



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 8**

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Ref: 8EPR-EP

Joseph W. Russell, Chairperson  
Montana Board of Environmental Review  
P.O. Box 200901  
Helena, MT 59620-0901

Subject: EPA Approval of Montana's Revised  
Nondegradation Provisions as Applied to EC and  
SAR

Dear Mr. Russell:

The U.S. Environmental Protection Agency, Region 8 (EPA) has completed its review of Montana's revised Surface Water Quality Standards and Procedures, Chapter 30, Sub-Chapter 6 (ARM 17.30.670(6)). This revision was adopted by the Montana Board of Environmental Review (Board) on March 23, 2006. The revised water quality standards were submitted to EPA for review with a letter dated June 5, 2006, from Richard H. Opper, Director of the Montana Department of Environmental Quality (Department). The submittal package included: (1) a statement from the Attorney General's Office certifying that the revisions were duly made pursuant to State law; (2) a statement of basis; and (3) a response to public comment. Receipt of the revised water quality standards on June 9, 2006, initiated EPA's review pursuant to Section 303(c) of the Clean Water Act (CWA) and the implementing federal water quality standards regulation at 40 CFR Part 131. EPA has completed its review, and this letter is to notify you of our action.

The revised water quality standards amend Montana's nondegradation requirements applicable to electrical conductivity (EC) and sodium adsorption ratio (SAR) for the Tongue River, Powder River and Little Powder River Basins. The revision to ARM 17.30.670(6) classifies EC and SAR as "harmful" parameters for the purposes of making nonsignificance determinations for high quality waters. Specifically, the revised rule now reads: "EC and SAR are harmful parameters for the purposes of the Montana Water Quality Act, Title 75, Chapter 5, MCA." EC and SAR, therefore, now will be subject to the nonsignificance criteria in ARM 17.30.715(1)(f), which provides, in part, that changes in high quality waters will be considered nonsignificant where "... changes outside of a mixing zone designated by the department are less than 10% of the applicable standard and the existing water quality level is less than 40% of the standard."

## Agency Review

The Clean Water Act, Section 303(c)(2), requires States and authorized Indian Tribes to submit new or revised water quality standards to EPA for review. EPA is to review and approve or disapprove the submitted standards. Pursuant to CWA Section 303(c)(3), if EPA determines that any standard is not consistent with the applicable requirements of the Act, the Agency is to notify the State or authorized Tribe and specify the changes to meet such requirements. If such changes are not adopted by the State or authorized Tribe within ninety days after the date of notification, EPA is to promptly propose and promulgate such standard pursuant to CWA Section 303(c)(4). EPA's goal has been, and will continue to be, to work closely with States and authorized Tribes throughout the State or Tribal standards revision process as a means to avoid the need for a disapproval action, and where disapproval is unavoidable, to explore with the State or authorized Tribe an acceptable resolution that will make federal promulgation unnecessary.

## Today's Action

I am pleased to inform you that today EPA is approving the revision to Montana's water quality standards, Surface Water Quality Standards and Procedures, Chapter 30, Sub-Chapter 6 (ARM 1730.670(6)), adopted by the Board on March 23, 2006. EPA has concluded that the revision is consistent with the requirements of the Clean Water Act and EPA's implementing regulation at 40 CFR Section 131.12. Accordingly, this revision is approved.

## Basis for Approval

EPA has long recognized the appropriateness of focusing antidegradation reviews on activities that would significantly lower water quality,<sup>1</sup> and States have used a variety of approaches, from the simple to the complex, to identify significant changes in high quality waters. EPA Region 8 approved Montana's statewide nondegradation provisions, as set out in the Montana Water Quality Act and Sub-Chapter 7, in letters to the Governor of Montana dated January 26, 1999 and August 12, 1999. Montana's regulatory nondegradation provisions are set out in Sub-chapter 7, *Nondegradation of Water Quality* (ARM 17.30.701 - 718). Montana's approach to identifying parameters to be considered in a nondegradation review and determining whether certain activities or classes of activities will result in significant changes in water quality is within the range of approaches deemed acceptable to EPA and is consistent with 40 CFR Section 131.12.<sup>2</sup>

For high quality waters, ARM 17.30.705(2)(b) provides, in part, that degradation may be allowed only where authorized, and prohibits "any activity that may cause degradation of high

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<sup>1</sup> See, for example, *EPA Region VIII Guidance: Antidegradation Implementation* at pp. 16-19, August 1993.

<sup>2</sup> See, generally, EPA's Advance Notice of Proposed Rulemaking, 63 Fed. Reg. 36742, 36779-87 (July 7, 1998).



quality waters, for any parameter,<sup>3</sup> unless changes in existing water quality resulting from the activity are determined to be nonsignificant under ARM 17.30.715 or 17.30.716.” ARM 17.30.15 then sets out the criteria the Department will use in determining whether certain activities or classes of activities will result in nonsignificant changes in surface water quality. Where the expected changes are determined to be nonsignificant, the reviewed activity or activity class is exempted from the nondegradation review. The nonsignificance thresholds established in the rule apply to a range of parameters, including carcinogenic, bioconcentrating, toxic and harmful parameters and those parameters covered only by narrative water quality standards.

In the revision to ARM 17.30.670(6) at issue, the Board has determined that EC and SAR are “harmful” parameters for the purposes of making nonsignificance determinations for high quality waters. There is evidence in the record that EC and SAR may be harmful to plants and soils, and therefore harmful to irrigated agriculture, the most sensitive designated use for these two parameters in the Tongue River, Powder River and Little Powder River Basins. Indeed, the Board’s adoption of numeric water quality criteria for EC and SAR in 2003, developed to protect irrigated agriculture, is an acknowledgment that these parameters may adversely affect attainment of that use. Further, Montana’s nondegradation significance threshold applies to all other parameters for which the Board has adopted numeric criteria. By establishing a nondegradation significance threshold for EC and SAR, the Board’s action brings EC and SAR in line with all other parameters for which Montana has developed numeric criteria, and appropriately focuses future EC and SAR nondegradation reviews on avoiding significant changes to water quality on high quality waters.

The revision to ARM 17.30.670(6), although not a change to the State’s nondegradation rule itself, changes the manner in which the State’s nondegradation provisions will be applied to EC and SAR in the Tongue River, Powder River and Little Powder River Basins, by removing a previous exemption from nondegradation considerations for these two parameters. The previous version of ARM 17.30.670(6) was approved by EPA with a letter to the Board dated August 28, 2003. In the course of considering the revision to Montana’s nondegradation rule that is now before us, EPA has reviewed both the administrative record EPA considered when making the decision on August 28, 2003, to approve Montana’s nondegradation rule, and all relevant information the Agency reviewed subsequent to that decision. This review included review of the public comments received by the State of Montana and the testimony in public hearings held ~~on August 28, 2003, and on September 1, 2003, in the Tongue River, Powder River and Little Powder River Basins.~~ ~~of Proposed Rulemaking, 63 Fed. Reg. 36742, 36782-83 (July 7, 1998).~~

amended ARM 17.30.670(6) simply makes application of nondegradation to EC and SAR consistent with Montana's statewide approach. As discussed above, that revision is also within a range of options considered by EPA to be consistent with 40 CFR 131.12. As a result, EPA approves Montana's revision.

#### Revisions not Subject to EPA's CWA Section 303(c) Review

In its March 23, 2006 action, the Board deleted ARM 17.30.670(7), removing the instructions to the Department to use a "flow-based analysis that considers a range of flows or monthly flow probability" in implementing parameters of concern occurring in CBM-produced water. As explained in our August 28, 2003 approval of Montana's EC and SAR numeric criteria, EPA considered ARM 17.30.670(7) to be a permitting provision, instructing the Department permitting staff on the modeling approach it was to use in setting permit limits. As such, we did not consider the compliance provision to be a water quality standard subject to EPA review and approval, and in 2003, we did not formally act on ARM 17.30.670(7). Similarly, although we do not object to removal of this provision, we do not consider the Board's current action, deleting the flow-based provision, to be a water quality standards action subject to EPA review and approval. Further, we do not consider the Board's deletion of ARM 17.30.670(8), the non-severability clause, to be a water quality standards action subject to EPA review and approval pursuant to the Clean Water Act and EPA's implementing regulation. We are, therefore, not acting on either the deletion of ARM 17.30.670(7) or the deletion of ARM 17.30.670(8).

#### Indian Country

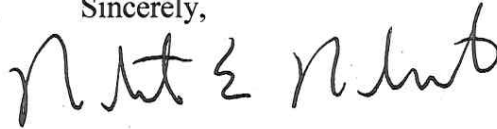
EPA's approval of this revision to Montana's water quality standards does not apply to waterbodies that are within Indian country, as defined in 18 U.S.C. Section 1151. In Montana, "Indian country" includes all lands within the exterior boundaries of the following Indian reservations: the Blackfeet, Crow, Flathead, Ft. Belknap, Ft. Peck, Northern Cheyenne and Rocky Boys Indian Reservations. "Indian country" also includes any land held in trust by the United States for an Indian tribe and any other areas defined as "Indian country" within the meaning of 18 U.S.C. 1151. This letter does not approve water quality standards applying to waters within Indian country. EPA, or eligible Indian tribes, as appropriate, will retain responsibilities for water quality standards for waters within Indian country.

#### **Conclusion**

As indicated above, EPA has concluded that the revision to the nondegradation provision in ARM 17.30.670(6) is consistent with the requirements of the Clean Water Act and EPA's antidegradation provisions (nondegradation in Montana) at 40 CFR Section 131.12, and the revised rule is approved.

If you have questions concerning this letter, please contact Tonya Fish of my staff.  
Tonya may be reached at 303-312-6832.

Sincerely,

A handwritten signature in black ink, appearing to read "Robert E. Roberts". The signature is written in a cursive style with some loops and flourishes.

Robert E. Roberts  
Regional Administrator

cc: Richard H. Opper, Director, Montana Department of Environmental Quality  
John Corra, Director, Wyoming Department of Environmental Quality  
Mark Wilson, Field Supervisor, FWS Montana Field Office  
Amy Newman, OST, EPA Headquarters

