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May 10, 2022

Ref: 8WD-IO

SENT VIA EMAIL

Director Christopher Dorrington
Montana Department of Environmental Quality
P.O. Box 200901
Helena, Montana 59620-0901
CDorrington2@mt.gov

Subject: EPA's action on Montana's water quality standards in Sections 2(1), 3, 4, and 7 of Senate Bill 358

Dear Director Dorrington:

The U.S. Environmental Protection Agency (EPA) has determined that legislative actions in Section 2(1), 3, 4, and 7 of Senate Bill 358 (SB 358) signed into law on April 30, 2021, include changes that are new or revised water quality standards (WQS) that EPA has the authority and duty to approve or disapprove under the CWA section 303(c)(3). Although the statutory changes took effect under state law on April 30, 2021, the new and revised WQS are not effective for CWA purposes, including for implementation in the CWA Section 402 National Pollutant Discharge Elimination System (NPDES) permitting program (see 40 C.F.R. 131.21(c)), absent EPA's approval.

The Montana Department of Environmental Quality (MDEQ) informed EPA on May 3, 2021, that it did not intend to submit the statutory changes to EPA for review pursuant to CWA Section 303(c).[1] EPA is nonetheless obligated to review and act pursuant to CWA Section 303(c) and 40 C.F.R. Part 131 regarding certain statutory changes that constitute new or revised WQS. EPA is disapproving these provisions because the revisions are not consistent with the requirements of the CWA and 40 C.F.R. Part 131. The disapproved provisions are: (1) Section 2(1) of SB 358 specifying that Montana's numeric nutrient criteria (NNC) contained in MDEQ's Department

[1] May 3, 2021 email from Myla Kelly, MDEQ Water Quality Standards Section Supervisor to Tonya Fish, EPA Region 8 Water Quality Section.

Circular DEQ-12A[2] cannot be used for permitting purposes; (2) Section 3 of SB 358 which mandates the removal of all references to the NNC and general variances by the Board of Environmental Review (Board); (3) Section 4 of SB 358 which mandates the removal of all references to the NNC and general variances by MDEQ; and (4) Section 7[3] of SB 358 specifying changes to Montana's antidegradation (nondegradation) program. Therefore, these revised and new WQS cannot be used for any CWA purpose. The enclosure contains a more detailed rationale for today's action.

Clean Water Act Review Requirements

CWA section 303(c)(2) requires states and authorized Indian tribes[4] to submit new or revised WQS to EPA for review. EPA is required to review and approve, or disapprove, the submitted standards. In this case, Montana did not submit SB 358 to EPA for review. However, EPA's authority and duty to evaluate whether a provision is a new or revised WQS is not dependent upon whether the provision was submitted to EPA for review.[5]

EPA concludes that Sections 2(1), Section 3, and Section 4 of SB 358 constitute revised WQS and Section 7 constitutes a new WQS. The enclosure includes EPA's evaluation concluding that these provisions constitute revised and new WQS and EPA's rationale for disapproval.

Today's Action

EPA is disapproving Section 2(1) of SB 358 because Section 2(1) revises the desired condition for the applicable waterbodies to be the condition described by the general narrative criteria (narrative criteria) only (i.e., no longer including the NNC) without adequate information to demonstrate that the narrative criteria alone protects the designated uses. The state's permitting record over the past two years demonstrates that the implementation of the narrative criteria alone does not protect the designated use, as required by 40 C.F.R. § 122.44(d)(1).[6] Additionally, the narrative criteria alone, as informed by the record supporting the NNC, does not contain sufficient parameters or constituents to protect the designated use consistent with 40 C.F.R. § 131.11(a)(1).[7] Applying a similar rationale, EPA is disapproving Section 3 and Section 4 of SB 358 because these sections revise the desired condition for the applicable waterbodies by

[2] deq.mt.gov/files/Water/WQPB/Standards/PDF/NutrientRules/CircularDEQ12A_July2014_FINAL.pdf.
[3] For purposes of this action letter, the term "Section 7" is only referring to that portion codified as MCA 75-5-317(2)(u). MCA 75-5-317(2)(v) is addressed in EPA's May 6, 2022 memo to the file: "SB 358 Water Quality Standards Review; Rationale for EPA not acting on remaining provisions of SB358."
[4] CWA section 518(e) specifically authorizes EPA to treat eligible Indian tribes in the same manner as states for purposes of CWA section 303. *See also* 40 C.F.R. § 131.8.
[5] The U.S. Court of Appeals for the 11th Circuit held that EPA has a mandatory duty to act on new or revised state WQS, whether or not they are submitted to EPA. *Miccosukee Tribe of Indians of Florida v. EPA,* 105 F.3d 599 (11th Cir. 1997); *FPIRG v. EPA*, 386 F.3d 1070 (11th Cir 2004) (concurring with the reasoning in *Miccosukee*).
[6] EPA evaluated the state's permitting record since May 2020, when MDEQ began to apply the general narrative criteria rather than the NNC in determining whether a discharge had the reasonable potential to cause or contribute to an excursion of WQS.
[7] 40 C.F.R. § 131.11(a)(1) requires that criteria must be "based on sound scientific rationale and must contain sufficient parameters or constituents to protect the designated use."

mandating removal of any reference in Montana's regulations to the NNC by the Board (Section 3) and MDEQ (Section 4) without ensuring that the remaining criteria contain sufficient parameters or constituents to protect the designated use consistent with 40 C.F.R. § 131.11(a)(1). This deficiency is documented in the state's permitting record over the past two years. EPA is also disapproving Montana's new nondegradation provision in Section 7 because it is inconsistent with 40 C.F.R. § 131.12(a)(2).

Endangered Species Act Requirements

In addition to EPA's review pursuant to section 303(c) of the CWA, section 7(a)(2) of the Endangered Species Act (ESA) requires federal agencies, in consultation with the U.S. Fish and Wildlife Service (USFWS), to ensure their actions are not likely to jeopardize the continued existence of federally listed species or result in the destruction or adverse modification of designated critical habitat of such species. EPA's disapproval of Section 2(1), Section 3, Section 4, and Section 7 of SB 358 is not considered an "action" under ESA Section 7(a)(2) as defined at 50 C.F.R. § 402.02. As such, EPA's disapproval is not subject to ESA Section 7(a)(2) consultation requirements given EPA's action is not authorizing, funding or carrying out any activity or program. Even if EPA's disapproval of Sections 2(1), 3, 4, and 7 of SB 358 were to be considered an "action" subject to ESA Section 7(a)(2) consultation obligations, EPA's disapproval will not result in any change to the existing WQS under the CWA. Therefore, EPA's action will have **no effect** on listed species or their designated critical habitat. EPA has no ESA consultation obligation for today's action.

Indian Country

EPA's disapproval of Montana's WQS does not extend to Indian country as defined in 18 U.S.C. § 1151. Indian country in Montana generally includes (1) lands within the exterior boundaries of the following Indian reservations located within Montana: the Blackfeet Indian Reservation, the Crow Indian Reservation, the Flathead Reservation, the Fort Belknap Reservation, the Fort Peck Indian Reservation, the Northern Cheyenne Indian Reservation, and the Rocky Boy's Reservation; (2) any land held in trust by the United States for an Indian tribe (including but not limited to the Little Shell Tribe of Chippewa Indians); and (3) any other areas that are "Indian country" within the meaning of 18 U.S.C. § 1151. EPA, or eligible Indian tribes, as appropriate, retain responsibilities under CWA Section 303 in Indian country. Today's action is not intended as an action to approve or disapprove WQS for waters within Indian country.

Conclusion

If you have any questions related to EPA's action on Sections 2(1), 3, or 4 of SB 358, please contact Tina Laidlaw at (406) 457-5016 or laidlaw.tina@epa.gov. For questions related to EPA's action on SB 358 Section 7, please contact Tonya Fish on my staff at fish.tonya@epa.gov.

Sincerely,

DARCY OCONNOR

Digitally signed by DARCY OCONNOR
Date: 2022.05.10 13:57:39 -06'00'

Darcy O'Connor, Director
Water Division

Enclosure

cc: Amy Steinmetz, Administrator, Water Quality Division

Rationale for the EPA's Disapproval of Montana's Nutrient Provision in Sections 2(1), 3, 4, and 7 of Senate Bill 358

Water quality standards (WQS) include: (1) designated uses; (2) water quality criteria that support the designated uses; and (3) antidegradation requirements. 40 C.F.R. Part 131. At issue in this action are water quality criteria for nutrients (i.e., nitrogen and phosphorus) and antidegradation requirements for high quality waters.

I. Background

In 2014, Montana adopted WQS for nutrients and submitted the package to EPA for action under CWA Section 303(c). The standards included numeric nutrient criteria (NNC) for total nitrogen (TN) and total phosphorus (TP) to protect the designated uses of wadeable streams and certain segments of the Yellowstone River, WQS variances for nutrients justified based on the economic impacts of attaining the NNC for facilities discharging to these waters, and non-severability provisions linking the applicability of nutrient criteria to the availability of WQS variances for nutrients. EPA approved the NNC and WQS variances pursuant to CWA Section 303(c) in 2015. In 2017, EPA approved Montana's revised variance for a subset of dischargers. EPA subsequently approved the non-severability provisions in 2020.[8]

Montana Department of Environmental Quality (MDEQ) considered multiple lines of evidence in establishing the 2014 NNC including: (a) nutrient concentrations from reference distributions; (b) nitrogen to phosphorus (N:P) ratios observed at reference sites; and (c) thresholds identified in scientific studies derived from stressor-response analyses. The record accompanying MDEQ's 2014 adoption of the NNC and EPA's 2015 CWA Section 303(c) approval of the NNC demonstrates the NNC are scientifically defensible and protective of designated uses, and that both TN and TP need to be addressed and limited to protect the applicable designated uses. EPA is not aware of any information demonstrating that the science has changed to alter this conclusion and EPA continues to support dual nutrient control.[9]

In 2021, Montana enacted state legislation (Senate Bill 358 or SB 358) directing MDEQ to write permits "in a manner consistent with" the narrative criteria,[10] "delete all references to" the NNC, and adopt rules

[8] Litigation has occurred over the past several years regarding EPA's actions on Montana's nutrient water quality standards. On October 6, 2021, the U.S. Court of Appeals for the Ninth Circuit issued an opinion upholding EPA's approval of Montana's water quality standards variance. *Upper Missouri Waterkeeper v. U.S. Environmental Protection Agency*, 15 F.4th 966 (9th Cir. 2021). The Ninth Circuit remanded the case to the U.S. District Court for the District of Montana with specific instructions regarding summary judgment in the case. The district court has not yet acted on the remand. However, under a district court order issued on October 20, 2020, Montana's variance approved by EPA on October 31, 2017, and the state's numeric nutrient criteria approved by EPA on February 26, 2015, remain in effect for CWA purposes. *Upper Missouri Waterkeeper v. U.S. Environmental Protection Agency*, No. CV16-52-GF-BMM, CV-20-27-BMM (D. Mont. Oct. 30, 2020).

[9] USEPA. Preventing Eutrophication: Scientific Support for Dual Nutrient Criteria. February 2015. Available at: www.epa.gov/sites/default/files/documents/nandpfactsheet.pdf.

[10] ARM 17.30.637 GENERAL PROHIBITIONS (1) State surface waters must be free from substances attributable to

related to Montana's existing narrative criteria that provide for the development of an adaptive management program. EPA is acting on a subset of provisions in SB 358 that it found to be new or revised WQS. Specifically, Section 2(1) of SB 358 directs MDEQ to permit nutrient discharges, prior to adoption of final rules, "in a manner consistent with" Montana's narrative nutrient criteria and legislative intent. Section 3 directs the Montana Board of Environmental Review (Board)[11] to delete all references to the NNC and general variances and Section 4 directs MDEQ to delete all references to the NNC and general variances. In addition, Section 7[12] includes a new antidegradation (Montana uses the term nondegradation) requirement that describes conditions for determining that proposed activities that discharge phosphorus or nitrogen will not cause significant degradation of water quality and therefore are exempt from the antidegradation review process required by 40 C.F.R. § 131.12(a)(2).

On April 30, 2021, Montana Governor Gianforte signed SB 358 making it effective for state law purposes. Montana did not submit SB 358 to EPA for review pursuant to CWA Section 303(c)(2).

II. EPA Evaluation of Whether Sections of SB 358 are WQS Subject to CWA Section 303(c) Action

CWA section 303(c)(2) requires states to submit new or revised WQS to EPA. CWA section 303(c)(3) provides for EPA review of such WQS. EPA's authority and duty to review and approve or disapprove a new or revised WQS is not dependent upon whether the provision was submitted to the EPA for review.[13] Therefore, EPA analyzed SB 358 to determine whether it contains any new or revised WQS.

In October 2012, EPA posted a document online, entitled: "*What is a New or Revised Water Quality Standard Under CWA 303(c)(3)? Frequently Asked Questions*" (FAQs).[14] The EPA developed the document as an aid to discern when state or authorized tribal provisions constitute new or revised WQS, stating: "To date, EPA has evaluated each situation on a case-by-case basis. These FAQs consolidate EPA's plain language interpretation (informed by the CWA, EPA's implementing regulations at 40 C.F.R. Part 131, and relevant case law) of what constitutes a new or revised water quality standard that the Agency has the CWA Section 303(c)(3) authority and duty to approve or disapprove." The FAQs

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municipal, industrial, agricultural practices or other discharges that will:… (d) create concentrations or combinations of materials which are toxic or harmful to human, animal, plant, or aquatic life; and (e) create conditions which produce undesirable aquatic life.

[11] Montana adopted legislation in 2021 that removed the authority of the Board to conduct rulemaking related to water quality standards. MDEQ has confirmed it is now the Montana governmental entity that is responsible for implementing these deletions as part of any future rulemaking.

[12] For purposes of this action letter, the term "Section 7" is only referring to that portion codified as MCA 75-5-317(2)(u). MCA 75-5-317(2)(v) is addressed in EPA's May 6, 2022 memo to the file: SB 358 Water Quality Standards Review; Rationale for EPA not acting on remaining provisions of SB358.

[13] The U.S. Court of Appeals for the 11th Circuit has held that EPA has a mandatory duty to act on new or revised state WQS, whether or not they are submitted to EPA. *Miccosukee Tribe of Indians of Florida v. EPA,* 105 F.3d 599 (11th Cir. 1997); *FPIRG v. EPA*, 386 F.3d 1070 (11th Cir 2004) (concurring with the reasoning in *Miccosukee*). This reasoning has also been followed by a district court in Maine. *Friends of Merrymeeting Bay v. Olsen*, 839 F.Supp.2d 366, 375 (D. Maine 2012) ("EPA is under obligation to review a law that changes a water quality standard regardless of whether a state presents it for review.")

[14] EPA No. 820-F-12-017 (October 2012), www.epa.gov/sites/default/files/2014-11/documents/cwa303faq.pdf.

were, in part, an outgrowth of the Agency's experience in prior cases, and they are currently referenced in the EPA's *Water Quality Standards Handbook*.

EPA's FAQs describe a 4-part test: if all four questions below are answered "yes," then the provision would likely constitute a new or revised WQS that the EPA has the authority and duty to approve or disapprove under CWA Section 303(c)(3).

1) Is it a legally binding provision adopted or established pursuant to state or tribal law?
2) Does the provision address designated uses, water quality criteria (narrative or numeric) to protect designated uses, and/or antidegradation requirements for waters of the United States?
3) Does the provision express or establish the desired condition (e.g., uses, criteria) or instream level of protection (e.g., antidegradation requirements) for waters of the United States immediately or mandate how it will be expressed or established for such waters in the future?
4) Does the provision establish a new WQS or revise an existing WQS?

Question 1 is a threshold question of legal applicability that stems from the use of the terms "adopt," "law," "regulations," and "promulgate" in CWA section 303(a)-(c) and EPA's regulations at 40 CFR 131.3(i) which specifies that WQS "are provisions of state or federal law."[15] Question 2 reflects the CWA articulation that WQS include three core components: designated uses, water quality criteria, and antidegradation requirements (see CWA sections 303(c)(2)(A) and 303(d)(4)(B)). Question 3 addresses the substance of the provision and whether it changes one or more of the components of a WQS, such that the provision expresses or establishes a different water quality goal for CWA purposes.[16] Consistent with its placement as the final question, Question 4 only needs to be evaluated if Questions 1-3 are all answered in the affirmative. It clarifies that EPA's authority, as specified in CWA section 303(c)(2)(A), is to act only on new or revised WQS provisions, which includes provisions that have not previously been approved by EPA under section 303(c).[17] EPA's evaluation of whether a provision is new or revised requires a consideration of the effect of the provision on the WQS themselves. For example, if a provision meets the first three considerations but already exists as part of the state or authorized tribe's EPA-approved and CWA-applicable WQS and was only copied over to another section of the regulation for ease of reference, such a re-statement does not have the effect of establishing or changing the applicable WQS. Therefore, the provision is not new or revised, and EPA does not have the authority or duty to take an action under CWA section 303(c).

EPA reviewed SB 358 and determined that Section 2(1), Section 3, and Section 4 of SB 358 are revised WQS and Section 7 is a new WQS subject to EPA action pursuant to CWA Section 303(c).

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[15] 40 CFR 131.3(i): Water quality standards are provisions of State or Federal law which consist of a designated use or uses for the waters of the United States and water quality criteria for such waters based upon such uses. Water quality standards are to protect the public health or welfare, enhance the quality of water and serve the purposes of the Act.
[16] See 40 CFR 131.2: A water quality standard defines the water quality goals of a water body, or portion thereof, by designating the use or uses to be made of the water and by setting criteria that protect the designated uses.
[17] As stated in EPA's 2012 4-part test FAQs "A provision that EPA has never approved as a WQS would be considered 'new.' It must also meet the other three considerations to be a new or revised WQS."

A. Section 2(1) of SB 358:

"Section 2. Transition for nutrient standards -- department. (1) Until final [adaptive management program] rules are adopted pursuant to [section 1], the department shall administer the discharge permitting program under 75-5-402 in a manner consistent with ARM 17.30.637[18] [the narrative standard] and the intent of [this act]."

1. **Is it a legally binding provision adopted or established pursuant to state or tribal law?** Yes. Section 2(1) is a legally binding provision under state law as it is part of the SB 358 legislation passed by the Montana legislature and signed by Governor Gianforte on April 30, 2021.

2. **Does the provision address designated uses, water quality criteria (narrative or numeric) to protect designated uses, and/or antidegradation requirements for waters of the United States?** Yes. Section 2(1) addresses water quality criteria for nutrients to protect designated uses for waters of the United States within Montana, specifically wadeable streams and segments of the Yellowstone River.

3. **Does the provision express or establish the desired condition (e.g., uses, criteria) or instream level of protection (e.g., antidegradation requirements) for waters of the United States immediately or mandate how it will be expressed or established for such waters in the future?** Yes. Previously, wadeable streams and segments of the Yellowstone River had to meet both the narrative criteria and the numeric nutrient criteria. Section 2(1) revised the desired condition immediately with respect to nutrients for wadeable streams and segments of the Yellowstone River to attaining only the narrative criteria, and no longer requiring attainment of the scientifically defensible and protective numeric nutrient criteria.

   EPA's regulation at 40 C.F.R. § 131.21(d) states that applicable WQS are the minimum standards which must be used when the CWA and regulations implementing the CWA refer to WQS, including developing NPDES (here Montana Pollutant Discharge Elimination System (MPDES)) permit limitations under section 301(b)(1)(C) of the CWA. As described above, the language of Section 2(1) specifies that all MPDES permits shall be "consistent with" the narrative criteria and "the intent" of SB 358. Because Section 2(1) establishes the minimum standards that must be used when developing MPDES permit limitations, Section 2(1) changes the desired condition for Montana's wadeable streams and segments of the Yellowstone River from both the state's narrative criteria and the NNC to only the state's narrative criteria.

[18] ARM 17.30.637 includes general prohibitions and states: "State surface waters must be free from substances attributable to municipal, industrial, agricultural practices or other discharges that will:…(d) create concentrations or combinations of materials which are toxic or harmful to human, animal, plant, or aquatic life; and (e) create conditions which produce undesirable aquatic life."

As additional evidence, in a June 6, 2021 email, Amy Steinmetz, MDEQ Water Quality Division Administrator, clarified MDEQ's interpretation of this provision: "*The legislation directs DEQ to use the narrative standard during the transition to the adaptive management rules. Unless we disregard the plain language of the transition section, the NNC are not to be used to establish permit limits.*"[19] Thus, MDEQ confirmed that the state cannot interpret the narrative standard using the NNC for permitting purposes. MDEQ has further demonstrated through its implementation in recent permits that the narrative standard is the desired condition-- not the NNC; thus, reinforcing that Section 2(1) of SB 358 expresses a revised desired condition for Montana's wadeable streams and segments of the Yellowstone River.

4. **Does the provision establish a new WQS or revise an existing WQS?** Yes. Section 2(1) meets the first three questions of the 4-part test and has not been previously approved by EPA under CWA section 303(c).[20]

B. Sections 3 and 4 of SB 358:

Section 3. Board to amend rules. The board of environmental review shall amend ARM 17.30.201, 17.30.507, 17.30.516, 17.30.602, 17.30.619, 17.30.622, 17.30.623, 17.30.624, 17.30.625, 17.30.626, 17.30.627, 17.30.628, 17.30.629, 17.30.635, 17.30.702, and 17.30.715 to delete all references to department circular DEQ-12A, department circular DEQ-12B, base numeric nutrient standards, and nutrient standards variances.

Section 4. Department to amend rules. The department of environmental quality shall amend ARM 17.30.602 to delete all references to department circular DEQ-12A, department circular DEQ-12B, base numeric nutrient standards, and nutrient standards variances.

1. **Is it a legally binding provision adopted or established pursuant to state or tribal law?** Yes. Sections 3 and 4 are legally binding provisions under state law as they are part of the SB 358 legislation passed by the Montana legislature and signed by Governor Gianforte on April 30, 2021.

2. **Does the provision address designated uses, water quality criteria (narrative or numeric) to protect designated uses, and/or antidegradation requirements for waters of the United States?** Yes. Sections 3 and 4 address water quality criteria for nutrients to protect designated uses for waters of the United States within Montana, specifically wadeable streams and segments of the Yellowstone River.

3. **Does the provision express or establish the desired condition (e.g., uses, criteria) or instream level of protection (e.g., antidegradation requirements) for waters of the**

[19] June 6, 2021 email from Amy Steinmetz, MDEQ Water Quality Division Administrator, to Bert Garcia, Acting Director Water Division, EPA Region 8.
[20] As stated in EPA's 2012 4-part test FAQs "A provision that EPA has never approved as a WQS would be considered 'new.' It must also meet the other three considerations to be a new or revised WQS."

United States immediately or mandate how it will be expressed or established for such waters in the future? Yes. Previously, wadeable streams and segments of the Yellowstone River had to meet both the narrative criteria and the numeric nutrient criteria. Sections 3 and 4 revise the desired condition by mandating that the state regulatory agency delete all references to the CWA-applicable and scientifically sound NNC through future rulemaking, leaving only the narrative criteria in place. Thus, the future desired condition regarding nutrients for applicable waters has been revised from attaining the NNC and the narrative criteria to only requiring attainment of the narrative criteria.

4. **Does the provision establish a new WQS or revise an existing WQS?** Yes. Sections 3 and 4 meet the first three questions of the 4-part test and has not been previously approved by EPA under CWA section 303(c).

Conclusion: Based on its application of the 4-part test, EPA has concluded that Section 2(1), Section 3, and Section 4 of SB 358 constitute revised WQS that EPA has a mandatory duty to review and either approve or disapprove, pursuant to CWA 303(c).

C. Section 7 of SB 358, Codified at MCA 75-5-317(2)(u)

New text is underlined below:

> "75-5-317. Nonsignificant activities. (1) The categories or classes of activities identified in subsection (2) cause changes in water quality that are nonsignificant because of their low potential for harm to human health or the environment and their conformance with the guidance found in 75-5-301(5)(c).
> (2) The following categories or classes of activities are not subject to the provisions of 75-5-303:
> (u) discharges of total phosphorus or total nitrogen that do not:
> (i) create conditions that are toxic or harmful to human, animal, plant, and aquatic life;
> (ii) create conditions that produce undesirable aquatic life; or
> (iii) cause measurable changes in aquatic life."

1. **Is it a legally binding provision adopted or established pursuant to state or tribal law?** Yes. Section 7 is a legally binding provision under state law as it is part of the SB 358 legislation passed by the Montana legislature and signed by Governor Gianforte on April 30, 2021.

2. **Does the provision address designated uses, water quality criteria (narrative or numeric) to protect designated uses, and/or antidegradation requirements for waters of the United States?** Yes. The provision addresses antidegradation requirements for waters of the United States within Montana.

3. **Does the provision express or establish the desired condition (e.g., uses, criteria) or instream level of protection (e.g., antidegradation requirements) for waters of the United States immediately or mandate how it will be expressed or established for such waters in the future?** Yes. The provision establishes the instream level of protection for waters of the United States within Montana, effective immediately. Section 7 describes circumstances for determining that proposed activities that discharge phosphorus or nitrogen will not cause significant degradation of water quality and therefore are exempt from the review process required by 40 C.F.R. § 131.12(a)(2).

4. **Does the provision establish a new WQS or revise an existing WQS?** Yes. The provision meets the first three questions of the 4-part test and has not been previously approved by EPA.

Conclusion: Based on its application of the 4-part test, EPA has concluded that Section 7 constitutes a new WQS that EPA has a mandatory duty to review and either approve or disapprove, pursuant to CWA Section 303(c).

III. Section 2(1), Section 3, and Section 4 of SB 358 Do Not Protect the Applicable Designated Uses

EPA's review of the sections that contain new WQS begins with an examination of MDEQ's record of implementing their WQS when the state believes the narrative criteria alone are in effect for permitting purposes based on the relevant NPDES regulations. This examination informs EPA's review of the changes to WQS based on the relevant WQS regulations and CWA provisions.

40 C.F.R. § 122.44(d)(1) requires that NPDES permits shall include any requirements necessary to "[a]chieve water quality standards established under section 303 of the CWA, including State narrative criteria for water quality. Such limitations must control all pollutants or pollutant parameters which are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any State water quality standard, including State narrative criteria for water quality." 40 C.F.R. § 122.44(d)(1)(i). As EPA explained when promulgating this regulation, "Effluent limitations must attain and maintain water quality standards in order to be consistent with the requirements of the Clean Water Act." 54 Fed. Reg. 23868, 23873 (June 2, 1989).

In its summary judgment briefing filed in the challenge to EPA's 2020 approval of Montana's non-severability provisions that tied the NNC with the WQS general variances provisions, EPA addressed the future effect of Montana removing the NNC and reverting to the general narrative criteria. In that briefing, EPA noted it would be premature to predict how the state would implement its narrative criteria to address nutrients in the future and that EPA could not reasonably assume Montana's implementation of its narrative criteria would prove inadequate given that the state had developed a much more robust understanding of the science of nutrient pollution and was thereby far-better equipped than in the past to translate and implement the narrative criteria in NPDES permits.[21] Since the filing of

[21] *Upper Missouri Waterkeeper v. U.S. Environmental Protection Agency,* No. 4:20-cv-000027-BMM (D. Mont.), Defendants' Reply Memorandum in Support of Defendants' Cross-Motion for Summary Judgment at page 7 (Sept. 9, 2020).

that briefing, subsequent information is now available to inform EPA's understanding of how the state is implementing the narrative criteria with respect to protection of the applicable designated uses from adverse effects of excess nutrients.

EPA evaluated the state's permitting record since May 2020, when MDEQ began to apply the general narrative criteria rather than the NNC in executing its permitting obligations described above. [22] Instead of applying the protective NNC or the supporting science to interpret the narrative criteria, permits issued by MDEQ from 2020 through 2022 demonstrate that the state is: a) not completing an adequate reasonable potential analysis based on an interpretation of the narrative criteria; and b) not setting permit limits that provide adequate protection of designated uses based on the narrative. EPA's May 6, 2022 memo to the file "Implementation by Montana of its Narrative Water Quality Standards in lieu of the Clean Water Act Applicable Numeric Nutrient Criteria," provides details on each permit reviewed by EPA along with the rationale documenting the state's permitting approach. EPA evaluated whether the state's actual implementation of the remaining narrative criteria would nonetheless be sufficient to protect designated uses. After careful evaluation of the record of the state's recent implementation of the narrative criteria in NPDES, EPA concludes it does not.

This record prompts an evaluation of whether the state's removal of the NNC, and reliance on the narrative criteria alone, result in criteria that contain sufficient parameters or constituents to protect the designated use as required by 40 C.F.R. § 131.11(a)(1). 40 C.F.R. § 131.11(a)(1) requires that "criteria must be based on sound scientific rationale and must contain sufficient parameters to protect the designated use." Montana's NNC were derived following EPA's recommended approaches for establishing NNC (i.e., reference-condition and stressor-response based analyses). MDEQ validated the proposed nutrient thresholds by comparing to regionally relevant dose-response that further strengthened the state's rationale for the proposed criteria.[23,24] In its 2015 approval of Montana's NNC, EPA concluded that: "Montana's integration of multiple approaches -- results from stressor-response studies; understanding of reference conditions; nutrient limitations -- minimizes the uncertainty associated with a single approach and further strengthens the technical basis for the final NNC values…Therefore, the EPA has determined that the NNC provisions are consistent with the federal requirements because, as discussed above, the state has demonstrated that the NNC for wadeable streams will protect aquatic life and recreational designated uses and are based on a sound scientific rationale that is consistent with the EPA guidance on deriving NNC using scientifically defensible methods. Accordingly, the EPA approves Montana's NNC."[25]

The record accompanying MDEQ's 2014 adoption of the NNC and EPA's 2015 CWA section 303(c) approval of the NNC demonstrates the NNC are based on sound science and protective of designated uses, and that both total nitrogen (TN) and total phosphorus (TP) must be addressed and limited to

[22] EPA May 6, 2022 memo to the file "Implementation by Montana of its Narrative Water Quality Standards in lieu of the Clean Water Act Applicable Numeric Nutrient Criteria."
[23] Suplee, Michael W., V. Watson, A. Varghese, and Joshua Cleland. 2008. Scientific and Technical Basis of the Numeric Nutrient Criteria for Montana's Wadeable Streams and Rivers. Helena, MT: MDEQ Water Quality Planning Bureau.
[24] *Id.*
[25] See EPA Action letter dated February 26, 2015 from Martin Hestmark, Assistant EPA Regional Administrator, to Tom Livers, MDEQ Acting Director.

protect the applicable designated uses.[26] The need for dual-nutrient control for both TN and TP to protect designated uses in the affected waters is supported by Montana's own dosing study conducted in eastern Montana[27]

Section 2(1), Section 3, and Section 4 of SB 358 all result in removal of the NNC (now and in the future) from the expression of the desired condition of affected waters without identifying an alternative that provides adequate assurance that designated uses will be protected. The narrative criteria refer to preventing conditions that produce undesirable aquatic life, but lack the specificity provided by the NNC. The NNC provide specific protective TN and TP levels for the affected waters. At this time, the NNC and the supporting science are the only bases that Montana has identified that will protect its designated uses from adverse effects of excess nutrients. The scientific record indicates that dual control of both TN and TP is needed to assure protection of aquatic life in the affected waters. EPA must consider the availability of this science in its action today. With removal of the NNC and reliance on the narrative criteria alone, EPA lacks assurance that designated uses would be protected as required by 40 C.F.R. § 131.11(a)(1) given the demonstrated importance of TN and TP for the affected waters. This lack of assurance is further evidenced by the MDEQ permitting record over the past two years, as described above. Based on the available record, it is apparent that removal of the NNC results in criteria that do not contain sufficient parameters or constituents to protect designated uses with respect to the adverse effects of excess nutrients for the affected waters in Montana.

IV. EPA Action on Section 2(1), Section 3, and Section 4 of SB 358

For the reasons stated above, EPA finds that Section 2(1), 3, and 4 of SB 358 constitute new WQS that EPA has the authority and duty to approve or disapprove under CWA section 303(c)(3). Based on its review, EPA concludes that these provisions are not protective of the applicable designated uses with respect to nutrients as required by 40 C.F.R. § 131.11(a)(1) and do not contain sufficient parameters or constituents to protect the designated use. See 40 C.F.R. § 131.11(a)(1). Therefore, EPA disapproves these provisions because they do not comply with the requirements of the CWA and 40 C.F.R. Part 131.

Pursuant to CWA § 303(c)(3), if EPA determines that any standard is not consistent with the applicable requirements of the CWA or implementing regulation, the Agency shall notify the state or authorized tribe and specify the changes to meet the requirements. EPA's goal has been, and will continue to be, to work closely with states and authorized tribes throughout the WQS development process to ensure that statutory and regulatory requirements are clear.

Pursuant to 40 C.F.R. § 131.21(c), new or revised state standards that go into effect under state law after May 30, 2000, are not effective for CWA purposes unless and until approved by EPA. Once approved, they remain in effect unless EPA approves a revision or promulgates a more stringent standard. 40 CFR § 131.21(e). EPA previously approved Montana's NNC, on February 26, 2015, as meeting the requirements of the CWA and its implementing regulations, and EPA has not subsequently approved

[26] *Id.* Pages 7-11.
[27] Suplee, M.W., and V. Watson, 2013. Scientific and Technical Basis of the Numeric Nutrient Criteria for Montana's Wadeable Streams and Rivers—Update 1. Helena, MT: Montana Dept. of Environmental Quality.

any revision to those criteria. Therefore, the NNC remain the applicable water quality standard for CWA purposes. Because the NNC remain in effect for all CWA purposes, changes are not necessary to meet the requirements of the CWA. MDEQ is required to use the NNC as the minimum standards for all CWA purposes, including identifying impaired waters and calculating TMDLs under CWA section 303(d) and 40 CFR § 130.7, developing NPDES permit limitations under CWA section 301(b)(1)(C) and 40 CFR §§ 122.44(d) & 123.25(a)(15), evaluating proposed discharges of dredged or fill material under CWA section 404 and 40 CFR Part 230, and issuing certifications under CWA section 401 and 40 CFR Part 121. 40 C.F.R. 131.21(d).

EPA understands that MDEQ is actively engaged in rulemaking designed to adopt rule language related to the narrative criteria per SB 358 Section 1. EPA will review any future new or revised WQS that MDEQ adopts consistent with EPA's applicable statutory and regulatory requirements. EPA recognizes the challenges associated with establishing and implementing WQS for nutrients. This action does not preclude the state from developing a modified approach to address nutrients in their WQS. However, any modification must meet the requirements of the CWA and its implementing regulation. EPA's regulation at 40 CFR § 131.14 provides a mechanism to accommodate elements of adaptive management approaches.

Based on the specific facts described in this letter, the state cannot remove their protective NNC without also providing a suitable replacement (i.e., one that provides for criteria that contain sufficient parameters or constituents to protect the designated use) at the same time.

V. Section 7 of SB 358, Codified at MCA 75-5-317(2)(u) Does Not Protect High Quality Waters

The federal requirements for antidegradation at 40 C.F.R. § 131.12 implement the CWA section 101(a) objective to ". . . restore and *maintain* the chemical, physical and biological integrity of the Nation's waters" (emphasis added). 40 C.F.R. § 131.12 requires states and authorized tribes to develop two elements for their antidegradation programs: an antidegradation policy and antidegradation implementation methods. State and tribal antidegradation policies and implementation methods must be consistent with 40 C.F.R. § 131.12 and with each other. 40 C.F.R. § 131.12(b). 40 C.F.R. § 131.5(a)(3) specifies that EPA's review and decision to approve or disapprove WQS involves a determination of "[w]hether any State adopted antidegradation implementation methods are consistent with § 131.12."

Antidegradation policies are a set of legally binding requirements included in state or tribal WQS that describe the expectations for preventing or minimizing degradation to waters. State and tribal antidegradation policies must provide for the protection of three antidegradation categories: existing uses, high quality waters, and outstanding national resource waters. 40 C.F.R. § 131.12(a)(1)-(3). These categories of protection are commonly referred to as "tiers." Montana's nondegradation policy (MCA 75-5-303) was approved by EPA in 1999.[28]

[28] See EPA's action letter dated January 26, 1999 from Jack W. McGraw, EPA Deputy Regional Administrator, to Marc Racicot, The Honorable Governor of Montana.

Today's action is relevant to the requirements of 40 C.F.R. § 131.12(a)(2), or "Tier 2," which addresses high quality waters – those with water quality better than necessary to support the CWA Section 101(a)(2) uses, which include the protection and propagation of fish, shellfish, and wildlife and recreation in and on the water.[29] In other words, these waters can receive an additional amount of a pollutant and still meet the quality necessary to support the CWA section 101(a)(2) uses. In the context of antidegradation, the difference between the criterion and the actual, better water quality achieved in the water body is called assimilative capacity (see Figure 1).

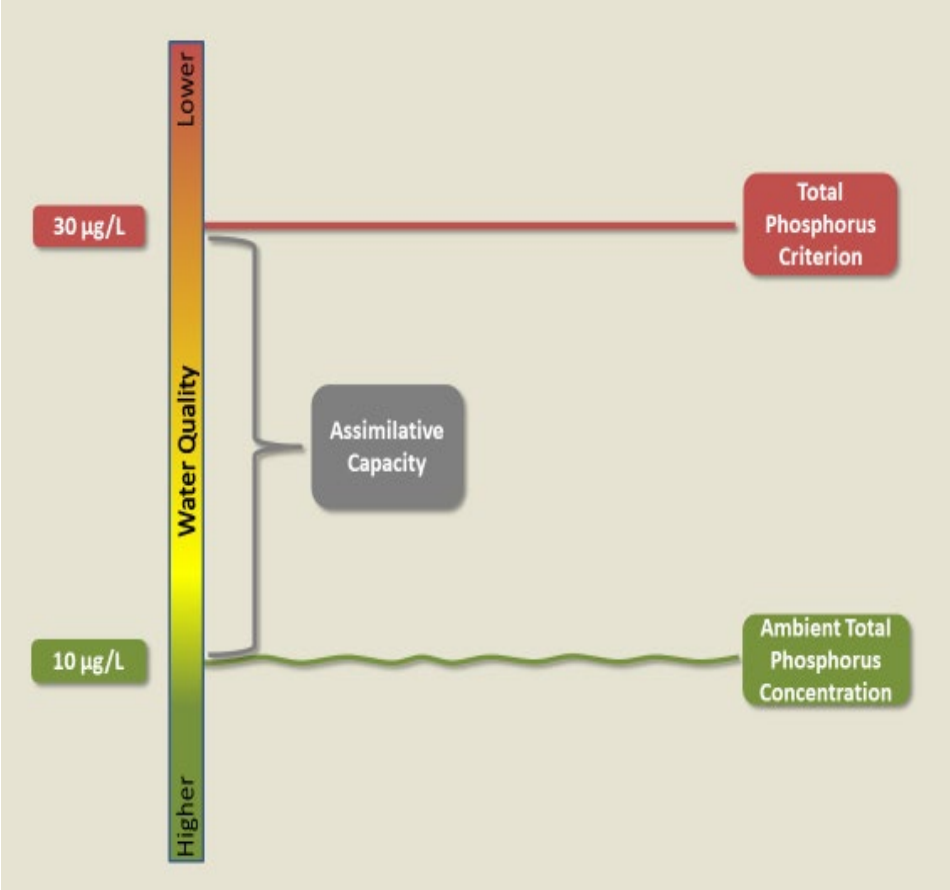

Figure 1. Example of a High Quality Water. The current ambient concentration of total phosphorus of 10 µg/L is better than the total phosphorus aquatic life criterion of 30 µg/L. In this example the waterbody has available assimilative capacity of 20 µg/L total phosphorus.

Per 40 C.F.R. § 131.12, the water quality of high-quality waters must be maintained and protected unless the state or authorized tribe makes a finding that a lowering[30] of water quality is necessary to

[29] *Water Quality Standards Regulation.* 48 Fed. Reg. 51403 (November 8, 1983).
[30] *Lowering* means an increase in pollution, resulting from an activity that would use some of the assimilative capacity in a high quality water. In this regard, the quality of water is lowered closer to the criterion for a specific parameter.

accommodate important economic or social development in the area in which the waters are located. This structured process is referred to as "Tier 2 review" and must include all of the requirements described in 40 C.F.R. § 131.12(a)(2), including: (1) analysis of alternatives; (2) analysis of economic or social development; (3) intergovernmental coordination and public participation; (4) ensuring protection of existing uses; and (5) ensuring pollution control measures are properly implemented for point and non-point sources.

Antidegradation implementation methods are additional documents and/or provisions in which a state or authorized tribe describes methods for implementing its antidegradation policy (i.e., *how* the policy will be implemented).[31] Some states have included in their antidegradation implementation methods the concept of "*de minimis"* exemptions from Tier 2 reviews. Such *de minimis* provisions are intended to prioritize and manage limited resources by specifying that certain activities do not need a Tier 2 review because they only cause an insignificant or "trivial" lowering of high-water quality.[32] For example, a state or authorized tribe could identify a percentage of assimilative capacity lost for a parameter that would be considered insignificant or *de minimis*. States and authorized tribes have the discretion to include provisions that identify such a *de minimis* threshold in their antidegradation programs, as long as they are consistent with the CWA and 40 C.F.R. § 131.12. This requires appropriate technical justification demonstrating that the *de minimis* threshold and its application would result in truly insignificant degradation, considering cumulative impacts over time (i.e., collectively, degradation from all activities on the water body must be considered when determining whether the *de minimis* threshold has been exceeded and a Tier 2 review is needed to allow additional degradation).[33] See Figure 2.

[31] Water Quality Standards Regulatory Revisions. 80 Fed. Reg. 51034 (August 21, 2015).
[32] *See Alabama Power Co. v. Costle*, 636 F. 2d 323, 360 (D.C. Circ. 1979)
[33] *See Ky. Waterways Alliance v. Johnson*, 540 F.3d 466, 486-87 (5th Cir. 2008)

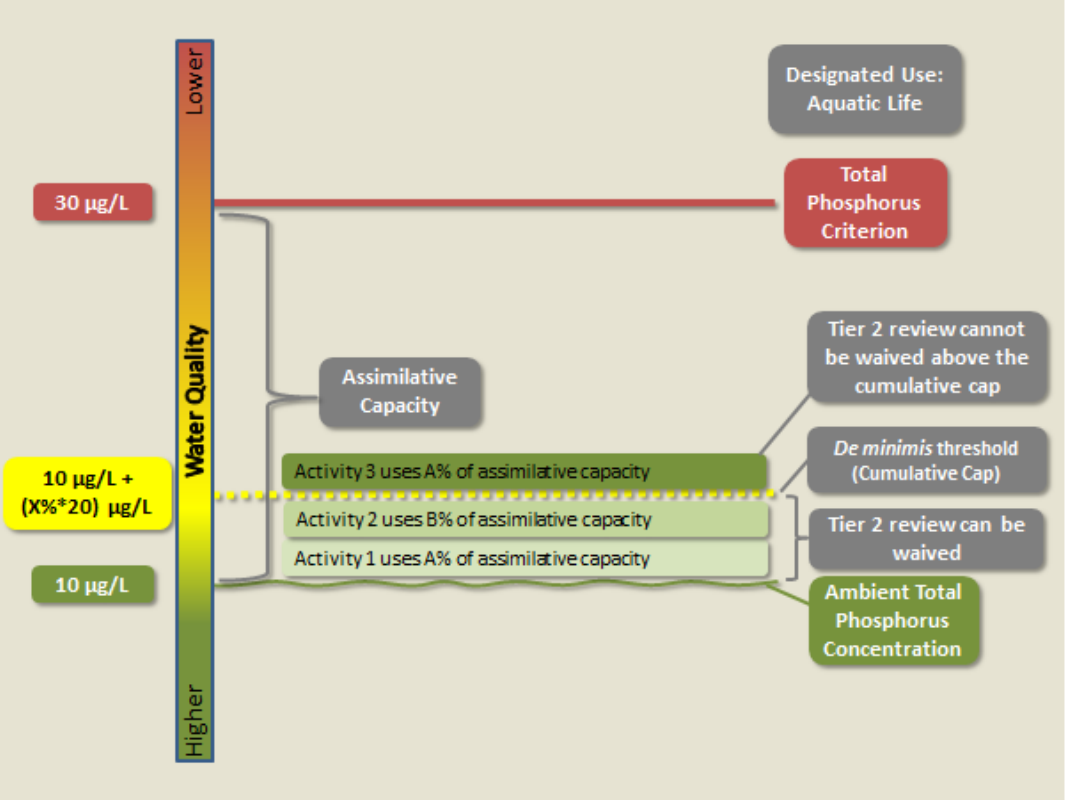

Figure 2. Example of the Cumulative Impact of Multiple *de minimis* Activities. The level of degradation considered insignificant by the state or authorized tribe, or *de minimis*, is X% of the assimilative capacity (in this example, X% of 20 µg/L). This threshold is set as a cumulative cap. Lowering of the high water quality may be allowed without a Tier 2 review up until the point that the collective degradation has used up X% of that water body's assimilative capacity. After that point, the state or authorized tribe must conduct a Tier 2 review before allowing any additional lowering of water quality. Here, activity 1 used A% of the assimilative capacity and activity 2 used B% of the assimilative capacity, which collectively used X% of the water body's assimilative capacity. A Tier 2 review could have been waived for these activities. Activity 3 also uses A% of the assimilative capacity, but since activities 1 and 2 have already collectively used X% of the water body's assimilative capacity, the state or authorized tribe must perform a Tier 2 review before the lowering of high water quality is allowed for Activity 3.

Section 7 of SB 358 establishes a new *de minimis* provision in Montana's antidegradation implementation methods by exempting discharges of total phosphorus or total nitrogen from Tier 2 review if they meet certain conditions. New text is underlined below:

> "75-5-317. Nonsignificant activities. (1) The categories or classes of activities identified in subsection (2) cause changes in water quality that are nonsignificant because of their low potential for harm to human health or the environment and their conformance with the guidance found in 75-5-301(5)(c).
> (2) The following categories or classes of activities are not subject to the provisions of 75-5-303:[34]
> (u) discharges of total phosphorus or total nitrogen that do not:
> (i) create conditions that are toxic or harmful to human, animal, plant, and aquatic life.
> (ii) create conditions that produce undesirable aquatic life; or
> (iii) cause measurable changes in aquatic life."

MDEQ has clarified that all three conditions in (i)-(iii) must be met for activities to be considered nonsignificant.[35]

EPA notes that the text of (i) and (ii) is almost identical to the state's narrative criteria in ARM 17.30.637(1)(d) and (e):

> (1) State surface waters must be free from substances attributable to municipal, industrial, agricultural practices or other discharges that will:
> (d) create concentrations or combinations of materials which are toxic or harmful to human, animal, plant, or aquatic life; and
> (e) create conditions which produce undesirable aquatic life.

The use of similar language is concerning because the purpose of the narrative criteria above is to protect designated uses, whereas the purpose of Tier 2 antidegradation is to maintain and protect water quality that exceeds the levels necessary to support certain designated uses (the protection and propagation of fish, shellfish, and wildlife and recreation in and on the water) unless the state finds that lowering is necessary to accommodate important economic or social development in the area in which the waters are located. Because the narrative criteria language is similar to the language in (i) and (ii), (i) and (ii) appear to allow use of all assimilative capacity for total phosphorus and total nitrogen without a Tier 2 review to determine if such a lowering is necessary to accommodate important economic or social development in the area of the waters. Therefore, EPA concludes that the provision could allow degradation of high-quality waters up to the threshold determined to be protective of the use. The threshold of "measurable changes in aquatic life" in (iii) is less clear, but there are similarly no constraints in (iii) that would prevent the use of a significant amount of assimilative capacity. Depending on the metric that is being used to assess the effects of nitrogen and phosphorus, a significant lowering

[34] MCA 75-5-303 is Montana's nondegradation policy, which includes the Tier 2 review process.
[35] See May 3, 2021 email from Myla Kelly, DEQ Water Quality Standards Section Supervisor, to Tonya Fish, EPA Region 8 Water Quality Section.

of water quality may occur before a measurable change is detected, especially if it is a metric that is not highly responsive to increasing nutrient concentrations. Given this, EPA concludes that (iii) cannot be relied on to assure that lowering of water quality under this exemption will be insignificant.

EPA does not have any information indicating that limitations exist on the assimilative capacity the discharges addressed in MCA 75-5-317(2)(u) would use on an individual or cumulative basis. In addition, there is no estimate of the percentage of assimilative capacity that would be lost pursuant to this exemption or any associated technical justification that such loss would be insignificant or *de minimis* degradation.[36] Therefore, Section 7 could allow potentially significant lowering of water quality without a Tier 2 review, contrary to the requirement of 40 C.F.R. § 131.12(a)(2).

VI. EPA Action on Section 7 of SB 358, Codified at MCA 75-5-317(2)(u)

Based on the information above, EPA disapproves Section 7 because this *de minimis* provision could allow for the degradation of high-quality waters without the necessary Tier 2 review, as required by 40 C.F.R. § 131.12(a)(2). MDEQ has not adequately justified that the provision would only result in insignificant or *de minimis* degradation.

In this situation, no changes are necessary to address EPA's disapproval of Section 7 because Montana's WQS currently include an EPA approved and CWA effective nondegradation policy and implementation methods. EPA's regulations do not require states to include *de minimis* provisions in their policies or implementation methods. Only EPA-approved WQS may be used for CWA purposes, including in developing effluent limitations for MPDES permits. Therefore, this provision may not be used as the basis for exempting activities from Tier 2 review.

[36] Montana has not established baseline water quality, which is the ambient water quality of the water body at the point when the state starts tracking the use of assimilative capacity.