

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 6 1445 ROSS AVENUE, SUITE 1200 DALLAS, TX 75202-2733

MAY 0 8 2012

James P. Bearzi, Chief Surface Water Bureau New Mexico Environment Department 1190 S. St. Francis Drive P.O. Box 5469 Santa Fe, NM 87502



Dear Mr. Bearzi:

Thank you for submitting New Mexico's 2012 § 303(d) List of Water Quality Limited Segments. The Environmental Protection Agency (EPA) has conducted a complete review of the submissions received March 28, 2012, and supporting documentation and supplemental information provided at EPA's request. During this review, we worked closely with staff from the New Mexico Environment Department to ensure that the 2012 § 303(d) List accurately reflected impaired water bodies in New Mexico based on available data. I would like to acknowledge that this could not have been possible without the close cooperative efforts by the staff of both agencies.

Based on this review, EPA has determined that New Mexico's 2012 § 303(d) List of Water Quality Limited Segments still requiring Total Maximum Daily Loads meets the requirements of §303(d) of the Clean Water Act and EPA's implementing regulations. By this final action, EPA is taking an approval action regarding the State's decisions to list all the water bodies and associated pollutants identified in the 2012 § 303(d) List of the State's listing submission and associated priority rankings. The statutory and regulatory requirements, and summary of EPA's review of New Mexico's compliance with each requirement, are described in the enclosed Record of Decision document.

Thank you for your efforts to develop the New Mexico 2012 § 303(d) List. If you have questions on any of the above information, feel free to give me a call at (214) 665-3187 or call Forrest John of my staff at (214) 665-8368.

Sincerely,

William K. Honker, P.E.

Acting Director

Water Quality Protection Division

Enclosure

cc:

Butch Tongate, Chair, New Mexico Water Quality Control Commission James Hogan, Surface Water Quality Bureau, New Mexico Environment Department



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James Hogan, Acting Chief Surface Water Bureau New Mexico Environment Department 1190 S. St. Francis Drive P.O. Box 5469 Santa Fe, NM 87502 NOV 0 5 2012
SURFACE WATER QUALITY BUREAU

Dear Mr. Hogan:

I am writing in reference to the Environmental Protection Agency's (EPA) May 8, 2012, approval of New Mexico's 2012 § 303(d) List of Water Quality Limited Segments. In the Record of Decision, we incorrectly referred to the total recoverable form of aluminum rather than the dissolved fraction for purposes of the Clean Water Act in waters where the pH is at or below 6.5. Consequently, we have amended the Record of Decision (enclosed) reflecting that the 87 μ g/L dissolved aluminum criterion is applicable to those waters where the pH is below 6.5. This correction does not affect EPA's May 8, 2012, final approval of the New Mexico 2012 § 303(d) List.

Thank you for your patience on this matter. If you have questions on any of the above information, feel free to give me a call at (214) 665-3187 or call Forrest John of my staff at (214) 665-8368.

Sincerely,

William K. Honker, P.E.

Acting Director

Water Quality Protection Division

Enclosure

cc:

Butch Tongate, Chair, New Mexico Water Quality Control Commission Shelly Lemon, Surface Water Quality Bureau, New Mexico Environment Department

Summary of Actions

The statutory and regulatory requirements, and the Environmental Protection Agency's (EPA's) review of the State of New Mexico's compliance with each requirement, are described in detail below. Today, by this final action, EPA is taking an approval action regarding the State's decisions to list all the water bodies and associated pollutants identified in the 2012 § 303(d) List of the State's listing submission and associated priority rankings. See Administrative Record 14.

Administrative Records Cited

- Letter from State of New Mexico Environment Department to William Honker, Acting Division Director, Water Quality Protection Division, Region 6, EPA. March 28, 2012. Available at ftp://ftp.nmenv.state.nm.us/www/swqb/303d-305b/2012-2014/NMEDSubmittalLetter03-28-2012.pdf
- State Of New Mexico Procedures For Assessing Standards Attainment For The Integrated § 303(d) § 303(d) /§ 305(b) Water Quality Monitoring And Assessment Report: Assessment Protocol, Revised May 6, 2011. Available at ftp://ftp.nmenv.state.nm.us/www/swqb/MAS/Protocols/AssessmentProtocol+Appendices.pdf
- Guidance for Water Quality Based Decisions: The TMDL Process. EPA 440/4-91-001.
 April 1991. Available at http://www.epa.gov/waterscience/library/modeling/SASD0109.pdf.
- EPA 2002 Integrated Water Quality Monitoring and Assessment Report Guidance. November 19, 2001. Available at http://www.epa.gov/owow/tmdl/2002wqma.html
- State of New Mexico 2012 2014 State of New Mexico Clean Water Act § 303(d)/§ 305(b) Integrated Report, Appendix C, Response to Comments. March 13, 2012.
 Available at ftp://ftp.nmenv.state.nm.us/www/swqb/303d-305b/2012-2014/AppendixC-WOCC-ApprovedResponseToComments.pdf
- Environmental Protection Agency Action on the New Mexico Standards for Interstate and Intrastate Waters (Chapter 20.6.4 New Mexico Administrative Code). April 18, 2011.
- Environmental Protection Agency Record of Decision, New Mexico's Standards for Interstate and Intrastate Surface Waters, Chapter 20.6.4 New Mexico Administrative Code. April 12, 2011.
- Environmental Protection Agency Action on the New Mexico Standards for Interstate and Intrastate Waters, Chapter 20.6.4, New Mexico Administrative Code). April 18, 2012.
- State of New Mexico Continuing Planning Process. Antidegradation Policy Implementation Procedure. Appendix A. New Mexico Water Quality Control Commission. November 30, 2010. Available at ftp://ftp.nmenv.state.nm.us/www/swqb/WOMP-CPP/CPP-AppendixA.pdf
- State of New Mexico Statewide Water Quality Management Plan and Continuing Planning Process. December 23, 2011. Available at ftp://ftp.nmenv.state.nm.us/www/swqb/WQMP-CPP/WQMP-CPP-December2011.pdf
- New Mexico 2012 Integrated Report approval by the State of New Mexico Water Quality Control Commission (WQCC), March 13, 2012. Available at ftp://ftp.nmenv.state.nm.us/www/swqb/303d-305b/2012-2014/2012-2014WQCC ApprovalOrder-NM303d-305b.pdf

- 12. Surface Water Quality Bureau Seeks Water Quality Data and Input on the Assessment Protocol Used to Determine Impairment Status for Development of the 2012-2014 State of New Mexico CWA §303(d)/ §305(b) Integrated Report. March 22, 2011. Available at ftp://ftp.nmenv.state.nm.us/www/swqb/MAS/Protocols/PublicNotice.pdf
- New Mexico Environment Department Surface Water Quality Bureau Draft 2012 2014
 State Of New Mexico Clean Water Act Sections 303(d)/ 305(b) Integrated List of Assessed Surface Waters. Notice of a 45-Day Public Comment Period. December 15, 2011. Available at ftp://ftp.nmenv.state.nm.us/www/swqb/303d-305b/2012-2014/PublicCommentDRAFT303d-PublicNotice.pdf
- Water Quality Limited Segments-Pollutant Combinations (Category 5 Waters)/State of New Mexico 2012 § 303(d) List

List of Abbreviations

AU - Assessment Unit

CFR - Code of Federal Regulation

CPP - Continuing Planning Process

CWA - Clean Water Act

EPA - Environmental Protection Agency

NHD - National Hydrographic Dataset

NMAC - New Mexico Administrative Code

NMED - New Mexico Environment Department

TMDL - Total Maximum Daily Load

WQCC - Water Quality Control Commission

WQLS - Water Quality Limited Waters

WQMP/CPP - Water Quality Management Plan/Continuous Planning Process

A. Purpose

The purpose of this review document is to describe the rationale for EPA's approval of New Mexico's 2012 § 303(d) List of Water Quality Limited Segments (WQLS) requiring Total Maximum Daily Loads (TMDLs). The following sections identify those key elements to be included in the list submission based on the Clean Water Act (CWA) and EPA regulations. See 40 CFR § 130.7. EPA reviewed the methodology used by the State in developing the § 303(d) list and the State's description of the data and information it considered. EPA's review of New Mexico's 2012 § 303(d) List is based on whether the State reasonably considered all existing and readily available water quality-related data and information and reasonably identified waters required to be listed.

B. Statutory and Regulatory Background

1. Identification of WQLSs for Inclusion on § 303(d) List

Section 303(d)(1) of the CWA directs states to identify those waters within its jurisdiction for which effluent limitations required by § 301(b)(1)(A) and (B) of the CWA are not stringent enough to assure attainment with any applicable water quality

standard, and to establish a priority ranking for such waters, taking into account the severity of the pollution and the uses to be made of such waters. The § 303(d) listing requirements apply to waters impaired by point and/or nonpoint sources, pursuant to EPA's long standing interpretation of § 303(d).

EPA regulations provide that states do not need to list waters where the following controls are adequate to implement applicable standards: (1) technology based effluent limitations required by the CWA; (2) more stringent effluent limitations required by state or local authority; and (3) other pollution control requirements required by state, local, or federal authority. See 40 CFR § 130.7(b)(1).

Consideration of Existing and Readily Available Water Quality Related Data and Information

In developing § 303(d) lists, states are required to assemble and evaluate all existing and readily available water quality related data and information, including, at a minimum, consideration of existing and readily available data and information about the following categories of waters: (1) waters identified as partially meeting or not meeting designated uses, or as threatened, in the state's most recent § 305(b) report; (2) waters for which dilution calculations or predictive modeling indicate non-attainment of applicable standards; (3) waters for which water quality problems have been reported by governmental agencies, members of the public, or academic institutions; and (4) waters identified as impaired or threatened in any § 319 non-point assessments submitted to EPA. See 40 CFR § 130.7(b)(5). In addition to these minimum categories, the states are required to consider any other data and information that are existing and readily available. EPA's 1991 "Guidance for Water Quality Based Decisions" describes categories of water quality related data and information that may be existing and readily available. See Administrative Record 3. While the states are required to evaluate all existing and readily available water quality related data and information, the states may decide to rely or not rely on particular data or information in determining whether to list particular waters.

In addition to requiring states to assemble and evaluate all existing and readily available water quality related data and information, EPA regulations at 40 CFR § 130.7(b)(6) require the states to include, as part of their submissions to EPA, documentation to support decisions to rely or not rely on particular data and information for decisions to list or not list waters. Such documentation needs to include, at a minimum, the following information: (1) a description of the methodology used to develop the list; (2) a description of the data and information used to identify waters; (3) a rationale for any decision not to use any existing and readily available information; and (4) any other reasonable information requested by the EPA Regional Administrator.

3. Public Participation

The process for identifying water quality limited segments requires the involvement of the general public commonly referred to as the *public participation process*. The *public participation process* is intended to foster public awareness and open processes of

government decision making. See 40 CFR § 25.1(a). At a minimum, the public participation process must provide, encourage and assist the participation of the public or segments of the public which may have a particular interest in a given program or decision. See 40 CFR § 25.3(a) and § 25.4(b)(5). The public notification must be provided far enough in advance of agency action to permit time for public response which in general should not be less than 30 days. See 40 CFR § 25.4(c). The State's public participation process is to be clearly described in the State Continuing Planning Process (CPP). See 40 CFR § 130.7(a).

4. Priority Ranking

EPA regulations also codify and interpret the requirement in § 303(d)(1)(A) of the CWA that the states establish a priority ranking for listed waters. The regulations at 40 CFR § 130.7(b)(4) require the states to prioritize waters on their § 303(d) lists for TMDL development, and also to identify those Water Quality Limited Segments (WQLSs) targeted for TMDL development in the next two years. In prioritizing and targeting waters, the states must, at a minimum, take into account the severity of the pollution and the uses to be made of such waters. See § 303(d)(1)(A) CWA. As long as these factors are taken into account, the CWA provides that the states establish priorities. The states may consider other factors relevant to prioritizing waters for TMDL development, including immediate programmatic needs, vulnerability of particular waters as aquatic habitats; recreational, economic, and aesthetic importance of particular waters; degree of public interest and support; and the state or national policies and priorities. See 57 FR 33040, 33045 (July 24, 1992) and Administrative Record 3.

C. Review of New Mexico's Submission

EPA reviewed New Mexico's description of the data and information it considered, its methodology for identifying waters, and the State's responsiveness summary dated March 13, 2012. See Administrative Record 5. EPA concludes that in general the State properly assembled all existing and readily available data and information, including data and information relating to the categories of waters specified in 40 CFR § 130.7(b)(5). EPA concludes that the State's decisions to list the waters identified in its submission are consistent with federal listing requirements with exceptions described below.

As part of the State's ambient water quality assessment process, water quality standards segments, defined in NMAC § 20.6.4.7.M, are further divided into assessment units (AUs) for standards attainment determination and linked to the National Hydrographic Dataset (NHD) for national electronic reporting requirements. Assessment Units are stream reaches, lakes, or reservoirs defined by hydrologic boundaries, WQS, geology, topography, incoming tributaries, and surrounding land use/ land management. See Administrative Record 2.

1. Identification of WQLSs for Inclusion on § 303(d) List

For the purpose of listing waters under 40 CFR § 130.7(b), the term water quality standard applicable to such waters and applicable water quality standard refer to those

water quality standards established under § 303 of the CWA, including numeric criteria, narrative criteria, waterbody uses, and antidegradation. See 40 CFR §130.7(b)(3).

The listing methodology employed by New Mexico for the 2012 § 303(d) List describes a set of decision criteria that were reasonably applied. See Administrative Record 3. In general, waters were listed in cases where samples exceeded the applicable water quality standards. However, EPA determined that the State developed the 2012 § 303(d) List using water quality standards which EPA took no action and/or deferred action regarding Revisions to New Mexico's Standards for Interstate and Intrastate Surface Waters, Chapter 20.6.4, New Mexico Administrative Code (NMAC). See 40 CFR § 131.5 and Administrative Record 6. EPA's no action and/or deferred action pertained to sections of the State's water quality standards as follows:

- a. No action regarding the new amendment at NMAC § 20.6.4.10 D. (I)(e) Site-specific criteria and the revised language in NMAC § 20.6.4.10 J. Turbidity. EPA indicated that additional information was necessary to allow further action on these provisions.
- b. Deferred action on the new and revised criteria for aluminum, cadmium and zinc, NMAC § 20.6.4.900 I. (1) and (2), both Acute and Chronic Hardness-based Metals Criteria. EPA required an extensive review of the supporting documentation prior to taking action on these criteria.

EPA concluded its April 18, 2011 review of the State's water quality standards by providing that new and revised water quality standards do not go into effect for CWA purposes until approved by EPA. Therefore, the new and revised water quality standards for NMAC § 20.6.4.10 D. (1)(e), § 20.6.4.13 J and § 20.6.4.900 I. (1) and (2) were not effective for CWA purposes. See 40 CFR §131.21(c) and Administrative Record 6.

New Mexico's 2012 § 303(d) List submission premised listing actions on water quality standards that EPA either took no action and/or deferred action. EPA regulations require a disapproval action regarding listings or failure to list waters associated with water quality standards yet to be approved. However, shortly after the submission of State of New Mexico's Integrated Report, March 28, 2012, EPA took an April 18, 2012 approval action regarding the pending sections of the State's water quality standards (see Administrative Record 8), as follows:

a. EPA determined that the provision NMAC § 20.6.4.10 D., Site-specific criteria, i.e., guidelines for developing site specific criteria, represent implementation procedures and do not constitute water quality standards that require EPA's review or action under § 303(c) of the CWA and, as such, will not be taking action on them. Furthermore, EPA had no obligation to act on NMAC § 20.6.4.10. Site-specific criteria, in its April 18, 2011 action and rescind the previous action on the provision. Any site-specific criteria adopted under this provision would constitute new water quality standards subject to EPA review and approval or disapproval on a case-by-case basis. See § 303(c) of the CWA;

- b. EPA approved the revised language in NMAC § 20.6.4.13 J., Turbidity, with the expectation that the revised provision will be implemented consistent with the antidegradation policy and implementation methods in the State's standards and Continuing Planning Process and related documents; and
- c. Regarding EPA's no action on the new and revised criteria for aluminum, cadmium, and zinc, NMAC § 20.6.4.900 I., (1) Acute and (2) Chronic Hardness-based Metals Criteria, based on an extensive review of the supporting documentation, EPA approved the hardness-dependent equations for both cadmium and zinc criteria independent of pH. Furthermore, EPA approved the application of the hardness-dependent equation for aluminum criteria to those waters of the State at a pH of 6.5 to 9.0 and disapproved the application of this equation in waters where the pH is below 6.5. Consistent with EPA's regulations, the previously approved § 304(a) of the CWA, criteria for aluminum are now applicable to water quality standards (for purposes of the CWA) in waters where the pH is at or below 6.5. As the permitting authority in New Mexico, EPA will apply the previously approved 87 μg/L chronic dissolved aluminum criterion.

Following EPA's April 18, 2012 water quality standards approval, EPA's post hoc evaluation of the New Mexico § 303(d) List has concluded that the State's actions were consistent with revised NMAC § 20.6.4.13 J. as it relates to the State's antidegradation policy (see Administrative Record 9) and revised NMAC § 20.6.4.900 I., pH dependent application. Lastly, EPA's final disposition on NMAC § 20.6.4.10 D., Site-specific criteria, had no bearing on listing or failure to list waters as part of the State's 2012 § 303(d) List submission.

2. Consideration of Existing and Readily Available Water Quality-Related Data and Information.

EPA has reviewed the State's submission and has concluded that the State developed its § 303(d) list in compliance with § 303(d) of the CWA and 40 CFR § 130.7. EPA has determined that New Mexico's submission includes all waters that meet § 303(d) listing requirements. Therefore, regarding New Mexico's 2012 § 303(d) List submission, EPA is taking an approval action. EPA's review is based on its analysis of whether the State reasonably considered existing and readily available water quality-related data and information and reasonably identified waters required to be listed.

As suggested by EPA guidance, New Mexico chose to combine the State's 2012 § 305(b) report and § 303(d) List into a single report following EPA's listing guidance titled "Guidance for the 2002 Integrated Assessment and Reporting on the Quality of States' Waters" ("Integrated Report"). See Administrative Record 4. A single assessment methodology for the Integrated Report was used for both the § 305(b) reporting and the § 303(d) listing activities. The Integrated Report included five categories as established in EPA guidance. Category 5, which is the New Mexico 2012 § 303(d) List was also included in the report. Category 5 is the portion of the Integrated Report on which EPA is taking action. See Administrative Record 6.

While EPA reviewed New Mexico's listing methodology as part of its review of its submission, EPA's approval of the State's listing decisions should not be construed as concurrence with or approval of the listing methodology. EPA is not required to take action on the listing methodology. See 40 CFR § 130.7. EPA's decision to approve New Mexico's listing decisions is based on EPA's review of the data and information submitted concerning individual waters and the State's evaluations of those waters. While EPA considered the State's listing methodology as part of its review, its evaluation was intended to determine whether the State had identified all waters that meet federal listing requirements specified in § 303(d) of the CWA and 40 CFR § 130.7. Furthermore, a State's applicable water quality standards are the basis for determining whether a waterbody is impaired by a pollutant and therefore included on the State's § 303(d) List (Category 5). See 40 CFR § 130.7(b)(3).

3. Public Participation

The State of New Mexico public participation requirements are found at State of New Mexico Statewide Water Quality Management Plan and Continuing Planning Process (WQMP/CPP), Section XIV. See Administrative Record 10. Specific to the New Mexico § 303(d)/305(b) Integrated Report public participation requirements, Table XIV-1, WQMP/CPP, EPA has determined the State in general took reasonable steps to solicit all existing and readily available water quality-related data and information from members of the public and government agencies via the public participation for the New Mexico's 2012 § 303(d)/305(b) Integrated Report as outlined:

- a. New Mexico Environment Department (NMED) solicited existing and readily available data via public notice Match 22, 2011 through April 20, 2011. See Administrative Record 12.
- b. New Mexico 2012 § 303(d)/305(b) Integrated Report was opened for a 45-day public comment period from December 15, 2011 through January 30, 2012, to fulfill public participation requirements and generate public comments. See Administrative Record 13.
- c. Notices were placed in the following newspapers (see Administrative Record 1):
 - i. Albuquerque Journal
 - ii. Santa Fe New Mexican
 - iii. Farmington Daily Times
 - iv. Las Cruces Sun News
 - v. Silver City Daily Press
 - vi. Taos News
- d. New Mexico 2012 § 303(d)/305(b) Integrated Report approval by the State of New Mexico Water Quality Control Commission (WQCC). March 13, 2012. See Administrative Record 11.

e. New Mexico 2012 § 303(d)/305(b) Integrated Report received by EPA Region 6. March 28, 2012. See Administrative Record 1.

4. Priority Ranking

EPA reviewed the State's priority ranking of listed waters for TMDL development, and concludes that the State properly took into account the severity of pollution and the uses to be made of such waters. In addition, EPA reviewed the State's identification of Water Quality Limited Segments targeted for TMDL development in the next two years, and concludes that the targeted waters are appropriate for TMDL development in this time frame.

D. Radioactive Listings

Section 502(6) of the CWA (See 33 U.S.C. § 1362 et seq.) defines pollutant to include radioactive materials except those regulated under the Atomic Energy Act. See Train v. Colorado Public Interest Research Group, 426 U.S. 1, 96 S.Ct. 1938, 48 L.Ed.2d 434 (1976). EPA interprets § 303(d) of the CWA to require EPA establishment or approval of § 303(d) or TMDLs for pollutants. Waters listed on New Mexico's 2012 § 303(d) List as impaired by radioactive materials may have a range of probable sources, e.g., watershed runoff following wildfire, natural sources, erosion, or sedimentation, many of which have no relationship to activities regulated by the Atomic Energy Act of 1954, § 1 et seq. as amended, 33 U.S.C.A. § 1251 et seq. (AEA). Therefore, EPA approves New Mexico's listings as consistent with § 303(d) and the Agency's implementing regulations, insofar as these waters are listed for radioactive materials that are pollutants under the CWA. If it is subsequently demonstrated that the radioactive material for which a water quality limited segment is listed and not a pollutant under the CWA, there would be no obligation to establish or approve a TMDL for such material.

E. Administrative Record Supporting This Action

In support of this decision to approve the State's listing decisions, EPA carefully reviewed the materials submitted by the State with its § 303(d) listing decision. The administrative record supporting EPA's decision comprises materials submitted by the State, copies of the New Mexico 2012 § 303(d) List, associated federal regulations, and EPA guidance concerning preparation of § 303(d) Lists, and this Record of Decision and supporting reports. EPA determined that the materials provided by the State with its submission provided sufficient documentation to support our analysis and findings that the State listing decisions meet the requirements of the CWA and associated federal regulations. We are aware that the State compiled and considered additional materials (e.g., data and water quality analysis reports) as part of its list development process that were not included in the materials submitted to EPA. EPA did not consider these additional materials as part of its review of the listing submission. It was unnecessary for EPA to consider all of the materials considered by the State in order to determine that the State complied with the applicable federal listing requirements. Moreover, federal regulations do not require the State to submit all data and information considered as part of the listing submission.