to the CWA §101(a)(2) goal. Where appropriate, compliance schedules to achieve the highest attainable effluent condition as soon as possible can be established in the permit.

The EPA's recently Proposed Water Quality Standard Regulatory Clarifications[3] specify two options for defining the highest attainable effluent condition in a variance:

> "a variance must specify (1) the highest attainable interim use and numeric criterion that will apply during the term of the variance or (2) an interim numeric effluent condition that reflects the highest attainable condition for a specific permittee(s) during the term of the variance."[4]

[2] Letter from Richard Opper, MDEQ Director to Jim Martin, EPA Region 8 Regional Administrator, 9 March 2011.
[3] 78 Fed. Reg. 54518, 54533 (Sept. 4, 2013).
[4] 78 Fed. Reg. 54518, 54533 (Sept. 4, 2013).

In its proposed regulations, MDEQ has included an initial set of "end of pipe treatment requirements" (see above) accompanied by an expiration date for the initial phase within the general variance. This expiration is appropriate given that the State statute authorizing the variance, MCA 75-5-313, sets forth end-of-pipe treatment requirements for only that time frame. As the expiration date approaches for the initial set of end-of-pipe treatment requirements to expire, the EPA fully expects MDEQ to readopt the general variance with the next set of phased end-of-pipe treatment requirements, reflecting the highest attainable effluent condition at that time. The EPA is committed to working collaboratively with the State during the general variance readoption process to ensure that at no time are eligible permittees left without coverage under the general variance. The EPA understands that MT's intention is to continue the general variance, as appropriate, until the State's waters attain the numeric nutrient criteria, for up to 20 years from initial adoption. The EPA is supportive of that approach.

3) Variances for New Dischargers. In the Implementation Guidance (middle of page 6), MDEQ defines the scope of the implementation provisions as:

> "The provisions for general, individual, and alternative variances in section 75-5-313, MCA, are available to all discharge permit holders and are not limited to dischargers under permit on the effective dates of MDEQ Circular DEQ-12A or MDEQ Circular DEQ-12B." [underline added]

The EPA's long-standing policy is that variances are authorized only where one of the factors for removing a designated use in 40 CFR §131.10(g) are met. Importantly, all six of the removal criteria are subject to the caveat that only a designated use that is not an existing use may be removed. 40 CFR §131.10(g) specifies that "states may remove a designated use which is not an *existing* use." 40 CFR §131.3(e) defines existing uses as "those uses actually attained in the water body on or after November 28, 1975, whether or not they are included in the water quality standards."

Variances are not authorized in situations where the site-specific facts indicate that existing uses would be impacted. However, the EPA recognizes that there may be situations where it would be possible for a discharger to demonstrate that the variance protects the existing use while providing temporary relief from meeting the underlying water quality standard. In these cases, a variance may be justified.

4) Nutrient Reduction Steps. Section 2 (page 7) of the Implementation Guidance establishes a set of nutrient reduction steps for the three categories of dischargers. The guidance states that:

> "the Department will only supersede the reduction steps defined here if substantial cost reductions for existing technology have occurred, or technological innovations have

> allowed for nutrient reductions well beyond the defined steps and those technologies can be readily implemented on wastewater facilities in Montana". [underline added]

The EPA's position is that variance limits reflect the highest degree of pollutant removal attainable. Because those limits have not yet been determined for the three categories of dischargers, we recommend MDEQ strike this sentence from the final Implementation Guidance. In addition, because plant performance may vary greatly and to allow maximum flexibility to achieve the final limits, MDEQ may want to consider simply establishing the final interim variance limit that would apply for each category of discharger instead of outlining specific nutrient reduction steps facilities would be required to meet each permit cycle. The duration of compliance schedules to meet the final limits can be customized based on discharger-specific information.

5) Economic Analysis Exemption for Limits of Technology-Based Variances. MDEQ's Implementation Guidance exempts dischargers applying for an individual variance based on limits of technology from preparing an economic analysis to demonstrate economic hardship. This language is found on page 8 and repeated on page 14:

> "Permittees applying for an individual variance based on discharging at the limits of technology do not have to prepare the economic analysis presented below in **Section 3.1.1**. Rather, they should demonstrate to the Department that the waste treatment system they are proposing can achieve, at a minimum, the nitrogen and phosphorus concentrations shown in **Section 1.2** of this document, and that achieving those concentrations still will not enable them to attain the base numeric nutrient standards at a 14Q5 flow." (middle of page 8)

Because each individual variance will be a Montana WQS rule change that must be submitted to the EPA for review and approval pursuant to 40 CFR §131.20(c), the variance application will need to demonstrate consistency with 40 CFR §131.10(g). As noted in Comment #1, although none of the EPA's 40 CFR §131.10(g) factors include the phrase "limits of technology," such technology limits may be relevant to a demonstration provided under 40 CFR §131.10(g)(6) where water quality based controls would "result in substantial and widespread economic and social impacts."

Dischargers should use the most appropriate 40 CFR §131.10(g) factor to demonstrate they meet the requirements to be eligible for a variance. The guidance language exempting permittees from the federal requirement to provide this demonstration, even in situations where the most appropriate factor is 40 CFR §131.10(g)(6), could result in variances that may not comply with the EPA's regulations.

To address this concern, we recommend MDEQ consider the following modification to the language found on pages 8 and 14.

EPA-Recommended Language:

"Permittees applying for an individual variance based on discharging at the limits of technology ~~do~~ may not have to prepare the economic analysis. Permittees must demonstrate, based on one of the factors at 40 CFR§131.10(g) that it is infeasible to meet its water quality-based effluent limits based on the applicable designated use and associated criteria."

6) Alternative Variances. MCA 75-5-313(10)(a) and (b) authorize MDEQ to issue an "alternative" variance in situations where the discharger is an "insignificant" source of the nutrient load. MDEQ's Implementation Guidance provides additional detail (pages 16-17) on approaches (e.g., modeling) that can be used to evaluate whether the discharger nutrient contribution is "insignificant" and eligible for an alternative variance.

As noted in the EPA's 2011 letter to MDEQ[5], none of the 40 CFR §131.10(g) factors authorize variances based on *de minimus* considerations; therefore, a variance based on a *de minimus* demonstration would not comply with the EPA's regulations. Instead, *de minimus* situations may be addressed through the development of total maximum daily load (TMDL) allocations pursuant to CWA §303(d). This approach is described in New Rule Section 8 and addresses situations where a TMDL has been approved and the discharger meets the waste load allocation.

7) Detailed Comments on the Implementation Guidance: In addition to the comments summarized in this letter, the EPA has provided a number of edits and formatting changes to the Implementation Guidance using track changes. These comments are intended to help clarify the information in the document or improve readability. The EPA considers these revisions to be non-substantive and intended simply as editorial suggestions.

[5] Letter from Jim Martin, EPA Region 8 Regional Administrator to Richard Opper, MDEQ Director, 16 March 2011.

Conclusion

We hope our comments are helpful to MDEQ and the parties to this rulemaking. We appreciate MDEQ's efforts to address issues of concern to the EPA. If there are questions concerning our comments, please contact Tina Laidlaw (406-457-5016). We look forward to working with the parties to address these issues.

Sincerely,

Sandra Spence, Chief
Water Quality Unit