STATE OF NEW MEXICO
BEFORE THE WATER QUALITY CONTROL COMMISSION

In the Matter of:	)	
	)	
PROPOSED AMENDMENTS TO STANDARDS FOR INTERSTATE AND INTRASTATE SURFACE WATERS, 20.6.4 NMAC .	)	**No. WQCC 20-51(R)**

HEARING OFFICER'S REPORT

I. INTRODUCTION

This matter comes before the New Mexico Water Quality Control Commission ("Commission" or "WQCC") by Petition filed by the New Mexico Environment Department ("NMED" or "Department") on August 19, 2020, proposing amendments to the State of New Mexico's Standards for Interstate and Intrastate Surface Waters, which are codified as Title 20, Chapter 6, Part 4 of the New Mexico Administrative Code ("20.6.4 NMAC").

The Petition came before the Commission for consideration at its October 13, 2020, regular meeting. On October 19, 2020, the Commission issued its Order for Hearing and Appointment of Hearing Officer ("Order for Hearing"), appointing Gregory Chakalian as Hearing Officer and setting the public hearing to commence on July 13, 2021. In its Order for Hearing, the Commission specified that the scope of the rulemaking was limited to the amendments proposed by the Department in its Petition, and any logical outgrowths thereof.[1]

On November 9, 2020, the Hearing Officer issued a Procedural Order which included a table of relevant pre-hearing deadlines. On April 1, 2021, the Hearing Officer issued an Order Granting Amigos Bravos' Unopposed Motion for Extension of Time to File Notices of Intent to File Direct and Rebuttal Testimony and adjusting the table of relevant deadlines accordingly.

Pursuant to 20.1.6.304 NMAC, the Hearing Officer left the record open following the conclusion of the hearing for written submission of comments and arguments, revised proposed

[1] Triad/DOE filed a Petition for Rulemaking in WQCC 21-16 on March 15, 2021 (consistency) because "Triad/DOE are unsure whether a number of their recommended changes to NMED's draft amendments will be incorporated in an NMED revised draft or would be considered "logical outgrowths" of NMED's amendments." The Commission issued an Order assigning Gregory Chakalian as hearing officer and deferring the hearing on WQCC 21-16 to a later date. The parties held a prehearing scheduling conference to consider whether the issues raised in the Petition were logical outgrowths of the Triennial Review; no decision was formally entered by the hearing officer. Triad/DOE contends that it is proper for the Commission to consider and determine proposed changes to 20.6.4.12(E) NMAC, 20.6.4.14(A) NMAC, and 20.6.4.7(S) NMAC as proposed by Triad/DOE. The issue was raised again by NMED's Concurrence filed December 23, 2021 (see discussion below in Section II(C)).

rule language, and proposed statements of reasons. However, the evidentiary record was not left open. It is important to outline the role of the Hearing Officer. In presenting my report and attachment, I interpret the scope of my role as assisting the Commission in its deliberations, NOT in weighing evidence. If there was a scintilla of evidence to support a parties' proposed amendment, I cited to the record. On the other hand, if a party proposed an amendment that was not grounded in evidence, I did not include it in Attachment A.

A public hearing was held via the WebEx online meeting platform from July 13, 2021, through July 16, 2021, and then finally on July 21, 2021. The Commission heard testimony from all the parties. Public comments were heard from twelve individuals during the hearing (individually summarized below). The Commission allowed all interested persons a reasonable opportunity to submit data, views, and arguments, and to examine witnesses.

NMED has made several post-hearing changes and edits to its proposed amendments to 20.6.4 NMAC. These edits and changes are summarized as follows:

20.6.4.7(A)(8) NMAC – Removed the word "be" and added "have criteria" and "criteria for the" to clarify the stringency applies to the criteria not the use.

20.6.4.7(C) NMAC – Removed the definition for "contaminants of emerging concern" based on the renaming of the definition of "contaminants of emerging concern" to "emerging contaminants."

20.6.4.7(C) NMAC – Amended subsection references following moving "contaminants of emerging concern" to "emerging contaminants."

20.6.4.7(E) NMAC – Added the definition for "emerging contaminants" based on the renaming of "contaminants of emerging concern" to "emerging contaminants."

20.6.4.7(E) NMAC – Amended subsection references following moving "contaminants of emerging concern" to "emerging contaminants."

20.6.4.11(I) NMAC – Changed the subsection reference based on a typographic error when re-establishing language in 20.6.4.11(H) NMAC.

20.6.4.13(F) NMAC – Changed language from "contaminants of emerging concern" to "emerging contaminants" based on the amendment to the term in the definitions.

20.6.4.103 NMAC – Added "Las Animas Creek" based on Commissioner Patten's cross-examination of Ms. Aranda on July 16, 2021. Tr. Vol. 4, 1056:10-1058:25.

20.6.4.105 NMAC – Changed language from "effluent conditions" to "effluent requirements."

20.6.4.106 NMAC – Changed language from "effluent conditions" to "effluent requirements."

20.6.4.112 NMAC – Added “Las Animas Creek” based on Commissioner Patten’s cross-examination of Ms. Aranda on July 16, 2021. Tr. Vol. 4, 1056:10-1058:25.

20.6.4.140 NMAC – Changed the word “Two-Mile” to “Twomile” to accurately reflect the waterbody being referred to.

II. AUTHORITY

a. Clean Water Act

The federal Clean Water Act (CWA), 42 U.S.C. Section 1251(a), states its objective as the restoration and maintenance of the chemical, physical and biological integrity of the Nation’s waters. The CWA achieves this objective by ensuring "wherever attainable, water quality which provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water be achieved."

CWA Section 1313(c) establishes the purpose of water quality standards ("WQS" or "standards") to "serve the purposes of the Clean Water Act." This language means that the WQS should fulfill the objectives, goals, and policies of the CWA. EPA's Water Quality Standards Handbook provides more specific guidance. To "serve the purposes of the Clean Water Act", standards must (a) include provisions for restoring and maintaining chemical, physical, and biological integrity of state waters; (b) wherever attainable, achieve a level of water quality that provides for the protection and propagation of fish, shellfish, and wildlife, and recreation in and on the water; and (c) consider the use and value of State waters for public water supplies, propagation of fish and wildlife, recreation, agriculture and industrial purposes, and navigation.

Standards serve two important purposes: (a) to "define the goals for a water body, or portion, thereof, by designating the use or uses to be made of the water, by setting criteria necessary to protect the uses;" and (b) to "serve as the regulatory basis for the establishment of water-quality-based treatment controls and strategies beyond technology-based levels of treatment required by sections 301(b) and 306 of the Act" in NPDES and Dredge-or-Fill permits.

b. Water Quality Act

The New Mexico Water Quality Act (WQA), Section 74-6-3.E, designates the Commission as the state's water pollution control agency for all purposes of the CWA. The WQA requires the WQCC to take all necessary steps to comply with the CWA and to protect water quality in New Mexico. WQA Section 74-6-4.D requires the Commission to:

> Adopt water quality standards for surface and ground water of the state based on credible scientific data and other evidence appropriate under the Water Quality Act. The standards shall include narrative standards and as appropriate, the designated uses of the waters and the water quality criteria necessary to protect such uses. The standards shall at a minimum protect the public health or welfare, enhance the quality of water, and serve the

> purposes of the Water Quality Act. In making standards, the commission shall give weight it deems appropriate to all facts and circumstances, including the use and value of the water for water supplies, propagation of fish and wildlife, recreational purposes, and agricultural, industrial, and other purposes.

WQA Section 74-6-4.E designates NMED to provide technical services to the Commission. As part of this designation, and as specifically provided by the State of New Mexico Continuing Planning Process, NMED takes the lead technical role in the triennial review process[2]. In adopting regulations, the Commission shall give weight it deems appropriate to all relevant facts and circumstances, including:

> (1) character and degree of injury to or interference with health, welfare, environment and property;
> (2) the public interest, including the social and economic value of the sources of water contaminants;
> (3) technical practicability and economic reasonableness of reducing or eliminating water contaminants from the sources involved and previous experience with equipment and methods available to control the water contaminants involved;
> (4) successive uses, including but not limited to domestic, commercial, industrial, pastoral, agricultural, wildlife and recreational uses;
> (5) feasibility of a user or a subsequent user treating water before a subsequent use;
> (6) property rights and accustomed uses; and
> (7) federal water quality requirements.

Id.

c. Scope of Rule-Making – Doctrine of Logical Outgrowth

NMED contends that since NMED had not proposed any amendments to 20.6.4.14 NMAC, that LANL's proposed amendment to 20.6.4.14.A is not a "logical outgrowth" of NMED's Petition. *See* NMED Ex. 106 at 5, 7-9 (filed on June 22, 2021).

LANL's counterargument:

> NMED's understanding of the scope of this rulemaking as being limited to NMED's proposed rule changes and "logical outgrowths" thereof, is wrong. The Public Notice of Hearing expressly states that the purpose of the hearing is "to consider proposed amendments to 20.6.4 NMAC, Standards and Intrastate Surface Waters," and that "these amendments have been proposed as a result of a review of state water quality standards and reflect updates to those standards as required by the federal Clean Water Act and the state Water Quality Act." See, e.g., NMED Ex. 96 at 3 (Notice published in the New

[2] SJWC Exception (unnumbered, p. 7, "The positions advocated by NMED in this Triennial Review are not entitled to any special deference because NMED carries the same burden as every other party. NMSA 1978, Sections 74-6-9(F), (G) (1967), as amended through 1993)."

Mexico Register). The notice does not limit the hearing to only NMED's proposed amendments. If the Commission meant to do so, it could have done so in the notice.

As NMED noted in its Petition, "[t]he Clean Water Act at 33 U.S.C § 1313(c)(1), and the Commission's regulations at 20.6.4.10(A) NMAC, require the State to, at least once every three years, hold public hearings for the purpose of reviewing applicable water quality standards and proposing, as appropriate, necessary revisions to water quality standards." NMED's interpretation on the scope of this hearing is inconsistent with federal and state regulations and would result in New Mexico being out of compliance with applicable federal law for the Triennial Review.

40 CFR § 131.20(a) & (b) require New Mexico "at least once every 3 years, [to] hold public hearings for the purpose of reviewing applicable water quality standards adopted pursuant to [40 CFR §131.10 through 131.15] and Federally promulgated water quality standards and, as appropriate, modifying and adopting standards," and to "hold one or more public hearings for the purpose of reviewing water quality standards as well as when revising water quality standards, in accordance with provisions of State law and EPA's public participation regulation." Similarly, 20.6.4.10(A) NMAC specifies that "Section 303(c)(1) of the federal Clean Water Act requires that the state hold public hearings at least once every three years for the purpose of reviewing water quality standards and proposing, as appropriate, necessary revisions to water quality standards." (Emphasis added.)

The Hearing Officer was not asked to decide this issue, and therefore leaves it up to the Commission's counsel to advise.

III. TRIENNIAL REVIEW PROCESS

a. EPA Approval

CWA Section 1313(c)(1) requires New Mexico to hold a public hearing at least once every three years to review applicable water quality standards and, as appropriate, to modify and adopt standards. This process is generally known as the "Triennial Review." The U.S. Environmental Protection Agency ("EPA") approved the last such revisions in August of 2017. Petition, pp. 1-2.

After the WQCC holds this hearing, it sends the modified standards to EPA for review and approval. The states have considerable latitude in developing and tailoring their standards to achieve state goals and priorities, but the standards still must comply with federal guidelines. If EPA approves the standards, they become enforceable under federal law. If EPA does not approve the standards, in whole or in part, it gives the state an opportunity to correct the problem. If the state cannot or will not correct the problem, then EPA must promulgate standards for the state. There have been several instances in the history of New Mexico's standards that EPA has disapproved a portion of the standards. Where the EPA has not approved an amendment

promulgated by the WQCC, EPA has reverted to a prior EPA-approved standard. *See* https://www.epa.gov/wqs-tech/water-quality-standards-regulations-new-mexico

b. 2020 Triennial Review

NMED implemented a full public participation process for the 2020 Triennial Review, including public comment periods, public notices, and meetings. NMED revised its discussion draft to consider many of the comments received during the public participation process.

NMED filed its petition to amend the standards on August 19, 2020, initiating the 2020 Triennial Review, and the Commission Administrator docketed the petition on the same date. In July 2020 the Department held three stakeholder outreach sessions for Department-identified and self-identified stakeholders, using the slides eventually filed as NMED Exhibit 82. (NMED Exhibit 4, p. 50). In November 2020, the Department also provided a public comment period for proposed amendments. Notification was distributed via several outlets, including posting the notification on the Surface Water Quality Bureau's main webpage, the Water Quality Standards webpage, and the 2020 Triennial Review webpage (NMED Exhibit 83). The Department provided notification in both English and Spanish (NMED Exhibit 84) through a GovDelivery email distribution to 1,805 individuals subscribed to the Bureau's distribution list (NMED Exhibit 85); notification to 37 individuals representing 24 tribes (NMED Exhibit 78); and 101 identified stakeholders (NMED Exhibit 86). NMED Exhibit 4, p. 52.

The public comment period was initially open from November 2, 2020, through December 2, 2020; however, due to public response, the Department extended the period for an additional 35 days through January 6, 2021. The Department conducted two virtual public meetings as a part of the public outreach efforts. The first was held on November 12, 2020, at 5:30 p.m. (NMED Exhibit 87), which 36 individuals attended, and the other on November 16, 2020, at 2:30 p.m. which approximately 17 individuals attended. NMED Exhibit 4, p. 52.

As a result of the public comment period and outreach discussions, the Department received approximately 200 comments regarding the proposed amendments. The Department posted the comments, as submitted, on the Department's Triennial Review webpage. NMED Exhibit 4, p. 53.

Public Notice of the hearing was timely provided in accordance with all relevant state and federal laws. NMED Exhibit 4, pp. 53-56. Legal notice for the hearing was published in the New Mexico Register, in both Spanish and English, and newspapers of general circulation in the state. NMED Ex. 96 (Notice published in the New Mexico Register); NMED Ex. 98 (Notice published in the Albuquerque Journal); NMED Ex. 99 (Notice published in The Santa Fe New Mexican). Notice of the hearing was sent to the Commission's mailing list and the Surface Water Quality Bureau's ("SWQB") mailing list. NMED Ex. 97 (Notice sent to stakeholders); NMED Ex. 100 (Notice sent to NMED District Managers); NMED Ex. 102 (Notice sent to SWQB Listserv); NMED Ex. 103 (Notice published on NM Sunshine Portal); NMED Ex. 104 (Notice sent to NM

Legislative Council Service); and NMED Ex. 105 (Notice sent to NM Small Business Regulatory Advisory Commission). Notice was also published on the SWQB website. NMED Ex. 101 (Notice on SWQB Webpage).

On March 12, 2021, more than four months prior to the hearing and more than six weeks prior to the eventual due date for Notices of Intent to Present Technical Testimony, the Department filed an amended version of the proposed amendments.

The following non-petitioning parties ultimately entered appearances in this proceeding: Amigos Bravos; The Gila Resources Information Project and Communities for Clean Water; The New Mexico Mining Association; The U.S. Department of Energy and Triad National Security; The San Juan Water Commission; and the Buckman Direct Diversion Board.

On May 3, 2021, the Parties filed their Notices of Intent to Present Technical Testimony, including the pre-filed written direct testimony of their witnesses. On June 22, 2021, the Parties filed their Notices of Intent to Present Technical Rebuttal Testimony, including the pre-filed written rebuttal testimony of their witnesses. At the hearing, all interested persons were given a reasonable opportunity to submit data, views, and arguments orally and in writing, and to examine witnesses testifying at the hearing[3].

IV. STANDARD FOR RULEMAKING

The Commission adopts water quality standards pursuant to its authority under the Water Quality Act, Section 74-6-4.C. At a minimum, the standards must protect the public health or welfare, enhance the quality of water, and serve the purposes of the WQA. The standards must be based on credible scientific data and other evidence. "Other evidence" is particularly appropriate when the decision concerns legal or policy issues. *New Mexico Mining Association v. Water Quality Control Commission*, 2007-NMCA-084, ¶16, 142 N.M. 200, 164 P.3d 81 (because the statute references both "credible scientific data" and "other appropriate evidence", the Commission is "empowered to give controlling weight to other evidence appropriate under the WQA in making what [is] largely a political and legal judgment.")

The Commission's decision to adopt a standard must be based on substantial evidence. "Substantial evidence supporting administrative agency action is relevant evidence that a reasonable mind might accept as adequate to support a conclusion." *Oil Transportation Co. v. New Mexico State Corporation Commission*, 110 N.M. 563, 571, 798 P.2d 169, 172 (1990). The agency must consider all evidence in the record. *Perkins v. Department of Human Services*, 106 N.M. 651, 654, 748 P.2d 24, 27 (Ct. App. 1987). It is not necessary that this evidence be

[3] SJWC Exception, p. 8, "SJWC asserts that the expert technical witnesses of all parties other than NMED were hampered in their preparations for the Triennial Review because neither NMED's August 19, 2020, Petition nor NMED's March 12, 2021, Amended Petition provided the technical bases or other reasons for NMED's proposed amendments…"

admissible in a jury trial. *Tenneco Oil Co. v. WQCC*, 107 N.M. 469, 760 P.2d 161 (Ct. App. 1988) (the legal residuum rule does not apply in judicial review of administrative rulemaking).

V. PARTIES PROVIDING TECHNICAL TESTIMONY

NMED was represented by John Verheul and Annie Maxfield of the Department's Office of General Counsel. NMED presented the testimony by Shelly Lemon, Chief of the Surface Water Quality Bureau, Kris Barrios, Program Manager for the Bureau's Monitoring, Assessment, and Standards Section, Diana Aranda, Bureau's Scientist/Specialist-Advanced on the Standards, Planning, and Reporting Team, and Jennifer Fullam, Standards, Planning and Reporting Team Supervisor and the Water Quality Standards Coordinator with the Bureau.

The San Juan Water Commission was represented by Jolene McCaleb and Elizabeth N. Taylor, of Taylor and McCaleb. Jane DeRose-Bamman, an Environmental Consultant, testified for the Commission, a joint powers agency whose purpose is to assure a stable water supply for their entities, including the cities of Aztec, Bloomfield, and Farmington, and San Juan County, and the rural water users' associations in San Juan County.

Triad National Security, LLC was represented by Louis W. Rose and Kari Olson of Montgomery and Andrews, Alexander Arensberg and Carolyn L. McIntosh of Squire Patton Boggs LLP, and Maxine McReynolds, Office of Laboratory Counsel, Los Alamos National Laboratory. The U.S. Dept. of Energy (collectively "LANL") was represented by Silas DeRoma and Stephen Jochem. LANL presented the testimony of Dr. Richard Meyerhoff, a senior water quality specialist, Robert Gallegos, an environmental professional, Timothy Goering, an environmental professional, Dr. D. Bryan Dail, an environmental scientist, Barry Fulton, an environmental scientist, Dr. John Toll, an environmental scientist, David DeForest, an environmental toxicologist, and Nancy Judd, an environmental toxicologist.

Amigos Bravos was represented by Tannis Fox of the Western Environmental Law Center. Amigos Bravos is a non-profit river conservation organization dedicated to protecting the ecological and cultural richness of the Rio Grande and other wild rivers in New Mexico. Rachel Conn, Projects Director for Amigos Bravos, and Jamie DeWitt, Ph.D., DABT, Associate Professor in the Dept. of Pharmacology and Toxicology of the Brody School of Medicine at East Carolina University testified for Amigos Bravos, along with David Hope, Chief Executive Officer of Pacific Rim Laboratories, and Ann Bailey, M.S.

The N.M. Mining Assn. was represented by Stuart Butzier and Christina Sheehan of Modrall, Sperling, Roehl, Harris & Sisk, P.A., and Dalva Moellenberg of Gallagher & Kennedy, P.A., and presented the testimony of David Gratson, Senior Technical Chemist.

Buckman Direct Diversion Board was represented by Kyle Harwood and Luke Pierpont of Egolf + Ferlic + Martinez + Harwood, LLC, and presented the rebuttal testimony of James Bearzi, Senior Environmental Geologist.

Communities for Clean Water and the Gila Resources Information Project was represented by Charles de Saillan, and presented the testimony of Kathleen Wan Povi Sanchez, a teacher and community organizer, Pamela Homer, Environmental Scientist, James Kuipers, Consulting Engineer, and Allyson Siwik, Director of Gila Resources Information Project.

The technical testimony presented by the parties will not be summarized here. To the extent the technical testimony offered before or during the hearing supports or opposes a party's final proposal to amend the standards, it appears in Attachment A, with a pleading log or transcript citation, under the relevant section of the standards. Attachment A is a guidepost for the Commission to begin their consideration of each issue. It is not meant to provide a comprehensive description of all of the positions taken and evidence presented at the hearing and in prehearing submissions.

NOTE: there were several instances where parties "abandoned" or "waived" issues that were addressed in evidence (prefiled technical testimony, under oath, and admitted exhibits), yet were not pursued in the party's closing argument and/or omitted from the party's proposed statement of reasons. The undersigned Hearing Officer consulted the parties and provided opportunities to submit a notice of errata if the omission was in error and there was no objection.

VI. PUBLIC COMMENT

Opportunities for public comment were offered many times during the hearing, including every day of the hearing at 6 p.m. and starting on the second day, at 12 p.m. Public comment was also taken at random times each day when there was a break in the testimony.

Susan Schuurman, long time resident of New Mexico, cares deeply about water quality. Fears that Albuquerque water is not safe as it flows down from the Los Alamos Labs. Wants to strengthen water quality standards for the state's surface waters. She supports defining climate change as human-caused and sees combatting climate change as the purpose of these regulations. She supports adding PFAS chemical to the list of contaminants of emerging concern due to how damaging they are to human health. Ms. Schuurman states that she understood public comment periods to be at 8am and 5pm each day and that was not the case. States moving public comment time periods makes genuine public participation very challenging for workers who are protecting our water while trying to hold down a job and support a family. She urges the Hearing Officer to honor the public comment schedule originally stated. [Transcript: page 611 lines 5 – 17; page 612 lines 1 – 11].

Katherine Shera offers her support of NMED's proposed amendments to water quality standards, considering Amigos Bravos and CCW-GRIP's suggested changes. Would like to emphasize the importance of monitoring and regulating emerging contaminants especially PFAS. States these contaminants are known at Holloman and Cannon air force bases and LANL and just now are being recognized as a part of fracking. PFAS represent a significant human health hazard and are being recognized as a contaminant in drinking water across the state. Asks the Commission to

consider criteria measuring total organic fluorine. States that water quality regulation will need to be increasingly rigorous and forward looking, not hobbled to industry-friendly methods of the past. She states that the interests represented at this hearing seem to be preventing the rapid degradation of water quality in New Mexico. [Transcript: page 614 line 21 to page 618 line 3].

Emily Arasim is a resident of Alcalde, New Mexico and supports all the requests made by Communities for Clean Water. As a young farmer in her 20s, Arasim depends on acequia irrigation to water her crops and sustain her livelihood. States the water drawn directly from rivers, streams, springs, and lakes is vulnerable to any level of surface water contamination from any source. These bodies of water are where food is grown to feed families across the state. Arasim fears being exposed as a farmer to all contaminants and asks regulators to take serious action to enforce the most stringent protection possible for New Mexico's water. She is in alignment with the requests of Communities for Clean Water. [Transcript: page 629 line 20 to page 632 line 10].

Carlos Herrera is a water quality scientist working in the environmental field for over 21 years. He is from the Cochiti Pueblo where he grew up on the reservation and learned about water quality and how it impacts human lives. He works for Rivers Source, a Santa Fe company that helps tribes. Herrera states there are deposits of contaminants from LANL in Cochiti Lake, impacting people in the middle Rio Grande Valley from contaminated water. People can't eat most fish caught because of high levels of contamination. He states there needs to be a better understanding of, and updated list of toxic pollutants. [Transcript: page 663 line 18 to page 666 line 21].

Brooke Zanatelle holds a PhD in natural resources management from Cornell University. Ms. Zanatelle grew up in the west, and currently resides in Taos, New Mexico. She teaches water resource management in the UNM system. States she is opposed to a limited definition of climate change. States there are new toxic chemicals that are causing world-wide concern and wants our leadership to start monitoring these chemicals. States we need to pay attention to the fish in the streams and the animals in general as a method of measuring toxicity in the environment of our groundwater and in our human communities, as humans hunt and fish and consume these animals. Zanatelle supports the existing definition of toxic pollutants and is opposed to any weakening of the HH-OO criteria and any limited monitoring of any site in New Mexico. She supports no limitation on any monitoring at any national lab. [Transcript: page 1001 line 15 – page 1004 line 10].

Teresa Seamster is a resident of Santa Fe County and a school administrator for 26 years. She is a member of the Water Sentinels, a national water monitoring program administered by the Sierra Club and conducted by residents. The program samples water from multiple sites in northern New Mexico rivers and reports to NMED. She is concerned about medical waste, pharmaceuticals, and other untested waste downstream of a Santa Fe water treatment plant where the presence of hormones, PCBs and heavy metals were found. She states Steroid Androgens and synthetic estrogens can seriously poison fish and impact their reproduction. The same hormones

when ingested by young children can affect their development. Ms. Seamster states that the European Commission lists these toxins in their water framework directorate and states her opinion that New Mexico needs to catch up with the protective regulations of other countries. [Transcript: page 1007 line 4 to page 1009 line 4].

Beata Tsosie Pena is from the Santa Clara Pueblo and El Rito and works with Tewa Women United. She is a birth worker, farmer, educator, and advocate for an end to environmental violence from nuclear colonialism and extraction industries in her ancestral homelands. She supports the efforts of Communities for Clean Water's testimony and recommendations. She opposes several proposals put forth by LANL. Tsosie Pena supports comments made by Communities for Clean Water and urges the commission to adopt a definition of climate change that identifies human activities as a major cause. She urges the commission to protect all waterways because her community still relies on fishing and hunting and feels all toxins should be identified and responded to based on existing definitions of these pollutants. She opposes LANLs proposals to limit monitoring for the purposes of permit compliance and enforcement. She supports the adoption of the contaminants of emerging concern definition that gives NMED authority to monitor CECs. [Transcript: page 1011 line 3 – page 1014 line 9].

Freyr A. Marie supports comments made by Communities for Clean Water and feels the Commission should adopt a definition of climate change that identifies human activities as a major cause and make combatting climate change the purpose of the regulations. She affirms the adoption of emerging concern definition that gives NMED the authority to monitor CECs. She supports adding PFAS to the CEC definition as an example of CECs. She is in opposition to LANLs proposal to weaken HH-OO criteria to protect the fish in the waters and objects to US DOE and LANL spending taxpayer dollars to fight state efforts to protect waters from pollutants. She feels there needs to be accountability when water is harmed, and cleanup enforced to restore the water. Public lands should not be leased for extractive efforts for coal and fossil fuel. [Transcript: page 1049 – line 3 to page 1052 line 9].

Susann McCarthy urges the Commission to avoid a limited definition of climate change. She supports standards of contaminants of CECs and having a strict definition of CECs. She states she wants NMED to require monitoring. No toxic fishing should be permitted because of LANL requesting a limitation on the number of protected waters. She is against limiting the definition of toxic pollutants. [Transcript: page 1195 line 15 to page 1196 line 5].

Logan Glasenap, staff attorney for non-profit New Mexico Wild, which is an organization committed to protecting New Mexico's wildlands, waters and wildlife, urges the Commission to adopt a definition of climate change that identified human activities as the major cause of climate change and to specify that combatting climate change is a purpose of the regulations. NM Wild also supports the adoption of a contaminant of emerging concern definition that gives the Environment Department the authority it needs to require monitoring of these harmful materials, as well as supporting adding PFAS to the CEC definition. [Transcript: page 1431 line 11 to page 1433 line 12]

Joni Arends spoke as Concerned Citizens for Nuclear Safety, or CCNS, a Santa-Fe-based nongovernmental organization formed to address community concerns about the proposed transportation of waste from LANL to WIPP. CCNS' mission is to protect all living beings from effects of radioactive and other hazardous materials. Ms. Arends spoke about her concern regarding the amount of time between Triennial Reviews which are held to review water quality standards. She states that CCNS requests that the Commission, when approving the Open Meetings Act Annual Resolution require a presentation from NMED to update the commission about the current status of Triennial Review process. Ms. Arends feels this would hold the agencies accountable and give the public access to updates on what's happening with triennial review. Ms. Arends also stated that CCNS fully supports the testimony and concerns by CCW and GRIP as presented in this TR to provide the NMED with the authority to require permittees to monitor and sample toxic pollutants and other emerging contaminants. [Transcript: page 1487 line 18 to page 1490 line 6]

Cathy Swedlund felt compelled to speak out about the importance of protection of water, air and earth, feeling that we are in a crisis with the climate as is evidenced by raging fires and flooding around the planet. Ms. Swedlund feels that these crises are human caused, and to take away any kind of ability to enforce change in our carbon footprint would be unconscionable. Ms. Swedlund feels we must stand firm on the identification of climate crises as human-caused and does not feel there should be any limits put on the protections of the environment, and there should be the strictest standards regarding chemical contaminants in the water because too many people are developing cancer and the fish are dying. [Transcript: page 1435 line 2 to page 1436 line 22]

VII. THE MAJOR ISSUES

In its deliberations, the Commission may decide to proceed section by section through Attachment A to this report, from the beginning to the end of the standards. On the smaller proposed changes this approach would be efficient. If the Commission decides to tackle the larger issues first, it is these to which it should turn its attention:

a. Climate Change

The Department developed and presented to the Commission a new proposed objective for the Standards for Interstate and Intrastate Surface Waters in 20.6.4.6(D) NMAC, which affirmatively asserts that the standards "serve to respond to the inherent threats of climate change and provide resiliency for the continued protection and enhancement of water quality." To support this objective, the Department proposed a definition for the term "climate change" in 20.6.4.7(C) NMAC, specifying that the term "refers to any significant change in the measures of climate lasting for an extended period, typically decades or longer, and includes major changes in temperature, precipitation, wind patterns or other weather-related effects." The definition further explains that climate change "may be due to natural processes or human-caused changes of atmosphere, or a combination of the two."

While LANL agrees that climate change is of significant concern and should be appropriately addressed, amendments to the WQS is not the appropriate way to address climate change. LANL contends that neither the WQA nor the Standards grant the Commission or NMED authority to address emissions of greenhouse gases to mitigate climate change. Moreover, NMED's proposed "climate change" definition is not an appropriate regulatory definition. Rather, it was based upon information from a years-old, archived EPA website that was not presented as a definition by EPA and is not current.

SJWC is very concerned about climate change and its potential adverse impacts on water supplies and quality, however it is "uneasy" about NMED's proposal to adopt a distinct climate change objective that arguably "elevates climate change above all other sources of water quality impairment."

Amigos Bravos proposed language to 20.6.4.6.C. NMAC [sic] to strengthen protection against climate change as an objective of the water quality standards that a purpose of the standards is to respond to and protect against the threats of climate change and to provide resiliency to enhance water quality and identifies documented threats to New Mexico's surface waters from climate change. Amigos Bravos proposes adding the following sentence to the definition of climate change at 20.6.4.7.C(4) NMAC, "Humans are largely responsible for recent climate change," to ensure that the Commission's definition of climate change is accurate and not misleading. According to Amigos Bravos, NMED's proposed definition of "climate change" implies that "natural processes" and "human-caused changes" are equivalent causes of climate change when the scientific consensus is that humans are the primary driver of climate change.

b. Classification of LANL Waters

In this Triennial Review, the Commission is asked to review the appropriate classification for ephemeral, intermittent, and perennial waters located within the exterior boundary of the Laboratory. This is not a matter of first impression for the Commission. The Commission previously considered the classification of LANL waters during the 2003 Triennial Review, WQCC 02-05(R). On May 13, 2005, the Commission adopted sections 20.6.4.126 NMAC ("Section 126") and 20.6.4.128 NMAC ("Section 128"). *Identified* perennial waters within LANL were classified under Section 126, and all other waters (ephemeral and intermittent) were classified under Section 128[4]. Since the completion of the 2003 Triennial Review, the Commission has not amended its classification of LANL waters under Sections 126 and 128.

At that time, NMED proposed to classify all *known perennial, intermittent, and ephemeral waters* within LANL, based upon an extensive U.S. Fish and Wildlife Service assessment of the water quality in streams within LANL[5]. During the 2013 Triennial Review, Amigos Bravos, DOE, Los Alamos National Security LLC, and NMED entered a Joint Stipulation, whereby the

[4] Only those perennial waters **identified** at that time (20030 were classified in Section 126. Section 126 did not represent a catch-all section for all perennial waters at LANL. NMED Exception No. 4).
[5] NMED Exception No. 5.

parties agreed to collect data and work together to continue evaluation of the appropriate water quality protections for LANL waters currently classified under Section 128.

As an outcome of a Joint Stipulation Regarding Proposed Changes to 20.2.4.128 NMAC, a number of [6] Hydrology Protocol surveys were performed on waters at the Los Alamos National Laboratory ("LANL") to determine the appropriate protections for those waters. Based upon the data collected in those surveys by the parties to the Joint Stipulation, NMED proposed to create a new Section, 20.6.4.140 NMAC, breaking out certain intermittent waters within LANL from 20.6.4.128 NMAC, and amending 20.6.4.128 NMAC accordingly. LANL generally supports NMED's proposed reclassification under new Section 140 with two exceptions (*see* Attachment A).

LANL proposed their own amendments to 20.6.4.126 NMAC, asserting that waters currently classified in 20.2.4.128 NMAC but recently to have perennial characteristics should be classified in 20.6.4.126 NMAC. NMED's position is that while LANL has a right to petition the Commission for an amendment to a designated use, LANL must complete a use attainability analysis prior to a hearing. As this critical step was not taken, the proposed amendment fails as a matter of law[7].

SJWC supported LANL's proposal to adopt a formal procedure for designating or amending existing uses to ensure fair and sound Commission decision-making. SJWC urges the Commission to "define – in regulation – the process for developing an Existing Use Analysis ("EUA") to include public participation requirements and the amount and type of data required for an EUA to provide sufficient "supporting evidence" of an existing use." *See* SJWC Exception, p. 11.

c. <u>The Process for Reviewing and Amending the WQS</u>

LANL contends that the process for reviewing and amending the WQS should include a process for determining existing uses and more protective designated uses. The federal provisions of the Clean Water Act do not establish what information must be developed to support these use decisions nor what procedure to apply. "However, there is federal guidance that instructs how an existing use should be evaluated. LANL asserts that during this Triennial Review, for the first time and without any established process in the WQS, NMED applied an existing use demonstration to re-examine secondary contact recreational uses for certain water bodies and to re-examine aquatic life uses for certain waters within LANL. Therefore, LANL requests the Commission formally adopt in the Standards or the WQMP/CPP, procedures for determining

[6] Amigos Bravos asserts there were "47 surveys conducted" in its Exception No. 6.

[7] Per LANL's Exception No. 2, LANL contends that "no use attainability analysis is required because the newly identified perennial segments in question are a portion of ephemeral or intermittent waters currently classified under Section 128…"

existing uses and for reclassifying a water to assign a more protective designated use, for clarity…[8]"

d. Methods of Compliance with Water Quality Standards – 20.6.4.14.A NMAC

LANL proposes amendments to amend 20.6.4.12.E and 20.6.4.14.A NMAC to require the use of federal Part 136 approved methods for NPDES compliance determinations and CWA Section 401 state certifications, and to incorporate the 40 C.F.R. § 122.44 definitions of "lowest minimum level" and "sufficiently sensitive" into the WQS. LANL filed a Second Notice of Errata December 10, 2021, correcting the proposed rule language to include "pollutant parameter" consistent with the language of 40 CFR Section 122.44(i)(1)(iv)[9].

Amigos Bravos objected to LANL's proposal to limit sampling methods at 20.6.4.14.A NMAC for purposes of compliance with the water quality standards and federal permits. The Commission's current regulations authorize a range of authoritative sources for use as sampling methods, including federal Part 136 Methods. Amigos Bravos contends LANL's legal analysis is wrong and LANL's exhibits demonstrate that states have the authority to select non-Part 136 methods if no Part 136 Method applies. The consequence of LANL's proposal, according to Amigos Bravos, is there would be ineffective monitoring for PCBs and no monitoring for PFAS.

In furtherance of their Exceptions, Amigos Bravos filed a Motion to Strike LANL's Proposed Amendment to 20.6.4.14.A and LANL's "Misrepresentation of an EPA Regulation" asserting a general lack of evidence to support LANL's proposal, and a lack of opportunity to cross-examine LANL's witnesses. Being fully briefed, the Hearing Officer scheduled a motion hearing to receive oral argument on December 30, 2021. NMED and CCW-GRIP filed motions in concurrence with Amigos Bravos. The parties condensed arguments follow in their own words:

Amigos Bravos:

> Amigos Bravos moved to strike an amendment to 20.6.4.14.A NMAC first proposed by LANL in its post-hearing brief. Amigos Bravos moved to strike the following highlighted language on the ground that there is **no** evidence in the record to support the proposal and because the parties had no opportunity to cross-examine any witness on the meaning and effect of the proposed language. *See* NMSA 1978, §§ 74-6-7.B(2), 74-6-6.D.
>
> **20.6.4.14 SAMPLING AND ANALYSIS:**
> **A.** 40 CFR Part 136 approved methods shall be used to determine compliance with these standards and in Section 401 certifications under the federal Clean Water Act. In cases of pollutants and pollutant parameters for which there are no approved methods under 40 CFR Part 136,

[8] LANL Exception No. 6.

[9] See Triad Second Notice of Errata to LANL's Closing Argument at 3, filed December 10, 2021.

> analyses shall be conducted according to a test procedure specified in the applicable permit or 401 certification. Where 40 CFR Part 136 approved methods are not required, sampling ~~Sampling~~ and analytical techniques shall conform with methods described in the following references unless otherwise specified by the commission pursuant to a petition to amend these standards:

Amigos Bravos detailed in its motion why there is no evidence in support. Amigos Bravos maintains in its reply that LANL did not attempt to cite to evidence in support in LANL's response.

Amigos Bravos further contends that LANL's proposed language does not verbatim reflect the federal regulations relating at 40 CFR § 122.44, as alleged by LANL, and the language is ambiguous (1) whether non-Part 136 Methods may be used to determine compliance with federal permits and state water quality standards and (2) whether EPA Method 1668C, which tests for PCBs at the lowest numeric water quality standards established by the Water Quality Control Commission, is authorized, since there was no opportunity to cross-examine any witness on this proposal. NMED joined in support of the motion to strike.

LANL:

Citing to LANL's Proposed Statement of Reasons at Paragraph 46 and to 40 C.F.R. § 122.44, LANL responded that its final proposed amendments to 20.6.4.14(A) NMAC further conformed the rule to federal regulations and that the testimony during the hearing made clear that the purpose of LANL's original proposed revisions was to conform the WQCC's requirements for the use of analytical methods for compliance purposes, including [N.M.] 401 certifications of federal permits, to federal law.[10] LANL also objected to the first Motion to Strike on several procedural grounds, including that the Motion is without legal authority. LANL also separately filed LANL's Second Notice of Errata, addressing Amigos Bravos' allegations that an EPA regulation was misquoted on page 111 of LANL's Proposed Statement of Reasons. At the December 30, 2021 hearing, Amigos Bravos' expressed disagreement with LANL's characterization of the evidence in the record in support of LANL's final proposed amendments to 20.6.4.14(A) NMAC. During the hearing, the Hearing Officer requested that LANL provide further, specific record citations in support of LANL's final proposed amendments to 20.6.4.14(A) NMAC. LANL filed the requested additional citations on

[10] 40 C.F.R. §122.44(i)(1)(iv)(B) provides "In the case of pollutants or pollutant parameters for which there are no approved methods under 40 CFR Part 136 . . . monitoring shall be conducted according to a test procedure specified in the permit for such pollutants or pollutant parameters."

January 5, 2022, in its Notice of Compilation of Evidence.

e. Toxic Pollutants and Contaminants of Emerging Concern-20.6.4.7 NMAC

LANL contends that the Commission should reject NMED's proposed amendments to the Toxic Pollutants General Criteria and the related definition of "contaminants of emerging concern," and amend the General Criteria and Toxic Pollutant definition in the manner proposed by LANL, by expressly referencing the accepted EPA list of toxic pollutants set out in CWA Section 307(a) and providing a placeholder for the Commission to add pollutants to the list through the rule-making process.

On December 16, 2021, Amigos Bravos filed a Motion to Strike LANL's Proposed Amendments to Definition of "Toxic Pollutant" at 20.6.4.7.T(2) NMAC[11]. Amigos Bravos argued that LANL presented no evidence for its new proposals to include in the definition of "toxic pollutants": the list of "persistent toxics listed in 20.6.4.900.J NMAC," and two "PFAS compounds" with accompanying footnote 1 stating that PFAS compounds do not apply to waters with limited aquatic life use, and the list of "toxic pollutants" in 20.6.2.7 NMAC and accompanying footnote 2, stating that the toxic pollutants in 20.6.2.7 NMAC apply only to domestic water supply use, with the exception of PFAS compounds. In sum, Amigos Bravos asserts that Mr. Dail's testimony cited to by LANL does not provide any evidentiary support for LANL's proposal and LANL's claim that it does is misleading. The parties' condensed arguments follow in their own words:

Amigos Bravos:

> Amigos Bravos moved to strike an amendment to the definition of "toxic pollutant" at 20.6.4.7.T(2) NMAC first proposed by LANL in its post-hearing brief. Amigos Bravos moved to strike on the ground that there is **no** evidence in the record to support the proposal and because the parties had no opportunity cross-examine any witness on the meaning and effect of the proposed language. *See* NMSA 1978, §§ 74-6-7.B(2), 74-6-6.D. Amigos Bravos moved to strike LANL's proposed:
>
> - List of "persistent toxics listed in 20.6.4.900.J NMAC,"
> - List of two "PFAS compounds" with accompanying footnote 1 stating that PFAS compounds do not apply to waters with limited aquatic life use,
> - List of "toxic pollutants" in 20.6.2.7 NMAC and accompanying footnote 2, stating that the toxic pollutants in 20.6.2.7 NMAC apply only to domestic water supply use, with the exception of PFAS compounds.

[11] The Scheduling Order does not contemplate party submissions after the December 8, 2021 deadline to file Exceptions.

> Amigos Bravos' Exhibit A to the motion highlights the portions of LANL's proposal to which Amigos Bravos objects and is attached hereto. Amigos Bravos detailed in its motion why there is no evidence in support and detailed in its reply why the evidence cited to in LANL's response does not support its proposal. NMED, CCW-GRIP joined in support of the motion to strike.

LANL:

> Citing to various portions of the record (including testimony of Dr. Dail, see LANL Ex. 5 at 8 (Dail Direct); LANL Ex. 1 (Proposed Changes); Hrg. Tr., Vol. II, 505:19-506:1 (Dail); Hrg. Tr. Vol. 2 at 518:10- 13 (Dail); Hrg. Tr. Vol. 2 at 535:17-25 (Judd); see also Hrg. Tr. Vol 2 at 588:4-6 (De Rose- Bamman)), LANL argued that specifically listing constituents that are considered toxic pollutants was an attempt at reaching compromise on the various proposals submitted by parties, is necessary to cure the due process problem with the existing definition and is consistent with 40 C.F.R. § 131.3(d) and the Commission's approach to regulating toxic pollutants in the groundwater regulations, 20.6.2 NMAC. LANL also objected to the second Motion to Strike on several procedural grounds, including that the Motion is without legal authority. At the December 30, 2021 hearing, Amigos Bravos' expressed disagreement with LANL's characterization of the evidence in the record in support of LANL's final proposed amendments to 20.6.4.7.T(2) NMAC. The Hearing Officer agreed that there was evidence in the record to support LANL's final proposed amendments to 20.6.4.7.T(2) NMAC and requested that LANL provide further, specific record citations in support of LANL's final proposed amendments to 20.6.4.7.T(2) NMAC. LANL filed the requested additional citations on January 5, 2022 in its Notice Of Compilation Of Evidence.

Amigos Bravos supports NMED's proposal to include a new definition for "contaminants of emerging concern" or "CECs" at 20.6.4.7.C(7) NMAC." CECs are a widely recognized as a group of potentially harmful contaminants, including by EPA. Amigos Bravos proposes two amendments to NMED's proposed definition, i.e., adding per- and polyfluoroalkyl substances or "PFAS" as examples of CECs, which NMED supports, and clarifying that CECs and "toxic pollutants" are two separate regulatory categories. Amigos Bravos proposes an amendment at 20.6.4.14.F NMAC that would give NMED express authority to require dischargers with federal permits to monitor for CECs. Amigos Bravos contends that, by definition, CECs are contaminants that may cause significant harm to human or ecological health and require further study and, therefore, NMED should have the authority to requiring monitoring. NMED does not object to this proposal.

VIII. Issues Abandoned

It is important to note that there was evidence presented through pre-hearing submissions (NOIs etc.), sworn testimony, cross examination and rebuttal on issues that were not pursued in post-

hearing submissions. Pursuant to my interpretation of 20.1.6.305 NMAC, and my verbal instructions to the parties provided at the end of the hearing, issues not raised in written closing argument and proposed statement of reasons are deemed waived. Waived issues, therefore, are not addressed in Attachment A.

IX. Parties' Exceptions

Finally, the Parties' Exceptions were received timely on December 8, 2021 (30-days after the filing of the preliminary Report and Attachment). The Report and Attachment A were modified when an exception was deemed to be of service to the Commission's upcoming deliberations (i.e., added clarity). Exceptions that merely served as a second bite at the apple (another opportunity to argue or assert a parties' position) were omitted but are available to the Commission as part of the record. Amigos Bravos filed two Motions to Strike which are outlined in the major issues above. Pursuant to 20.1.6.100.B NMAC (Powers and Duties of Hearing Officer), and 20.1.6.207 NMAC (Motions), a motion hearing was held (even though Subsection (F) permits the Hearing Officer to rule on non-dispositive motions without a hearing), and my Report and Attachment incorporates my decisions.

VIII. ATTACHMENT TO THIS REPORT

Attachment A is the primary document Commissioners will refer to during deliberations. Each proposal to amend the rule is broken down into parties' arguments and citations to evidence (prehearing and testimonial) supporting or opposing those proposals as required by 20.1.6.305 NMAC.

The existing standards were the starting point, and those sections identified for amendment by the Department are in red type (and blue type if a party is proposing an amendment to another party's amendment) reflect the proposed changes in legislative format (brackets and strikethrough for deletions, underlining for additions). As LANL and the other parties demonstrated their proposed amendments differently, their proposals are incorporated in the outlined sections single spaced, *not italicized* and indented. Where a section of the standards is not italicized, either no changes are proposed by any party, or the only change necessary will be re-numbering/re-lettering.

As NMED petitioned for this rulemaking, whenever they proposed an amendment, I placed their argument in the first position. When another party proposed an amendment, I placed their amended language in following paragraphs where I summarized their position. If NMED did not petition for an amendment, I placed the amending party in the first position.

Beneath each section in which a party has proposed a change, in italics, is a description of the proposal; the basis for the proposal, with cites to the administrative record and transcript; and arguments regarding the proposal made in the final post-hearing submittals from the parties, pro and con. If no opposition is expressly set out, such as with many of the Department's proposals, it means no opposition was ultimately offered by another party. Given the sophistication of the

parties and the excellent quality of their post-hearing written submittals, I have let them speak for themselves, and included their final arguments and proposed reasons largely in their own words.

NOTE: At times I have summarized a parties' position on an issue in my own words. When I found that the parties' own words needed no summarizing, I used the phrase "To wit," and provided the Commission the gist of the parties' position quoting from their closing argument or proposed statement of reasons.

Finally, Attachment A reflects merely a somewhat polished compilation of the parties' final proposals. I have refrained from making any recommendations in deference to the policy-making role of the Commissioners. I have refrained from offering any legal advice as well. Although I will be available during Commission deliberations (by telephone) to answer questions about the record, Commission counsel should be available to answer your legal questions at the meeting.

Respectfully submitted
January 8, 2022,

Gregory Chakalian

Digitally signed by Gregory Chakalian
Date: 2022.01.06 17:51:04 -07'00'

Gregory Chakalian, Hearing Officer

TRIENNIAL REVIEW – WQCC 20-51(R)
ATTACHMENT "A" TO THE HEARING OFFICER'S REPORT

TITLE 20 ENVIRONMENTAL PROTECTION
CHAPTER 6 WATER QUALITY
PART 4 STANDARDS FOR INTERSTATE AND INTRASTATE SURFACE WATERS

20.6.4.1 ISSUING AGENCY: Water Quality Control commission.
[20.6.4.1 NMAC - Rp 20 NMAC 6.1.1001, 10/12/2000]

20.6.4.2 SCOPE: Except as otherwise provided by statute or regulation of the water quality control commission, this part governs all surface waters of the state of New Mexico, which are subject to the New Mexico Water Quality Act, Sections 74-6-1 through 74-6-17 NMSA 1978.
[20.6.4.2 NMAC - Rp 20 NMAC 6.1.1002, 10/12/2000; A, 5/23/2005]

20.6.4.3 STATUTORY AUTHORITY: This part is adopted by the water quality control commission pursuant to Subsection C of Section 74-6-4 NMSA 1978.
[20.6.4.3 NMAC - Rp 20 NMAC 6.1.1003, 10/12/2000]

20.6.4.4 DURATION: Permanent.
[20.6.4.4 NMAC - Rp 20 NMAC 6.1.1004, 10/12/2000]

20.6.4.5 EFFECTIVE DATE: October 12, 2000, unless a later date is indicated in the history note at the end of a section.
[20.6.4.5 NMAC - Rp 20 NMAC 6.1.1005, 10/12/2000]

20.6.4.6 OBJECTIVE:

A. The purpose of this part is to establish water quality standards that consist of the designated use or uses of surface waters of the state, the water quality criteria necessary to protect the use or uses and an antidegradation policy.

B. The state of New Mexico is required under the New Mexico Water Quality Act (Subsection C of Section 74-6-4 NMSA 1978) and the federal Clean Water Act, as amended (33 U.S.C. Section 1251 *et seq*.) to adopt water quality standards that protect the public health or welfare, enhance the quality of water and are consistent with and serve the purposes of the New Mexico Water Quality Act and the federal Clean Water Act. It is the objective of the federal Clean Water Act to restore and maintain the chemical, physical and biological integrity of the nation's waters, including those in New Mexico. This part is consistent with Section 101(a)(2) of the federal Clean Water Act, which declares that it is the national goal that wherever attainable, an interim goal of water quality that provides for the protection and propagation of fish, shellfish and wildlife and provides for recreation in and on the water be achieved by July 1, 1983. Agricultural, municipal, domestic and industrial water supply are other essential uses of New Mexico's surface water; however, water contaminants resulting from these activities will not be permitted to lower the quality of surface waters of the state below that required for protection and propagation of fish, shellfish and wildlife and recreation in and on the water, where practicable.

C. Pursuant to Subsection A of Section 74-6-12 NMSA 1978, this part does not grant to the water quality control commission or to any other entity the power to take away or modify property rights in water.

D. These surface water quality standards serve to respond to the inherent threats of climate change and provide resiliency for the continued protection and enhancement of water quality.

[20.6.4.6 NMAC - Rp 20 NMAC 6.1.1006, 10/12/2000; A, 5/23/2005; A, XX/XX/XXXX]

Climate Change Objective

1. *The Department proposed to add an objective in 20.6.4.6(D) NMAC indicating that "[t]hese surface water quality standards serve to respond to the inherent threats of climate change and*

provide resiliency for the continued protection and enhancement of water quality." NMED Exhibit 1, pp. 11-12; NMED Exhibit 106, pp. 3-14; Tr. Vol. 1, 116:20-128:12.

2. *SJWC is very concerned about climate change and its potential adverse impacts on water supplies and quality, however it opposed the Department's proposed amendment because it arguably elevates climate change above all other sources of water quality impairment. SJWC's SOR at 11-12, 13 (P. 4), 15-16 (P 13), 18 (P 20); [Exhibit] 2, pp. 3-8; Tr. Vol. 1, 223:3-230:13. SJWC further contends that a new objective is not needed because current standards address climate change. Also, NMED's proposed objective has changed over time and thus is not well developed. Existing Objective B at 20.6.4.6 NMAC encompasses climate change, so the proposed objective is unnecessary. All parties agree that adoption of a climate change objective will not give the WQCC any new authority to adopt SWQS to mitigate water quality impacts from climate change, so it is superfluous. A climate change objective could result in confusion or unintended consequences.*

   Moreover, Amigos Bravos has proposed alternate language for a climate change objective, but it is not an objective, but rather a proclamation of the current understanding of evolving science. Finally, neither the New Mexico Water Quality Act nor the federal Clean Water Act, nor the associated state and federal regulations, contain a definition of, or even refer to, climate change.

3. *Amigos Bravos supported the Department's proposal to add an objective addressing climate change but proposed alternative language to provide additional context on how climate change impacts New Mexico's waters. AB Exhibit 1, p. 1; AB Exhibit 3, pp. 2-6; Tr. Vol. 1, 184:8-194:11. To wit: the Commission should clarify and strengthen NMED's proposed language to include climate change as an objective of the water quality standards. Amigos Bravos supports including climate change in the Objective section and proposes language to clarify and strengthen that*

section. Amigos Bravos urges the Commission to adopt a climate change objective section at 20.6.4.6.C NMAC and definition at 20.6.4.7.C(4) NMAC.

20.6.4.6 OBJECTIVE:

C. A further purpose of these surface water quality regulations is to respond to the threats of climate change to water quality and provide resiliency to protect and enhance water quality. The quality of New Mexico surface waters is being affected by climate change. New Mexico's climate is getting hotter and drier, resulting in earlier springs, hotter summers, and less predictable winters. New Mexico is experiencing more intense droughts and a greater proportion of precipitation falling as rain instead of snow. Snowpack is shrinking and earlier snowmelts contribute to lower stream flows at critical times of the year when the reduced availability of water has greater environmental consequences. Increased water temperatures resulting from increased air temperatures tend to lead to lower levels of dissolved oxygen in water, resulting in increased stress on the fish, insects, crustaceans and other aquatic animals that rely on oxygen. More intense precipitation events and increased evaporation rates lead to increased runoff and more pollution, including increased nutrients sediment, and salt that wash into surface waters. Development of New Mexico surface water quality standards should take into account the importance of protecting of water quality in light of climate change.

AB Ex. 24 at 1.

Amigos Bravos' proposal clarifies that a purpose of the water quality standards is to respond to and protect against the threats of climate and to provide resiliency to enhance water quality and Identifies documented threats to New Mexico's surface waters from climate change. Amigos Bravos contends that NMED does not support language identifying the documented threats of climate change to surface waters, arguing that identifying the threats is not an objective and the science on climate change is evolving. However, the science underlying the threats identified in Amigos Bravos' proposed language is well-established and is accurate. In fact, Shelley Lemon, NMED Surface Water Quality Bureau Chief, cites the same threats in her rebuttal testimony.

4. *NMED contends it considered the rationales and arguments put forward by SJWC and Amigos Bravos' written direct testimony and modified the proposed climate change objective to better reflect how the regulations will address climate change, while noting that the objective will not*

change implementation of water quality standards. NMED Exhibit 106, p. 10-11; NMED Exhibit 110; Tr. Vol. 1, 127:2-128:8.

5. *LANL opposed the Department's proposed amendment on the grounds that the objective does not contain enough detail about what actions are required to meet the objective. LANL Exhibit 59, pp. 34-36; Tr. Vol. 1, 244:12-246:10; that "water quality does not create climate change; the Standards may require future modifications due to climate change, but the Standards cannot address climate change." LANL Ex. 59 at 35-36 (Gallegos Rebuttal); SJWC Ex. 2 (DeRose-Bamman Direct).*
6. *NMMA contends the Commission should reject the proposed amendments to 20.6.4.6 NMAC and 20.6.4.7(C)(4) NMAC offered by Amigos Bravos. They are superfluous and create regulatory uncertainty. Unlike the Department's proposed changes, Amigos Bravos' proposed amendments to 20.6.4.6(C) and 20.6.4.7(C)(4) NMAC, as set forth in AB Ex. 10, create confusion and are unnecessary. The Department's proposed 20.6.4.6(C) NMAC regulation provides a concise objective of the surface water quality regulations concerning climate change. Amigos Bravos' proposed revisions to this provision are rambling, redundant and uncalled for as they do not state cogent objectives for the surface water regulations. Amigos Bravos' proposed revisions to 20.6.4.7(C)(4) NMAC are similarly flawed and fail to offer anything to the Department's proposed definition.*
7. *CCW-GRIP supported the Department's proposal to include an objective related to climate change but suggested alternative language. CCW-GRIP Exhibit 5; Tr. Vol. 1, 123:8-124:4. To wit, CCW and GRIP propose the following alternate new subsection D to section 20.6.4.6: "A further purpose of these surface water quality standards is to address the inherent threats to water quality due to climate change." The CCW-GRIP proposed new provision is a statement of purpose.*

8. *Based on the weight of the evidence, the Commission finds the Department's proposal to explicitly name response to the threat of climate change and resiliency for the continued protection and enhancement of water quality to be well-taken. For this reason, the Commission adopts the Department's proposal to amend the objective section in 20.6.4.6 NMAC as proposed by the Department,*

   OR,

   The Commission finds that Amigos Bravos' proposed language in the Objective section clarifies that a purpose of the water quality standards is to respond to and protect against the threats of climate change and to provide resiliency to enhance water quality and identifies documented threats to New Mexico's surface waters from climate change, and adopts Amigos Bravos' proposal to amend the Objective section at 20.6.4.6.C NMAC,

   OR,

   The Commission concludes that it already has the authority to consider climate change in water quality standards development. NMSA 1978, § 74-6-3(E). Accordingly, the Commission finds that the proposed new objective in 20.6.4.6(D) NMAC is unnecessary, and the Commission declines to adopt it. Consistent with that determination, the Commission also declines to adopt Amigos Bravos' proposed new section 20.6.4.6(C) NMAC or CCW-GRIP's proposed amended statement of objective. See ***Amigos Bravos Ex. 24*** *(Second Revised Proposed Amendments);* ***CCW-GRIP Ex. 1*** *(Proposed Revisions to 20.6.4 NMAC),*

   OR,

   Based on the weight of the evidence, the Commission finds the proposal of CCW-GRIP to explicitly state that a purpose of the regulations is to address the threats to water quality due to climate change to be well-taken. The CCW-GRIP proposal is written clearly as an objective or purpose. Courts regularly look to the purpose of a statute or regulation in discerning its meaning. See, e.g.,

N.M. Dep't of Game & Fish v. Rawlings, ¶ 6, 2019-NMCA-018 ("When interpreting a statute, a court's primary goal is to facilitate and promote the Legislature's purpose.") (emphasis added). For this reason, the Commission adopts the proposal of CCW-GRIP to amend the objective section in 20.6.4.6 NMAC as proposed.

20.6.4.7 DEFINITIONS: Terms defined in the New Mexico Water Quality Act, but not defined in this part will have the meaning given in the Water Quality Act.

A. Terms beginning with numerals or the letter "A," and abbreviations for units.

(1) "4Q3" means the critical low flow as determined by the minimum average flow over four consecutive days that occurs with a frequency of once in three years.

4Q3

1. *The Department proposed adding the definition of the term "4Q3" to the definitions section in 20.6.4.7 NMAC and deleting the definition of the term from 20.6.4.11(B)(2) NMAC. As provided in the Department's proposed amendments, this definition would become paragraph 20.6.4.7(A)(1) NMAC. NMED Exhibit 1, p. 13; NMED Exhibit 110; Tr. Vol. 1, 273:24-275:4. The definition of "4Q3" is in the middle of a paragraph in 20.6.4.11 NMAC. Moving the definition from 20.6.4.11(B)(2) to 20.6.4.7(A)(1) NMAC would make it easier to locate by placing it with other definitions. NMED Exhibit 1, p. 13; Tr. Vol. 1, 273:24-275-4.*
2. *No party objected to these changes. Based on the weight of the evidence, the Commission finds the Department's proposal to move the definition of "4Q3" is well-taken and agrees with the Department's amendments to 20.6.4.7(A)(1) and 20.6.4.11(B)(2) NMAC as proposed.*

[~~(1)~~](2) "4T3 temperature" means the temperature not to be exceeded for four or more consecutive hours in a 24-hour period on more than three consecutive days.

[~~(2)~~](3) "6T3 temperature" means the temperature not to be exceeded for six or more consecutive hours in a 24-hour period on more than three consecutive days.

[~~(3)~~](4) Abbreviations used to indicate units are defined as follows:

(a) "cfu/100 mL" means colony-forming units per 100 milliliters; the results for *E. coli* may be reported as either colony forming units (CFU) or the most probable number (MPN), depending on the analytical method used;

(b) "cfs" means cubic feet per second;

(c) "µg/L" means micrograms per liter, equivalent to parts per billion when the specific gravity of the solution equals 1.0;

(d) "µS/cm" means microsiemens per centimeter; one µS/cm is equal to one µmho/cm;

(e) "mg/kg" means milligrams per kilogram, equivalent to parts per million;

(f) **"mg/L"** means milligrams per liter, equivalent to parts per million when the specific gravity of the solution equals 1.0;

(g) **"MPN/100 mL"** means most probable number per 100 milliliters; the results for *E. coli* may be reported as either CFU or MPN, depending on the analytical method used;

(h) **"NTU"** means nephelometric turbidity unit;

(i) **"pCi/L"** means picocuries per liter;

(j) **"pH"** means the measure of the acidity or alkalinity and is expressed in standard units (su).

[~~(4)~~](5) **"Acute toxicity"** means toxicity involving a stimulus severe enough to induce a response in 96 hours of exposure or less. Acute toxicity is not always measured in terms of lethality, but may include other toxic effects that occur within a short time period.

[~~(5)~~](6) "**Adjusted gross alpha**" means the total radioactivity due to alpha particle emission as inferred from measurements on a dry sample, including radium-226, but excluding radon-222 and uranium. Also excluded are source, special nuclear and by-product material as defined by the Atomic Energy Act of 1954.

[~~(6)~~](7) **"Aquatic life"** means any plant or animal life that uses surface water as primary habitat for at least a portion of its life cycle, but does not include avian or mammalian species.

[~~(7)~~](8) "**Attainable Use"** means a use that is achievable by the imposition of effluent limits required under sections 301(b) and 306 of the federal Clean Water Act and implementation of cost-effective and reasonable best management practices for nonpoint source control. An attainable use may or may not have criteria as stringent as the criteria for the designated use.

Attainable Use

1. *The Department proposed to amend the definition of "Attainable" to that of "Attainable use" to aid in the implementation of Water Quality Standards. NMED Exhibit 4, p. 3; NMED Exhibit 9; Tr. Vol. 2, 321:22-323:23. As written, the definition for "attainable" does not clarify that it refers specifically to a type of use for a surface water of the state. Other uses for surface waters of the state are "designated use" and "existing use," both of which include the word "use" in their definitions to distinguish them from the common usage of the word. NMED Exhibit 4, pp. 3-4; Tr. Vol. 2, 321:22-323:23.*

2. *LANL initially objected to the inclusion of the word "use" as it would limit the term to uses that are achievable by the imposition of effluent limits. At hearing, in response to Ms. Fullam's testimony, LANL withdrew its objection to the word "use" in its post-hearing submission, but maintained its objections to the definition proposed by NMED because it excludes many of the factors that prevent attainment of a use in 40 C.F.R. 131.10(g). LANL Exhibit 63, pp. 8-10; Tr. Vol. 2 385:1-386:23.*

   LANL revised its proposed definition of attainable use as follows:

   (8) "Attainable Use" means ~~achievable by the imposition of effluent limits required under sections 301(b) and 306 of the Clean Water Act and implementation of cost-effective and reasonable best management practices for nonpoint source control.~~ an aquatic life, wildlife, or recreation use that is attainable, based on the evaluation of the factor(s) in 40 CFR 131.10(g) that preclude(s)

attainment of the use and any other information or analyses that were used to evaluate attainability. An attainable use may require criteria more or less stringent than prescribed by the designated uses.

3. *NMED contends that LANL pointed out that the application of stringency is not applicable to a use but rather a criterion. NMED agreed with this point and revised its proposal for the last sentence of the proposed definition to read "An attainable use may or may not have criteria as stringent as the criteria for the designated use." LANL Exhibit 62; NMED Exhibit 110; Tr. Vol. 2, 326:1-20.*

4. *No other party provided testimony regarding these changes. Based on the weight of the evidence, the Commission finds the Department's proposal to amend the definition of "Attainable" to "Attainable Use" is well-taken and agrees with the Department's amendments to 20.6.4.7(A) NMAC as proposed; OR,*

   The Commission finds that the modified definition of "attainable use" proposed by LANL is consistent with federal regulations, is supported by evidence, and will serve the interests of transparency to the Commission and regulated, interested parties. The Commission concludes that LANL's proposal as reflected in the Proposed Final Rule submitted by LANL should be adopted.

B. Terms beginning with the letter "B".

(1) "Baseflow" refers to the sustained flow volume of a stream or river. In natural systems, baseflow is comprised from regional groundwater inflow and local shallow subsurface inflow that is temporarily stored in the watershed during snowmelt and rain events and slowly released to the stream or river over time. In effluent dominated systems, baseflow is comprised predominantly from effluent with limited subsurface contributions. Baseflow in both scenarios is critical for sustaining flow in streams and rivers over seasonal and longer timeframes.

Baseflow

1. *The Department proposed to add a definition of the term "baseflow" in 20.6.4.7(B) NMAC to assist with implementation of the water quality standards. The term "baseflow" will also provide clarity for the Department's proposed definition of "effluent dominated" in 20.6.4.7(E) NMAC. NMED Exhibit 1; NMED Exhibit 106; NMED Exhibit 110; Tr. Vol. 1, 276:7-276:17. The Department does not propose to add the term "baseflow" to any other section of 20.6.4 NMAC. However, the concept of baseflow, as proposed in 20.6.4.7(B)(1), is often evaluated when analyzing water quality and pollutant loading into*

surface waters. Baseflow is used in National Pollutant Discharge Elimination System ("NPDES") permits and the Bureau's Comprehensive Assessment and Listing Methodology ("CALM"). For these reasons, a definition of "baseflow" has wider applicability beyond 20.6.4 NMAC and provides for consistent application of the water quality standards. NMED Exhibit 1, p. 13; NMED Exhibit 110; Tr. Vol. 1, 276:11-278:6.

2. *SJWC opposed the Department's proposed inclusion of a definition for "baseflow." SJWC' SOR at 23-29; [Exhibit] 2, p. 7 (2020 TR SJWC-0010); Tr. Vol. 2, 412:24-413:24. SJWC does not support adoption of the proposed definition because the term is not used anywhere else in the NM Surface Water Quality Standards found in 20.6.4 NMAC (SWQS). Thus, the definition is not needed and could create confusion concerning the applicability to other SWQS. Further, it is not possible to determine whether the proposed definition is appropriate without knowing the context in which it may be used, if ever in future SWQS. Because the term "baseflow" currently is nowhere to be found in the SWQS, and because NMED has not provided sufficient evidence concerning the context in which it is used in other documents, the WQCC should not adopt a definition at this time "because it would be doing so in a vacuum." See SJWC Exception, p. 15.*
3. *LANL opposed the Department's proposed inclusion of a definition for "baseflow," because it is not used in the SWQS, serves no regulatory purpose, and is not needed. LANL Exhibit 58, pp. 24-27 (2020 TR LANL-01102 - 01105); LANL Exhibit 59, p. 32 (2020 TR LANL-01147); Tr. Vol. 2, 408:10-410:5; Tr. Vol. 2, 396:21-398:5.*
4. *Amigos Bravos originally opposed the Department's proposed inclusion of a definition for "baseflow," but later revised its position to oppose reference to the term "effluent dominated" in the "baseflow" definition. Amigos Bravos then proposed alternate wording for a definition of "baseflow," in the form of removing the term "effluent dominated" and replacing it with the word "some." AB Exhibit 1, p. 3; AB Exhibit 10, p. 4; Tr. Vol 2, 422:23-426:13. NMED does not object to this proposal. To wit, Amigos*

Bravos objects to introducing the term "effluent dominated" because creating a definition of "effluent dominated" could represent the first step in setting up a framework in which waters that are fed with effluent may be considered less worthy of protection than other waters.

5. *Based on the weight of the evidence, the Commission finds the Department's proposal to add a definition of "baseflow" at 20.6.4.7(B)(1) NMAC is well-taken and agrees with the Department's amendments to 20.6.4.7(B) NMAC as proposed,*

   OR,

   Based on the weight of the evidence, the Commission finds that NMED's proposal to add a definition of "baseflow" at 20.6.4.7.B(1) NMAC is well-taken and that Amigos Bravos' proposal to substitute the word "some" for "effluent dominated", to which NMED does not object, is also well-taken. The Commission therefore adopts NMED's amendments to 20.6.4.7.B(1) NMAC as proposed with Amigos Bravos' addition,

   OR,

   The Commission finds that NMED did not identify any specific program documents in which the term is used or explained how the definition would be used. The Commission will not adopt a new definition without understanding how the term will be applied. See Hrg. Tr., Vol. II, 406:22-407:1 (Meyerhoff); Hrg. Tr., Vol. II, 413:15-21 (DeRose-Bamman). The Commission concludes that NMED's statement of reasons do not adequately explain why the proposed definition should be added to the Standards. Therefore, NMED has not met its burden to show that the proposed amendment is appropriate or warranted. Consistent with that determination, the Commission also declines to adopt Amigos Bravos' alternative definition proposed in Amigos Bravos Exhibit 24.

[~~(1)~~](2) "Best management practices" or "BMPs":

(a) for national pollutant discharge elimination system (NPDES) permitting purposes means schedules of activities, prohibitions of practices, maintenance procedures and other management practices to prevent or reduce the pollution of "waters of the United States;" BMPs also include treatment requirements, operating procedures and practices to control plant site runoff, spillage or leaks, sludge or waste disposal or drainage from raw material storage; or

(b) for nonpoint source pollution control purposes means methods, measures or practices selected by an agency to meet its nonpoint source control needs; BMPs include but are not limited to structural and nonstructural controls and operation and maintenance procedures; BMPS can be applied before, during and after pollution-producing activities to reduce or eliminate the introduction of pollutants into receiving waters; BMPs for nonpoint source pollution control purposes shall not be mandatory except as required by state or federal law.

[~~(2)~~](3) "Bioaccumulation" refers to the uptake and retention of a substance by an organism from its surrounding medium and food.

[~~(3)~~](4) "Bioaccumulation factor" is the ratio of a substance's concentration in tissue versus its concentration in ambient water, in situations where the organism and the food chain are exposed.

[~~(4)~~](5) "Biomonitoring" means the use of living organisms to test the suitability of effluents for discharge into receiving waters or to test the quality of surface waters of the state.

C. Terms beginning with the letter "C".

(1) "**CAS number**" means an assigned number by chemical abstract service (CAS) to identify a substance. CAS numbers index information published in chemical abstracts by the American chemical society.

(2) "Chronic toxicity" means toxicity involving a stimulus that lingers or continues for a relatively long period relative to the life span of an organism. Chronic effects include, but are not limited to, lethality, growth impairment, behavioral modifications, disease and reduced reproduction.

(3) "Classified water of the state" means a surface water of the state, or reach of a surface water of the state, for which the commission has adopted a segment description and has designated a use or uses and applicable water quality criteria in 20.6.4.101 through 20.6.4.899 NMAC.

(4) "Climate change" refers to any significant change in the measures of climate lasting for an extended period of time, typically decades or longer, and includes major changes in temperature, precipitation, wind patterns or other weather-related effects. Climate change may be due to natural processes or human-caused changes of the atmosphere, or a combination of the two.

Climate Change

1. *The Department proposed to add a definition of "climate change" in 20.6.4.7(C) NMAC to support and clarify the proposed inclusion of the above-described climate change objective. The Department based its proposed definition on EPA's publicly available climate change definition, which is similar to other leading climate science organizations' definitions. NMED Exhibit 1, p. 12; NMED Exhibit 33; Tr. Vol. 1, 128:19-134:7.*

2. *CCW-GRIP proposed adding the following alternate new definition of "climate change" to section 20.6.4.7.C NMAC*:

> "Climate change" refers to any significant change in the measures of climate lasting for an extended period of time, typically decades or longer, and includes major changes in temperature, precipitation, wind patterns or other weather-related effects. Climate change is due primarily to anthropogenic emissions of greenhouse gases into the atmosphere, in combination with natural processes.

CCW-GRIP Revised Ex. 1 at 1. This proposed definition of "climate change" clearly states that the primary cause of climate change is the anthropogenic emission of greenhouse gases into the atmosphere. CCW-GRIP Revised Ex. 1 at 1.

3. *Amigos Bravos contends that the Commission should Identify in the Definition of Climate Change that Human Activity Is the Primary Cause of Climate Change NMED's proposed definition implies that the causes of climate change – natural processes and human activities – are equivalent. However, this is not accurate, and the definition as written is misleading. It is the scientific consensus that climate change is primarily human caused, as Ms. Conn pointed out in her testimony. Ms. Conn pointed out that EPA's definition of climate change, relied upon by NMED, does not include language about sources of climate change proposed by NMED. However, EPA does recognize on the EPA website referred to by NMED that, "Humans are largely responsible for recent climate change." According to the U.S. Global Research Program, "Earth's climate is now changing faster than at any point in the history of modern civilization, primarily as a result of human activities. The Intergovernmental Panel on Climate Change finds that, "Human influence on the climate system is clear, and recent anthropogenic emissions of green-house gases are the highest in history." The Union of Concerned Scientists concludes that, "Scientists worldwide agree that global warming is happening, and that human activity causes it." Multiple independent lines of evidence and the vast body of peer-reviewed science demonstrate that the greenhouse gases emitted by human activities are the primary driver of climate change.* Amigos Bravos proposes the following addition (in blue) to NMED's proposed definition:

> **(4) "Climate change"** refers to any significant change in the measures of climate lasting for an extended period of time, typically decades or longer, and includes major changes in temperature, precipitation, wind patterns or other weather-related effects. Climate change may be due to natural processes or human-caused changes of the atmosphere, or a combination of the two. Humans are largely responsible for recent climate change.

AB Ex. 24 at 2.

4. *SJWC objected to the Department's proposal to add a definition of "climate change" because it objects to the inclusion of an objective in 20.6.4.6 NMAC that relates to addressing climate change. SJWC's SOR at 12, 20-23. As the term "climate change" does not appear elsewhere in the regulations, SJWC argues that the definition is unnecessary if the Commission does not adopt the Department's proposed climate change objective. SJWC [Exhibit] 2, pp. 3-7 (2020 TR SJWC-0006 - 0010); SJWC [Exhibit] 3, pp. 1-4 (2020 TR SJWC-0192 - 0195); Tr. Vol. 1, 223:10-230:13. SJWC contends that NMED mischaracterizes climate change information on EPA's archived website as a "definition," but that is cobbled from EPA's 2017 webpage that does not define climate change, but only its effects. Moreover, the Amigos Bravos proposed definition is vague and ambiguous. The WQCC should not adopt a definition created from such tenuous evidence, especially considering the fact it apparently would be the first regulatory body in the State of New Mexico to do so.*
5. *LANL also objected to the Department's proposal to add a definition of "climate change" on the basis that the definition is unnecessary if the Commission does not elect to adopt an objective relating to climate change, which it also opposes. LANL Exhibit 59, pp. 33-36; Tr. Vol. 1, 244:12-246:10. To wit, neither the "climate change" objective nor the definition would have a direct effect or create additional implementation actions or responsibilities. Hrg. Tr., Vol. I, 160:6-17 (Lemon). To wit, the record reflects that there is not a consensus about the definition of "climate change" and, in the absence of specific implementation provisions, the Commission should find that the concerns about unintended consequences are reasonable and legitimate. See Hrg. Tr., Vol. I, 227:2-18 (DeRose-Bamman); Hrg. Tr., Vol. I, 244:15-25, 251:19-252:14 (Gallegos). Although Amigos Bravos and CCW-GRIP supported adding a "climate change" definition, neither of those parties agreed with the definition proposed by NMED, with both proposing a statement that climate change is primarily human caused, which statement was rejected by NMED. See Hrg. Tr., Vol. I, 130:4-13, 125:3-126:14 (Lemon); Amigos Bravos Ex. 3 at 5-6 (Conn Direct) and Amigos Bravos Ex. 24 at 2 (Second Revised Proposed Amendments); CCW-GRIP Ex.*

1 (Proposed Revisions to 20.6.4 NMAC). LANL urges the Commission to find that the definition of "climate change" proposed by NMED is not a regulatory definition, it is a description from a 2017 archived page from the EPA website that is not a part of the current EPA website. Hrg. Tr., Vol. I, 146:2-7 (Lemon); Hrg. Tr., Vol. I, 229:11-17 (DeRose-Bamman); SJWC Ex. 3 at 4 (DeRose-Bamman Rebuttal). There is not a definition of "climate change" in the CWA (Hrg. Tr., Vol. I, 147:8-12 (Lemon); SJWC Ex. 3 at 4), or in EPA regulations. Hrg. Tr., Vol. I, 173:25-174:11 (Lemon). There is no evidence in the record that any other state has adopted a climate change objective or definition in its state surface water quality standards. Hrg. Tr., Vol. I, 158:5-16 (Lemon). There is also currently no definition of "climate change" in any New Mexico statute or regulation in the New Mexico Administrative Code. SJWC Ex. 3 at 4 (DeRose-Bamman Rebuttal); Hrg. Tr., Vol. I, 230:8-13 (DeRose-Bamman); see, Hrg. Tr., Vol. I, 147:23-148:15, 174:2-11 (Lemon). If it adopted the proposed definition, the Commission would be the first regulatory body in the State to adopt a "climate change" definition. Hrg. Tr., Vol. I, 174:5-11 (Lemon).

6. *NMMA contends the Commission should reject the proposed amendments to 20.6.4.6 NMAC and 20.6.4.7(C)(4) NMAC offered by Amigos Bravos. They are superfluous and create regulatory uncertainty. Unlike the Department's proposed changes[1], Amigos Bravos' proposed amendments to 20.6.4.6(C) and 20.6.4.7(C)(4) NMAC, as set forth in AB Ex. 10, create confusion and are unnecessary. The Department's proposed 20.6.4.6(C) NMAC regulation provides a concise objective of the surface water quality regulations concerning climate change. Amigos Bravos' proposed revisions to this provision are rambling, redundant and uncalled for as they do not state cogent objectives for the*

[1] *As the NMMA indicated in its opening statement, the NMMA does not oppose the Department's proposed changes to 20.6.4.6 and 20.6.4.7(C)(4) NMAC as set forth in NMED Exhibit 110. The NMMA notes that the testimony presented by the Department's witness, Shelly Lemon, during the hearing indicates that the proposed changes may be unnecessary, as there are no substantive standards or requirements or processes set forth in the 20.6.4 regulations, including in NMED Exhibit 110, that make use of the term "climate change" or would be affected by the term.*

surface water regulations. Amigos Bravos' proposed revisions to 20.6.4.7(C)(4) NMAC are similarly flawed and fail to offer anything to the Department's proposed definition.

7. *Based on the weight of the evidence and the Commission's decision to adopt an objective that addresses climate change for 20.6.4 NMAC, the Commission finds the Department's proposed amendment to add a definition of "climate change to 20.6.4.7(C) NMAC to be well-taken and adopts this amendment as proposed,*

   OR,

   Based on the weight of the evidence and the Commission's decision to adopt an objective that addresses climate change in 20.6.4 NMAC, the Commission finds NMED's proposed amendment to add a definition of "climate change to 20.6.4.7.C(4) NMAC to be well-taken. Based on the undisputed evidence that the scientific consensus is that climate change is primarily human caused, the Commission adopts Amigos Bravos' proposed amendment to NMED's definition of "climate change."

   OR,

   Based on the weight of the evidence and the Commission's decision to adopt an objective that addresses climate change for 20.6.4 NMAC, the Commission finds the various proposals to add a definition of "climate change" to 20.6.4.7(C) NMAC to be well-taken and adopts the amendment that CCW-GRIP have proposed. The CCW-GRIP proposed definition clearly and unambiguously states that the primary cause of climate change is the anthropogenic emission of greenhouse gases into the atmosphere,

   OR,

   The Commission concludes that it already has the authority to consider climate change in water quality standards development. NMSA 1978, § 74-6-3(E); see Hrg. Tr., Vol. I, 145:13-22 (Lemon); Hrg. Tr., Vol. I, 200:7-12, 203:24-204:3 (Conn); Hrg. Tr., Vol. I, 225:20-226:1 (DeRose-Bamman); Hrg. Tr., Vol. I, 249:17-250:1, 253:21-24, 254:21-255:1 (Gallegos). Accordingly, the Commission finds that the

proposed definition of "climate change" in 20.6.4.7(C)(4) NMAC is unnecessary, and the Commission declines to adopt it. Consistent with that determination, the Commission also declines to adopt Amigos Bravos' or CCW-GRIP's proposed amended definitions. See Amigos Bravos Ex. 24 (Second Revised Proposed Amendments); CCW-GRIP Ex. 1 (Proposed Revisions to 20.6.4 NMAC).

[~~(4)~~](5) "Closed basin" is a basin where topography prevents the surface outflow of water and water escapes by evapotranspiration or percolation.

[~~(5)~~](6) "Coldwater" in reference to an aquatic life use means a surface water of the state where the water temperature and other characteristics are suitable for the support or propagation or both of coldwater aquatic life.

[~~(6)~~](7) "Coolwater" in reference to an aquatic life use means the water temperature and other characteristics are suitable for the support or propagation of aquatic life whose physiological tolerances are intermediate between and may overlap those of warm and coldwater aquatic life.

[~~(7)~~](8) "Commission" means the New Mexico water quality control commission.

[~~(8)~~](9) "Criteria" are elements of state water quality standards, expressed as constituent concentrations, levels or narrative statements, representing a quality of water that supports a use. When criteria are met, water quality will protect the designated use.

D. Terms beginning with the letter "D".

(1) "**DDT and derivatives**" means 4,4'-DDT (CAS number 50293), 4,4'-DDE (CAS number 72559) and 4,4'-DDD (CAS number 72548).

(2) "Department" means the New Mexico environment department.

(3) "Designated use" means a use specified in 20.6.4.97 through 20.6.4.899 NMAC for a surface water of the state whether or not it is being attained.

(4) "Dissolved" refers to the fraction of a constituent of a water sample that passes through a 0.45-micrometer pore-size filter. The "dissolved" fraction is also termed "filterable residue."

(5) "Domestic water supply" means a surface water of the state that could be used for drinking or culinary purposes after disinfection.

E. Terms beginning with the letter "E".

(1) "E. coli" means the bacteria Escherichia coli.

(2) "Effluent dominated" refers to a water that has, over a 12-month average, more than three-quarters of its baseflow attributed to discharges from a permitted effluent discharge. Waters that are effluent dominated are of significant value by providing aquatic life and wildlife habitat.

20.6.4.7(E) NMAC - Effluent Dominated

1. *The Department proposed to add a definition of the term "effluent dominated" in 20.6.4.7(E) NMAC to assist with implementation of the water quality standards. The term "effluent dominated" is often evaluated when implementing the standards, specifically in Total Maximum Daily Load ("TMDL") development, NPDES permitting, and state certifications of federally issued permits. NMED Exhibit 1, pp. 13-14; NMED Exhibit 106, pp. 17-19; NMED Exhibit 110; Tr. Vol. 1, 281:1-271:16. The Department does not propose to add the term "effluent dominated" to any other section of 20.6.4 NMAC. However,*

the concept of effluent dominated, as proposed in 20.6.4.7(E)(2), is often evaluated when implementing the water quality standards, specifically in TMDL development, NPDES permitting, and state certifications of federally issued permits. For these reasons, a definition of "effluent dominated" has wider applicability beyond 20.6.4 NMAC and provides for consistent application of the water quality standards. NMED Exhibit 1; NMED Exhibit 106; NMED Exhibit 110; Tr. Vol. 1, 282:1-287:12.

2. *SJWC opposed the Department's proposed inclusion of a definition for "effluent dominated." SJWC's SOR at 23-29; SJWC [Exhibit] 2, p. 7 (2020 TR SJWC-0010); Tr. Vol. 2, 412:24-416:9. To wit, SJWC does not support adoption of the proposed definition because the term is not used anywhere else in the SWQS. Thus, the definition is not needed and could create confusion concerning the applicability to other SWQS. Further, it is not possible to determine whether the proposed definition is appropriate without knowing the context in which it may be used, if ever in future SWQS. Because the term "effluent dominated" is not currently used in the SWQS, and because NMED has not provided sufficient evidence concerning the context in which it is used in other documents, the WQCC should not adopt a definition at this time because it would be doing so in a vacuum. If the term "effluent dominated" is used in regulatory documents, the appropriate place to define the term is in those documents. SJWC's SOR at 24, 26-28.*

3. *LANL opposed the Department's proposed inclusion of a definition for "effluent dominated," because it serves no regulatory purpose because it is not used in the Standards. In the alternative, LANL proposed an alternate definition in which NPDES permit discharges will not be required to continue discharging. LANL Exhibit 58, pp. 24-27 (2020 TR LANL-01102 - 01105); LANL Exhibit 59, p. 32 (2020 TR LANL-01147); Tr. Vol. 2, 408:10-410:5; Tr. Vol. 2, 396:21-398:5.* To wit, *LANL and SJWC also testified that if adopted, the definition should expressly state that permitted discharges are not required to continue in perpetuity to enable permittees the option to recycle, pursue zero discharge goals, or accept more stringent permit limits. Hrg. Tr., Vol. II, 409:2-16 (Gallegos); Hrg. Tr., Vol. II, 415:5-416:5*

(DeRose-Bamman). LANL also testified that the value statement in the last sentence of the proposed definition should be deleted because the definition is focused on flow. Hrg. Tr., Vol. II, 397:23-398:1 (Meyerhoff).

4. *Amigos Bravos opposed the Department's proposed inclusion of a definition for "effluent dominated" because the definition could lead to lesser protections for effluent dominated waters. AB Exhibit 1, p. 3; AB Exhibit 3, p.11; AB Exhibit 10, p. 4; Tr. Vol 2, 422:23-426:13; Hrg. Tr., Vol. II, 424:2-10, 425:10-17 (Conn).*

5. *Based on the weight of the evidence the Commission finds the Department's proposal to add a definition of "effluent dominated" at 20.6.4.7(E)(2) NMAC is well-taken and agrees with the Department's amendments to 20.6.4.7(E) NMAC as proposed;*

OR,

The Commission finds that the definition of "effluent dominated" is not used in the Standards. Contrary to NMED's testimony, the term is not used in the WQMP/CPP. Hrg. Tr., Vol. II, 399:7-9 (Meyerhoff). It is used one time in the CALM document. Hrg. Tr., Vol. II, 399:20-400:2 (Meyerhoff). It is also not used in the Antidegradation Policy Implementation Procedures, instead the term "effluent dependent" is used. Hrg. Tr., Vol. II, 399:12-17 (Meyerhoff). Because the term is generally not used, the Commission finds that the definition would not provide any benefit. See Hrg. Tr., Vol. II, 404:13-15 (Meyerhoff). Moreover, if it were to be adopted, it would create confusion regarding the Antidegradation Policy Implementation Procedures since a different but similar term is used and defined in that policy. See Hrg. Tr., Vol. II, 400:17-401:2 (Meyerhoff). For these reasons, the Commission finds that the proposed definition would not provide clarity or consistency.

(3) "Emerging contaminants" refer to water contaminants including, but not limited to, per- and polyfluoroalkyl substances, pharmaceuticals and personal care products that may cause significant ecological or human health effects at low concentrations. Emerging contaminants are generally chemical compounds recognized as having deleterious effects at environmental concentrations whose negative impacts have not been fully quantified and may not have regulatory numeric criteria.

20.6.4.7(E) NMAC - <u>Contaminants of Emerging Concern</u>

1. *The Department proposed adding a definition of the term "contaminants of emerging concern" as a reference because it proposes to use the term elsewhere in the standards in the general criterion for toxic pollutants. NMED Exhibit 2, p. 4; NMED Exhibit 107, pp. 2-5; NMED Exhibit 110; Tr. Vol. 2, 436:7-441:24. The Department agreed with CCW-GRIP that the term "emerging contaminants" is clearer than "contaminants of emerging concern," and has incorporated this term into the proposed amendments to 20.6.4 NMAC submitted with this Statement of Reasons as proposed 20.6.4.7(E)(3). NMED Exhibit 141.*
2. *SJWC opposed the Department's proposed inclusion of a definition for "contaminants of emerging concern." SJWC's SOR at 32-33, 39-43; SJWC [Exhibit] 2, pp. 7-8 and 16-17 (2020 TR SJWC-0010 - 0011 and 0019 - 0020); Tr. Vol. 2, 582:2-587:13. To wit, SJWC urges the WQCC to not adopt the reference to CECs in the toxic pollutants regulation because it would allow NMED to regulate contaminants that are not routinely monitored, may not yet have regulatory standards, and may not yet have been fully studied to determine their negative impacts. Indeed, NMED's final proposed definition of CECs admits that they "may cause" ecological or human health effects and their "negative impacts have not been fully quantified." NMED Ex. 110 at 3 (emphasis added). This definition directly conflicts with the definition of a "toxic pollutant," which is a pollutant that "<u>will cause</u>" death or other significant adverse effects. 20.6.4.7(T)(2) NMAC (emphasis added). The WQCC should not adopt NMED's proposal to specifically refer to CECs in the SWQS regulation for toxic pollutants because it is not necessary, would improperly cast all CECs as toxic pollutants, would create confusion in the regulatory community, and because NMED has existing authority to regulate CECs that are scientifically shown to be toxic. Because the reference to CECs should not be added to the toxic pollutants' regulation, no definition of CECs is needed. Further, the proposed definition conflicts with EPA information on CECs and is internally contradictory.*

3. *LANL opposed the Department's proposed inclusion of a definition for "contaminants of emerging concern." LANL Exhibit 5; LANL Exhibit 63; LANL Exhibit 65; Tr. Vol. 2, 499:7-501:2, 555:12-556:15; 537:6-537:21. Specifically: LANL, SJWC, and NMMA opposed NMED's amendment to reference CEC in the toxic pollutant general criterion and define CEC. LANL Ex. 5 at 10 (Dail Direct) (stating "LANL opposes inclusion of pollutants and contaminants not tied to the adoption of existing 304(a) criteria, or other scientifically defensible guidance . . . NMED's proposal "seeks to broaden even further without regulatory oversight, this group of unnamed chemicals . . . and further muddies the waters and creates additional regulatory uncertainty"); LANL Ex. 5 at 6-7 (Dail Direct) (explaining that given "the possibly hundreds of pharmaceuticals, detergents, and other possible endocrine disruptors (and breakdown products thereof) that fall under the CEC definition, there is no indication what entity (state or regulated community, or both) will need to perform monitoring, and for which among these contaminants"); Hrg. Tr., Vol. II, 536 (Judd) (stating there are so many CECs including thousands of PFAS that "lack toxicological data for criteria development or assessment as to whether they are toxic pollutants"); SJWC Ex. 2 at 8 (DeRose-Bamman Direct), 16-17 (objecting to reference to [CECs] because it "would allow NMED to regulate contaminants that are not routinely monitored, may not yet have regulatory standards, and may not yet have been fully studied to determine their negative impacts"); NMMA NOI at 4 (stating the "open-ended definition [of CEC], with its vaguely stated and unscientific operative phrase 'suspected to have impacts' is troublesome enough by itself. It is highly objectionable when one considers how the phrase is substantively used . . .. This provision effectively could be construed as adding a broad range of ill-defined and not fully studied contaminants to the scope of "toxic pollutants" under the regulations, and worse, could create a surface water regulatory prohibition for them.").*
4. *LANL also opposed NMED's language referencing those toxic pollutants listed in the Commission's groundwater regulations, 20.6.2 NMAC "because some pollutants included in the list "lack EPA-*

promulgated guidance documents which determine numeric limits that are going to be use-specific to [the uses] covered in 20.6.4 NMAC" making it "unclear what numeric limits would apply to both state surveillance and NPDES discharges absent some consideration and promotion before this Commission." Hrg. Tr., Vol. II, 501-502 (Dail); see also LANL Ex. 5 at 7 (Dail Direct) (noting that the criteria that is available for Toxic Pollutants listed in 20.6.2 is not listed in 20.6.2).

5. *NMMA opposed the Department's proposed inclusion of a definition for "contaminants of emerging concern" in a summary of potential non-technical testimony. To wit, the Department's proposed definition of "contaminants of emerging concern," as set out in 20.6.4.7(C)(7) NMAC, and its proposed use of that definition in 20.6.4.13(F)(1) NMAC, is vague and rife with uncertainty for the regulators and regulated community and should be rejected by the Commission. As set forth in NMED Exhibit 110, the Department proposes to define, "contaminants of emerging concern," to essentially mean "generally chemical compounds that, although suspected to potentially have impacts, do not have regulatory standards, are not routinely monitored for, and the concentrations to which negative impacts are observed have not been fully studied." This unscientific definition by its own terms is without standard, largely turns on mere speculation, fails to provide meaningful guideposts for compliance, and is highly problematic given how it is used in the Department's proposed amendments to 20.6.4.13(F)(1) NMAC. That provision, as proposed, would require in relevant part that "surface waters shall be free of toxic pollutants, including but not limited to contaminants of emerging concern . . .."*

6. *Amigos Bravos supported adding a definition of "contaminants of emerging concern" and proposed an edit that the Department adopted in NMED Exhibit 110. AB Exhibit 10, pp. 3; AB Exhibit 11, pp. 2-3 and pp. 6-8; Tr. Vol. 4, 1167:3-1168:4. To wit: the Commission should adopt a definition of contaminants of emerging concern at 20.6.4.7.C(7) NMAC and authorize monitoring of CECs at 20.6.4.14.F NMAC. Contaminants of emerging concern is a well-established regulatory category and*

should be included in the water quality standards. Amigos Bravos recommends two amendments to NMED's proposed definition. Amigos Bravos proposes adding per- and polyfluoroalkyl substances or "PFAS" as examples of CECs. NMED supports this addition. Amigos Bravos proposes adding language to clarify that CECs and "toxic pollutants" are two separate regulatory categories. According to NMED, CECs are compounds that, while suspected to have impacts, "may not have regulatory standards," and require further study. Toxic pollutants, on the other hand, are pollutants that are documented to cause harm at certain levels; may not be discharged into New Mexico surface waters at concentrations that harm to aquatic life, wildlife, and humans; and do have regulatory standards. See 20.6.4.7.T(2), -13.F NMAC. ***NMED objects to this proposal****. Amigos Bravos proposes the following additions (in blue):*

> **(7) "Contaminants of emerging concern" or "CECs"** refer to water contaminants including, but not limited to, per- and polyfluoroalkyl substances, pharmaceuticals and personal care products that may cause significant ecological or human health effects at low concentrations and are not already considered "toxic pollutants" by the department. CECs are generally chemical compounds that, although suspected to potentially have impacts, may not have regulatory standards, and the concentrations to which negative impacts are observed have not been fully studied.

AB Ex. 24 at 3.

7. *CCW-GRIP supported the Department's proposed addition of a definition of "contamination of emerging concern" and opposed LANL's argument against including the definition. CCW-GRIP proposed calling the term "emerging contaminants," rather than "contaminants of emerging concern," which the Department adopted in NMED Exhibit 141. CCW-GRIP Ex. 1; Tr. Vol. 2, 619:4-622:25. "The Department needs to be able to require monitoring for emerging contaminants that are not currently on the Clean Water Act toxic pollutant list." CCW-GRIP Ex. 5 at 7; Tr. CCW-GRIP propose adding the following alternate new definition of "emerging contaminants" to section 20.6.4.7.E NMAC:*

> "Emerging contaminants" ~~Contaminants of emerging concern" or "CECs" refer to water~~ means contaminants, including~~,~~ but not limited to poly- and perfluoroalkyl substances, pharmaceuticals and ingredients in personal care products, that may cause significant adverse ecological or human health effects at low concentrations. ~~CECs~~ Emerging contaminants are ~~generally~~ chemical compounds that, although suspected to potentially

have ~~impacts~~ adverse effects, may not have regulatory standards, and the concentrations to which ~~negative impacts~~ adverse effects are observed may not have ~~not~~ been fully studied. An emerging contaminant may be a toxic pollutant if it falls within the definition of that term.

CCW-GRIP proposed the following new subsection F to section 20.6.2.13 NMAC to expressly state and clarify that the Department has the authority to require monitoring for emerging contaminants: "An emerging contaminant shall be monitored if it may be present in effluent or receiving waters."

8. *BDD supports NMED's definition of CECs in the amended petition at 20.6.4.7.C(7) but opposes NMED's proposed amendment to 20.6.4.13.F that would include CECs within the general criteria for toxic pollutants. BDD supports NMED's proposed definition of CEC's so that NMED may establish and impose monitoring requirements for CECs when imposing conditions through its certification of federal Clean Water Act permits. BDD is opposed to LANL's proposal would remove NMED's authority to require further sampling for PFAS or any other CEC in either surface water or storm water. NMED has further proposed to amend 20.6.4.13(F) NMAC to include CECs within the definition of toxic pollutants. NMED Amended Petition, at 6. Without clearly stated criteria for CECs, including CECs in the definition of toxic pollutants conflates CECs with toxic pollutants and presumes that CECs have the characteristics of toxic pollutants even where no such determination has been made. BDD supports a revised reference to CECs in the general criteria for toxic pollutants at 20.6.4.13.F that clarifies that it applies only to "those CECs meeting the definition of toxic pollutants."*

9. *Based on the weight of the evidence, Commission finds the Department's proposal to add a definition of "emerging contaminant" at 20.6.4.7(E)(3) NMAC is well-taken and agrees with the Department's amendments to 20.6.4.7(E) NMAC as proposed;*

   OR,

   Based on the weight of the evidence, the Commission finds the various proposals to add a definition of "emerging contaminant" at 20.6.4.7(E)(3) NMAC are well taken and adopts the amendment that

CCW-GRIP have proposed. The CCW-GRIP proposed definition is somewhat more clearly written and appropriately distinguishes "emerging contaminants" and "toxic pollutants."

OR,

Based on the weight of the evidence, the Commission finds NMED's proposal to add a definition for "emerging contaminant" at 20.6.4.7.E(3) NMAC is well-taken. The Commission however finds that "emerging contaminants" and "toxic pollutants" are two separate regulatory categories and agrees with Amigos Bravos' proposed amendment to clarify that distinction. The Commission therefore adopts NMED's amendments to 20.6.4.7.E(3) NMAC except its proposed language: "An emerging contaminant may be a toxic pollutant if it falls within the definition of that term." The Commission instead adopts Amigos Bravos' proposed language: "and are not already considered 'toxic pollutants' by the department"[2],

OR,

The Commission finds that the proposed amendments to 20.6.4.13(F)(1) NMAC offered by NMED, read with the existing definition of "toxic pollutant" under 20.6.4.7(T)(2) NMAC and the proposed definition of CECs under 20.6.4.7(C)(7) NMAC, fail to provide constitutionally adequate notice of compounds that trigger the label toxic pollutants before subjecting dischargers to enforcement or penalties for an enforcement violation under Sections 74-6-10(A), -10.1(B), and -10.2(A)(1) of the New Mexico Water Quality Act, as required under Bokum Res. Corp. v. New Mexico Water Quality Control Comm'n, 1979-NMSC-090, ¶ 17, 93 N.M. 546, 550 , 603 P.2d 285, 289; Kerr-McGee Nuclear Corp. v New Mexico Water

[2] 3 Language at 20.6.4.7.E(3) NMAC would therefore read as set forth below, with Amigos Bravos' proposal in blue underline:
"Emerging contaminants" "~~Contaminants of emerging concern" or "CECs" refer to water~~ means contaminants, including, but not limited to poly- and perfluoroalkyl substances, pharmaceuticals and ingredients in personal care products, that may cause significant adverse ecological or human health effects at low concentrations and are not already considered toxic pollutants. ~~CECs~~ Emerging contaminants are ~~generally~~ chemical compounds that, although suspected to potentially have ~~impacts~~ adverse effects, may not have regulatory standards, and the concentrations to which ~~negative impacts~~ adverse effects are observed may not have ~~not~~ been fully studied. ~~An emerging contaminant may be a toxic pollutant if it falls within the definition of that term.~~

Quality Control Comm'n, 1982-NMCA-015, ¶ 13, 98 N.M. 240, 244, 647 P.2d 873, 877. The Commission therefore rejects NMED's proposed changes to 20.6.4.13(F)(1) NMAC. Because the proposal to include CEC in the general criteria for Toxic Pollutants is rejected, the Commission finds it is unnecessary to define CECs in the Standards. The Commission therefore rejects NMED's proposal to define CEC under 20.6.4.7(C)(7) NMAC. The Commission also finds that including general reference to PFAS in the general criteria for toxic pollutants is not supported by credible science and will create uncertainty for regulators and the regulated community. The proposal is therefore rejected,

OR,

The Commission adopts some of the amendments proposed by Amigos Bravos and CCW-GRIP for the definition of CECs, or adopt its own conclusion to remedy its concerns.

[~~(2)~~](4) "Ephemeral" when used to describe a surface water of the state means the water body contains water briefly only in direct response to precipitation; its bed is always above the water table of the adjacent region.

[~~(3)~~](5) "Existing use" means a use actually attained in a surface water of the state on or after November 28, 1975, whether or not it is a designated use.

F. Terms beginning with the letter "F".

(1) "Fish culture" means production of coldwater or warmwater fishes in a hatchery or rearing station.

(2) "**Fish early life stages**" means the egg and larval stages of development of fish ending when the fish has its full complement of fin rays and loses larval characteristics.

G. Terms beginning with the letter "G". [RESERVED]

H. Terms beginning with the letter "H".

(1) "Hardness" means the measure of dissolved calcium and magnesium salts in water expressed as dissolved calcium carbonate (CaCO3) unless otherwise noted.

20.6.4.7(H) NMAC - Hardness

1. *The Department proposed adding a definition of the term "hardness" to clarify the meaning of the term. As provided in the Department's proposed amendments, this definition would become paragraph 20.6.4.7(H)(1) NMAC, while the existing paragraphs 20.6.4.7(H)(1) and (2) NMAC would be renumbered as paragraphs 20.6.4.7(H)(3) and (4) NMAC, respectively. NMED Exhibit 3; NMED Exhibit 110; Tr. Vol. 2, 358:25-359:18. The word "hardness" is used several times throughout 20.6.4 NMAC. Adding a definition would clarify the term, providing consistency when implementing the State's*

hardness-based aquatic life use metals criteria [20.6.4.900(I) NMAC]. NMED Exhibit 3; Tr. Vol. 2, 358:25-359:18.

2. *SJWC recommended removing the word "dissolved" before "hardness" in 20.6.4.12(F) NMAC and 20.6.4.900(I) NMAC, such that it aligns with the new definition, to eliminate redundancy and to clarify the term. SJWC [Exhibit] 2, p. 8 (2020 TR SJWC-0011). The Department concurred with SJWC's recommendation and removed the word "dissolved" before "hardness" in 20.6.4.12(F) and 20.6.4.900(I) NMAC in its proposed amendments to 20.6.4 NMAC. NMED Exhibit 108; NMED Exhibit 110.*
3. *No party objected to these changes. Based on the weight of the evidence, the Commission finds the Department's proposal to add a definition of "hardness" is well-taken and agrees with the Department's amendments to 20.6.4.7(H) NMAC as proposed.*

(2) "Harmonic mean flow" is the number of daily flow measurements divided by the sum of the reciprocals of the flows; that is, it is the reciprocal of the arithmetic mean of reciprocal daily flow measurements consistent with the equations in Paragraph (1) of Subsection B of 20.6.4.11 NMAC.

20.6.4.7(H) NMAC - Harmonic Mean Flow

1. *The Department proposed adding the definition of the term "harmonic mean flow" to the definitions section in 20.6.4.7 NMAC and deleting the definition of the term from 20.6.4.11(B)(1) NMAC. As provided in the Department's proposed amendments, this definition would become paragraph 20.6.4.7(H)(2) NMAC, while the existing paragraph 20.6.4.7(H)(2) NMAC would be renumbered as paragraph 20.6.4.7(H)(4) NMAC. NMED Exhibit 1; NMED Exhibit 110; Tr. Vol. 1, 275:10-275:20. The definition of "harmonic mean flow" is in the middle of a subparagraph that sets forth the relationship of critical low flow to human health-organism only criteria as applied to water quality standards in 20.6.4.11 NMAC. Moving the definition from 20.6.4.11(B)(1) to 20.6.4.7(H)(2) definition would make it easier to locate by placing it with other definitions. NMED Exhibit 1; Tr. Vol. 1, 275:25-275-20.*

2. *No party objected to these changes. Based on the weight of the evidence, the Commission finds the Department's proposal to move the definition of "harmonic mean flow" is well-taken and agrees with the Department's amendments to 20.6.4.7(H) and 20.6.4.11(B)(1) NMAC as proposed.*

[~~(1)~~](3) "High quality coldwater" in reference to an aquatic life use means a perennial surface water of the state in a minimally disturbed condition with considerable aesthetic value and superior coldwater aquatic life habitat. A surface water of the state to be so categorized must have water quality, stream bed characteristics and other attributes of habitat sufficient to protect and maintain a propagating coldwater aquatic life population.

[~~(2)~~](4) "Human health-organism only" means the health of humans who ingest fish or other aquatic organisms from waters that contain pollutants.

I. Terms beginning with the letter "I".

(1) "Industrial water supply" means the use or storage of water by a facility for process operations unless the water is supplied by a public water system. Industrial water supply does not include irrigation or other agricultural uses.

(2) "Intermittent" when used to describe a surface water of the state means the water body contains water for extended periods only at certain times of the year, such as when it receives seasonal flow from springs or melting snow.

(3) "Interstate waters" means all surface waters of the state that cross or form a part of the border between states.

(4) "Intrastate waters" means all surface waters of the state that are not interstate waters.

(5) "Irrigation" means application of water to land areas to supply the water needs of beneficial plants.

(6) "Irrigation storage" means storage of water to supply the needs of beneficial plants.

J. Terms beginning with the letter "J". [RESERVED]

K. Terms beginning with the letter "K". [RESERVED]

L. Terms beginning with the letter "L".

(1) "LC-50" means the concentration of a substance that is lethal to fifty percent of the test organisms within a defined time period. The length of the time period, which may vary from 24 hours to one week or more, depends on the test method selected to yield the information desired.

(2) "**Limited aquatic life**" as a designated use, means the surface water is capable of supporting only a limited community of aquatic life. This subcategory includes surface waters that support aquatic species selectively adapted to take advantage of naturally occurring rapid environmental changes, [~~ephemeral or intermittent water,~~]low-flow, high turbidity, fluctuating temperature, low dissolved oxygen content or unique chemical characteristics.

20.6.4.7(L) NMAC - Limited Aquatic Life

1. *The Department proposed to amend language in the definition for "limited aquatic life" at 20.6.4.7(L)(2) NMAC to clarify that this designated aquatic life use is not limited in application only to ephemeral or intermittent waters. NMED Exhibit 4, pp. 4-5. NMED Exhibit 9; Tr. Vol. 2, 327:15-332:11.*

2. *LANL initially objected to this proposed amendment. LANL Exhibit 6, pp. 7-9 (2020 TR LANL-00172 - 00174); LANL Exhibit 62, pp. 8-10 (TR LANL-01194 - 01196). LANL continues to disagree with NMED's position that retaining hydrologic regimes in the definition is unnecessary, however, LANL no longer*

opposes NMED's proposed amendments to 20.6.4.7(L)(2). Upon hearing NMED's testimony at hearing, however, LANL withdrew its objection because Ms. Fullam's testimony that, under NMED's interpretation, "Limited Aquatic Life" "may apply regardless of hydrologic regime" resolves LANL's concerns. Hrg. Tr., Vol. II, 370:7-11 (Fulton). Tr. Vol. 2, 367:15-370:17.

3. *Amigos Bravos objected to this proposed amendment. AB Exhibit 10, p. 5; AB Exhibit 11, p. 20. Upon hearing NMED's testimony at hearing, however, Amigos Bravos withdrew its objection. Tr. Vol. 2, 422:17-423:7.*

4. *All parties who had initially objected withdrew those objections, and no other party objected to these changes. Based on the weight of the evidence, the Commission finds the Department's proposal to amend the definition of "limited aquatic life" at 20.6.4.7(L)(2) NMAC is well-taken and agrees with the Department's amendments as proposed.*

(3) "Livestock watering" means the use of a surface water of the state as a supply of water for consumption by livestock.

M. Terms beginning with the letter "M".

(1) "Marginal coldwater" in reference to an aquatic life use means that natural [~~intermittent or low-flows, or other natural~~]habitat conditions severely limit maintenance of a coldwater aquatic life population during at least some portion of the year or historical data indicate that the temperature [~~in~~] of the surface water of the state may exceed that which could continually support aquatic life adapted to coldwater[~~25°C (77°F)~~].

20.6.4.7(M) NMAC - Marginal Coldwater

1. *The Department proposed to amend the definition of "marginal coldwater" at 20.6.4.7(M)(1) NMAC to clarify that this designated use is not limited to ephemeral or intermittent waters, and to include those conditions that distinguish it from a coldwater aquatic life use designation. NMED Exhibit 4, pp. 5-7; NMED Exhibit 9; NMED Exhibit 109, pp. 2-6; NMED Exhibit 110; Tr. Vol. 2, 332:15-338:12.*

2. *LANL objected to this proposed amendment. LANL Exhibit 6, pp. 4-7 (2020 TR LANL-00169 - 0173); LANL Exhibit 62, pp. 3-8 (TR LANL-01189 - 01194); Tr. Vol. 2, 368:12-372:17. To wit, LANL and SJWC objected to removing numeric temperature criteria and hydrologic regimes on the basis that NMED has not provided a sufficient explanation for the changes or justified why NMED seeks to retain*

"intermittent low flow" in the definition of "marginal warmwater" but exclude the language from the nearly identical definition of "marginal coldwater." Hrg. Tr., Vol. II, 371:4-11 (Fulton); ***SJWC Ex. 2*** *at 8-9 (DeRose-Bamann Direct); Hrg. Tr., Vol. II, 417:20-418:5 (DeRose-Bamann); see also Hrg. Tr., Vol. II, 343:22-344:9 (Fullam) (acknowledging that the real difference between marginal warmwater and marginal coldwater is the temperature criteria). LANL cautioned that excluding hydrologic regime from marginal coldwater and retaining hydrologic regime in marginal warmwater will create confusion as to how the terms will be applied and regulatory uncertainty. Hrg. Tr., Vol. II, 371-372 (Fulton);* ***LANL Ex. 6*** *at 5-6 (Fulton Direct). LANL's proposed amendment:* ***"Marginal coldwater"*** *in reference to an aquatic life use means that natural intermittent or low flows, or other natural habitat conditions severely limit maintenance of a coldwater aquatic life population during at least some portion of the year or historical data indicate that the temperature ~~in~~ of the surface water of the state may exceed 25°C (77°F).*

3. *SJWC also objected to NMED's proposal, arguing that a similar amendment was not proposed for the definition of "marginal warmwater." SJWC [Exhibit] 2, pp. 8-9 (2020 TR SJWC-0011 - 0012). Tr. Vol. 2, 416:10-418:10. SJWC contends that the information provided by NMED in support of its proposal does not sufficiently explain the rationale behind deleting the temperature criterion from the definition of "marginal coldwater.[3]" However, NMED has not proposed to remove the temperature criterion from the definition of "marginal warmwater" in 20.6.4.7(M)(2), but on the contrary has proposed to modify the temperature criterion in 20.6.4.900(H)(6) NMAC to match the criterion in the definition. Thus, NMED's position is inconsistent with respect to the temperature criteria in the definitions of "marginal coldwater" and "marginal warmwater." It is SJWC's position that "contrary to NMED's assertion in the hearing, there is no conflict between the applicable marginal coldwater aquatic life criteria and the*

[3] SJWC Exception, p. 20, "Jennifer Fullam testified on behalf of NMED that removal of the temperature criterion would make the definition consistent with other designated aquatic life use designations."

current definition of "marginal coldwater." SJWC's SOR at 31. SJWC therefore recommends that the WQCC reject NMED's proposal to remove the temperature criterion from the definition of "marginal coldwater." SJWC's SOR at 31-32.

4. *The Department contends it provided substantial evidence in response to the objections of other parties. NMED Exhibit 109, pp. 2-6; NMED Exhibit 110; Tr. Vol. 2, 332:15-338:12.*

5. *Based on the weight of the evidence, the Commission finds the Department's proposal to amend the definition of "marginal coldwater" at 20.6.4.7(M)(1) NMAC is well-taken and agrees with the Department's amendments as proposed;*

   OR

   The Commission agrees with LANL and SJWC and finds, contrary to NMED's statement of reasons for the proposed changes and supporting technical testimony, that the proposed changes do not improve "clarity" of the definition, do not add "consistency between definitions" and do not "aid in the implementation of the water quality standards." See, e.g., NMED Ex. 4 at 7 (Fullam Direct). The current definition of "marginal coldwater" has been in the SWQS for many years. The Commission further finds that retaining criteria in the definition for designated uses does not "render the definition lengthy and overly cumbersome for reference and implementation of water quality standards." For these reasons, we conclude that NMED has not provided sufficient evidence to support removing the temperature criterion from the definition of "marginal coldwater" at this time.

(2) **"Marginal warmwater"** in reference to an aquatic life use means natural intermittent or low flow or other natural habitat conditions severely limit the ability of the surface water of the state to sustain a natural aquatic life population on a continuous annual basis; or historical data indicate that natural water temperature routinely exceeds 32.2°C (90°F).

(3) **"Maximum temperature"** means the instantaneous temperature not to be exceeded at any time.

(4) **"Minimum quantification level"** means the minimum quantification level for a constituent determined by official published documents of the United States environmental protection agency.

N. Terms beginning with the letter "N".

(1) **"Natural background"** means that portion of a pollutant load in a surface water resulting only from non-anthropogenic sources. Natural background does not include impacts resulting from historic or existing human activities.

(2) **"Natural causes"** means those causal agents that would affect water quality and the effect is not caused by human activity but is due to naturally occurring conditions.

(3) "Nonpoint source" means any source of pollutants not regulated as a point source that degrades the quality or adversely affects the biological, chemical or physical integrity of surface waters of the state.

O. Terms beginning with the letter "O".

(1) "**Organoleptic**" means the capability to produce a detectable sensory stimulus such as odor or taste.

(2) "Oversight agency" means a state or federal agency, such as the United States department of agriculture forest service, that is responsible for land use or water quality management decisions affecting nonpoint source discharges where an outstanding national resource water is located.

P. Terms beginning with the letter "P".

(1) "**Playa**" means a shallow closed basin lake typically found in the high plains and deserts.

(2) "Perennial" when used to describe a surface water of the state means the water body typically contains water throughout the year and rarely experiences dry periods.

(3) "Persistent toxic pollutants" means pollutants, generally organic, that are resistant to environmental degradation through chemical, biological and photolytic processes and can bioaccumulate in organisms, causing adverse impacts on human health and aquatic life.

20.6.4.7(P) NMAC - Persistent Toxic Pollutants

1. *The Department proposed to add a definition of "persistent toxic pollutants" at 20.6.4.7(P)(3) NMAC to clarify its meaning, as the term describes certain pollutants with numeric criteria in 20.6.4.900(J)(1). NMED Exhibit 2, pp. 4-5; NMED Exhibit 110; Tr. Vol. 2, 432:8-433:11.*

2. *No party objected to the proposed addition of this definition. Based on the weight of the evidence, the Commission finds the Department's addition of the definition of "persistent toxic pollutants" is well-taken and agrees with the Department's amendments to 20.6.4.7(P) NMAC as proposed.*

[~~(3)~~](4) "Point source" means any discernible, confined and discrete conveyance from which pollutants are or may be discharged into a surface water of the state, but does not include return flows from irrigated agriculture.

[~~(4)~~](5) "**Practicable**" means that which may be done, practiced or accomplished; that which is performable, feasible, possible.

[~~(5)~~](6) "Primary contact" means any recreational or other water use in which there is prolonged and intimate human contact with the water, such as swimming and water skiing, involving considerable risk of ingesting water in quantities sufficient to pose a significant health hazard. Primary contact also means any use of surface waters of the state for cultural, religious or ceremonial purposes in which there is intimate human contact with the water, including but not limited to ingestion or immersion, that could pose a significant health hazard.

[~~(6)~~](7) "Public water supply" means the use or storage of water to supply a public water system as defined by New Mexico's Drinking Water Regulations, 20.7.10 NMAC. Water provided by a public water system may need to undergo treatment to achieve drinking water quality.

Q. Terms beginning with the letter "Q". [RESERVED]

R. Terms beginning with the letter "R". [RESERVED]

S. Terms beginning with the letter "S".

(1) "Secondary contact" means any recreational or other water use in which human contact with the water may occur and in which the probability of ingesting appreciable quantities of water is minimal, such as fishing, wading, commercial and recreational boating and any limited seasonal contact.

(2) "Segment" means a classified water of the state described in 20.6.4.101 through 20.6.4.899 NMAC. The water within a segment should have the same uses, similar hydrologic characteristics or flow regimes, and natural physical, chemical and biological characteristics and exhibit similar reactions to external stresses, such as the discharge of pollutants.

(3) "**Specific conductance**" is a measure of the ability of a water solution to conduct an electrical current.

(4) **"State"** means the state of New Mexico.

20.6.4.7(S) NMAC - Sufficiently Sensitive

1. *LANL proposes to define "sufficiently sensitive" under 20.6.4.7(S) NMAC using the EPA definition under 40 C.F.R. § 122.44(i)(1)(iv). LANL Ex. 57 (Proposed Changes to 20.6.4 NMAC); Hrg. Tr., Vol. III, 770:9-14 (Toll); LANL Ex. 7 at 11 (Toll Direct):*

   (5) "Sufficiently sensitive" means any method approved under 40 CFR part 136 for the analysis of pollutants or pollutant parameters for which (1) the method minimum level (ML) is at or below the level of the effluent limit established in the permit; or (2) the method has the lowest ML of the analytical methods approved under 40 CFR part 136 for the measured pollutant or pollutant parameter.

2. *LANL witness Dr. Toll explained that these amendments seek to conform New Mexico WQS requirements for analytical methods and use of analytical methods for compliance purposes to federal law. The anticipated effect of these changes is (1) elimination of ambiguity about compliance monitoring obligations and (2) clarification to how the Commission's numeric criteria should be applied in situations where the criterion is less than the ML of the required method. LANL Ex. 7 at 5, 9 (Toll Direct).*

3. *NMED objected to the proposed amendment to 20.6.4.7(S) NMAC. NMED Exhibit 106, pp. 5-9.*

4. *The Commission finds that LANL's proposed Section 7(S) is well-taken and supported by the weight of the evidence, and the Commission hereby adopts the proposal as reflected in the Proposed Final Rule submitted by LANL. The Commission finds that LANL's proposal will make the Standards consistent with federal regulations and improve clarity and regulatory certainty,*

   OR,

   The Commission rejects LANL's proposed amendment.

(5) "Surface water(s) of the state"

(i) means all surface waters situated wholly or partly within or bordering upon the state, including the following:

(1) lakes[~~,~~];

(2) rivers[~~,~~];

(3) streams (including intermittent and ephemeral streams) [~~,~~];
(4) mudflats[~~,~~];
(5) sandflats[~~,~~];
(6) wetlands[~~,~~];
(7) sloughs[~~,~~];
(8) prairie potholes [~~,~~];
(9) wet meadows[~~,~~];
(10) playa lakes[~~,~~];
(11) reservoirs[~~,~~]; [~~or~~]and
(12) natural ponds.

(ii) [~~Surface waters of the state~~]also means all tributaries of such waters, including adjacent wetlands, any manmade bodies of water that were originally created in surface waters of the state or resulted in the impoundment of surface waters of the state, and any "waters of the United States" as defined under the Clean Water Act that are not included in the preceding description.

(iii) [~~Surface waters of the state~~]does not include private waters that do not combine with other surface or subsurface water or any water under tribal regulatory jurisdiction pursuant to Section 518 of the Clean Water Act. Waste treatment systems, including treatment ponds or lagoons designed and actively used to meet requirements of the Clean Water Act (other than cooling ponds as defined in 40 CFR Part 423.11(m) that also meet the criteria of this definition), are not surface waters of the state, unless they were originally created in surface waters of the state or resulted in the impoundment of surface waters of the state.

20.6.4.7(S) NMAC - Definitions - Surface Waters of the State

1. *NMED proposed to amend the definition of "surface waters of the state" in 20.6.4.7(S) NMAC to make formatting changes in order to provide clarity. NMED Exhibit 3, pp. 3-4; Tr. Vol. 5, 1477:25-1478:18.*

2. *No party objected to the proposed addition of this definition. Based on the weight of the evidence, the Commission finds the Department's proposed amendments to the definition of "surface waters of the state" is well-taken and agrees with the Department's amendments to 20.6.4.7(S)(5) NMAC as proposed.*

T. Terms beginning with the letter "T".

(1) **"TDS"** means total dissolved solids, also termed "total filterable residue."

(2) **"Toxic pollutant"** means those pollutants, or combination of pollutants, including disease-causing agents, that after discharge and upon exposure, ingestion, inhalation or assimilation into any organism, either directly from the environment or indirectly by ingestion through food chains, will cause death, shortened life spans, disease, adverse behavioral changes, reproductive or physiological impairment or physical deformations in such organisms or their offspring.

20.6.4.7(T) NMAC - Definitions - Toxic Pollutant:

1. *CCW-GRIP argued that the Department's proposed reference to the list of toxic pollutants from 20.6.2.7 NMAC in 20.6.4.13(F) NMAC would be more appropriately placed in the definition of "toxic pollutant" in 20.6.4.7(T) NMAC. CCW-GRIP Exhibit 5; Tr. Vol. 2, 620:4-620:14. CCW-GRIP is opposed to LANL's revised definition of "toxic pollutant" because the proposal would eliminate*

the current narrative definition of "toxic pollutant." The narrative portion of the definition serves to allow flexibility to address a contaminant not currently on the list without waiting to go through a years-long regulatory revision. CCW-GRIP Ex. 5 at 6; Tr. Including a list of pollutants in the definition of "toxic pollutants" is helpful. It would enhance certainty for all parties, and it would avoid unnecessary future arguments about whether those pollutants are or are not toxic. CCW-GRIP Ex. 5 at 5-6; 2 Tr. p. 619, lines 15-21.

CCW-GRIP propose the following amendment[4]:

(2) "Toxic pollutant" means those pollutants, or combination of pollutants, including disease-causing agents, that after discharge and upon exposure, ingestion, inhalation or assimilation into any organism, either directly from the environment or indirectly by ingestion through food chains, will cause death, shortened life spans, disease, adverse behavioral changes, reproductive or physiological impairment or physical deformations in such organisms or their offspring. The term includes, but is not limited to, the toxic pollutants listed in the federal regulations at 40 CFR 401.15, and the groundwater quality regulations at 20.6.2.7.T(2) NMAC as those lists may be amended.

2. *The Department concluded that CCW-GRIP's proposal to refer to the list of toxic pollutants in 20.6.2.7 NMAC in 20.6.4.7(T) NMAC would have no regulatory difference to the Department's proposal. Tr. Vol. 2, 457:14-457:25.*
3. *SJWC opposes the CCW-GRIP proposal to amend the definition of "toxic pollutant" in the SWQS to incorporate, wholesale, the Groundwater Rule's list of toxic pollutants and the toxic pollutants referenced in 40 C.F.R. § 401.15. SJWC's SOR at 49-51. To wit, SJWC opposes this proposal on the same grounds that it opposes incorporating the Groundwater Rule's list of toxic pollutants in 20.6.2 NMAC into the SWQS narrative standard for toxic pollutants in 20.6.4.13(F)(1) NMAC (see discussion of "Toxic Pollutants: 20.6.4.13(F) NMAC"). SJWC notes that NMED also opposes the CCW-GRIP proposal. In addition, incorporating the reference to the federal regulation would*

[4] Amigos Bravos Exception, p. 9 – the proposed language was not submitted by CCW-GRIP as part of its post-hearing submission but proposed by Amigos Bravos "to aid the Commission in its deliberation." Amigos Bravos' proposed new language appears in blue underline and CCW-GRIP's proposed amendment appears in red underline.

create confusion in the regulated community and for NMED because it contains categories of pollutants instead of a simple list of individual pollutants. Significantly, CCW-GRIP failed to present any technical testimony to support its proposal, and it did not even offer 40 C.F.R. § 401.15 as an exhibit for the other parties or the WQCC to use in their evaluation of the proposal. Thus, it fails to meet the standard for WQCC adoption, which requires credible scientific or other evidence. As SJWC noted in its opposition to NMED's proposal to incorporate the Groundwater Rule's toxins into the SWQS, toxic pollutants already are regulated in the SWQS, so this proposal is unnecessary. SJWC therefore urges the WQCC to reject this proposal.

4. *LANL does not oppose individually identifying each toxin from the list of toxic pollutants in the ground water regulations, 20.6.2.7 NMAC, so long as it is clear that applicability is limited to human health-related designated uses. Hrg. Tr., Vol. II, 505:19-506:1 (Dail).*
5. *LANL also proposes to add the list of toxic pollutants in 20.6.2.7 NMAC to the list of toxic pollutants, subject to a limitation that "For purposes of 20.6.4 NMAC[5], toxic pollutants listed in 20.6.2.7 NMAC only apply to waters with a domestic water supply designated use, with the exception of the PFAS compounds listed above." [6] LANL therefore proposes the following revised definition of "Toxic Pollutant" to incorporate these post hearing modifications:[7]*

(2) "Toxic pollutant" means those pollutants, or combination of pollutants~~, including disease-causing agents, that after discharge and upon exposure, ingestion, inhalation or assimilation into any organism, either directly from the environment or indirectly by ingestion through food chains, will cause death, shortened life spans, disease, adverse behavioral changes, reproductive or physiological impairment or physical deformations in such organisms or their offspring.~~ listed by the EPA Administrator under section 307(a) of the federal Clean Water Act, 33 U.S.C. § 1313(a) or in the list below.

[5] LANL's Second Notice of Errata to LANL's Closing Argument, at 1.
[6] NMED Exception No. 11 – "This list was not proposed in any testimony provided before or during the hearing, and it should therefore be stricken from Attachment A given that members of the public would have no way to anticipate this proposed amendment to 20.6.4 NMAC. Furthermore, absolutely no evidence was presented before or at the hearing as why to [sic] PFAS compounds to not apply to Limited Aquatic Life Use or why 20.6.2.7 NMAC toxic pollutants should only apply to domestic water use."
[7] LANL's corrected final proposed amendments to the current 20.6.4.7.T(2) NMAC (definition of Toxic Pollutant) are shown with additions underlined and deletions indicated by strikethrough. The correction to LANL Exhibit A, Final Proposed Amendments to 20.6.4 NMAC are shown in red.

Persistent Toxics listed in 20.6.4.900.J NMAC

Antimony, dissolved (CAS 7440-36-0)
Arsenic, dissolved (CAS 7440-38-2)
Methylmercury (CAS 22967-92-6)
Nickel, dissolved (CAS 7440-02-0)
Selenium, dissolved (CAS 7782-49-2)
Thallium, dissolved (CAS 7440-28-0)
Zinc, dissolved (CAS 7440-66-6)
Aldrin (CAS 309-00-2)
Benzo(a)pyrene (CAS 50-32-8)
Chlordane (CAS 57-74-9)
4,4'-DDT (CAS number 50293)
4,4'-DDE (CAS number 72559)
4,4'-DDD (CAS number 72548).
Dieldrin (CAS 60-57-1)
Dioxin
Hexachlorobenzene (CAS 118-74-1)
Polychlorinated Biphenyls (PCBs) (CAS 1336-36-3)
Tetrachloroethylene (CAS 127-18-4)
PFAS Compounds [8]
Perfluorooctanoic acid (PFOA) (CAS 335-67-1)
Perfluorooctane sulfonate (PFOS) (CAS 1763-23-1)

Toxic Pollutants listed in 20.6.2.7 NMAC [9]

acrolein (CAS 107-02-8)
acrylonitrile (CAS 107-13-1)
benzene and alkylbenzenes
benzene (CAS 71-43-2)
toluene (methylbenzene) (CAS 108-88-3)
ethylbenzene (CAS 100-41-4)
xylenes (dimethyl benzene isomers): o-xylene (CAS 95-47-6); m-xylene (CAS 108-38-3) and p-xylene (CAS 106-42-3)
styrene (ethenylbenzene) (CAS 100-42-5)
chlorinated benzenes
monochlorobenzene (CAS 108-90-7)
1,2-dichlorobenzene (ortho-dichlorobenzene) (CAS 95-50-1)
1,4-dichlorobenzene (para-dichlorobenzene) (CAS 106-46-7)
1,2,4-trichlorobenzene (CAS 120-82-1)
1,2,4,5-tetrachlorobenzene (CAS 95-94-3)
Pentachlorobenzene (CAS 608-93-5)
hexachlorobenzene (CAS 118-74-1)
chlorinated phenols

[8] Pollutants listed as PFAS compounds do not apply to waters with a limited aquatic life designated use.
[9] For the purposes of 20.6.4 NMAC, toxic pollutants listed in 20.6.2.7 NMAC only apply to waters with a domestic water supply designated use, with the exception of the PFAS compounds listed above.

2,4-dichlorophenol (CAS 120-83-2)
2,4,5-trichlorophenol (CAS 95-95-4)
2,4,6-trichlorophenol (CAS 88-06-2)
pentachlorophenol (PCP) (CAS 87-86-5)

chloroalkyl ethers
bis (2-chloroethyl) ether (CAS 111-44-4)
bis (2-chloroisopropyl) ether (CAS 108-60-1)
bis (chloromethyl) ether (CAS 542-88-1)

1,2-dichloropropane (propylene dichloride, PDC) (CAS 78-87-5)
dichloropropenes (CAS 542-75-6)
1,4-dioxane (CAS 123-91-1)
halogenated ethanes
1,2-dibromoethane (ethylene dibromide, EDB) (CAS 106-93-4)
1,1-dichloroethane (1,1-DCA) (CAS 75-34-3)
1,2-dichloroethane (ethylene dichloride, EDC) (CAS 107-06-2)
1,1,1-trichloroethane (TCA) (CAS 71-55-6)
1,1,2-trichloroethane (1,1,2-TCA) (CAS 79-00-5)
1,1,2,2-tetrachloroethane (CAS 79-34-5)
hexachloroethane (CAS 67-72-1)

halogenated ethenes
chlorothene (vinyl chloride) (CAS 75-01-4)
1,1-dichloroethene (1,1-DCE) (CAS 75-35-4)
cis-1,2dichloroethene (cis-1,2-DCE) (CAS 156-59-2)
trans-1,2-dichloroethene (trans-1,2-DCE) (CAS 156-60-5)
trichloroethene (trichloroethylene, TCE) (CAS 79-01-6)
tetrachloroethene (perchloroethylene, PCE) (CAS 127-18-4)

halogenated methanes
bromodichloromethane (CAS 75-27-4)
bromomethane (CAS 74-83-9)
chloromethane (CAS 74-87-3)
dichlorodifluoromethane (fluorocarbon-12) (CAS 75-71-8)
dichloromethane (methylene chloride) (CAS 75-09-2)
tribromomethane (bromoform) (CAS 75-25-2)
trichloromethane (chloroform) (CAS 67-66-3)
tetrachloromethane (carbon tetrachloride) (CAS 56-23-5)
trichlorofluoromethane (fluorocarbon-11) (CAS 75-69-4)

hexachlorobutadiene (CAS 87-68-3)
isophorone (CAS 78-59-1)
methyl tertiary-butyl-ether (MTBE) (CAS 1634-04-4)
nitroaromatics and high explosives (HE)
nitrobenzene (CAS 98-95-3)
2,4-dinitrotoluene (2,4-DNT) (CAS 121-14-2)
2,6-dinitrotoluene (2,6-DNT) (CAS 606-20-2)
octrahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX) (CAS 2691-41-0)
hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX) (CAS 121-82-4)
2,4,6-trinitrotoluene (TNT) (CAS 118-96-7)

2,4-dinitro-o-cresol (CAS 534-52-1)
dinitrophenols (CAS 51-28-5)
nitrosamines
N-nitrosodiethylamine (CAS 55-18-5)
N-nitrosodimethylamine (CAS 62-75-9)
N-nitrosodibutylamine (CAS 924-16-3)
N-nitrosodiphenylamine (CAS 86-30-6)
N-nitrosopyrrolidine (CAS 930-55-2)
perchlorate (CAS 14797-73-0)
perfluorinated-chemicals (PFCs)
perfluorohexane sulfonic acid (PHHxS) (CAS 355-46-4)
perfluorooctane sulfonate (PFOS) (CAS 1763-23-1)
perfluorooctanoic acid (PFOA) (CAS 335-67-1)
pesticides
Aldrin (CAS 309-00-2)
atrazine (CAS 1912-24-9)
chlordane (CAS 57-74-9)
DDT (CAS 50-29-3)
dieldrin (CAS 60-57-1)
endosulfan (CAS 115-29-7)
endrin (CAS 72-20-8)
heptachlor (CAS 76-44-8)
hexachlorocyclohexane (HCH, lindane): alpha-HCH (CAS 319-84-6); beta-HCH (CAS 319-85-7); gamma-HCH (CAS 58-89-9); and technical-HCH (CAS 608-73-1)
hexachlorocyclopentadiene (CAS 77-47-4)
prometon (CAS 1610-18-0)
toxaphene (CAS 8001-35-2)
phenol (CAS 108-95-2)
phthalate esters
dibutyl phthalate (CAS 84-74-2)
di-2-ethylhexyl phthalate (DEHP) (CAS 117-81-7)
diethyl phthalate (DEP) (CAS 84-66-2)
dimethyl phthalate (DMP) (CAS 131-11-3)
polycyclic compounds
benzidine (CAS 92-87-5)
dichlorobenzidine (CAS 91-94-1)
diphenylhydrazine (CAS 122-66-7
polychlorinated biphenyls (PCBs) (CAS 1336-36-3)
polynuclear aromatic hydrocarbons (PAHs)
anthracne (CAS 120-12-7)
benzo(a)pyrene (CAS 50-32-8)
3,4-benzofluoranthene (CAS 205-99-2)
benzo(k)fluoranthene (CAS 207-08-9)
fluoranthene (CAS 206-44-0)
fluorene (CAS 86-73-7)

naphthalene (CAS 91-20-3)
1-methylnaphthalene (CAS 90-12-0)
2-methylnaphthalene (CAS 91-57-6)
phenanthrene (CAS 85-01-8)
pyrene (CAS 129-00-0)
thiolane 1,1 dioxide (sulfolane) (CAS 126-33-0)

* * *

6. *Amigos Bravos contends that the nine PFAS identified by Dr. DeWitt are toxic pollutants under the commission's definition at 20.6.4.7.t(2) NMAC. The nine are: PFOA, PFOS, perfluorohexane sulfonic acid (PFHxS), perfluorononanoic acid (PFNA), perfluorobutane sulfonate (PFBS), fluorotelomer sulphonic acid 8:2 (8:2 FTS), N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA), N-methylperfluorooctane sulfonamidoacetic acid (NMeFOSAA), and perfluorooctanesulfonamide (PFOSA or FOSA). No party rebutted Dr. DeWitt's testimony[10]. Further, the Commission should reject LANL's proposal at 20.6.4.7.T(2) NMAC to restrict the definition of toxic pollutants. The Commission's current definition of "toxic pollutant" is virtually identical to the definition of "toxic pollutant" under the Clean Water Act, as Ms. Judd acknowledged; compare 20.6.4.7.T(2) NMAC with 33 USC § 1362(13). LANL proposes to eliminate this definition, even though it mirrors the federal definition, and instead to limit the Commission's definition to EPA's list of toxic pollutants and any list the Commission promulgates in future rulemakings, but LANL presented no testimony explaining why the Commission's definition, which is the same as Congress' definition, is somehow inadequate, outdated, or not based on appropriate scientific concepts.*
7. *NMMA contends the Commission should adopt LANL's proposed amendments to the definition of "toxic pollutant," as set forth in LANL Exhibit 1, as they address contaminants of emerging concern and provide clarity about the pollutants that are subject to the regulatory requirements of the rule. LANL's proposed definition of "toxic pollutant" includes reference to a specific and*

[10] Amigos Bravos Exception, No. 11

clear list of pollutants that are provided by the Environmental Protection Agency Administrator under Section 307(a) of the Clean Water Act as toxic and provides the Commission with the ability to list additional pollutants it considers toxic on an as needed basis. This proposed definition would therefore allow the Commission, after appropriate process, to adopt and list any contaminants of emerging concern that are not currently listed by the EPA that are of concern to New Mexico. LANL's proposed definition would create an ascertainable list of toxic pollutants, would facilitate the identification of contaminants of emerging concern, and would create clarity for the regulated community and the Department.

8. *BDD is opposed to LANL's proposed definition as it would limit what are considered to be toxic pollutants from the current narrative definition to those listed by EPA under the Clean Water Act at § 307(a), or under a list adopted, through rulemaking, by the WQCC. BDD Ex. 1 at 9. Replacing the current narrative definition of toxic pollutants with EPA's list of toxic pollutants would take away the State's authority to protect New Mexico waters from contaminants that have been well-established by the scientific community as "toxic," but that have not gone through the lengthy and cumbersome rulemaking process that EPA must undertake to add to its definition of toxic pollutants.*
9. *NMED's response to LANL's proposed amendment is found in NMED Exhibit 107, pp. 5-9.*[11]
10. *Therefore, based on the evidence the Commission finds that the proposed amendments to 20.6.4.13(F)(1) NMAC offered by NMED, read with the existing definition of "toxic pollutant" under 20.6.4.7(T)(2) NMAC and the proposed definition of CECs under 20.6.4.7(C)(7) NMAC, fail to provide constitutionally adequate notice of compounds that trigger the label toxic pollutants before subjecting dischargers to enforcement or penalties for an enforcement violation under Sections 74-6-10(A), -10.1(B), and -10.2(A)(1) of the New Mexico Water Quality Act, as required*

[11] NMED Exception No. 10 accepted by HO.

under Bokum Res. Corp. v. New Mexico Water Quality Control Comm'n, 1979-NMSC-090, ¶ 17, 93 N.M. 546, 550 , 603 P.2d 285, 289; Kerr-McGee Nuclear Corp. v New Mexico Water Quality Control Comm'n, 1982-NMCA-015, ¶ 13, 98 N.M. 240, 244, 647 P.2d 873, 877. Because the proposal to include CEC in the general criteria for Toxic Pollutants is rejected, the Commission finds it is unnecessary to define CECs in the Standards. The Commission therefore rejects NMED's proposal to define CEC under 20.6.4.7(C)(7) NMAC. The Commission also finds that including general reference to PFAS in the general criteria for toxic pollutants is not supported by credible science and will create uncertainty for regulators and the regulated community. The proposal is therefore rejected. The Commission finds LANL's proposed modifications to the Toxic Pollutant definition and General Criteria for Toxic Pollutants is supported by credible scientific technical testimony. The Commission finds that LANL's proposal provides regulatory certainty and a clear, defensible path for the Commission to address constituents that should be recognized to be of significant concern in surface waters across New Mexico. The Commission finds that LANL's proposal is also most protective of New Mexico waters because it includes in the list of toxic pollutants, those pollutants the Commission has already labeled persistent toxic pollutants. The Commission finds that LANL's proposed amendments provide a process for adding CECs or other non-numeric pollutants to the list as NMED is able to "demonstrate [] scientifically supportable translators of the General Criteria" LANL Ex. 61 at 4 (Dail Rebuttal). The Commission concludes that LANL's proposed modifications as reflected in the Proposed Final Rule submitted by LANL should be adopted;

OR,

Based on the weight of the evidence, the Commission finds the proposal of CCW-GRIP to amend the definition of "toxic pollutant" at 20.6.4.7.T(3) NMAC to include both a narrative definition

and references to lists of toxic pollutants in federal and New Mexico regulations is well-taken and adopts the amendment that CCW-GRIP have proposed,

OR,

Based on the uncontroverted evidence from Amigos Bravos, the Commission finds that the following PFAS are "toxic pollutants" under the Commission's definition at 20.6.4.7.T(2) NMAC: perfluorooctanoic acid (PFOA), perfluorooctane sulfonate (PFOS), perfluorohexane sulfonic acid (PFHxS), perfluorononanoic acid (PFNA), perfluorobutane sulfonate (PFBS), fluorotelomer sulphonic acid 8:2 (8:2 FTS), N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA), N-methylperfluorooctane sulfonamidoacetic acid (NMeFOSAA), and perfluorooctanesulfonamide (PFOSA or FOSA),

OR,

The Commission concludes that the proposed Final Rule submitted by LANL is hereby rejected.

(3) "**Tributary**" means a perennial, intermittent or ephemeral waterbody that flows into a larger waterbody, and includes a tributary of a tributary.

(4) **"Turbidity"** is an expression of the optical property in water that causes incident light to be scattered or absorbed rather than transmitted in straight lines.

U. Terms beginning with the letter "U". [~~RESERVED~~]

(1) "Unclassified waters of the state" means those surface waters of the state not identified in 20.6.4.101 through 20.6.4.899 NMAC.

20.6.4.7(U) NMAC - Definitions - Unclassified Waters of the State

1. *The Department proposed to move the definition of "unclassified waters of the state" to the definitions section in 20.6.4.7(U) NMAC from 20.6.4.11 NMAC and edit the definition for clarity. NMED Exhibit 2, pp. 2-3; Tr. Vol. 2, 352:19-353:20*
2. *SJWC objected to the Department's proposed amendments to "unclassified waters of the state," as it did not see a reason to move the definition and viewed the Department's proposed changes as unnecessary and confusing. SJWC [Exhibit] 2, pp. 9-10 (2020 TR SJWC-0012 - 0013).*

3. *In response to written testimony from SJWC, the Department modified the proposed definition of "unclassified waters of the state." SJWC then withdrew its objection. NMED Exhibit 110; Tr. Vol. 2, 353:10-17.*

4. *Based on the weight of the evidence, the Commission finds the Department's proposed amendments to "unclassified waters of the state" well-taken and agrees with the Department's amendments to 20.6.4.7(U) NMAC as proposed.*

(2) "Use attainability analysis" means a scientific study conducted for the purpose of assessing the factors affecting the attainment of a use.

20.6.4.7(U) NMAC - Definitions - Use Attainability Analysis

1. *LANL proposed to move the definition of "use attainability analysis" to the Definitions section, 20.6.4.7(U)(2) NMAC. LANL Exhibit 5, pp. 18-19 (2020 TR LANL-00157 - 00158):*

> **(2)** "Use Attainability Analysis" means a structured scientific assessment of the factors affecting the attainment of the use, which include physical, chemical, biological, and economic factors as described in 40 CFR 131.10(g).

2. *NMED found this proposal to be consistent with other amendments associated with definitions and updated its proposed amendments accordingly. NMED Exhibit 109, p. 35; NMED Exhibit 110.*

3. *Based on the weight of the evidence, the Commission finds LANL's proposal to move the definition of "use attainability analysis" to 20.6.4.7(U)(2) NMAC is well-taken and agrees with NMED's amendments to 20.6.4.7(U) NMAC as proposed.*

V. Terms beginning with the letter "V". [RESERVED]

W. Terms beginning with the letter "W".

(1) "Warmwater" with reference to an aquatic life use means that water temperature and other characteristics are suitable for the support or propagation or both of warmwater aquatic life.

(2) "Water contaminant" means any substance that could alter if discharged or spilled the physical, chemical, biological or radiological qualities of water. "Water contaminant" does not mean source, special nuclear or by-product material as defined by the Atomic Energy Act of 1954, but may include all other radioactive materials, including but not limited to radium and accelerator-produced isotopes.

(3) "Water pollutant" means a water contaminant in such quantity and of such duration as may with reasonable probability injure human health, animal or plant life or property, or to unreasonably interfere with the public welfare or the use of property.

(4) "Wetlands" means those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions in New Mexico. Wetlands that are constructed

outside of a surface water of the state for the purpose of providing wastewater treatment and that do not impound a surface water of the state are not included in this definition.

(5) "Wildlife habitat" means a surface water of the state used by plants and animals not considered as pathogens, vectors for pathogens or intermediate hosts for pathogens for humans or domesticated livestock and plants.

X. Terms beginning with the letters "X" through "Z". [RESERVED]

[20.6.4.7 NMAC - Rp 20 NMAC 6.1.1007, 10/12/2000; A, 7/19/2001; A, 5/23/2005; A, 7/17/2005; A, 8/1/2007; A, 12/1/2010; A, 1/14/2011; A, 3/2/2017; A, XX/XX/XXXX]

20.6.4.8 ANTIDEGRADATION POLICY AND IMPLEMENTATION PLAN:

A. Antidegradation Policy: This antidegradation policy applies to all surface waters of the state.

(1) Existing [~~instream water~~]uses, as defined in Paragraph (4) of Subsection E of 20.6.4.7 NMAC, and the level of water quality necessary to protect the existing uses shall be maintained and protected in all surface waters of the state.

20.6.4.8 NMAC - Antidegradation Policy and Implementation Plan

1. *The Department proposed three amendments to the Antidegradation Policy and Implementation Plan at 20.6.4.8 NMAC. These amendments were for the purpose of adding clarity to that section. NMED Exhibit 3, pp. 4-5; NMED Exhibit 9.*

2. *No party objected to these changes. Based on the weight of the evidence, the Commission finds the Department's proposal to amend the Antidegradation Policy and Implementation Plan at 20.6.4.8 NMAC is well-taken and agrees with the Department's amendments to 20.6.4.8 NMAC as proposed.*

(2) Where the quality of a surface water of the state exceeds levels necessary to support the propagation of fish, shellfish, and wildlife, and recreation in and on the water, that quality shall be maintained and protected unless the commission finds, after full satisfaction of the intergovernmental coordination and public participation provisions of the state's continuing planning process, that allowing lower water quality is necessary to accommodate important economic and social development in the area in which the water is located. In allowing such degradation or lower water quality, the state shall assure water quality adequate to protect existing uses fully. Further, the state shall assure that there shall be achieved the highest statutory and regulatory requirements for all new and existing point sources and all cost-effective and reasonable BMPs for nonpoint source control. Additionally, the state shall encourage the use of watershed planning as a further means to protect surface waters of the state.

(3) No degradation shall be allowed in waters designated by the commission as outstanding national resource waters (ONRWs), except as provided in Subparagraphs (a) through (e) of this paragraph and in Paragraph (4) of this Subsection A.

(a) After providing a minimum 30-day public review and comment period, the commission determines that allowing temporary and short-term degradation of water quality is necessary to accommodate public health or safety activities in the area in which the ONRW is located. Examples of public health or safety activities include but are not limited to replacement or repair of a water or sewer pipeline or a roadway bridge. In making its decision, the commission shall consider whether the activity will interfere with activities implemented to restore or maintain the chemical, physical or biological integrity of the water. In approving the activity, the commission shall require that:

(i) the degradation shall be limited to the shortest possible time and shall not exceed six months;

(ii) the degradation shall be minimized and controlled by best management practices or in accordance with permit requirements as appropriate; all practical means of minimizing the duration, magnitude, frequency and cumulative effects of such degradation shall be utilized;

(iii) the degradation shall not result in water quality lower than necessary to protect any existing use in the ONRW; and

(iv) the degradation shall not alter the essential character or special use that makes the water an [~~ORNW~~]ONRW.

(b) Prior to the commission making a determination, the department or appropriate oversight agency shall provide a written recommendation to the commission. If the commission approves the activity, the department or appropriate oversight agency shall oversee implementation of the activity.

(c) Where an emergency response action that may result in temporary and short-term degradation to an ONRW is necessary to mitigate an immediate threat to public health or safety, the emergency response action may proceed prior to providing notification required by Subparagraph (a) of this paragraph in accordance with the following:

(i) only actions that mitigate an immediate threat to public health or safety may be undertaken pursuant to this provision; non-emergency portions of the action shall comply with the requirements of Subparagraph (a) of this paragraph;

(ii) the discharger shall make best efforts to comply with requirements (i) through (iv) of Subparagraph (a) of this paragraph;

(iii) the discharger shall notify the department of the emergency response action in writing within seven days of initiation of the action;

(iv) within 30 days of initiation of the emergency response action, the discharger shall provide a summary of the action taken, including all actions taken to comply with requirements (i) through (iv) of Subparagraph (a) of this paragraph.

(d) Preexisting land-use activities, including grazing, allowed by federal or state law prior to designation as an ONRW, and controlled by best management practices (BMPs), shall be allowed to continue so long as there are no new or increased discharges resulting from the activity after designation of the ONRW.

(e) Acequia operation, maintenance, and repairs are not subject to new requirements because of ONRW designation. However, the use of BMPs to minimize or eliminate the introduction of pollutants into receiving waters is strongly encouraged.

(4) This antidegradation policy does not prohibit activities that may result in degradation in surface waters of the state when such activities will result in restoration or maintenance of the chemical, physical or biological integrity of the water.

(a) For ONRWs, the department or appropriate oversight agency shall review on a case-by-case basis discharges that may result in degradation from restoration or maintenance activities, and may approve such activities in accordance with the following:

(i) the degradation shall be limited to the shortest possible time;

(ii) the degradation shall be minimized and controlled by best management practices or in accordance with permit requirements as appropriate, and all practical means of minimizing the duration, magnitude, frequency and cumulative effects of such degradation shall be utilized;

(iii) the degradation shall not result in water quality lower than necessary to protect any existing use of the surface water; and

(iv) the degradation shall not alter the essential character or special use that makes the water an [~~ORNW~~]ONRW.

(b) For surface waters of the state other than ONRWs, the department shall review on a case-by-case basis discharges that may result in degradation from restoration or maintenance activities, and may approve such activities in accordance with the following:

(i) the degradation shall be limited to the shortest possible time;

(ii) the degradation shall be minimized and controlled by best management practices or in accordance with permit requirements as appropriate, and all practical means of minimizing the duration, magnitude, frequency and cumulative effects of such degradation shall be utilized; and

(iii) the degradation shall not result in water quality lower than necessary to protect any existing use of the surface water.

(5) In those cases where potential water quality impairment associated with a thermal discharge is involved, this antidegradation policy and implementing method shall be consistent with Section 316 of the federal Clean Water Act.

(6) In implementing this section, the commission through the appropriate regional offices of the United States environmental protection agency will keep the administrator advised and provided with such information concerning the surface waters of the state as he or she will need to discharge his or her responsibilities under the federal Clean Water Act.

B. Implementation Plan: The department, acting under authority delegated by the commission, implements the water quality standards, including the antidegradation policy, by describing specific methods and procedures in the continuing planning process and by establishing and maintaining controls on the discharge of pollutants to surface waters of the state. The steps summarized in the following paragraphs, which may not all be applicable in every water pollution control action, list the implementation activities of the department. These implementation activities are supplemented by detailed antidegradation review procedures developed under the state's continuing planning process. The department:

(1) obtains information pertinent to the impact of the effluent on the receiving water and advises the prospective discharger of requirements for obtaining a permit to discharge;

(2) reviews the adequacy of existing data and conducts a water quality survey of the receiving water in accordance with an annually reviewed, ranked priority list of surface waters of the state requiring total maximum daily loads pursuant to Section 303(d) of the federal Clean Water Act;

(3) assesses the probable impact of the effluent on the receiving water relative to its attainable or designated uses and numeric and narrative criteria;

(4) requires the highest and best degree of wastewater treatment practicable and commensurate with protecting and maintaining the designated uses and existing water quality of surface waters of the state;

(5) develops water quality based effluent limitations and comments on technology based effluent limitations, as appropriate, for inclusion in any federal permit issued to a discharger pursuant to Section 402 of the federal Clean Water Act;

(6) requires that these effluent limitations be included in any such permit as a condition for state certification pursuant to Section 401 of the federal Clean Water Act;

(7) coordinates its water pollution control activities with other constituent agencies of the commission, and with local, state and federal agencies, as appropriate;

(8) develops and pursues inspection and enforcement programs to ensure that dischargers comply with state regulations and standards, and complements EPA's enforcement of federal permits;

(9) ensures that the provisions for public participation required by the New Mexico Water Quality Act and the federal Clean Water Act are followed;

(10) provides continuing technical training for wastewater treatment facility operators through the utility operators training and certification programs;

(11) provides funds to assist the construction of publicly owned wastewater treatment facilities through the wastewater construction program authorized by Section 601 of the federal Clean Water Act, and through funds appropriated by the New Mexico legislature;

(12) conducts water quality surveillance of the surface waters of the state to assess the effectiveness of water pollution controls, determines whether water quality standards are being attained, and proposes amendments to improve water quality standards;

(13) encourages, in conjunction with other state agencies, implementation of the best management practices set forth in the New Mexico statewide water quality management plan and the nonpoint source management program, such implementation shall not be mandatory except as provided by federal or state law;

(14) evaluates the effectiveness of BMPs selected to prevent, reduce or abate sources of water pollutants;

(15) develops procedures for assessing use attainment as required by 20.6.4.15 NMAC and establishing site-specific standards; and

(**16**) develops list of surface waters of the state not attaining designated uses, pursuant to Sections 305(b) and 303(d) of the federal Clean Water Act.

[20.6.4.8 NMAC - Rp 20 NMAC 6.1.1101, 10/12/2000; A, 5/23/2005; A, 8/1/2007; A, 1/14/2011; A, XX/XX/XXXX]

20.6.4.9 OUTSTANDING NATIONAL RESOURCE WATERS:

A. Procedures for nominating an ONRW: Any person may nominate a surface water of the state for designation as an ONRW by filing a petition with the commission pursuant to [~~the guidelines for water quality control commission regulation hearings~~]20.1.6 NMAC, Rulemaking Procedures - Water Quality Control Commission. A petition to designate a surface water of the state as an ONRW shall include:

20.6.4.9(A) NMAC - Outstanding National Resource Waters

1. *The Department proposed amendments to the procedures for nominating an Outstanding National Resource Water at 20.6.4.9(A) NMAC to reflect the correct citation to the rulemaking procedures for the Commission. NMED Exhibit 3, p. 5; NMED Exhibit 9.*

2. *No party objected to these changes. Based on the weight of the evidence, the Commission finds the Department's proposal to amend the procedures for nominating an Outstanding National Resource Water at 20.6.4.9(A) NMAC is well-taken and agrees with the Department's amendments to 20.6.4.9(A) NMAC as proposed.*

(1) a map of the surface water of the state, including the location and proposed upstream and downstream boundaries;

(2) a written statement and evidence based on scientific principles in support of the nomination, including specific reference to one or more of the applicable ONRW criteria listed in Subsection B of this section;

(3) water quality data including chemical, physical or biological parameters, if available, to establish a baseline condition for the proposed ONRW;

(4) a discussion of activities that might contribute to the reduction of water quality in the proposed ONRW;

(5) any additional evidence to substantiate such a designation, including a discussion of the economic impact of the designation on the local and regional economy within the state of New Mexico and the benefit to the state; and

(6) affidavit of publication of notice of the petition in a newspaper of general circulation in the affected counties and in a newspaper of general statewide circulation.

B. Criteria for ONRWs: A surface water of the state, or a portion of a surface water of the state, may be designated as an ONRW where the commission determines that the designation is beneficial to the state of New Mexico, and:

(1) the water is a significant attribute of a state special trout water, national or state park, national or state monument, national or state wildlife refuge or designated wilderness area, or is part of a designated wild river under the federal Wild and Scenic Rivers Act; or

(2) the water has exceptional recreational or ecological significance; or

(3) the existing water quality is equal to or better than the numeric criteria for protection of aquatic life and contact uses and the human health-organism only criteria, and the water has not been significantly modified by human activities in a manner that substantially detracts from its value as a natural resource.

C. Pursuant to a petition filed under Subsection A of this section, the commission may classify a surface water of the state or a portion of a surface water of the state as an ONRW if the criteria set out in Subsection B of this section are met.

D. Waters classified as ONRWs: The following waters are classified as ONRWs:

(1) Rio Santa Barbara, including the west, middle and east forks from their headwaters downstream to the boundary of the Pecos Wilderness; and

(2) the waters within the United States forest service Valle Vidal special management unit including:

(a) Rio Costilla, including Comanche, La Cueva, Fernandez, Chuckwagon, Little Costilla, Powderhouse, Holman, Gold, Grassy, LaBelle and Vidal creeks, from their headwaters downstream to the boundary of the United States forest service Valle Vidal special management unit;

(b) Middle Ponil creek, including the waters of Greenwood Canyon, from their headwaters downstream to the boundary of the Elliott S. Barker wildlife management area;

(c) Shuree lakes;

(d) North Ponil creek, including McCrystal and Seally Canyon creeks, from their headwaters downstream to the boundary of the United States forest service Valle Vidal special management unit; and

(e) Leandro creek from its headwaters downstream to the boundary of the United States forest service Valle Vidal special management unit.

(3) the named perennial surface waters of the state, identified in Subparagraph (a) below, located within United States department of agriculture forest service wilderness. Wilderness are those lands designated by the United States congress as wilderness pursuant to the Wilderness Act. Wilderness areas included in this designation are the Aldo Leopold wilderness, Apache Kid wilderness, Blue Range wilderness, Chama River Canyon wilderness, Cruces Basin wilderness, Dome wilderness, Gila wilderness, Latir Peak wilderness, Pecos wilderness, San Pedro Parks wilderness, Wheeler Peak wilderness, and White Mountain wilderness.

(a) The following waters are designated in the Rio Grande basin:

(i) in the Aldo Leopold wilderness: Byers Run, Circle Seven creek, Flower canyon, Holden Prong, Indian canyon, Las Animas creek, Mud Spring canyon, North Fork Palomas creek, North Seco creek, Pretty canyon, Sids Prong, South Animas canyon, Victorio Park canyon, Water canyon;

(ii) in the Apache Kid wilderness Indian creek and Smith canyon;

(iii) in the Chama River Canyon wilderness: Chavez canyon, Ojitos canyon, Rio Chama;

(iv) in the Cruces Basin wilderness: Beaver creek, Cruces creek, Diablo creek, Escondido creek, Lobo creek, Osha creek;

(v) in the Dome wilderness: Capulin creek, Medio creek, Sanchez canyon/creek;

(vi) in the Latir Peak wilderness: Bull creek, Bull Creek lake, Heart lake, Lagunitas Fork, Lake Fork creek, Rito del Medio, Rito Primero, West Latir creek;

(vii) in the Pecos wilderness: Agua Sarca, Hidden lake, Horseshoe lake (Alamitos), Jose Vigil lake, Nambe lake, Nat lake IV, No Fish lake, North Fork Rio Quemado, Rinconada, Rio Capulin, Rio de las Trampas (Trampas creek), Rio de Truchas, Rio Frijoles, Rio Medio, Rio Molino, Rio Nambe, Rio San Leonardo, Rito con Agua, Rito Gallina, Rito Jaroso, Rito Quemado, San Leonardo lake, Santa Fe lake, Santa Fe river, Serpent lake, South Fork Rio Quemado, Trampas lake (East), Trampas lake (West);

(viii) in the San Pedro Parks wilderness: Agua Sarca, Cañon Madera, Cave creek, Cecilia Canyon creek, Clear creek (North SPP), Clear creek (South SPP), Corralitos creek, Dove creek, Jose Miguel creek, La Jara creek, Oso creek, Rio Capulin, Rio de las Vacas, Rio Gallina, Rio Puerco de Chama, Rito Anastacio East, Rito Anastacio West, Rito de las Palomas, Rito de las Perchas, Rito de los Pinos, Rito de los Utes, Rito Leche, Rito Redondo, Rito Resumidero, San Gregorio lake;

(ix) in the Wheeler Peak wilderness: Black Copper canyon, East Fork Red river, Elk lake, Horseshoe lake, Lost lake, Sawmill creek, South Fork lake, South Fork Rio Hondo, Williams lake.

(b) The following waters are designated in the Pecos River basin:

(i) in the Pecos wilderness: Albright creek, Bear creek, Beatty creek, Beaver creek, Carpenter creek, Cascade canyon, Cave creek, El Porvenir creek, Hollinger creek, Holy Ghost creek, Horsethief creek, Jack's creek, Jarosa canyon/creek, Johnson lake, Lake Katherine, Lost Bear lake, Noisy brook, Panchuela creek, Pecos Baldy lake, Pecos river, Rio Mora, Rio Valdez, Rito Azul, Rito de los Chimayosos, Rito de los Esteros, Rito del Oso, Rito del Padre, Rito las Trampas, Rito Maestas, Rito Oscuro, Rito Perro, Rito Sebadilloses, South Fork Bear creek, South Fork Rito Azul, Spirit lake, Stewart lake, Truchas lake (North), Truchas lake (South), Winsor creek;

(ii) in the White Mountain wilderness: Argentina creek, Aspen creek, Bonito creek, Little Bonito creek, Mills canyon/creek, Rodamaker creek, South Fork Rio Bonito, Turkey canyon/creek.

(c) The following waters are designated in the Gila River basin:

(i) in the Aldo Leopold wilderness: Aspen canyon, Black Canyon creek, Bonner canyon, Burnt canyon, Diamond creek, Falls canyon, Fisherman canyon, Running Water canyon, South Diamond creek;

(ii) in the Gila wilderness: Apache creek, Black Canyon creek, Brush canyon, Canyon creek, Chicken Coop canyon, Clear creek, Cooper canyon, Cow creek, Cub creek, Diamond creek, East Fork Gila river, Gila river, Gilita creek, Indian creek, Iron creek, Langstroth canyon, Lilley canyon, Little creek, Little Turkey creek, Lookout canyon, McKenna creek, Middle Fork Gila river, Miller Spring canyon, Mogollon creek, Panther canyon, Prior creek, Rain creek, Raw Meat creek, Rocky canyon, Sacaton creek, Sapillo creek, Sheep Corral canyon, Skeleton canyon, Squaw creek, Sycamore canyon, Trail canyon, Trail creek, Trout creek, Turkey creek, Turkey Feather creek, Turnbo canyon, West Fork Gila river, West Fork Mogollon creek, White creek, Willow creek, Woodrow canyon.

(d) The following waters are designated in the Canadian River basin: in the Pecos wilderness Daily creek, Johns canyon, Middle Fork Lake of Rio de la Casa, Middle Fork Rio de la Casa, North Fork Lake of Rio de la Casa, Rito de Gascon, Rito San Jose, Sapello river, South Fork Rio de la Casa, Sparks creek (Manuelitas creek).

(e) The following waters are designated in the San Francisco River basin:

(i) in the Blue Range wilderness: Pueblo creek;

(ii) in the Gila wilderness: Big Dry creek, Lipsey canyon, Little Dry creek, Little Whitewater creek, South Fork Whitewater creek, Spider creek, Spruce creek, Whitewater creek.

(f) The following waters are designated in the Mimbres Closed basin: in the Aldo Leopold wilderness Corral canyon, Mimbres river, North Fork Mimbres river, South Fork Mimbres river.

(g) The following waters are designated in the Tularosa Closed basin: in the White Mountain wilderness Indian creek, Nogal Arroyo, Three Rivers.

(h) The wetlands designated are identified on the *Maps and List of Wetlands Within United States Forest Service Wilderness Areas Designated as Outstanding National Resource Waters* published at the New Mexico state library and available on the department's website.

[20.6.4.9 NMAC - Rn, Subsections B, C and D of 20.6.4.8 NMAC, 5/23/2005; A, 5/23/2005; A, 7/17/2005; A, 2/16/2006; A, 12/1/2010; A, 1/14/2011; A, XX/XX/XXXX]

20.6.4.10 REVIEW OF STANDARDS; NEED FOR ADDITIONAL STUDIES:

A. Section 303(c)(1) of the federal Clean Water Act requires that the state hold public hearings at least once every three years for the purpose of reviewing water quality standards and proposing, as appropriate, necessary revisions to water quality standards.

B. In accordance with 40 CFR 131.10(i), when an existing use, as defined under 20.6.4.7 NMAC, is higher quality water than prescribed by the designated use and supporting evidence demonstrates the presence of that use, the designated use shall be amended accordingly to have criteria no less stringent than the existing use.

[~~B.~~] C. It is recognized that, in some cases, numeric criteria [~~have been adopted that reflect use designations rather than existing conditions of surface waters of the state.~~]for a particular designated use may not adequately reflect the local conditions or the aquatic communities adapted to those localized conditions. In these cases, a water quality criterion may be modified to reflect the natural condition of a specific waterbody. The modification of the criterion does not change the designated use; the modification only changes the criterion for that specific waterbody. [~~Narrative criteria are required for many constituents because accurate data on background levels are lacking. More intensive water quality monitoring may identify surface waters of the state where existing quality is considerably better than the established criteria.~~]When justified by sufficient data and information, a numeric [~~the~~] water quality [~~criteria~~]criterion [~~will~~]may be adopted or modified in accordance with 20.6.4.10(F) and 20.6.4.10(G) NMAC, to protect the attainable uses of the waterbody.

D. The removal or amendment of a designated use to a designated use with less stringent criteria can only be done through a use attainability analysis in accordance with 20.6.4.15 NMAC.

[~~C.~~] E. It is also recognized that contributions of water contaminants by diffuse nonpoint sources of water pollution may make attainment of certain criteria difficult. Revision of these criteria may be necessary as new information is obtained on nonpoint sources and other problems unique to semi-arid regions.

20.6.4.10 NMAC - Review of Standards

1. *The Department proposed to amend the language pertaining to reviewing and amending standards at 20.6.4.10 NMAC to clarify when and how a designated use or criterion may be amended for a surface water of the State. Related amendments to 20.6.4.12(H) NMAC and 20.6.4.318(C)(10) NMAC were also proposed, amending the references in those subsections to align with the proposed amendments to 20.6.4.10 NMAC. No new provisions were proposed which would impact the review of standards, the amendments were solely to provide additional clarity. NMED Exhibit 4, pp. 9-12; NMED Exhibit 9; Tr. Vol. 3, 936:22-941:9.*
2. *SJWC opposed certain of NMED's proposed amendments. SJWC's SOR at 57-58, 60-62, SJWC [Exhibit] 2, pp. 12-15 (2020 TR SJWC-0015 - 0018); SJWC [Exhibit] 3, pp. 7-10 (2020 TR SJWC-0198 - 0201) Tr. Vol. 4, 1201:19-1203:23. SJWC contends that NMED proposes to add a new subsection B to 20.6.4.10 NMAC to address when a designated use must be upgraded to protect an existing use. NMED has made three attempts to craft the new subsection. Unfortunately, the current proposal only paraphrases the applicable federal regulation, 40 C.F.R. § 131.10(i), and it improperly focuses on water quality rather than water use. This difference is significant, and NMED's proposal creates confusion. SJWC and LANL oppose the proposal. Specifically, NMED's proposal refers to an existing use with "higher quality water," but it does not define that term. For that reason, it is unclear whether a designated use must be upgraded simply because the quality of one single constituent is better than the numeric criteria assigned to that constituent for the designated use. In addition, NMED's proposal refers to "supporting evidence demonstrating the presence of" an existing use", but it does not define the "supporting evidence" required to determine a use is an existing use. Nor does it define a process to make such a determination. NMED's proposal therefore fails to meet its asserted goals of specifying and clarifying the "regulatory process" for designating or amending an existing use. NMED's proposal should be rejected.*

SJWC contends that LANL has proposed alternative language that meets NMED's goals, and SJWC supports its adoption. LANL's proposal appropriately focuses the existing use analysis on water use, like the federal regulation, and captures the federal requirement that there be "new" evidence establishing the existence of a particular use. SJWC's SOR at58, 62-63. LANL's proposal also requires the adoption of a formal procedure for designating or amending existing uses. Such a procedure would ensure fair and sound WQCC decision-making. SJWC urges the WQCC to develop a formal existing use analysis procedure considering NMED's failure to engage with affected permittees, the public or other stakeholders (including SJWC and LANL) concerning the two Existing Use Analyses ("EUAs") it prepared for this Triennial Review. NMED's EUA process was unfair and adversely impacted the ability of other parties to fully analyze the EUAs and prepare for the Triennial Review hearing. NMED filed its Petition in August 2020, but it did not provide the two EUAs, which are complex and lengthy technical documents, until it filed technical testimony on May 3, 2021. That was almost nine months after NMED filed its Petition and only two months before the Triennial Review hearing began. Further, NMED rejected a public request by SJWC's technical expert for a copy of the draft EUA concerning primary contact recreation. NMED also prepared an EUA for certain waters located on LANL property. However, NMED failed to share that EUA with LANL before the deadline for filing direct technical testimony even though LANL worked with NMED to develop a workplan for the EUA.

In this proceeding, SJWC and LANL have raised significant concerns about the content of the EUAs. Those concerns could have been resolved if NMED had engaged with SJWC and LANL in advance of filing its Petition—and especially in advance of the technical testimony deadline. NMED was aware of SJWC's interest in the primary contact EUA because, during the last Triennial Review, SJWC objected to NMED's proposal to upgrade the designated use of the same stream segments. NMED's actions ignored the interests of stakeholders, especially those who became parties to this proceeding. By extension, NMED's actions have impeded the WQCC's ability to make an informed decision based on

credible scientific evidence. Finally, SJWC contends that NMED's testimony concerning the current process for developing an EUA was inconsistent. To wit, "NMED recognizes the value of general guidance when determining existing uses" but at the same time "NMED does not believe an EUA framework is actually required." SJWC's SOR at 65-66.

3. *LANL opposed certain of NMED's proposed amendments. LANL Exhibit 3, pp. 32-40 (2020 TR LANL-00091 - 00099); LANL Exhibit 6, pp. 10-12 (2020 TR LANL-00175 - 00177); Tr. Vol. 3, 1016:3-1018:9; Tr. Vol. 4, 1100:4-1113:5. LANL recommends that the Commission delete a portion of the second sentence of 20.6.4.10(C) NMAC. Hrg. Tr., Vol. IV, 1077:2-15 (Toll). LANL supports section D. See LANL Ex. 57 (Proposed Changes to 20.6.4 NMAC). LANL's proposed amendments to 20.6.4.10(B) and (C) NMAC are shown below and presented in LANL's Proposed Final Rule:*

> **B.** In accordance with 40 CFR 131.10, when an existing use of a water, as defined under 20.6.4.7 NMAC, requires a higher level of protection than the current designated use and new supporting evidence demonstrates the presence of that use, the designated use shall be amended accordingly to protect the existing use. This action can only be taken after the commission has established formal procedures, through the water quality management plan continuing planning process, to amend a designated use that is found to be less restrictive than an existing use. The process described in this section may not be used where the commission has already made a determination concerning the existing use of classified waters of the state.
>
> **C.** It is recognized that, in some cases, numeric criteria ~~have been adopted that reflect use designations rather than existing conditions of surface waters of the state.~~ for a particular designated use may not adequately reflect the local conditions or the aquatic communities adapted to those localized conditions. In these cases, a water quality criterion may be modified. The modification of the criterion does not change the designated use; the modification only changes the criterion for that specific waterbody. ~~Narrative criteria are required for many constituents because accurate data on background levels are lacking. More intensive water quality monitoring may identify surface waters of the state where existing quality is considerably better than the established criteria.~~ When justified by sufficient data and information, a numeric ~~the~~ water quality ~~criteria~~ criterion ~~will~~ may be adopted or modified in accordance with 20.6.4.10(F) and 20.6.4.10(G) NMAC, to protect the attainable uses of the waterbody.

4. LANL and SJWC objected to NMED's improper use of the term "stringent" to apply to designated use. See e.g., NMED's Original Petition, filed August 18, 2020 (proposing to add to 20.6.4.15(A) "the amendment of a designated use, based on a more stringent existing use, does not require a use attainability analysis;"). Mr. Fulton recommended, consistent with federal regulations (40 C.F.R. §

131.10) that NMED's proposed amendments to Subsections 10(B) and 15(A) and 15(D)(2)(c) be revised to limit use of the term "stringent" to "refer to the magnitude of numeric criteria rather than sub-categories of designated uses." (Within 40 C.F.R. 131.10, 'stringent' applies to criteria not uses").

5. Mr. Fulton also testified that using the language "is higher quality" in NMED's proposed amendments to 20.6.4.10(B) NMAC in reference to an existing use (or designated use) may create confusion because "sub-categories of aquatic life are not necessarily of 'higher' or "lesser" quality relative to one another. He further explained that uses may require different numeric criteria for some parameters (i.e., temperature) but require the same numeric criteria for other parameters (i.e., use-specific criterion set forth in 20.6.4.900(J)(1) NMAC). Mr. Fulton therefore recommended that 20.6.4.10(B) NMAC be modified as follows, consistent with LANL's Proposed Final Rule (above).

6. Based on the testimony of LANL, NMED made certain changes to its proposed amendments, and provided rebuttal testimony in response to the testimonies of SJWC and Triad/DOE. NMED Exhibit 109, pp. 8-25; NMED Exhibit 110; Tr. Vol. 3, 936:22-941:9.

7. Based on the weight of the evidence, the Commission finds the Department's proposal to amend the language pertaining to reviewing and amending standards at 20.6.4.10 NMAC is well-taken and agrees with the Department's amendments to 20.6.4.10 NMAC and related amendments to 20.6.4.12(H) NMAC and 20.6.4.318(C)(10) NMAC as proposed;

OR,

The Commission finds that LANL's proposed revisions to 20.6.4.10(B) and (C) NMAC are well taken and supported by the weight of the evidence. The Commission hereby adopts such changes as reflected in the Proposed Final Rule submitted by LANL. We disagree with NMED's assertion that the language of its proposed modifications to 20.6.4.10 NMAC "is clear and implementable as written." As noted by LANL and SJWC, the mixture of language regarding higher water quality and uses is confusing. The

applicable federal regulation focusses on uses and not water quality. Given the lack of clarity, we reject NMED's proposal.

[~~D.~~] F. Site-specific criteria.

(1) The commission may adopt site-specific numeric criteria applicable to all or part of a surface water of the state based on relevant site-specific conditions such as:

(a) actual species at a site are more or less sensitive than those used in the national criteria data set;

(b) physical or chemical characteristics at a site such as pH or hardness alter the biological availability and/or toxicity of the chemical;

(c) physical, biological or chemical factors alter the bioaccumulation potential of a chemical;

(d) the concentration resulting from natural background exceeds numeric criteria for aquatic life, wildlife habitat or other uses if consistent with Subsection [~~E~~]G of 20.6.4.10 NMAC; or

(e) other factors or combination of factors that upon review of the commission may warrant modification of the default criteria, subject to EPA review and approval.

(2) Site-specific criteria must fully protect the designated use to which they apply. In the case of human health-organism only criteria, site-specific criteria must fully protect human health when organisms are consumed from waters containing pollutants.

(3) Any person may petition the commission to adopt site-specific criteria. A petition for the adoption of site-specific criteria shall:

(a) identify the specific waters to which the site-specific criteria would apply;

(b) explain the rationale for proposing the site-specific criteria;

(c) describe the methods used to notify and solicit input from potential stakeholders and from the general public in the affected area, and present and respond to the public input received;

(d) present and justify the derivation of the proposed criteria.

(4) A derivation of site-specific criteria shall rely on a scientifically defensible method, such as one of the following:

(a) the recalculation procedure, the water-effect ratio for metals procedure or the resident species procedure as described in the water quality standards handbook (EPA-823-B-94-005a, 2nd edition, August 1994);

(b) the streamlined water-effect ratio procedure for discharges of copper (EPA-822-R-01-005, March 2001);

(c) the biotic ligand model as described in aquatic life ambient freshwater quality criteria - copper (EPA-822-R-07-001, February 2007);

(d) the methodology for deriving ambient water quality criteria for the protection of human health (EPA-822-B-00-004, October 2000) and associated technical support documents; or

(e) a determination of the natural background of the water body as described in Subsection [~~E~~]G of 20.6.4.10 NMAC.

[~~E.~~]G. Site-specific criteria based on natural background. The commission may adopt site-specific criteria equal to the concentration resulting from natural background where that concentration protects the designated use. The concentration resulting from natural background supports the level of aquatic life and wildlife habitat expected to occur naturally at the site absent any interference by humans. Domestic water supply, primary or secondary contact, or human health-organism only criteria shall not be modified based on natural background. A determination of natural background shall:

(1) consider natural spatial and seasonal to interannual variability as appropriate;

(2) document the presence of natural sources of the pollutant;

(3) document the absence of human sources of the pollutant or quantify the human contribution; and

(4) rely on analytical, statistical or modeling methodologies to quantify the natural background.

20.6.4.10(F) NMAC - Site-specific criteria based on natural background

LANL submits this Notice of Errata to its Closing Argument, filed in the above captioned docket on September 24, 2021. LANL consulted the other parties regarding this proposed correction and understands that the filing of the correction is unopposed.

1. *LANL initially proposed to amend 20.6.4.10(F)(1)(d) to add the following language: "unless it is demonstrated such uses would be protected at natural background concentrations." LANL Ex. 1 (Proposed Changes). LANL witness Mr. Fulton explained that the rational for the suggested change is: to recognize that there may be instances where setting criteria to natural background concentrations would still protect primary or secondary contact, or human health- organism only uses. For example, a waterbody may be fishless due to low flow or other natural conditions or may support only a limited population of fish. In such cases, modifying human health criteria based on background conditions and attainable levels of exposure could still be protective of such uses."*
2. *LANL's proposal "would require these human-health uses to be protected" unless the uses are not attainable pursuant to 20.6.4.15 NMAC and provided clarification under what conditions these uses could still be protected. Hrg. Tr., Vol. III, 1020:18-1021:4 (Fulton). Mr. Fulton then explained that "the basis for [LANL's] proposed amendment was to recognize exposure and bioaccumulation factors may vary on a local basis compared to the default parameters used in EPA's criteria. I did not suggest that toxicity factors be modified to reflect local conditions." Hrg. Tr., Vol. III, 1021:5-9 (Fulton). Mr. Fulton further clarified that "the UAA procedure is not restricted to aquatic life uses and aquatic life criteria. It also applies to human health uses and criteria. Yet, the current language in 20.6.10(g) states human health criteria cannot be modified based on natural background." Mr. Fulton then reiterated that "this could be interpreted to mean that associated human health uses also cannot be modified based on natural background." Hrg. Tr., Vol. III, 1022 (Fulton).*

   LANL's proposed amendment:

   F. Site-specific criteria based on natural background. The commission may adopt site-specific criteria equal to the concentration resulting from natural background where that

concentration protects the designated use. The concentration resulting from natural background supports the level of aquatic life and wildlife habitat expected to occur naturally at the site absent any interference by humans. Domestic water supply, primary or secondary contact, or human health-organism only criteria shall not be modified based on natural background unless the WQCC determines such modification is appropriate on a site-specific basis. A determination of natural background shall:

(1) consider natural spatial and seasonal to interannual variability as appropriate;

(2) document the presence of natural sources of the pollutant;

(3) document the absence of human sources of the pollutant or quantify the human contribution; and

(4) rely on analytical, statistical or modeling methodologies to quantify the natural background.

3. *NMED did not propose any amendments to 20.6.4.10(F) NMAC beyond changing subsection and paragraph numbers and letters based on proposed amendments to other sections of 20.6.4.10 NMAC, a fact acknowledged by LANL's witness. NMED Exhibit 109, pp. 15-16; Tr. Vol. 3, 941:15-942:12. LANL Exhibit 62, p. 12 (2020 TR LANL-01198). NMED contends LANL conducted no outreach activities, nor did they publish any additional notice for this rulemaking proceeding to supplement that issued by NMED, therefore the public could not have reasonably anticipated the adoption of the amendments proposed by LANL to 20.6.4.10(F) NMAC - Site-specific criteria. Tr. Vol. 3, 942:4-12.*

4. *NMED further contends even if the public could have reasonably anticipated adoption of the amendments proposed by LANL to 20.6.4.10(F) NMAC, the proposed amendments are not sufficiently protective of human health. NMED Exhibit 109, pp. 15-16; Tr. Vol. 3, 942:13-946:5.*

5. *Based on the weight of evidence, the Commission finds that the testimony and recommendations of LANL's witness Fulton are credible and that the weight of evidence supports LANL's proposed amendments as consistent with federal regulation and serving the interests of transparency to the Commission and regulated, interested parties. The amendments to 20.6.4.10(F) are therefore adopted;*

OR,

The Commission declines to adopt LANL's proposed amendment.

[~~F.~~]H. Temporary standards[~~:~~].

(1) Any person may petition the commission to adopt a temporary standard applicable to all or part of a surface water of the state as provided for in this section and applicable sections in 40 CFR Part 131, Water Quality Standards; specifically, Section 131.14. The commission may adopt a proposed temporary standard if the petitioner demonstrates that:

(a) attainment of the associated designated use may not be feasible in the short term due to one or more of the factors listed in 40 CFR 131.10(g), or due to the implementation of actions necessary to facilitate restoration such as through dam removal or other significant wetland or water body reconfiguration activities as demonstrated by the petition and supporting work plan requirements in Paragraphs (4) and (5) of Subsection [~~F~~]H of 20.6.4.10 NMAC;

(b) the proposed temporary standard represents the highest degree of protection feasible in the short term, limits the degradation of water quality to the minimum necessary to achieve the original standard by the expiration date of the temporary standard, and adoption will not cause the further impairment or loss of an existing use;

(c) for point sources, existing or proposed discharge control technologies will comply with applicable technology-based limitations and feasible technological controls and other management alternatives, such as a pollution prevention program; and

(d) for restoration activities, nonpoint source or other control technologies shall limit downstream impacts, and if applicable, existing or proposed discharge control technologies shall be in place consistent with Subparagraph (c) of Paragraph (1) of Subsection [~~F~~]H of 20.6.4.10 NMAC.

(2) A temporary standard shall apply to specific designated use(s), pollutant(s), or permittee(s), and to specific water body segment(s). The adoption of a temporary standard does not exempt dischargers from complying with all other applicable water quality standards or control technologies.

(3) Designated use attainment as reported in the federal Clean Water Act, Section 305(b)/303(d) Integrated Report shall be based on the original standard and not on a temporary standard.

(4) A petition for a temporary standard shall:

(a) identify the currently applicable standard(s), the proposed temporary standard for the specific pollutant(s), the permittee(s), and the specific surface water body segment(s) of the state to which the temporary standard would apply;

(b) include the basis for any factor(s) specific to the applicability of the temporary standard (for example critical flow under Subsection B of 20.6.4.11 NMAC);

(c) demonstrate that the proposed temporary standard meets the requirements in this subsection;

(d) present a work plan with timetable of proposed actions for achieving compliance with the original standard in accordance with Paragraph (5) of Subsection [~~F~~]H of 20.6.4.10 NMAC;

(e) include any other information necessary to support the petition.

(5) As a condition of a petition for a temporary standard, in addition to meeting the requirements in this Subsection, the petitioner shall prepare a work plan in accordance with Paragraph (4) of Subsection [~~F~~]H of 20.6.4.10 NMAC and submit the work plan to the department for review and comment. The work plan shall identify the factor(s) listed in 40 CFR 131.10(g) or Subparagraph (a) of Paragraph (1) of Subsection [~~F~~]H of 20.6.4.10 NMAC affecting attainment of the standard that will be analyzed and the timeline for proposed actions to be taken to achieve the uses attainable over the term of the temporary standard, including baseline water quality, and any investigations, projects, facility modifications, monitoring, or other measures necessary to achieve compliance with the original standard. The work plan shall include provisions for review of progress in accordance with Paragraph (8) of Subsection [~~F~~]H of 20.6.4.10 NMAC, public notice and consultation with appropriate state, tribal, local and federal agencies.

(6) The commission may condition the approval of a temporary standard by requiring additional monitoring, relevant analyses, the completion of specified projects, submittal of information, or any other actions.

(7) Temporary standards may be implemented only after a public hearing before the commission, commission approval and adoption pursuant to Subsection [~~F~~]H of 20.6.4.10 NMAC for all state purposes, and the federal Clean Water Act Section 303 (c) approval for any federal action.

(8) All temporary standards are subject to a required review during each succeeding review of water quality standards conducted in accordance with Subsection A of 20.6.4.10 NMAC. The petitioner shall provide a written report to the commission documenting the progress of proposed actions, pursuant to a reporting schedule stipulated in the approved temporary standard. The purpose of the review is to determine progress consistent with the original conditions of the petition for the duration of the temporary standard. If the petitioner cannot demonstrate that sufficient progress has been made the commission may revoke approval of the temporary standard or provide additional conditions to the approval of the temporary standard.

(9) The commission may consider a petition to extend a temporary standard. The effective period of a temporary standard shall be extended only if demonstrated to the commission that the factors precluding

attainment of the underlying standard still apply, that the petitioner is meeting the conditions required for approval of the temporary standard, and that reasonable progress towards meeting the underlying standard is being achieved.

(10) A temporary standard shall expire no later than the date specified in the approval of the temporary standard. Upon expiration of a temporary standard, the original standard becomes applicable.

(11) Temporary standards shall be identified in 20.6.4.97-899 NMAC as appropriate for the surface water affected.

(12) "Temporary standard" means a time-limited designated use and criterion for a specific pollutant(s) or water quality parameter(s) that reflect the highest attainable condition during the term of the temporary standard.

[20.6.4.10 NMAC - Rp 20 NMAC 6.1.1102, 10/12/2000; Rn, 20.6.4.9 NMAC, 5/23/2005; A, 5/23/2005; A, 12/1/2010; A, 3/2/2017; A, XX/XX/XXXX]

20.6.4.11 APPLICABILITY OF WATER QUALITY STANDARDS:

A. [RESERVED]

B. Critical low flow: The critical low flow of a stream at a particular site shall be used in developing point source discharge permit requirements to meet numeric criteria set in 20.6.4.97 through 20.6.4.900 NMAC and Subsection F of 20.6.4.13 NMAC.

(1) For human health-organism only criteria, the critical low flow is the harmonic mean flow[; ~~"harmonic mean flow" is the number of daily flow measurements divided by the sum of the reciprocals of the flows; that is, it is the reciprocal of the mean of reciprocals~~]. For ephemeral waters the calculation shall be based upon the nonzero flow intervals and modified by including a factor to adjust for the proportion of intervals with zero flow. The equations are as follows:

$$\text{Harmonic Mean} = \frac{n}{\sum 1/Q}$$

where n = number of flow values
and Q = flow value

$$\text{Modified Harmonic Mean} = \left[\frac{\sum_{i=1}^{Nt-N0} \frac{1}{Qi}}{Nt - N0}\right]^{-1} x \left[\frac{Nt - N0}{Nt}\right]$$

where Qi = nonzero flow
Nt = total number of flow values
and N_0 = number of zero flow values

20.6.4.11(B NMAC - Harmonic Mean Flow

1. *The Department proposed to move the definition of "harmonic mean flow" from 20.6.4.11(B)(1) NMAC, Applicability of Water Standards, to the definitions section in 20.6.4.7(H). NMED Exhibit 2, p. 14; NMED Exhibit 110; Tr. Vol. 1, 275:10.*

2. *No parties objected to removing the definition of "harmonic mean flow" from 20.6.4.11 NMAC and placing it in 20.6.4.7 NMAC. Based on the weight of the evidence, the Commission finds the*

Department's proposal is well-taken and agrees with the Department's amendments to 20.6.4.11(B)(1) NMAC as proposed.

(2) For all other narrative and numeric criteria, the critical low flow is the minimum average four consecutive day flow that occurs with a frequency of once in three years (4Q3). The critical low flow may be determined on an annual, a seasonal or a monthly basis, as appropriate, after due consideration of site-specific conditions.

C. Guaranteed minimum flow: The commission may allow the use of a contractually guaranteed minimum streamflow in lieu of a critical low flow determined under Subsection B of this section on a case-by-case basis and upon consultation with the interstate stream commission. Should drought, litigation or any other reason interrupt or interfere with minimum flows under a guaranteed minimum flow contract for a period of at least 30 consecutive days, such permission, at the sole discretion of the commission, may then be revoked. Any minimum flow specified under such revoked permission shall be superseded by a critical low flow determined under Subsection B of this section. A public notice of the request for a guaranteed minimum flow shall be published in a newspaper of general circulation by the department at least 30 days prior to scheduled action by the commission. These water quality standards do not grant to the commission or any other entity the power to create, take away or modify property rights in water.

D. Mixing zones: A limited mixing zone, contiguous to a point source wastewater discharge, may be allowed in any stream receiving such a discharge. Mixing zones serve as regions of initial dilution that allow the application of a dilution factor in calculations of effluent limitations. Effluent limitations shall be developed that will protect the most sensitive existing, designated or attainable use of the receiving water.

E. Mixing zone limitations: Wastewater mixing zones, in which the numeric criteria set under Subsection F of 20.6.4.13 NMAC, 20.6.4.97 through 20.6.4.899 NMAC or 20.6.4.900 NMAC may be exceeded, shall be subject to the following limitations:

(1) Mixing zones are not allowed for discharges to lakes, reservoirs, or playas; these effluents shall meet all applicable criteria set under Subsection F of 20.6.4.13 NMAC, 20.6.4.97 through 20.6.4.899 NMAC and 20.6.4.900 NMAC at the point of discharge.

(2) The acute aquatic life criteria, as set out in Subsection I, Subsection J, and Subsection K of 20.6.4.900 NMAC, shall be attained at the point of discharge for any discharge to a surface water of the state with a designated aquatic life use.

(3) The general criteria set out in Subsections A, B, C, D, E, G, H and J of 20.6.4.13 NMAC, and the provision set out in Subsection D of 20.6.4.14 NMAC are applicable within mixing zones.

(4) The areal extent and concentration isopleths of a particular mixing zone will depend on site-specific conditions including, but not limited to, wastewater flow, receiving water critical low flow, outfall design, channel characteristics and climatic conditions and, if needed, shall be determined on a case-by-case basis. When the physical boundaries or other characteristics of a particular mixing zone must be known, the methods presented in Section 4.4.5, "Ambient-induced mixing," in "Technical support document for water quality-based toxics control" (March 1991, EPA/505/2-90-001) shall be used.

(5) All applicable water quality criteria set under Subsection F of 20.6.4.13 NMAC, 20.6.4.97 through 20.6.4.899 NMAC and 20.6.4.900 NMAC shall be attained at the boundaries of mixing zones. A continuous zone of passage through or around the mixing zone shall be maintained in which the water quality meets all applicable criteria and allows the migration of aquatic life presently common in surface waters of the state with no effect on their populations.

F. Multiple uses: When a surface water of the state has more than a single designated use, the applicable numeric criteria shall be the most stringent of those established for such water.

G. Human health-organism only criteria in Subsection J of 20.6.4.900 NMAC apply to those waters with a designated, existing or attainable aquatic life use. When limited aquatic life is a designated use, the human health-organism only criteria apply only if adopted on a segment-specific basis. The human health-organism only criteria for persistent toxic pollutants, as identified in Subsection J of 20.6.4.900 NMAC, also apply to all tributaries of waters with a designated, existing or attainable aquatic life use.

20.6.4.11(G) NMAC - Human Health-Organism Only Criteria

1. *LANL proposed changes to 20.6.4.11(G) NMAC to remove the applicability of human health-organism only criteria from all water bodies except those with a designated, existing, or attainable fish consumption use[12]. LANL Exhibit 6, p. 16 (2020 TR LANL-00181); LANL Exhibit 57, p. 10 (2020 TR LANL-01068); LANL Exhibit 62, pp. 15-16); Tr. Vol. 3, 809:23-815:4. To wit: 20.6.4.11(G) provides that HH-OO criteria for persistent organic pollutants, as identified in 20.6.4.900(J) NMAC apply to all tributaries of waters with designated, existing or attainable aquatic life use. LANL Ex. 6 at 16 (Fulton Direct). LANL witness Mr. Fulton testified that HH-OO criteria for persistent toxic pollutants should not be required to apply to all tributaries of waters with designated, existing, or attainable aquatic life use because such tributaries "might be fishless, or support only limited populations of fish or shellfish due to natural low flow conditions or habitat and would therefore, not support a fish consumption use." LANL Ex. 6 at 16 (Fulton Direct); LANL Ex. 62 at 15 (Fulton Rebuttal). At hearing, LANL revised its proposal in response to evidence and testimony from other parties. Hrg. Tr., Vol. III, 814:23-815:4 (Fulton). LANL's final proposed amendments to Section 20.6.4.11(G) are as follows:*

   > (G) Human health-organism only criteria in Subsection J of 20.6.4.900 NMAC apply to those waters with a designated, existing or attainable aquatic life use. When limited aquatic life is a designated use, the human health-organism only criteria apply only if adopted on a segment-specific basis. The human health-organism only criteria for persistent toxic pollutants, as identified in Subsection J of 20.6.4.900 NMAC, also apply to all tributaries of waters with a designated, existing or attainable aquatic life use <u>unless the Water Quality Control Commission determines the human health organism only criteria do not apply on a site-specific basis.</u>

2. *The Department did not propose any amendments to 20.6.4.11(G) NMAC. The Department opposed LANL's proposed amendments to 20.6.4.11(G) NMAC, as the proposed amendments would leave every water in the state without the protection of human health criteria and conflict with 20.6.4.900(H) NMAC. NMED Exhibit 107, pp. 9-10; Tr. Vol. 3, 704:22-709:10.*

[12] Per LANL's Exception No. 12, "[t]hese paragraphs do not reflect the discussion in LANL's post hearing submissions regarding how not applying HH-OO criteria in fishless tributaries could still be protective of downstream uses." *See* LANL's Proposed Statement of Reasons, Paragraphs; 94, 98, 99, and 100.

3. *CCW-GRIP also opposed LANL's proposed amendments to 20.6.4.11(G) NMAC, on the grounds that New Mexico does not have a fish consumption use and human health-organism only criteria should apply to all waters with an aquatic life use. The Department agreed with CCW-GRIP's reasoning. CCW-GRIP Exhibit 5; NMED Exhibit 107, pp. 9-10; Tr. Vol. 3, 709:13. To wit, the Commission has established water quality criteria to protect the health of humans who ingest fish or other aquatic organisms from New Mexico surface waters. 20.6.4.900 NMAC; see 20.6.4.7.H(2) NMAC. The proposal by DOE and Triad to amend the criteria established to protect the health of humans who ingest fish and shellfish not supported by substantial evidence in the record. See NMSA 1978, § 74-6-7.B(2).*

4. *The Commission finds that LANL's recommendation as reflected in the Proposed Final Rule submitted by LANL to add language to Section 20.6.4.11(G) NMAC is supported by the weight of evidence, will serve the interests of transparency to the Commission and regulated, interested parties and should be adopted. The Commission also finds that this amendment will have no impact on waters presently subject to HH-OO criteria without a petition to the Commission and the Commission is vested with the authority to consider site-specific exceptions;*

   OR,

   Based on the reasoning above, the Commission declines to adopt the amendments to 20.6.4.11(G) NMAC as proposed by LANL.

H. Unclassified waters of the state: ~~[Unclassified waters of the state are those surface waters of the state not identified in 20.6.4.101 through 20.6.4.899 NMAC.]~~An unclassified surface water of the state is presumed to support the uses specified in Section 101(a)(2) of the federal Clean Water Act. As such, it is subject to 20.6.4.98 NMAC if nonperennial or subject to 20.6.4.99 NMAC if perennial. The commission may include an ephemeral unclassified surface water of the state under 20.6.4.97 NMAC only if a use attainability analysis demonstrates pursuant to 20.6.4.15 NMAC that attainment of Section 101(a)(2) uses is not feasible.

20.6.4.11(U) NMAC - Unclassified Waters of the State

1. *The Department proposed to move the definition of "unclassified waters of the state" from 20.6.4.11(H) NMAC, Applicability of Water Standards, to the definitions section in 20.6.4.7(U) NMAC. NMED Exhibit 2, p. 14; NMED Exhibit 110; Tr. Vol. 1, 275:10.*

2. *SJWC objected to the Department's proposed amendments to "unclassified waters of the state," as it did not see a reason to move the definition. SJWC Ex. 2, pp. 9-10 (2020 TR SJWC-0012 - 0013). In response to written testimony from SJWC, the Department modified the proposed definition of "unclassified waters of the state" in 20.6.4.7(U) NMAC. SJWC then withdrew its objection to moving the definition from 20.6.4.11(H) NMAC. NMED Exhibit 110; Tr. Vol. 2, 353:10-17.*

3. *Based on the weight of the evidence, the Commission adopts the Department's proposed deletion of the definition of "unclassified waters of the state" in 20.6.4.11(H) NMAC as proposed.*

I. Exceptions: Numeric criteria for temperature, dissolved solids, dissolved oxygen, sediment or turbidity adopted under the Water Quality Act do not apply when changes in temperature, dissolved solids, dissolved oxygen, sediment or turbidity in a surface water of the state are attributable to:

(1) natural causes (discharges from municipal separate storm sewers are not covered by this exception.); or

(2) the reasonable operation of irrigation and flood control facilities that are not subject to federal or state water pollution control permitting; major reconstruction of storage dams or diversion dams except for emergency actions necessary to protect health and safety of the public are not covered by this exception.

[20.6.4.11 NMAC - Rp 20 NMAC 6.1.1103, 10/12/2000; A, 10/11/2002; Rn, 20.6.4.10 NMAC, 5/23/2005; A, 5/23/2005; A, 12/1/2010; A, XX/XX/XXXX]

20.6.4.12 COMPLIANCE WITH WATER QUALITY STANDARDS: The following provisions apply to determining compliance for enforcement purposes; they do not apply for purposes of determining attainment of uses. The department has developed assessment protocols for the purpose of determining attainment of uses that are available for review from the department's surface water quality bureau.

A. Compliance with acute water quality criteria shall be determined from the analytical results of a single grab sample. Acute criteria shall not be exceeded.

B. Compliance with chronic water quality criteria shall be determined from the arithmetic mean of the analytical results of samples collected using applicable protocols. Chronic criteria shall not be exceeded more than once every three years.

C. Compliance with water quality standards for total ammonia shall be determined by performing the biomonitoring procedures set out in Subsections D and E of 20.6.4.14 NMAC, or by attainment of applicable ammonia criteria set out in Subsections K, L and M of 20.6.4.900 NMAC.

D. Compliance with the human health-organism only criteria shall be determined from the analytical results of representative grab samples, as defined in the water quality management plan. Human health-organism only criteria shall not be exceeded.

E. The commission may establish a numeric water quality criterion at a concentration that is below the minimum quantification level. In such cases, the water quality standard is enforceable at the minimum quantification level.

20.6.4.12(E) NMAC & 20.6.4.14(A) – Establishing WQ criterion (MQL); Implementing 40 C.F.R. Part 136

1. *LANL proposed changes to 20.6.4.12(E) NMAC to limit sampling and analysis to only the EPA-approved methods listed in 40 C.F.R. Part 136. LANL Exhibit 7, pp. 5-9 (2020 TR LANL-00189 - 00193); Tr. Vol. 3, 767:17-777:20. To wit, LANL proposes to amend 20.6.4.12(E) NMAC and 20.6.4.14(A) NMAC to require*

the use of 40 C.F.R. part 136 ("Part 136") approved methods for NPDES compliance determinations and CWA Section 401 state certifications; and incorporate the 40 C.F.R. § 122.44 definition of "sufficiently sensitive" into the WQS. Hrg. Tr., Vol. III, 766 (Toll); LANL Ex. 7 (Toll Direct); LANL Ex. 57 (Proposed Changes to 20.6.4 NMAC).

2. *Specifically, LANL proposed to amend 20.6.4.12(E) NMAC to replace the undefined term "minimum quantification level" with "lowest minimum level (ML) of the analytical methods approved by EPA under 40 C.F.R. part 136 for the measured pollutant or pollutant parameter" and to add language clarifying that "in cases in which the WQCC establishes a numeric water quality criterion at a concentration that is below the ML of the EPA-approved analytical methods, the water quality standard is enforceable not at the numeric water quality criterion, but at the lowest ML of the 40 C.F.R. part 136 approved methods." LANL Ex. 57 (Proposed Changes to 20.6.4 NMAC); LANL Ex. 7 at 6 (Toll Direct); see also id. at 5-6. LANL's proposed amendment to 20.6.4.12(E):*

> The commission may establish a numeric water quality criterion at a concentration that is below the ~~minimum quantification level~~ lowest minimum level (ML) of the analytical methods approved by EPA under 40 C.F.R. part 136 for the measured pollutant or pollutant parameter. In ~~such~~ cases in which the WQCC establishes a numeric water quality criterion at a concentration that is below the ML of the EPA-approved analytical methods, the water quality standard is enforceable not at the ~~minimum quantification level~~ numeric water quality criterion, but at the lowest ML of the 40 C.F.R. part 136 approved methods.

3. *LANL also proposed to amend 20.6.4.14(A) NMAC to require use of Part 136 approved methods for NPDES compliance determination and Section 401 CWA state certifications. LANL Ex. 57 (Proposed Changes to 20.6.4 NMAC); LANL Ex. 7 at 10 (Toll Direct). Based on testimony and evidence presented at hearing, LANL recommends that 20.6.4.14(A) NMAC be further amended as follows:*

> **A.** 40 CFR Part 136 approved methods shall be used to determine compliance with these standards and in Section 401 certifications under the federal Clean Water Act. In cases of pollutants or pollutant parameters[13] for which there are no approved methods under 40 CFR Part 136, analyses shall be conducted according to a test procedure specified in the applicable permit or 401 certification. Where 40 CFR Part 136 approved methods are not required, sampling and analytical techniques shall conform with methods described in the following references unless otherwise specified by the commission pursuant to a petition to amend these standards:

[13] LANL Second Errata at 3.

(1) *"guidelines establishing test procedures for the analysis of pollutants under the Clean Water Act,"* 40 CFR Part 136 or any test procedure approved or accepted by EPA using procedures provided in 40 CFR Parts 136.3(d), 136.4, and 136.5;

(2) *standard methods for the examination of water and wastewater,* latest edition, American public health association;

(3) *methods for chemical analysis of water and waste,* and other methods published by EPA office of research and development or office of water;

(4) *techniques of water resource investigations of the U.S. geological survey;*

(5) *annual book of ASTM standards:* volumes 11.01 and 11.02, water (I) and (II), latest edition, ASTM international;

(6) *federal register,* latest methods published for monitoring pursuant to Resource Conservation and Recovery Act regulations;

(7) *national handbook of recommended methods for water-data acquisition,* latest edition, prepared cooperatively by agencies of the United States government under the sponsorship of the U.S. geological survey; or

(8) *federal register,* latest methods published for monitoring pursuant to the Safe Drinking Water Act regulations.

Dr. Toll explained that these amendments seek to conform New Mexico WQS requirements for analytical methods and use of analytical methods for compliance purposes to federal law. He further clarified that LANL's proposal does not address analytes with no approved Part 136 Method and is consistent with the EPA regulation allowing EPA or NMED to select a test method such analytes. Finally, Dr. Toll testified that LANL's proposal does not address or seek to impede NMED's ability to apply for approval of an alternative test method under the defined process in Part 136 for analytes with an approved Part 136 Method. Hrg. Tr., Vol. III, 772:5-14 (Toll).

4. *Finally, LANL proposes to define "sufficiently sensitive" under 20.6.4.7(S) NMAC using the EPA definition under 40 C.F.R. § 122.44(i)(1)(iv). LANL Ex. 57 (Proposed Changes to 20.6.4 NMAC); Hrg. Tr., Vol. III, 770:9-14 (Toll); LANL Ex. 7 at 11 (Toll Direct). (Issue addressed above).*
5. *The Department did not propose any amendments to 20.6.4.12(E) NMAC. The Department opposed LANL's proposed amendments to 20.6.4.12(E) NMAC, as the proposed amendments would eliminate the flexibility to use alternative methods to evaluate compliance with the water quality standards and protect human health. NMED Exhibit 106, pp. 2-3; Tr. Vol. 3, 711:4-715:1.*
6. *CCW-GRIP opposed LANL's proposed amendments to 20.6.4.12(E) NMAC, on similar grounds as the Department. CCW-GRIP Exhibit 5, pp. 7-9; Tr. Vol. 4, 1399:20-1401:25.*

7. *Amigos Bravos contends that the Commission's current regulations allow NMED to use a range of authoritative sources for sampling, including 40 CFR Part 136 Methods and, while LANL proposed to restrict acceptable sampling methods to Part 136 Methods for purposes of compliance, LANL did not put on evidence that the other methods authorized in the Commission's regulations are somehow inadequate, inaccurate, or not based on good science. LANL instead make a legal argument, through a non-lawyer, Mr. Toll, that EPA regulations require states to use Part 136 Methods for compliance with federal permits. Amigos Bravos contends that Mr. Toll's legal analysis is wrong, and his own exhibits demonstrate that states have the authority under the Clean Water Act to select non-Part sampling methods if there is no Part 136 Method that applies.*

   Amigos Bravos further contends that the consequence of LANL's proposal is there would be ineffective monitoring for PCBs and no monitoring for PFAS. This is because the Part 136 Method to test for PCB's, EPA Method 608, is not sufficiently sensitive to detect PCBs at certain of the Commission's numeric water quality standards, but a non-Part 136 Method that is approved by EPA's Office of Water, EPA Method 1668C, the congener method, is sufficiently sensitive, and because there is no Part 136 Method to test for PFAS, but there are methods to test for PFAS approved by EPA including EPA Method 537.1, approved by EPA's Office of Research and Development.

8. *BDD also opposed LANL's proposed amendments to 20.6.4.12(E) and 20.6.4.14(A) NMAC because the practical effect of LANL's proposal would be that contaminants like polychlorinated biphenyl compounds (PCBs) that are detectable, and detected, under the current rules and LANL NPDES permits, would be undetectable under the proposed amendments. BDD Exhibit 1; BDD Exhibit 7; Tr. Vol. 3, 821:2-825:24. To wit, "Adopting the LANL proposal to limit enforcement of water quality permits to the minimum level detectable under a Part 136 method would undermine the ability of NMED to enforce the Commission's numeric water quality standards for certain contaminants, including PCBs,*

and undermine the Water Quality Act's purpose of preventing, abating, and controlling water pollution in the state. NMSA 1978 § 74-6-13."

9. *NMED contends "There is no evidence in the record that LANL conducted any outreach activities or published any additional notice for this rulemaking proceeding to supplement that issued by NMED. Therefore, the public could not have reasonably anticipated the adoption of the amendments proposed by LANL to 20.6.4.12(E) NMAC." Even if the public could have reasonably anticipated adoption of the amendments proposed by LANL to 20.6.4.10(F) NMAC, the proposed amendments are not sufficiently protective of human health. NMED Exhibit 106, pp. 3-9; Tr. Vol. 3, 711:4-715:1; Tr. Vol. 3, 821:2-825:24; Tr. Vol. 4, 1399:20-1401:25. LANL objects to NMED's position and asserts instead that interested parties and the public had sufficient notice of LANL's proposed changes and opportunity to present evidence and cross-examine witnesses on proposed changes at hearing. To support their position, LANL points generally to: 1) the express language in the Public Notice of Hearing regarding the possibility of additional changes proposed prior to hearing; 2) that the proposed changes are within the noticed scope of "proposed amendments to 20.6.4 NMAC, and expressly stated in LANL's Exhibit 1 filed with the Commission on May 3, 2021 and posted to the public website; and 3) within Exhibit 57 filed on June 22, 201 and posted on the website.*

10. *The Commission therefore, finds that LANL's proposal to amend 20.6.4.12(E) NMAC and 20.6.4.14(A) NMAC is the most logical proposal because it codifies that 40 C.F.R. Part 136 methods are approved for 401 certifications and NPDES compliance determinations, and methods that are not approved under 40 C.F.R. Part 136 are not appropriate for that use. Accordingly, the Commission adopts LANL's proposed amendments to 20.6.4.12(E) NMAC and 20.6.4.14(A) as reflected in the Proposed Final Rule submitted by LANL.*

    OR,

Based on the reasoning above and including NMED's Closing Argument and Proposed Statement of Reasons, pp 120-126, the Commission declines to adopt the amendments to 20.6.4.12(E) NMAC as proposed by LANL;

F. For compliance with hardness-dependent numeric criteria, [~~dissolved~~]hardness (as mg $CaCO_3$/L) shall be determined from a sample taken at the same time that the sample for the contaminant is taken.

G. Compliance schedules: [~~It shall be the policy of the commission to allow on a case-by-case basis t~~]The commission may allow the inclusion of a schedule of compliance in a NPDES permit issued to an existing facility on a case-by-case basis. Such schedule of compliance will be for the purpose of providing a permittee with adequate time to make treatment facility modifications necessary to comply with water quality based permit limitations determined to be necessary to implement new or revised water quality standards or wasteload allocation. Compliance schedules may be included in NPDES permits at the time of permit renewal or modification and shall be written to require compliance at the earliest practicable time. Compliance schedules shall also specify milestone dates so as to measure progress towards final project completion (e.g., design completion, construction start, construction completion, date of compliance).

20.6.4.12(G) NMAC - Compliance Schedules

1. The Department proposed to reorganize the first sentence of 20.6.4.12(G) NMAC in order to clarify the meaning of the sentence and to reflect current practice. The existing wording implies that the Commission has a policy to allow compliance schedules in NPDES permits, which is not the case. NMED Exhibit 1, p. 14; NMED Exhibit 106, p. 19; Tr. Vol. 3, 715:11-716:7.

2. No party objected to this proposed amendment, and LANL specifically noted its lack of opposition in filed written testimony. LANL Exhibit 7, p. 4 (2020 TR-LANL-00188); Tr. Vol. 3, 716:7.

3. LANL in their closing argument provides a different argument for its proposed recommended change; to wit, NMED originally proposed to amend section 20.6.4.12(G) NMAC ("Section 12(G)") to amend language to clarify that compliance schedules for NPDES permits are allowed on a case-by-case basis. See NMED Orig. Petition, filed August 19, 2020. NMED maintained this proposal in its Amended Petition. See NMED Amended Petition, filed March 12, 2021; NMED Ex. 110 (NMED's Revised Proposed Amended Rule). NMED subsequently testified that NMED proposes "to amend the language in 12(G) to reflect the appropriate application of the section related to compliance schedules. This includes removing the reference to the Commission's policy . . . Although it is within the Commission's authority to include compliance schedules on a case-by-case basis, NMED is unaware and could not find a policy as currently

referenced in 20.6.4.12(G) NMAC. Therefore, NMED reworded language to reflect actual implementation."

Hrg. Tr., Vol. III, 715:11-25 (Lemon). LANL supported NMED's original proposal. See LANL Ex. 7 at 4 (Toll Direct).

4. Based on the weight of the evidence, the Commission adopts the Department's amendments to 20.6.4.12(G) NMAC as proposed.

H. It is a policy of the commission to allow a temporary standard approved and adopted pursuant to Subsection [~~F~~]H of 20.6.4.10 NMAC to be included in the applicable federal Clean Water Act permit as enforceable limits and conditions. The temporary standard and any schedule of actions may be included at the earliest practicable time, and shall specify milestone dates so as to measure progress towards meeting the original standard. [20.6.4.12 NMAC - Rp 20 NMAC 6.1.1104, 10/12/2000; A, 10/11/2002; Rn, 20.6.4.11 NMAC, 5/23/2005; A, 5/23/2005; A, 12/1/2010; A, 3/2/2017; A, XX/XX/XXXX]

20.6.4.13 GENERAL CRITERIA: General criteria are established to sustain and protect existing or attainable uses of surface waters of the state. These general criteria apply to all surface waters of the state at all times, unless a specified criterion is provided elsewhere in this part. Surface waters of the state shall be free of any water contaminant in such quantity and of such duration as may with reasonable probability injure human health, animal or plant life or property, or unreasonably interfere with the public welfare or the use of property.

A. Bottom deposits and suspended or settleable solids:

(1) Surface waters of the state shall be free of water contaminants including fine sediment particles (less than two millimeters in diameter), precipitates or organic or inorganic solids from other than natural causes that have settled to form layers on or fill the interstices of the natural or dominant substrate in quantities that damage or impair the normal growth, function or reproduction of aquatic life or significantly alter the physical or chemical properties of the bottom.

(2) Suspended or settleable solids from other than natural causes shall not be present in surface waters of the state in quantities that damage or impair the normal growth, function or reproduction of aquatic life or adversely affect other designated uses.

B. Floating solids, oil and grease: Surface waters of the state shall be free of oils, scum, grease and other floating materials resulting from other than natural causes that would cause the formation of a visible sheen or visible deposits on the bottom or shoreline, or would damage or impair the normal growth, function or reproduction of human, animal, plant or aquatic life.

C. Color: Color-producing materials resulting from other than natural causes shall not create an aesthetically undesirable condition nor shall color impair the use of the water by desirable aquatic life presently common in surface waters of the state.

D. Organoleptic quality:

(1) Flavor of fish: Water contaminants from other than natural causes shall be limited to concentrations that will not impart unpalatable flavor to fish.

(2) Odor and taste of water: Water contaminants from other than natural causes shall be limited to concentrations that will not result in offensive odor or taste arising in a surface water of the state or otherwise interfere with the reasonable use of the water.

E. Plant nutrients: Plant nutrients from other than natural causes shall not be present in concentrations that will produce undesirable aquatic life or result in a dominance of nuisance species in surface waters of the state.

F. Toxic pollutants:

(1) Except as provided in 20.6.4.16 NMAC, surface waters of the state shall be free of toxic pollutants, including but not limited to emerging contaminants and those toxic pollutants listed in 20.6.2 NMAC, from other than natural causes in amounts, duration, concentrations or combinations that affect the propagation of fish or that are toxic to humans, livestock or other animals, fish or other aquatic organisms, wildlife using aquatic environments for habitation or aquatic organisms for food, or that will or can reasonably be expected to bioaccumulate in tissues of fish, shellfish and other aquatic organisms to levels that will impair the health of aquatic

organisms or wildlife or result in unacceptable tastes, odors or health risks to human consumers of aquatic organisms.

(2) Pursuant to this section, the human health-organism only criteria shall be as set out in 20.6.4.900 NMAC. When a human health-organism only criterion is not listed in 20.6.4.900 NMAC, the following provisions shall be applied in accordance with 20.6.4.11, 20.6.4.12 and 20.6.4.14 NMAC.

(a) The human health-organism only criterion shall be the recommended human health criterion for "consumption of organisms only" published by the U.S. environmental protection agency pursuant to Section 304(a) of the federal Clean Water Act. In determining such criterion for a cancer-causing toxic pollutant, a cancer risk of 10^{-5} (one cancer per 100,000 exposed persons) shall be used.

(b) When a numeric criterion for the protection of human health for the consumption of organism only has not been published by the U.S. environmental protection agency, a quantifiable criterion may be derived from data available in the U.S. environmental protection agency's Integrated Risk Information System (IRIS) using the appropriate formula specified in *Methodology For Deriving Ambient Water Quality Criteria For The Protection Of Human Health (2000)*, EPA-822-B-00-004.

(3) Pursuant to this section, the chronic aquatic life criteria shall be as set out in 20.6.4.900 NMAC. When a chronic aquatic life criterion is not listed in 20.6.4.900 NMAC, the following provisions shall be applied in sequential order in accordance with 20.6.4.11, 20.6.4.12 and 20.6.4.14 NMAC.

(a) The chronic aquatic life criterion shall be the "freshwater criterion continuous concentration" published by the U.S. environmental protection agency pursuant to Section 304(a) of the federal Clean Water Act;

(b) If the U.S. environmental protection agency has not published a chronic aquatic life criterion, a geometric mean LC-50 value shall be calculated for the particular species, genus or group that is representative of the form of life to be preserved, using the results of toxicological studies published in scientific journals.

(i) The chronic aquatic life criterion for a toxic pollutant that does not bioaccumulate shall be ten percent of the calculated geometric mean LC-50 value; and

(ii) The chronic aquatic life criterion for a toxic pollutant that does bioaccumulate shall be: the calculated geometric mean LC-50 adjusted by a bioaccumulation factor for the particular species, genus or group representative of the form of life to be preserved, but when such bioaccumulation factor has not been published, the criterion shall be one percent of the calculated geometric mean LC-50 value.

(4) Pursuant to this section, the acute aquatic life criteria shall be as set out in 20.6.4.900 NMAC. When an acute aquatic life criterion is not listed in 20.6.4.900 NMAC, the acute aquatic life criterion shall be the "freshwater criterion maximum concentration" published by the U.S. environmental protection agency pursuant to Section 304(a) of the federal Clean Water Act.

(5) Within 90 days of the issuance of a final NPDES permit containing a numeric criterion selected or calculated pursuant to Paragraph (2), Paragraph (3) or Paragraph (4) of Subsection F of this section, the department shall petition the commission to adopt such criterion into these standards.

20.6.4.13(F) NMAC & 20.6.2.7 NMAC - Toxic Pollutants

1. *The Department proposed modify the narrative toxic pollutants standard in 20.6.4.13(F)(1) NMAC to include both CECs and the toxic pollutants listed in the Groundwater Rule at 20.6.2.7 NMAC to clarify the scope of the general criteria to better uphold the goals and objectives of the federal Clean Water Act. NMED Exhibit 2, pp. 3-4; NMED Exhibit 107, pp. 11-16; NMED Exhibit 110; NMED Exhibit 117; Tr. Vol. 2, 450:5-460:7.*
2. *LANL opposed the Department's proposed addition of "contaminants of emerging concern" and the toxic pollutants listed in 20.6.2.7 NMAC to the general criteria for toxic pollutants in 20.6.4.13(F) NMAC*

and proposed additional amendments to 20.6.4.13(F) NMAC. LANL Exhibit 5, pp. 6-10 (2020 TR LANL-00145 - 00149): Tr. Vol. 2, 500:20-503:4. To wit, LANL opposes inclusion of pollutants and contaminants not tied to the adoption of existing 304(a) criteria, or other scientifically defensible guidance . . . NMED's proposal "seeks to broaden even further without regulatory oversight, this group of unnamed chemicals . . . and further muddies the waters and creates additional regulatory uncertainty"); ***LANL Ex. 5*** *at 6-7 (Dail Direct) (explaining that given "the possibly hundreds of pharmaceuticals, detergents, and other possible endocrine disruptors (and breakdown products thereof) that fall under the CEC definition, there is no indication what entity (state or regulated community, or both) will need to perform monitoring, and for which among these contaminants"); Hrg. Tr., Vol. II, 536 (Judd) (stating there are so many CECs including thousands of PFAS that "lack toxicological data for criteria development or assessment as to whether they are toxic pollutants");* ***SJWC Ex. 2*** *at 8 (DeRose-Bamman Direct), 16-17 (objecting to reference to [CECs] because it "would allow NMED to regulate contaminants that are not routinely monitored, may not yet have regulatory standards, and may not yet have been fully studied to determine their negative impacts"); NMMA NOI at 4 (stating the "open-ended definition [of CEC], with its vaguely stated and unscientific operative phrase 'suspected to have impacts' is troublesome enough by itself. It is highly objectionable when one considers how the phrase is substantively used . . . . This provision effectively could be construed as adding a broad range of ill-defined and not fully studied contaminants to the scope of "toxic pollutants" under the regulations, and worse, could create a surface water regulatory prohibition for them."). LANL's proposed rule amendment:*

> **F. Toxic Pollutants:**
> **(1)** Except as provided in 20.6.4.16 NMAC, surface waters of the state shall be free of toxic pollutants from other than natural causes in amounts, concentrations, duration, or combinations that affect the propagation of fish or that are toxic to humans, livestock or other animals, fish or other aquatic organisms, wildlife using aquatic environments for habitation or aquatic organisms for food, or that will or can reasonably be expected to bioaccumulate in tissues of fish, shellfish and other aquatic organisms to levels that will impair the health of aquatic organisms or wildlife or result in unacceptable tastes, odors or health risks to human consumers of aquatic organisms.

3. *The Department concurred with LANL's addition of the word "duration" to 20.6.4.13(F)(1) NMAC but opposed all other proposed amendments by LANL. NMED Exhibit 107, pp. 13-14; NMED Exhibit 110.*

4. *SJWC opposed the Department's proposed amendments to 20.6.4.13(F) NMAC on the grounds that the language improperly expands the Department's regulatory scope. SJWC's SOR at 32-39, 44-49; SJWC [Exhibit] 2, pp. 16-18 (2020 TR SJWC-0019 - 0021); Tr. Vol. 2, 581:19-584:8. To wit, with respect to NMED's proposal to refer to CECs in the regulation for toxic pollutants at 20.6.4.13(F)(1) NMAC, SJWC urges the WQCC to reject the proposal because it would allow NNMED to regulate contaminants that are not routinely monitored, may not yet have regulatory standards, and may not yet have been fully studied to determine their negative impacts. The toxic pollutants listed in the Groundwater Rule were developed under a different definition of "toxic pollutant" than the definition found in the SWQS. In the SWQS, the definition of "toxic pollutant" mandates that the pollutant "will cause" death or other injury. By contrast, the Groundwater Rule requires only that pollutants "have potential for causing" injury. NMED failed to provide any evidence that the toxic pollutants in the Groundwater Rule also meet the definition of a toxic pollutant in the SWQS. NMED admitted it did not evaluate the history of the definition of toxic pollutants in the Groundwater Rule, nor does it know what standards or criteria were applied to place toxic pollutants on the Groundwater Rule's list when it was adopted. Therefore, there is no credible scientific evidence supporting NMED's proposal. Moreover, a review of the Groundwater Rule in toto shows that the list of toxic pollutants in that Rule applies only to groundwater. The fact the regulation (20.6.2 NMAC) title includes "surface water" does not mean that the list of toxic pollutants automatically applies to surface water, as NMED asserts. NMED provided no evidence indicating that the Groundwater Rule list of toxic pollutants ever has been applied to surface water. Finally, NMED's proposal will create confusion because some of the Groundwater toxic pollutants already have numeric criteria assigned to them in the SWQS, and some of those criteria may conflict with the criteria assigned in the Groundwater Rule. NMED indicated a "line by line comparison"*

would be required to identify any conflicts between the Groundwater Rule and the SWQS. A toxic pollutant under the Groundwater Rule already is regulated as a toxic pollutant under the SWQS if it meets the definition of "toxic pollutant" found in the SWQS at 20.6.4.7(T)(2) NMAC. The current regulatory framework protects the waters of the State, whether they are surface or groundwater. The WQCC should reject NMED's proposal as unnecessary, confusing, and not supported by credible scientific or other evidence.

5. *The Department denied that its proposed amendments to 20.6.4.13(F) NMAC expand regulatory scope in any way. Tr. Vol. 2, 454:18-455:5.*
6. *BDD opposed the Department's proposed amendments to 20.6.4.13(F) NMAC on the grounds that the proposed amendment includes CECs in the definition of toxic pollutants and conflates contaminants of emerging concern with toxic pollutants. BDD Exhibit 1; Tr. Vol. 2, 647:12-649:16. To wit, the BDD supports NMED's definition of CECs in the amended petition at 20.6.4.7.C(7) but opposes NMED's proposed amendment to 20.6.4.13.F that would include CECs within the general criteria for toxic pollutants.*
7. *The Department denied that its proposed amendments to 20.6.4.13(F) NMAC conflate the toxic pollutants listed in 20.6.2.7 NMAC with contaminants of emerging concern, as the Department did not propose to add contaminants of emerging concern to the definition of toxic pollutants. Tr. Vol. 2, 456:9-457:10. However, NMED did acknowledge that the amendment may create ambiguity, and that "[t]o avoid the mistaken assumption that all CECs are toxic pollutants, the Commission may wish to reference CECs in the general criterion for toxic pollutants as "those CECs meeting the definition of toxic pollutants." Id.*
8. *NMMA contends the Department's proposed definition of "contaminants of emerging concern," as set out in 20.6.4.7(C)(7) NMAC, and its proposed use of that definition in 20.6.4.13(F)(1) NMAC, is vague and rife with uncertainty for the regulators and regulated community and should be rejected by the*

Commission. As set forth in NMED Exhibit 110, the Department proposes to define, "contaminants of emerging concern," to essentially mean "generally chemical compounds that, although suspected to potentially have impacts, do not have regulatory standards, are not routinely monitored for, and the concentrations to which negative impacts are observed have not been fully studied." This unscientific definition by its own terms is without standard, largely turns on mere speculation, fails to provide meaningful guideposts for compliance, and is highly problematic given how it is used in the Department's proposed amendments to 20.6.4.13(F)(1) NMAC. That provision, as proposed, would require in relevant part that "surface waters shall be free of toxic pollutants, including but not limited to contaminants of emerging concern . . .." (Emphasis added.)

9. *CCW-GRIP argued that the Department's proposed reference to the list of toxic pollutants from 20.6.2.7 NMAC would be more appropriately placed in the definition of "toxic pollutant" in 20.6.4.7(T) NMAC. CCW-GRIP Exhibit 5; Tr. Vol. 2, 620:4-620:14.*
10. *The Department concluded that CCW-GRIP's proposal to refer to the list of toxic pollutants in 20.6.2.7 NMAC in 20.6.4.7(T) NMAC would have no regulatory difference to the Department's proposal. Tr. Vol. 2, 457:14-457:25.*
11. *Based on the weight of the evidence, the Commission finds that the Department's proposal to amend the language in 20.4.6.13(F) NMAC by adding "contaminants of emerging concern" (which the Department agreed to rename "emerging contaminants" in NMED Exhibit 141) and the toxic pollutants listed in 20.6.2.7 NMAC is well-taken and agrees with the Department's amendments to 20.6.4.13(F) NMAC as proposed;*

    OR,

    The Commission finds that the proposed amendments to 20.6.4.13(F)(1) NMAC offered by NMED, read with the existing definition of "toxic pollutant" under 20.6.4.7(T)(2) NMAC and the proposed definition of CECs under 20.6.4.7(C)(7) NMAC, fail to provide constitutionally adequate notice of compounds that

trigger the label toxic pollutants before subjecting dischargers to enforcement or penalties for an enforcement violation under Sections 74-6-10(A), -10.1(B), and -10.2(A)(1) of the New Mexico Water Quality Act, as required under Bokum Res. Corp. v. New Mexico Water Quality Control Comm'n, 1979-NMSC-090, ¶ 17, 93 N.M. 546, 550 , 603 P.2d 285, 289; Kerr-McGee Nuclear Corp. v New Mexico Water Quality Control Comm'n, 1982-NMCA-015, ¶ 13, 98 N.M. 240, 244, 647 P.2d 873, 877. The Commission therefore rejects NMED's proposed changes to 20.6.4.13(F)(1) NMAC. Because the proposal to include CEC in the general criteria for Toxic Pollutants is rejected, the Commission finds it is unnecessary to define CECs in the Standards. The Commission therefore rejects NMED's proposal to define CEC under 20.6.4.7(C)(7) NMAC. The Commission also finds that including general reference to PFAS in the general criteria for toxic pollutants is not supported by credible science and will create uncertainty for regulators and the regulated community. The proposal is therefore rejected.

G. Radioactivity: The radioactivity of surface waters of the state shall be maintained at the lowest practical level and shall in no case exceed the criteria set forth in the New Mexico Radiation Protection Regulations, 20.3.1 and 20.3.4 NMAC.

H. Pathogens: Surface waters of the state shall be free of pathogens from other than natural causes in sufficient quantity to impair public health or the designated, existing or attainable uses of a surface water of the state.

I. Temperature: Maximum temperatures for surface waters of the state have been specified in 20.6.4.97 through 20.6.4.900 NMAC. However, the introduction of heat by other than natural causes shall not increase the temperature, as measured from above the point of introduction, by more than 2.7°C (5°F) in a stream, or more than 1.7°C (3°F) in a lake or reservoir. In no case will the introduction of heat be permitted when the maximum temperature specified for the reach would thereby be exceeded. These temperature criteria shall not apply to impoundments constructed offstream for the purpose of heat disposal. High water temperatures caused by unusually high ambient air temperatures are not violations of these criteria.

J. Turbidity: Turbidity attributable to other than natural causes shall not reduce light transmission to the point that the normal growth, function or reproduction of aquatic life is impaired or that will cause substantial visible contrast with the natural appearance of the water. Activities or discharges shall not cause turbidity to increase more than 10 NTU over background turbidity when the background turbidity, measured at a point immediately upstream of the activity, is 50 NTU or less, nor to increase more than twenty percent when the background turbidity is more than 50 NTU. However, limited-duration turbidity increases caused by dredging, construction or other similar activities may be allowed provided all practicable turbidity control techniques have been applied and all appropriate permits, certifications and approvals have been obtained.

K. Total dissolved solids (TDS): TDS attributable to other than natural causes shall not damage or impair the normal growth, function or reproduction of animal, plant or aquatic life. TDS shall be measured by either the "calculation method" (sum of constituents) or the filterable residue method. Approved test procedures for these determinations are set forth in 20.6.4.14 NMAC.

L. Dissolved gases: Surface waters of the state shall be free of nitrogen and other dissolved gases at levels above one hundred ten percent saturation when this supersaturation is attributable to municipal, industrial or other discharges.

M. Biological integrity: Surface waters of the state shall support and maintain a balanced and integrated community of aquatic organisms with species composition, diversity and functional organization comparable to those of natural or minimally impacted water bodies of a similar type and region.
[20.6.4.13 NMAC - Rp 20 NMAC 6.1.1105, 10/12/2000; A, 10/11/2002; Rn, 20.6.4.12 NMAC, 5/23/2005; A, 5/23/2005; A, 12/1/2010; A, XX/XX/XXXX]

20.6.4.14 SAMPLING AND ANALYSIS:

A. Sampling and analytical techniques shall conform with methods described in the following references unless otherwise specified by the commission pursuant to a petition to amend these standards:

(1) "*Guidelines Establishing Test Procedures For The Analysis Of Pollutants Under The Clean Water Act*," 40 CFR Part 136 or any test procedure approved or accepted by EPA using procedures provided in 40 CFR Parts 136.3(d), 136.4, and 136.5;

(2) *Standard Methods For The Examination Of Water And Wastewater*, latest edition, American public health association;

(3) *Methods For Chemical Analysis Of Water And Waste*, and other methods published by EPA office of research and development or office of water;

(4) *Techniques Of Water Resource Investigations Of The U.S. Geological Survey*;

(5) *Annual Book Of ASTM Standards*: volumes 11.01 and 11.02, water (I) and (II), latest edition, ASTM international;

(6) *Federal Register*, latest methods published for monitoring pursuant to Resource Conservation and Recovery Act regulations;

(7) *National Handbook Of Recommended Methods For Water-Data Acquisition*, latest edition, prepared cooperatively by agencies of the United States government under the sponsorship of the U.S. geological survey; or

(8) *Federal Register*, latest methods published for monitoring pursuant to the Safe Drinking Water Act regulations.

20.6.4.14(A) NMAC - Methods for Compliance

1. LANL proposed an amendment to 20.6.4.14(A) NMAC[14] to limit sampling and analytical methods to only those methods specifically approved by EPA in 40 C.F.R. Part 136, which related to compliance determinations for federal permits and Clean Water Act Section 401 state certifications. LANL Exhibit 7, pp. 5-10; Tr. Vol. LANL's proposed amendment:

> **A.** 40 CFR Part 136 approved methods shall be used to determine compliance with these standards and in Section 401 certifications under the federal Clean Water Act. In cases of pollutants or pollutant parameters[15] for which there are no approved methods under 40 CFR Part 136, analyses shall be conducted according to a test procedure specified in the applicable permit or 401 certification. Where 40 CFR Part 136 approved methods are not required, sampling and analytical techniques shall conform with methods described in the following references unless otherwise specified by the commission pursuant to a petition to amend these standards:
>
> *(1)* "guidelines establishing test procedures for the analysis of pollutants under the Clean Water Act," 40 CFR Part 136 or any test procedure approved or accepted by EPA using procedures provided in 40 CFR Parts 136.3(d), 136.4, and 136.5;

[14] A continuation of LANL's argument above in 20.6.4.12.E
[15] LANL's Second Notice of Errata filed December 10, 2021, at 3.

(2) standard methods for the examination of water and wastewater, latest edition, American public health association;

(3) methods for chemical analysis of water and waste, and other methods published by EPA office of research and development or office of water;

(4) techniques of water resource investigations of the U.S. geological survey;

(5) annual book of ASTM standards: volumes 11.01 and 11.02, water (I) and (II), latest edition, ASTM international;

(6) federal register, latest methods published for monitoring pursuant to Resource Conservation and Recovery Act regulations;

(7) national handbook of recommended methods for water-data acquisition, latest edition, prepared cooperatively by agencies of the United States government under the sponsorship of the U.S. geological survey; or

(8) federal register, latest methods published for monitoring pursuant to the Safe Drinking Water Act regulations.

NOTE: what follows is a partial list of LANL's citations to the evidentiary record in support of the proposed rule changed. See Notice of Compilation of Evidence filed January 5, 2022. Dr. Toll supported LANL's proposed amendment to 20.6.4.14(A) in LANL's NOI, stating that "each NPDES permit includes requirements to monitor compliance with effluent limitations "[a]ccording to test procedures approved under Part 136 for the analyses of pollutants having approved methods under that part, and according to a test procedure specified in the permit for pollutants with no approved methods." LANL Exhibit 7 (Toll Direct) at 6:10-14. Dr. Toll referenced 40 CFR 122.44(i)(l)(iv) and LANL Exhibit 52 in further support and later explained that the basis for the recommended change to 20.6.4.14 NMAC was twofold: "to ensure consistency with the federal CWA. A rigorous, inclusive process is used to approve the 40 CFR Part 136 methods for use in compliance determinations and 401 certifications. Methods that do not survive that rigorous process are not appropriate for these uses." LANL Exhibit 7 (Toll Direct) at 10:4-11.

In written rebuttal testimony, NMED, AB, BDD, and CCW/GRIP opposed LANL's proposed amendment. Those comments are summarized here, generally all include reference to the flexibility of permit writers to use other appropriate methods and provide the basis for LANL's final proposed language for 20.6.4.14(A) NMAC, which responds to these comments.

NMED's Ms. Lemon specifically pointed out that permit writers can specify an analytical method when there is no approved Part 136 method.

According to EPA's Permit Writer's Manual, without analytical methods for a pollutant or pollutant parameter, a permit writer can (and should) specify the analytical method to be used to evaluate compliance with the permit (NMED Exhibit 136). Federal regulations also allow for approval of alternative test methods (NMED Exhibit 111).

NMED Exhibit 106 (Lemon Rebuttal) at 7:21-8:1. Similarly, AB provided examples of LANL permits that included non-Part 136 methods.

States should have the authority and flexibility to select reliable sampling and analytical methods in order to ensure compliance with their water quality standards. . . It is important to point out that EPA's current and draft LANL Wastewater and Stormwater Permits require LANL to monitor for PCBs using EPA Method 1668C. See EPA Draft LANL Wastewater Permit [Ex. 13] and EPA Draft LANL Stormwater Permit [Ex. 15]. In EPA's view, therefore, Method 1668C is appropriate and lawful for use for permit compliance and enforcement even though it is not an approved Part 136 Method.

AB Exhibit 11 (Conn Rebuttal) at 5. AB witness, Dr. DeWitt, also noted the absence of Part 136 methods for sampling PFAS, the availability of Method 537.1 (acknowledging the need to modify Method 537.1 for surface water) and concluding that LANL's proposal would not be protective. See AB Exhibit 17 (DeWitt Rebuttal) at 6-7. BDD expressed concern that LANL's proposal would be a "rollback" of current requirements. BDD Rebuttal NOI at 6-8.

2. NMED contends the Department did not propose any amendments to 20.6.4.14 NMAC and opposes LANL's proposal to amend 20.6.4.14(A) NMAC, as EPA has other approved analytical methods that are not contained in 40 C.F.R. Part 136. NMED Exhibit 106, pp. 7-8; Tr. Vol 3, 716:20-720:7. LANL did not provide any evidence for consideration as to why 20.6.4.14(A) NMAC as currently written is problematic or overly burdensome. NMED Exhibit 106, p. 8; Tr. Vol. 3, 717:16-717:25. There is no evidence

in the record that LANL conducted any outreach activities or published any additional notice for this rulemaking proceeding to supplement that issued by NMED. Therefore, the public could not have reasonably anticipated the adoption of the amendments proposed by LANL to 20.6.4.14(A) NMAC for analytical methods. Even if the public could have reasonably anticipated adoption of the amendments proposed by LANL to 20.6.4.14(A) NMAC, the proposed amendments are not sufficiently protective of human health as they limit methods the Department may use to evaluate criteria. NMED Exhibit 106, pp. 7-8; Tr. Vol. 3, 717:16-717:25.

3. Amigos Bravos contends that LANL's proposal to limit sampling methods at 20.6.4.14.A NMAC for purposes of compliance with federal permits to Part 136 Methods, LANL Ex. 67 at 13, would leave New Mexico waters vulnerable to discharges of known water contaminants, is inconsistent with the primary purpose of the Water Quality Act, and should be rejected. To wit, the Commission's current regulations allow NMED to select from a range of authoritative sources the best sampling methods for particular contaminants, including Part 136 Methods. See 20.6.4.14.A NMAC. LANL proposes to restrict acceptable sampling methods to Part 136 Methods. LANL did not put on any evidence that the other methods authorized in the Commission's regulations are somehow inadequate, inaccurate, or not based on good science. Instead, LANL made a legal argument, through a non-lawyer, Mr. Toll, that EPA regulations require states to use Part 136 Methods for compliance with federal permits. See LANL Ex. 7 at 9-10. Mr. Toll's legal analysis is wrong, and his own exhibits demonstrate that states have the authority under the Clean Water Act to select non-Part 136 sampling methods if there is no Part 136 Method that applies. If the Commission adopts LANL's proposal to limit testing to Part 136 Methods, NMED will not be able to ensure that all the Commission's standards for PCBs are met or require monitoring for PFAS. This is because the Part 136 Method to test for PCB's, EPA Method 608, is not sufficiently sensitive to detect PCBs at certain of the Commission's numeric water quality standards, but a non-Part 136 Method that is approved by EPA's Office of Water, EPA Method 1668C, the congener method, is sufficiently sensitive, and because

there is no Part 136 Method to test for PFAS, but there are methods to test for PFAS approved by EPA including EPA Method 537.1, approved by EPA's Office of Research and Development. This result would be contrary to the requirements of the Clean Water Act and implementing regulations that require state certifications of federal permits to include monitoring requirements that ensure that discharges meet state water quality standards and contrary to the Water Quality Act's fundamental goal to prevent and abate water pollution.[16]

4. CCW-GRIP contends that LANL's proposal to limit monitoring requirements would severely limit the authority of the Department to require monitoring of certain toxic pollutants. In particular, the proposal would limit regulatory authority over polychlorinated biphenyls (PCBs) and per- and polyfluoroalkyl substances (PFAS).

5. Based on the reasoning above, the Commission declines to adopt the amendments to 20.6.4.14(A) NMAC as proposed by LANL;

OR

The Commission finds that LANL's proposal to amend 20.6.4.12(E) NMAC and 20.6.4.14(A) NMAC is the most logical proposal because it codifies that 40 C.F.R. Part 136 methods are approved for 401 certifications and NPDES compliance determinations, and methods that are not approved under 40 C.F.R. Part 136 are not appropriate for that use. Accordingly, the Commission adopts LANL's proposed amendments to 20.6.4.12(E) NMAC and 20.6.4.14(A) as reflected in the Proposed Final Rule submitted by LANL.

B. Bacteriological Surveys: The monthly geometric mean shall be used in assessing attainment of criteria when a minimum of five samples is collected in a 30-day period.

C. Sampling Procedures:

(1) Streams: Stream monitoring stations below discharges shall be located a sufficient distance downstream to ensure adequate vertical and lateral mixing.

(2) Lakes: Sampling stations in lakes shall be located at least 250 feet from a discharge.

(3) Lakes: Except for the restriction specified in Paragraph (2) of this subsection, lake sampling stations shall be located at any site where the attainment of a water quality criterion is to be assessed. Water quality measurements taken at intervals in the entire water column at a sampling station shall be averaged for

[16] Per LANL's Exception No. 10, "LANL witness Dr. Toll testified that Amigos Bravos witness Conn's argument is normative and not based on the authority that states have. HRG. Tr., Vol. III, 772:17-19 (Toll)."

the epilimnion, or in the absence of an epilimnion, for the upper one-third of the water column of the lake to determine attainment of criteria, except that attainment of criteria for toxic pollutants shall be assessed during periods of complete vertical mixing, e.g., during spring or fall turnover, or by taking depth-integrated composite samples of the water column.

D. Acute toxicity of effluent to aquatic life shall be determined using the procedures specified in U.S. environmental protection agency "*Methods For Measuring The Acute Toxicity Of Effluents And Receiving Waters To Freshwater And Marine Organisms*" (5th Ed., 2002, EPA 821-R-02-012), or latest edition thereof if adopted by EPA at 40 CFR Part 136, which is incorporated herein by reference. Acute toxicities of substances shall be determined using at least two species tested in whole effluent and a series of effluent dilutions. Acute toxicity due to discharges shall not occur within the wastewater mixing zone in any surface water of the state with an existing or designated aquatic life use.

E. Chronic toxicity of effluent or ambient surface waters of the state to aquatic life shall be determined using the procedures specified in U.S. environmental protection agency "*Short-Term Methods For Estimating The Chronic Toxicity Of Effluents And Receiving Waters To Freshwater Organisms*" (4th Ed., 2002, EPA 821-R-02-013), or latest edition thereof if adopted by EPA at 40 CFR Part 136, which is incorporated herein by reference. Chronic toxicities of substances shall be determined using at least two species tested in ambient surface water or whole effluent and a series of effluent dilutions. Chronic toxicity due to discharges shall not occur at the critical low flow, or any flow greater than the critical low flow, in any surface water of the state with an existing or designated aquatic life use more than once every three years.

[20.6.4.14 NMAC - Rp 20 NMAC 6.1.1106, 10/12/2000; Rn, 20.6.4.13 NMAC, 5/23/2005 & A, 5/23/2005; A, 12/1/2010]

20.6.4.14(F) NMAC - Monitoring

1. *Amigos Bravos proposed a new Subsection F to 20.6.4.14 NMAC (in blue) because the commission should give NMED express authority to require dischargers to monitor for CECs:*

F. CEC monitoring: The department may require monitoring, analysis, and reporting of a contaminant of emerging concern as a condition of a federal permit under Section 401 of the federal Clean Water Act.

AB Exhibit 1, p. 2; AB Exhibit 17, p. 2; Tr. Vol. 3, 843:10, 844:25. Dr. DeWitt testified that NMED should have the authority to require dischargers to establish a baseline for and monitor CECs in federal permits. By definition, CECs are contaminants that may cause significant harm to human or ecological health, even at low concentrations, and require further study. Therefore, NMED should have the authority to study these compounds and add to the science community's body of knowledge by requiring dischargers to establish baseline and monitor and assess. Provisions in the Clean Water Act governing state certification of federal permits give states broad authority to impose conditions in EPA-issued permits, and specifically authorizes a certifying state "to review the manner in which the facility or activity [that is discharging] shall be operated or conducted for the purposes of assuring that applicable effluent limitations or other limitations or other applicable water quality requirements will

not be violated." 33 USC § 1341(a)(4) (emphasis added). See Amigos Bravos' Stmnt. of Reasons, FOF ¶¶ 72-86.

2. *CCW-GRIP propose a new Subsection F to 20.6.4.14 NMAC to give NMED express authority to require dischargers to monitor for emerging contaminants:*

> "F. An emerging contaminant shall be monitored if it may be present in effluent or receiving waters.[17]"

3. *The Department did not propose any amendments to 20.6.4.14 NMAC and noted that the Department already has authority to require sampling and monitoring of contaminants in permits but has no real objection to inclusion of Amigos Bravos' proposed language. NMED Exhibit 106, pp. 19-21; Tr. Vol. 3, 720:14-722:24. The Department witness agreed with CCW-GRIP's proposed addition. 2 Tr. P. 474, lines 12-18.*

4. *LANL opposed Amigos Bravos' proposal to add 20.6.4.14(F) NMAC. LANL Exhibit 63, pp. 15-18. LANL witness Toll explained that recent EPA guidance from the EPA Assistant Administrator for the Office of Water to EPA Regional Administrators provides a basis for evaluating whether an alternative test procedure ("ATP") is suitable for including sampling and monitoring of CECs as a condition in a federal permit under Section 401 of the CWA. See id. at 17. ATPs for CECs generally will not satisfy the presence threshold criterion specified in recent EPA guidance. Even if a particular ATP meets the presence threshold criterion, it will not satisfy the reliability criteria at this time. See id. at 17-18; see also LANL Ex. 85 (EPA Memo re: Recommendations from the PFAS NPDES Regional Coordinators Committee).*

5. *Based on the weight of credible evidence, the Commission adopts a definition of contaminants of emerging concern and authorizes monitoring of CECs by adopting Amigos Bravos' amendment to 20.6.4.14(F);*

[17] CCW-GRIP Exception, No 7.

OR,

Based on the weight of the evidence, the Commission adopts a definition of emerging contaminants and clarifies the Department's authority to require monitoring of emerging contaminants by adopting CCW-GRIP's proposed amendment to section 20.6.4.14(F) NMAC,

OR,

Given the weight of the evidence, the Commission declines to adopt the amendment to 20.6.4.14(F) NMAC proposed by Amigos Bravos and CCW-GRIP. The Commission finds that Amigos Bravos' proposed Section 14(F) and NMED's tacit approval of Amigos Bravos' proposal is inappropriate. In addition, NMSA 1978, Section 74-6-9(B) authorizes constituent agencies to "develop facts and make studies and investigations." The Commission notes that the NMED Drinking Water Bureau (https://www.env.nm.gov/pfas/data/) and NMED Oversight Bureau are examples of constituent agencies currently undertaking such studies, in particular of PFAS. NMSA 1978, Section 74-6-9(B) does not, however, authorize the Commission to task regulated entities to perform those functions.

20.6.4.15 USE ATTAINABILITY ANALYSIS:

A. Regulatory requirements for a use attainability analysis. [~~A use attainability analysis is a scientific study conducted for the purpose of assessing the factors affecting the attainment of a use.~~] Whenever a use attainability analysis is conducted, it shall be subject to the requirements and limitations set forth in 40 CFR Part 131, Water Quality Standards; specifically, Subsections 131.3(g), 131.10(g), 131.10(h) and 131.10(j) shall be applicable. In accordance with 40 CFR 131.10(i), and 20.6.4.10 NMAC, the amendment of a designated use, based on an existing use with more stringent criteria, does not require a use attainability analysis.

(1) The commission may remove a designated use, that is not an existing use, specified in Section 101(a)(2) of the federal Clean Water Act or adopt subcategories of a use in Section 101(a)(2) of the federal Clean Water Act[~~-use~~] requiring less stringent criteria only if a use attainability analysis demonstrates that attaining the use is not feasible because of a factor listed in 40 CFR 131.10(g). Uses in Section 101(a)(2) of the federal Clean Water Act[~~-uses~~], which refer to the protection and propagation of fish, shellfish and wildlife and recreation in and on the water, are also specified in Subsection B of 20.6.4.6 NMAC.

(2) A designated use cannot be removed if it is an existing use unless a use requiring more stringent criteria is designated.

B. Methods for developing a use attainability analysis. A use attainability analysis shall assess the physical, chemical, biological, economic or other factors affecting the attainment of a use. The analysis shall rely on scientifically defensible methods such as the methods described in the following documents:

(1) *Technical Support Manual: Waterbody Surveys And Assessments For Conducting Use Attainability Analyses*, volume I (November 1983) and volume III (November 1984) or latest editions, United States environmental protection agency, office of water, regulations and standards, Washington, D.C., for the evaluation of aquatic life or wildlife uses;

(2) the department's *Hydrology Protocol*, latest edition, approved by the commission, for identifying ephemeral, [~~and~~] intermittent, and perennial waters; or

(3) *Interim Economic Guidance For Water Quality Standards - Workbook*, March 1995, United States environmental protection agency, office of water, Washington, D.C. for evaluating economic impacts.

C. Determining the highest attainable use. If the use attainability analysis determines that the designated use is not attainable based on one of the factors in 40 CFR 131.10(g), the use attainability analysis shall demonstrate the support for removing the designated use and then determine the highest attainable use, as defined in 40 CFR 131.3(m), for the protection and propagation of fish, shellfish and wildlife and recreation in and on the water based on methods described in Subsection B of this section.

D. Process to amend a designated use through a use attainability analysis.

(1) The process for developing a use attainability analysis and petitioning the commission for removing a designated use and establishing the highest attainable use shall be done in accordance with the State's current *Water Quality Management Plan/Continuing Planning Process*.

[C.](2) If the findings of a use attainability analysis, conducted by the department, [based on] in accordance with the department's *Hydrology Protocol* (latest edition)[, approved by the commission,] demonstrates [to the satisfaction of the department]that federal Clean Water Act Section 101(a)(2) uses, that are not existing uses, are not feasible in an ephemeral water body due to the factor in 40 CFR 131.10(g)(2), the department may consider proceeding with the expedited use attainability analysis process in accordance with the State's current *Water Quality Management Plan/Continuing Planning Process*. The following elements must be met for the expedited use attainability analysis process to be authorized and implemented:

(a) The department is the primary investigator of the use attainability analysis;

(b) The use attainability analysis determined, through the application of the *Hydrology Protocol*, that the water being investigated is ephemeral and has no effluent discharges of sufficient volume that could compensate for the low-flow;

(c) The use attainability analysis determined that the criteria associated with the existing uses of the water being investigated are not more stringent than those in 20.6.4.97 NMAC;

(d) The designated uses in 20.6.4.97 NMAC have been determined to be the highest attainable uses for the water being analyzed;

(e) The department [shall]posted the use attainability analysis on its water quality standards website and [notify] notified its interested parties list of a 30-day public comment period.;

(f) [After reviewing]The department reviewed and responded to any comments received during the 30-day public comment period,; and

(g) The department [may proceed by submitting]submitted the use attainability analysis and response to comments to region 6 EPA for technical approval.

If EPA approves the revision under section 303(c) of the Clean Water Act [technical approval is granted], the water shall be subject to 20.6.4.97 NMAC for federal Clean Water Act purposes. The use attainability analysis, the technical support document,[approval,] and the applicability of 20.6.4.97 NMAC to the water shall be posted on the department's water quality standards website. The department shall periodically petition the commission to list ephemeral waters under Subsection C of 20.6.4.97 NMAC and to incorporate changes to classified segments as appropriate.

[D.]E. Use attainability analysis conducted by an entity other than the department. Any person may submit notice to the department stating their intent to conduct a use attainability analysis.

(1) The proponent shall provide such notice along with [develop]a work plan supporting [to conduct]the development of a use attainability analysis[, and shall submit the work plan] to the department and region 6 EPA for review and comment.

(2) Upon approval of the work plan by the department, the proponent shall conduct the use attainability analysis in accordance with the applicable portions of Subsections A through D of this Section and implement public noticing in accordance with the approved work plan.

(3) Work plan elements. The work plan shall identify, at a minimum:

(a) the waterbody of concern and the reasoning for conducting a use attainability analysis;

(b) the [scope]source and validity of data [currently available and the scope of data to be gathered]to be used to demonstrate whether the current designated use is not attainable;[,]

(c) the factors in 40 CFR 131.10(g) affecting [use]the attainment of that use;

(d) [that will be analyzed] a description of the data being proposed to be used to demonstrate the highest attainable use;

(e) [and]the provisions for consultation with appropriate state and federal agencies;

(f) a description of how stakeholders and potentially affected tribes will be identified and engaged;

(g) a description of the public notice mechanisms to be employed; and [~~consultation with appropriate state and federal agencies~~]

(h) the expected timelines outlining the administrative actions to be taken for a rulemaking petition, pending the outcome of the use attainability analysis.

(4) [~~Upon approval of the work plan by the department, the proponent shall conduct the use attainability analysis in accordance with the approved work plan. The cost of such analysis shall be the responsibility of the proponent.~~] Upon completion of the use attainability analysis, the proponent shall submit the data, findings and conclusions to the department, and provide public notice of the use attainability analysis in accordance with the approved work plan.

(5) Pending the conclusions of the use attainability analysis and as described in the approved work plan, [~~T~~]the department or the proponent may petition the commission to modify the designated use [~~if the conclusions of the analysis support such action~~]. The cost of such use attainability analysis shall be the responsibility of the proponent. Subsequent costs associated with the administrative rulemaking process shall be the responsibility of the petitioner.

[20.6.4.15 NMAC - Rp 20 NMAC 6.1.1107, 10/12/2000; Rn, 20.6.4.14 NMAC, 5/23/2005; A, 5/23/2005; A, 7/17/2005; A, 12/1/2010; A, XX/XX/XXXX]

20.6.4.15 NMAC - Use Attainability Analysis (UAA)

1. *The Department proposed to amend language in 20.6.4.15 NMAC to ensure that the state regulations, at a minimum, meet the federal regulations for amending a designated use to a use with less stringent criteria. The Department proposed several amendments with the goal of ensuring effective implementation of the UAA process. A related amendment to 20.6.4.97 NMAC was also proposed, amending the reference in that subsection to align with the proposed amendments to 20.6.4.15 NMAC. NMED Exhibit 4, pp. 12-17; NMED Exhibit 9; NMED Exhibit 109, pp. 25-27; NMED Exhibit 110; Tr. Vol. 3, 946:6-953:1.*
2. *SJWC initially had objections to these proposed amendments, but eventually withdrew them in response to the Department's rebuttal testimony. Tr. Vol. 3, 947:16-948:15.*
3. *NMMA submitted non-technical comment on the Department's proposed amendments, which were addressed by the Department. NMMA NOI, pp. 6-7; NMED Exhibit 109, pp. 25-27; Tr. Vol. 3, 949:18-951:12.*
4. *LANL objected to the Department's proposed amendments based on the use of the term "stringency" and the allegation that these amendments would provide the Department more discretion. LANL Exhibit 3, p. 32 (2020 TR LANL-00092); LANL Exhibit 6, pp. 10-12 (2020 TR LANL-00175 - 00177); LANL*

Exhibit 59, pp. 20-21 (2020 TR LANL-01135 - 01136); LANL Exhibit 62, pp. 10-13 (TR LANL-01196-01199); Tr. Vol. 3, 1016:3-25; Tr. Vol 4, 1100:3-1113:6. LANL contends, "[i]n its final proposal, NMED proposes to move the UAA definition to 20.6.4.7(U)(2) NMAC with all other definitions, change section headings to better reflect the content of each section, retain new section C, and detail the UAA processes retaining a distinction between a Department-conducted UAA and one conducted by another entity. LANL proposed additional amendments to section A, supported the majority of NMED's proposed revisions to sections B through D, and recommended inclusions of a review timeline in E. See ***LANL Ex. 57*** *(Proposed Changes to 20.6.4 NMAC). LANL's proposed amendments to 20.6.4.15(A) and (D) NMAC are shown below and presented in LANL's Proposed Final Rule:*

20.6.4.15 USE ATTAINABILITY ANALYSIS:

A. Regulatory Requirements for a use attainability analysis. ~~A use attainability analysis is a scientific study conducted for the purpose of assessing the factors affecting the attainment of a use. Whenever a use attainability analysis is conducted, it shall be subject to the requirements and limitations set forth in 40 CFR Part 131, Water Quality Standards; specifically, Subsections 131.3(g), 131.10(g), 131.10(h) and 131.10(j) shall be applicable.~~ In accordance with 40 CFR 131.10, and 20.6.4.10 NMAC, the amendment of a designated use to a different use that requires more stringent water quality criteria may be supported by a use attainability analysis, but, does not necessarily require a use attainability analysis. A use attainability analysis must be conducted when designated uses do not include uses specified in Section 101(a)(2) of the federal Clean Water Act or when designating sub-categories of these uses require less restrictive criteria than previously applicable. When removing designated uses that are not Section 101(a)(2) uses, a use attainability analysis is not required.

D. Use attainability analysis conducted by an entity other than the department. Any person may submit notice to the department stating the intent to conduct a use attainability analysis.

(1) The proponent shall provide such notice along with ~~develop~~ a work plan supporting ~~to conduct~~ the development of a use attainability analysis ~~and shall submit the work plan~~ to the department and region 6 EPA for review and comment. The department will review and approve work plans, or provide written basis for non-approval, within thirty days of submittal or, in the case of a previously non-approved work plan, re-submittal by a proponent.

5. *The Department contends it provided substantial evidence in response to the objections of LANL. NMED Exhibit 109, pp. 25-27; NMED Exhibit 110; Tr. Vol. 3, 946:6-953:1.*

6. *Based on the weight of the evidence, the Commission finds the Department's proposal to amend the language pertaining to reviewing and amending standards at 20.6.4.15 NMAC is well-taken and agrees with the Department's amendments to 20.6.4.15 NMAC as proposed;*

   OR,

   The Commission finds that LANL's proposed revisions to 20.6.4.15(A) NMAC are well taken and supported by the weight of the evidence. The Commission hereby adopts such changes as reflected in the Proposed Final Rule submitted by LANL. The Commission finds that LANL's proposal, including specifically the proposed last two sentences, would include all foundational requirements related to use attainability analyses in section A, providing greater clarity and support for the remaining sections of 20.6.4.15 NMAC. The Commission finds that LANL's proposed inclusion of "necessarily" comports more closely with EPA's language in 40 C.F.R. § 131.10(a) which states that when adopting new or revised designated uses other than the uses specified in CWA section 101(a)(2) or removing designated uses "a use attainability analysis may be used to satisfy th[e] requirement" (emphasis added) for documentation supporting the State's action. Lastly, the Commission finds that it is appropriate to have different processes for a UAA conducted by NMED versus one conducted by another entity. However, without a work plan review timeline for a non-Department UAA, NMED could effectively veto the UAA process by inaction. The Commission finds that LANL's proposal of 30 days may not provide sufficient time to review a detailed, site-specific UAA. The Commission will, instead, require review and approval or a written basis for non-approval of a UAA work plan within 60 days. The Commission approves and adopts the remainder of NMED's proposed revisions to 20.6.4.15 NMAC.

20.6.4.16 PLANNED USE OF A PISCICIDE: The use of a piscicide registered under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), 7 U.S.C. Section 136 *et seq*., and under the New Mexico Pesticide Control Act (NMPCA), Section 76-4-1 *et seq*. NMSA 1978 (1973) in a surface water of the state, shall not be a violation of Subsection F of 20.6.4.13 NMAC when such use is covered by a federal national pollutant discharge elimination system (NPDES) permit or has been approved by the commission under procedures provided in this section. The use of a piscicide which is covered by a NPDES permit shall require no further review by the commission and the person whose application is covered by the NPDES permit shall meet the additional notification and monitoring requirements outlined in Subsection G of 20.6.4.16 NMAC. The commission may approve the

reasonable use of a piscicide under this section if the proposed use is not covered by a NPDES permit to further a Clean Water Act objective to restore and maintain the physical or biological integrity of surface waters of the state, including restoration of native species.

A. Any person seeking commission approval of the use of a piscicide not covered by a NPDES permit shall file a written petition concurrently with the commission and the surface water bureau of the department. The petition shall contain, at a minimum, the following information:

(1) petitioner's name and address;

(2) identity of the piscicide and the period of time (not to exceed five years) or number of applications for which approval is requested;

(3) documentation of registration under FIFRA and NMPCA and certification that the petitioner intends to use the piscicide according to the label directions, for its intended function;

(4) target and potential non-target species in the treated waters and adjacent riparian area, including threatened or endangered species;

(5) potential environmental consequences to the treated waters and the adjacent riparian area, and protocols for limiting such impacts;

(6) surface water of the state proposed for treatment;

(7) results of pre-treatment survey;

(8) evaluation of available alternatives and justification for selecting piscicide use;

(9) documentation of notice requesting public comment on the proposed use within a 30-day period, including information as described in Paragraphs (1), (2) and (6) of Subsection A of 20.6.4.16 NMAC, provided to:

(a) local political subdivisions;

(b) local water planning entities;

(c) local conservancy and irrigation districts; and

(d) local media outlets, except that the petitioner shall only be required to publish notice in a newspaper of circulation in the locality affected by the proposed use.

(10) copies of public comments received in response to the publication of notice and the petitioner's responses to public comments received;

(11) post-treatment assessment monitoring protocol; and

(12) any other information required by the commission.

B. Within 30 days of receipt of the petition, the department shall review the petition and file a recommendation with the commission to grant, grant with conditions or deny the petition. The recommendation shall include reasons, and a copy shall be sent to the petitioner by certified mail.

C. The commission shall review the petition, the public comments received under Paragraphs (9) and (10) of Subsection A of 20.6.4.16 NMAC, the petitioner's responses to public comments and the department's technical recommendations for the petition. A public hearing shall be held if the commission determines there is substantial public interest. The commission shall notify the petitioner and those commenting on the petition of the decision whether to hold a hearing and the reasons therefore in writing.

D. If the commission determines there is substantial public interest a public hearing shall be held within 90 days of receipt of the department's recommendation in the locality affected by the proposed use in accordance with 20.1.3 NMAC, Adjudicatory Procedures - Water Quality Control Commission. Notice of the hearing shall be given in writing by the petitioner to individuals listed under Subsection A of 20.6.4.16 NMAC as well as to individuals who provided public comment under that subsection at least 30 days prior to the hearing.

E. In a hearing provided for in this section or, if no hearing is held, in a commission meeting, the registration of a piscicide under FIFRA and NMPCA shall provide a rebuttable presumption that the determinations of the EPA Administrator in registering the piscicide, as outlined in 7 U.S.C. Section 136a(c)(5), are valid. For purposes of this Section the rebuttable presumptions regarding the piscicide include:

(1) Its composition is such as to warrant the proposed claims for it;

(2) Its labeling and other material submitted for registration comply with the requirements of FIFRA and NMPCA;

(3) It will perform its intended function without unreasonable adverse effects on the environment; and

(4) When used in accordance with all FIFRA label requirements it will not generally cause unreasonable adverse effects on the environment.

(5) "Unreasonable adverse effects on the environment" has the meaning provided in FIFRA, 7 U.S.C. Section 136(bb): "any unreasonable risk to man or the environment, taking into account the economic, social, and environmental costs and benefits of the use of any pesticide."

F. After a public hearing, or commission meeting if no hearing is held, the commission may grant the petition in whole or in part, may grant the petition subject to conditions, or may deny the petition. In granting any petition in whole or part or subject to conditions, the commission shall require the petitioner to implement post-treatment assessment monitoring and provide notice to the public in the immediate and near downstream vicinity of the application prior to and during the application.

G. Any person whose application is covered by a NPDES permit shall provide written notice to local entities as described in Subsection A of 20.6.4.16 NMAC and implement post-treatment assessment monitoring within the application area as described in Subsection F of 20.6.4.16 NMAC.

[20.6.4.16 NMAC - Rn, Paragraph (6) of Subsection F of 20.6.4.12 NMAC, 5/23/2005; A, 5/23/2005; A, 3/2/2017]

20.6.4.17 - 20.6.4.49 [RESERVED]

20.6.4.50 BASINWIDE PROVISIONS - Special provisions arising from interstate compacts, international treaties or court decrees or that otherwise apply to a basin are contained in 20.6.4.51 through 20.6.4.59 NMAC.

[20.6.4.50 NMAC - N, 5/23/2005]

20.6.4.51 [RESERVED]

20.6.4.52 PECOS RIVER BASIN - In order to protect existing and designated uses, it is a goal of the state of New Mexico to prevent increases in TDS in the Pecos river above the following benchmark values, which are expressed as flow-weighted, annual average concentrations, at three USGS gaging stations: at Santa Rosa 500 mg/L; near Artesia 2,700 mg/L; and near Malaga 3,600 mg/L. The benchmark values serve to guide state action. They are adopted pursuant to the New Mexico Water Quality Act, not the Clean Water Act.

[20.6.4.52 NMAC - N, 12/1/2010]

20.6.4.53 [RESERVED]

20.6.4.54 COLORADO RIVER BASIN - For the tributaries of the Colorado river system, the state of New Mexico will cooperate with the Colorado river basin states and the federal government to support and implement the salinity policy and program outlined in the most current "review, water quality standards for salinity, Colorado river system" or equivalent report by the Colorado river salinity control forum.

A. Numeric criteria expressed as the flow-weighted annual average concentration for salinity are established at three points in the Colorado river basin as follows: below Hoover dam, 723 mg/L; below Parker dam, 747 mg/L; and at Imperial dam, 879 mg/L.

B. As a part of the program, objectives for New Mexico shall include the elimination of discharges of water containing solids in solution as a result of the use of water to control or convey fly ash from coal-fired electric generators, wherever practicable.

[20.6.4.54 NMAC - Rn, Paragraphs (1) through (3) of Subsection K of 20.6.4.12 NMAC, 5/23/2005; A, 5/23/2005]

20.6.4.55 - 20.6.4.96 [RESERVED]

20.6.4.97 EPHEMERAL WATERS: Ephemeral surface waters of the state as identified below and additional ephemeral waters as identified on the department's water quality standards website pursuant to Paragraph (2) of Subsection [C]D of 20.6.4.15 NMAC are subject to the designated uses and criteria as specified in this section. Ephemeral waters classified in 20.6.4.101-899 NMAC are subject to the designated uses and criteria as specified in those sections.

A. Designated uses: livestock watering, wildlife habitat, limited aquatic life and secondary contact.

B. Criteria: the use-specific criteria in 20.6.4.900 NMAC are applicable to the designated uses.

C. Waters:

(1) the following waters are designated in the Rio Grande basin:

(a) Cunningham gulch from Santa Fe county road 55 upstream 1.4 miles to a point upstream of the Lac minerals mine, identified as Ortiz mine on U.S. geological survey topographic maps;

(b) an unnamed tributary from Arroyo Hondo upstream 0.4 miles to the Village of Oshara water reclamation facility outfall;

(c) an unnamed tributary from San Pedro creek upstream 0.8 miles to the PAA-KO community sewer outfall;

(d) Inditos draw from the crossing of an unnamed road along a power line one-quarter mile west of McKinley county road 19 upstream to New Mexico highway 509;

(e) an unnamed tributary from the diversion channel connecting Blue canyon and Socorro canyon upstream 0.6 miles to the New Mexico firefighters academy treatment facility outfall;

(f) an unnamed tributary from the Albuquerque metropolitan arroyo flood control authority (AMAFCA) Rio Grande south channel upstream of the crossing of New Mexico highway 47 upstream to I-25;

(g) the south fork of Cañon del Piojo from [~~Canon~~]Cañon del Piojo upstream 1.2 miles to an unnamed tributary;

(h) an unnamed tributary from the south fork of Cañon del Piojo upstream 1 mile to the Resurrection mine outfall;

(i) Arroyo del Puerto from San Mateo creek upstream 6.8 miles to the Ambrosia Lake mine entrance road;

(j) an unnamed tributary from San Mateo creek upstream 1.5 miles to the Roca Honda mine facility outfall;

(k) San Isidro arroyo, including unnamed tributaries to San Isidro arroyo, from Arroyo Chico upstream to its headwaters;

(l) Arroyo Tinaja, including unnamed tributaries to Arroyo Tinaja, from San Isidro arroyo upstream to 2 miles northeast of the Cibola national forest boundary;

(m) Mulatto canyon from Arroyo Tinaja upstream to 1 mile northeast of the Cibola national forest boundary; and

(n) Doctor arroyo, including unnamed tributaries to Doctor arroyo, from San Isidro arroyo upstream to its headwaters, and excluding Doctor Spring and Doctor arroyo from the spring to its confluence with the unnamed tributary approximately one-half mile downstream of the spring.

(2) the following waters are designated in the Pecos river basin:

(a) an unnamed tributary from Hart canyon upstream 1 mile to South Union road;

(b) Aqua Chiquita from Rio Peñasco upstream to McEwan canyon; and

(c) Grindstone canyon upstream of Grindstone reservoir.

(3) the following waters are designated in the Canadian river basin:

(a) Bracket canyon upstream of the Vermejo river;

(b) an unnamed tributary from Bracket canyon upstream 2 miles to the Ancho mine; and

(c) Gachupin canyon from the Vermejo river upstream 2.9 miles to an unnamed west tributary near the Ancho mine outfall.

(4) in the San Juan river basin an unnamed tributary of Kim-me-ni-oli wash upstream of the mine outfall.

(5) the following waters are designated in the Little Colorado river basin:

(a) Defiance draw from County Road 1 to upstream of West Defiance Road; and

(b) an unnamed tributary of Defiance draw from McKinley county road 1 upstream to New Mexico highway 264.

(6) the following waters are designated in the closed basins:

(a) in the Tularosa river closed basin San Andres canyon downstream of South San Andres canyon; and

(b) in the Mimbres river closed basin San Vicente arroyo from the Mimbres river upstream to Maudes canyon.

[20.6.4.97 NMAC - N, 5/23/2005; A, 12/1/2010; A, 3/2/2017; A, 12/17/2019; A, XX/XX/XXXX]

20.6.4.97 NMAC - Unclassified Ephemeral Waters

1. *The Department proposed an amendment to 20.6.4.97(C)(1)(g) NMAC in order to correct the spelling of a word from "Canon" to "Cañon," to be consistent with other spellings in this section that utilize the Spanish eñe. NMED Exhibit 110; Tr. Vol. 5, 1473:14-1474:3.*
2. *Although the Department did not present technical testimony on correcting this spelling error, no party opposed the proposed amendment. The Commission finds the Department's proposal to amend the spelling to "Cañon" to be well-taken and adopts the Department's amendments to 20.6.4.97(C)(1)(g) NMAC as proposed.*

20.6.4.98 INTERMITTENT WATERS: All non-perennial surface waters of the state, except those ephemeral waters included under section 20.6.4.97 NMAC or classified in 20.6.4.101-899 NMAC.

A. Designated uses: livestock watering, wildlife habitat, marginal warmwater aquatic life and primary contact.

B. Criteria: the use-specific criteria in 20.6.4.900 NMAC are applicable to the designated uses, except that the following site-specific criteria apply: the monthly geometric mean of E. coli bacteria 206 cfu/100 mL or less, single sample 940 cfu/100 mL or less.

[20.6.4.98 NMAC - N, 5/23/2005; A, 12/1/2010; A, 3/2/2017]

20.6.4.99 PERENNIAL WATERS: All perennial surface waters of the state except those classified in 20.6.4.101-899 NMAC.

A. Designated uses: Warmwater aquatic life, livestock watering, wildlife habitat and primary contact.

B. Criteria: The use-specific criteria in 20.6.4.900 NMAC are applicable to the designated uses, except that the following site-specific criteria apply: the monthly geometric mean of E. coli bacteria 206 cfu/100 mL or less, single sample 940 cfu/100 mL or less.

[20.6.4.99 NMAC - N, 5/23/2005; A, 12/1/2010; A, 3/2/2017]

20.6.4.101-899 NMAC - Amendments to Selected Sections that Contain Secondary Contact Uses

1. *The Department proposed to amend language in 20.6.4.103, 20.6.4.112, 20.6.4.116, 20.6.4.204, 20.6.4.206 and 20.6.4.207 NMAC, and add a new section, 20.6.4.231 NMAC, to remove nonperennial reaches of tributaries from the list of classified perennial sections. NMED Exhibit 3, pp. 5-14. NMED Exhibit 9; NMED Exhibit 56; Tr. Vol. 3, 918:14-936:7.*
2. *LANL objected to certain of the Department's proposed amendments. LANL Exhibit 58, pp. 5-12 (2020 TR LANL-01083 - 01090). Tr. Vol. 4, 1080:9-1099:14. (**See .126, .128, and .140 below).** Of greatest concern to LANL is that NMED is proposing to modify the applicable recreational use from secondary*

contact to primary contact on in Section 103, 116, 204, 206 and 207 waters based solely on a review of available water quality data for Escherichia coli ("E. coli"), pH, or both. Specifically, LANL contends, the process and evidentiary requirements to reclassify a water to assign a more protective designated use or establish an existing use are not set out in the Standards and remain unclear. ***LANL Ex. 2*** *at 25 (Meyerhoff Direct); see Hrg. Tr., Vol. III, 928:25-929:4 (Aranda) (confirming "there are no regulations prescribing how a state determines existing uses."). During this Triennial Review, for the first time and without any established process in the WQS, NMED applied an "existing use demonstration" to re-examine secondary contact recreational uses for certain water bodies and to re-examine aquatic life uses for certain waters within LANL.* ***NMED Ex. 56*** *(Recreational EUA) and* ***NMED Ex. 73/Ex. 124*** *(LANL EUA). The process NMED used to develop these existing use demonstrations was unclear and did not involve stakeholder participation. Indeed, interested LANL stakeholders were not provided a copy of the LANL EUA,* ***NMED Ex. 73,*** *until May 3, 2021, when NMED filed its pre-filed direct testimony with NMED's Notice of Intent to Present Technical Testimony ("NMED NOI") in this the Triennial Review. Hrg. Tr., Vol. IV, 1316:19-22 (Fullam). LANL was not provided an opportunity to comment on* ***NMED Ex. 73*** *or the data NMED relied on to support it until LANL filed its pre-filed rebuttal testimony in the Triennial Review proceedings. Hrg. Tr., Vol. IV, 1316:23-1317:8 (Fullam); see Hrg. Tr., Vol. IV, 1115:4-15 (Gallegos). Consequently, LANL had no opportunity to raise data quality concerns with NMED concerning Effluent Canyon (among other data relied on in* ***NMED Ex. 73****) and NMED acknowledged that it "inadvertently overlooked" this water quality data demonstrating that the marginal warmwater aquatic life use designation may not be appropriate. Hrg. Tr., Vol. IV, 1297:21 (Fullam). These existing use demonstration efforts and NMED's associated testimony demonstrate the critical need for the Commission to formally adopt procedures either in the Standards or the WQMP/CPP.*

3. *SJWC objected to certain of the Department's proposed amendments, although some of those objections were later withdrawn. SJWC [Exhibit] 3, pp. 10-32 (2020 TR SJWC-0201 - 0223); Tr. Vol. 4,*

1201:12-1216:17. SJWC maintained its objection to NMED's proposal to upgrade the recreation designated use for five (5) stream segments (20.6.4.103/112, 116, 204, 207, and 206/231 NMAC) from secondary contact to primary contact based on NMED's Primary Contact EUA. SJWC's SOR at 69-101. To wit, Historically, the WQCC has required evidence of primary contact activities before assigning the primary contact use. During the last Triennial Review, the WQCC rejected NMED's proposal to upgrade these stream segments to the primary contact recreation use because of a lack of evidence of primary contact use. No new information has become available since the last Triennial Review concerning recreation in these stream segments that requires re-evaluation of the existing recreation use, as required by 40 C.F.R. § 131.20(a). NMED has provided only limited "new" water quality data for stream segments 20.6.4.103 and 207 NMAC—and none for stream segments 20.6.4.116, 204 and 206 NMAC. The Primary Contact EUA does not provide any credible scientific evidence or other information that primary contact use is occurring in these stream segments. The Primary Contact EUA does not conform with EPA guidance in the Smithee Letter because it is not based on site-specific conditions. The Primary Contact EUA does not conform with EPA guidance in the Smithee Letter because it does not include all available evidence of both use and water quality. The public and the parties were not provided a fair opportunity to participate in the development of the Primary Contact EUA or to fully analyze the EUA and present technical testimony concerning its adequacy. NMED's decision to not conduct site visits for the Primary Contact EUA does not mean evidence of primary contact use is unavailable. We note that NMED conducted site visits to examine hydrologic conditions for the LANL Waters EUA. [NMED Ex. 73]. NMED provided no evidence whether physical conditions prevent primary contact use in these stream segments because it did not conduct site visits. SJWC presented photographic evidence showing that primary contact use is not possible in at least part of the Rio Hondo because of physical difficulty in reaching the river and low water depth. SJWC's technical witness also testified that the Rio Hondo flows through the City of Roswell in concrete channels not conducive to primary contact

recreation. [SJWC Ex. 3-I; DeRose-Bamman Rebuttal, Ex. SJWC 3 at 22; DeRose-Bamman, Tr. at 1206:18-20]. NMED failed to comply with EPA guidance in the Water Quality Standards Handbook and the Smithee Letter requiring evidence that no physical site conditions prevent primary contact use in these stream segments. Our existing use determination therefore cannot be based solely on the water quality data provided by NMED.

4. *Amigos Bravos objected to certain of the Department's proposed amendments. AB Exhibit 11, pp. 12-20. Tr. Vol. 4, 1177:17-11:93:6. To wit, Amigos Bravos supports NMED's proposal to upgrade five waters from secondary to primary contact, but NMED erred by not examining all non-101(a)(2) waters and by conducting an incomplete analysis on limited aquatic life and secondary contact waters. NMED must examine all non-101(a)(2) waters and all available data during the Triennial Review. A fundamental requirement for any Triennial Review under Clean Water Act regulations is that states must re-examine any waterbody that does not have a section 101(a)(2) "fishable/swimmable" use. New Mexico's "secondary contact" and "limited aquatic life" uses are not section 101(a)(2) "fishable/swimmable" uses, and therefore all waters carrying those uses must be evaluated during each Triennial Review.*

   Waters with limited aquatic use that were not reviewed to determine whether to upgrade that use include segments at 20.6.4.97, -124, -128, 136, and -809 NMAC. These additional segments that were not examined consist of many waterbodies. Segment 20.6.4.97 alone includes 25 separate streams. The Commission therefore should direct NMED to evaluate whether segments at 20.6.4.97, -124, -128, -136, and -809 NMAC should be upgraded to a section 101(a)(2) aquatic use.

5. *NMED contends it provided substantial evidence in response to the objections of other parties. NMED Exhibit 108, pp. 6-8; NMED Exhibit 110; Tr. Vol. 3, 918:14-936:7. A letter from the U.S. Environmental Protection Agency regional water quality standards coordinator for Region 6, Russell Nelson, stated that the UAA prepared by the Department [NMED Exhibit 59] "appears to support the bureau's*

conclusion that current designated uses in the defined segments are not attainable and that the highest attainable uses recommended here are appropriate given the conditions in these individual waters." NMED Exhibit 139; Tr. Vol. 3; 906:2-907:12.

6. *Based on the weight of the evidence, the Commission finds the Department's proposal to amend language in 20.6.4.103, 20.6.4.112, 20.6.4.116, 20.6.4.204, 20.6.4.206, and 20.6.4.207 NMAC, and to add a new section, 20.6.4.231 NMAC, to establish the highest attainable use as intermittent waters pursuant to 20.6.4.98 NMAC is well-taken and agrees with the Department's amendments to these sections as proposed;*

   OR

   The Commission rejects the proposed amendments and adopt LANL's proposed five-step existing use analysis process. ***LANL Ex. 2*** *at 33-35 (Meyerhoff Direct);* ***LANL Ex. 3*** *at 41-42 (Gallegos Direct);* ***LANL Ex. 58*** *at LANL-01099-LANL-01101 (Meyerhoff Rebuttal);* ***LANL Ex. 59*** *at 7-21 (Gallegos Rebuttal); Hrg. Tr., Vol. IV, 1086:20-1087:24 (Meyerhoff); Hrg. Tr., Vol. IV, 1103:5-1106:25 (Gallegos). Specifically, the Commission rejects the Department's proposal to upgrade the recreation designated use for five stream segments for the reasons provided by LANL and SJWC. Historically, the Commission has required evidence of primary contact activities before assigning the primary contact use, and during the last Triennial Review, we rejected the Department's proposal to upgrade these same stream segments because of a lack of evidence of primary contact use. [SJWC's SOR at 73-78 (¶¶2(a)-2(j)), 81-82 (¶¶ 4(a)-4(c))]*

20.6.4.101-899 NMAC - Amendments to Selected Sections of Non-Perennial Reaches

1. The Department proposed to amend language in 20.6.4.108, 20.6.4.115, 20.6.4.206, 20.6.4.208, 20.6.4.209, 20.6.4.215, 20.6.4.220, 20.6.4.307 and 20.6.4.309 NMAC to remove nonperennial reaches of tributaries from the list of classified perennial sections. NMED Exhibit 3, pp. 14-23. NMED Exhibit 9; NMED Exhibit 59; Tr. Vol. 3, 904:23-916:6.

2. LANL does not oppose NMED's proposed amendments to 20.6.4.108, 20.6.4.115, 20.6.4.206, 20.6.4.208-209, 20.6.4.215, 20.6.4.220, 20.6.4.307 and 20.6.4.309 NMAC. LANL asserts that the two existing use analysis demonstration documents, ***NMED Ex. 56*** *(Recreational EUA),* ***NMED Ex. 73*** *and* ***NMED Ex. 124*** *(LANL EUA), are flawed and do not meet the requirements of applicable federal guidance. See LANL Exhibit 58, pp. 5-12 (2020 TR LANL-01083-01090); Tr. Vol. 4, 1080: 9-1099:14. NMED does not have a clear process for determining existing uses or more protective designated uses. Hrg. Tr., Vol. III, 928:25-929:4 (Aranda) (confirming "there are no regulations prescribing how a state determines existing uses.") Accordingly, LANL requests the Commission formally adopt procedures in the Standards or the WQMP/CPP for determining existing uses and for reclassifying a water to assign a more protective designated use.*

3. *SJWC withdrew its original objections, and on the first day of the Triennial Review, counsel stated on the record that SJWC no longer objects to the NMED's proposal concerning non-perennial tributaries in sections* 20.6.4.108, 115, 206, 208, 209, 215, 307 and 309 NMAC. *SJWC [Exhibit] 3-K, 3, pp. 10-32 (2020 TR SJWC-0201 - 0223); Tr. Vol. 4, 1201:12-1216:17.*

4. Amigos Bravos objected to certain of the Department's proposed amendments. To wit, the Commission should not downgrade non-perennial waters because NMED did not adequately delineate the boundaries of these waters. Moreover, these (undefined) boundaries are likely to change, and could change significantly, as a result of climate change. 4 Tr. 1185:2-19. This means these waters' designated uses will be de facto downgraded without NMED undertaking a required use attainability analysis. Id. With no specific boundaries identified for the waters that are being downgraded, there is no way to know now or in the future the designated uses for these waters. Id. To downgrade a designated use for certain waters, NMED must define the boundaries of the waters to which the downgrade applies.

5. NMED contends the witness for Amigos Bravos on cross-examination expressed a lack of familiarity with the National Hydrography Dataset, the source of the data used by NMED in its UAA (NMED

Exhibit 59). Tr. Vol. 4, 1188:5-17. The Department provided substantial evidence in response to the objections of other parties. NMED Exhibit 108, pp. 6-8; NMED Exhibit 110; Tr. Vol. 3, 904:23-916:6.

6. Based on the weight of the evidence, the Commission finds the Department's proposal to amend language in 20.6.4.103, 20.6.4.108, 20.6.4.112, 20.6.4.115, 20.6.4.116, 20.6.4.204, 20.6.4.206, 20.6.4.207, 20.6.4.208, 20.6.4.209, 20.6.4.215, 20.6.4.220, 20.6.4.307 and 20.6.4.309 NMAC to remove nonperennial reaches of tributaries from the list of classified perennial sections and establish the highest attainable use as intermittent waters pursuant to 20.6.4.98 NMAC is well-taken and agrees with the Department's amendments to these sections as proposed;

OR,

The Commission finds that NMED did not adequately define the boundaries of waters it proposes to remove from segments 20.6.4.108, -115, -206, -208, -209, -215, -220, -307, and -309 NMAC and place them by default to the non-classified segment for non-perennial waters at 20.6.4.98 NMAC. This change downgrades the aquatic life use from a high quality coldwater, coldwater, or marginal coldwater use to a marginal warmwater aquatic life use. NMED must define the boundaries of these waters prior to downgrading the aquatic life designated use of these waters. The Commission therefore rejects NMED's proposal to downgrade these waters to nonperennial.

20.6.4.100 [RESERVED]

20.6.4.101 RIO GRANDE BASIN: The main stem of the Rio Grande from the international boundary with Mexico upstream to one mile downstream of Percha dam.

A. Designated uses: irrigation, marginal warmwater aquatic life, livestock watering, wildlife habitat and primary contact.

B. Criteria:

(1) The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses except that the following segment-specific criterion applies: temperature 34°C (93.2°F) or less.

(2) At mean monthly flows above 350 cfs, the monthly average concentration for: TDS 2,000 mg/L or less, sulfate 500 mg/L or less and chloride 400 mg/L or less.

C. Remarks: sustained flow in the Rio Grande below Caballo reservoir is dependent on release from Caballo reservoir during the irrigation season; at other times of the year, there may be little or no flow.

[20.6.4.101 NMAC - Rp 20 NMAC 6.1.2101, 10/12/2010; A, 12/15/2001; A, 5/23/2005; A, 12/1/2010; A, 3/2/2017]

20.6.4.102 RIO GRANDE BASIN: The main stem of the Rio Grande from one mile downstream of Percha dam upstream to Caballo dam.

A. Designated uses: irrigation, livestock watering, wildlife habitat, primary contact and warmwater aquatic life.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: the monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less, single sample 235 cfu/100 mL or less.

C. Remarks: sustained flow in the Rio Grande downstream of Caballo reservoir is dependent on release from Caballo reservoir during the irrigation season; at other times of the year, there may be little or no flow.

[20.6.4.102 NMAC - Rp 20 NMAC 6.1.2102, 10/12/2010; A, 5/23/2005; A, 12/1/2010; A, 3/2/2017]

20.6.4.103 RIO GRANDE BASIN: [-] ~~[The main stem of the Rio Grande from the headwaters of Caballo reservoir upstream to Elephant Butte dam and p]~~Perennial reaches of tributaries to the Rio Grande in Sierra and Socorro counties not specifically identified under other sections of 20.6.4 NMAC, excluding waters on tribal lands.

A. Designated uses: irrigation, livestock watering, wildlife habitat, marginal coldwater aquatic life, secondary contact and warmwater aquatic life.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses.

~~**[C. Remarks:** flow in this reach of the Rio Grande main stem is dependent upon release from Elephant Butte dam.]~~

[20.6.4.103 NMAC - Rp 20 NMAC 6.1.2103, 10/12/2000; A, 5/23/2005; A, 12/1/2010; A, XX/XX/XXXX]

[NOTE: This segment was divided effective XX/XX/XXXX. The standards for the main stem of the Rio Grande from the headwaters of Caballo reservoir upstream to Elephant Butte dam, perennial reaches of Palomas creek, perennial reaches of Rio Salado, perennial reaches of Percha creek, perennial reaches of Alamosa creek, Las Animas creek, and perennial reaches of Abo arroyo are under 20.6.4.112 NMAC.]

20.6.4.104 RIO GRANDE BASIN: - Caballo and Elephant Butte reservoir.

A. Designated uses: irrigation storage, livestock watering, wildlife habitat, primary contact and warmwater aquatic life.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: the monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less, single sample 235 cfu/100 mL or less.

[20.6.4.104 NMAC - Rp 20 NMAC 6.1.2104, 10/12/2000; A, 5/23/2005; A, 12/1/2010]

20.6.4.105 RIO GRANDE BASIN: [-] The main stem of the Rio Grande from the headwaters of Elephant Butte reservoir upstream to Alameda bridge (Corrales bridge), excluding waters on Isleta pueblo.

A. Designated uses: irrigation, marginal warmwater aquatic life, livestock watering, public water supply, wildlife habitat and primary contact.

B. Criteria:

(1) The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses.

(2) At mean monthly flows above 100 cfs, the monthly average concentration for: TDS l,500 mg/L or less, sulfate 500 mg/L or less and chloride 250 mg/L or less.

(3) Effluent requirements referenced in 20.6.2.2102 NMAC, Rio Grande basin-community sewerage systems, apply if the applicability conditions in 20.6.2.2100 NMAC are met.

[20.6.4.105 NMAC - Rp 20 NMAC 6.1.2105, 10/12/2000; A, 5/23/2005; A, 12/1/2010; A, XX/XX/XXXX]

20.6.4.105 NMAC and 20.6.4.106 NMAC - Classified Waters Rio Grande Basin

1. *The Department proposes to add language to 20.6.4.105 NMAC and 20.6.4.106 NMAC to clarify that effluent requirements referenced in 20.6.2.2102 NMAC apply if the conditions in 20.6.2.2100 NMAC are met. The purpose of this proposed amendment is to provide clarification that the criteria in*

20.6.2.2102 NMAC may apply to certain discharges in the Rio Grande Basin but does not change the meaning of these sections. NMED Exhibit 1, p. 15; NMED Exhibit 106, p. 21; NMED Exhibit 110; Tr. Vol. 3, 726:11.

2. *SJWC opposed the Department's proposed amendment on the grounds that the scope of applicability of the effluent limitations in the Groundwater Rule is very limited, that there is no definition of "community sewerage system" in 20.6.2 NMAC or 20.6.4 NMAC, and the effluent limitations are not appropriate surface water criteria. SJWC's SOR at 51-57; SJWC [Exhibit] 2, p. 20; Tr. Vol. 3, 883:8-890:5. SJWC contends that NMED inappropriately proposes to graft Groundwater Rule effluent conditions for undefined community sewerage systems to the surface water quality criteria for stream segments 20.6.4.105 and 20.6.4.106 NMAC, which encompasses nearly the entire Middle Rio Grande (from the Angostura diversion works to Elephant Butte). The effluent conditions NMED proposes to add are temporary effluent discharge quality limits that apply only after a community sewerage system violates its NPDES permit conditions for more than 30 days, and they expire after the sewerage system comes back into compliance with its NPDES permit. Effluent limits are not SWQS criteria; rather, effluent limits restrict the amount (concentration and load) of a pollutant that can be discharged through a point source. Although NMED says that it does not intend for the effluent limits to become surface water quality criteria, if adopted, they will, in fact, become criteria because they will be labeled "criteria" in the standards and can only be interpreted as such under the SWQS. For that reason alone, SJWC recommends that the WQCC reject the proposal. NMED's proposal is unusual because no other end-of-pipe conditions, such as these effluent limits, have been incorporated into the SWQS. Instead, they are properly incorporated into NPDES permits. NMED contends that its proposal will "clarify and make sure there is no confusion about these requirements," but the effluent limits conflict with the SWQS for at least one constituent—pH range. The pH range in the effluent limits is more stringent than the range in the SWQS. In addition to this conflict, several features of the proposal will create*

confusion for permittees. For example, the term "community sewerage system" is not defined in either the SWQS or the Groundwater Rule, so the applicability of the effluent limits is uncertain. Also, the two sets of rules conflict because of the different nature of the rules—the effluent limits restrict the amount of a constituent that can be discharged in the sewer outfall pipe, whereas the SWQS criteria apply to a stream segment as a whole and inform the development of NPDES permit conditions. Further, there is a difference between the constituents that must be monitored under the Groundwater Rule effluent limits and the typical NPDES monitoring requirements. In fact, according to SJWC's technical witness, it appears that the effluent limits in the Groundwater Rules are out of date. Finally, the temporary nature of the effluent limits in the Groundwater Rule also is likely to be confusing to permittees. NMED defends its proposal on the ground it will "aid in the implementation of appropriate water quality protections that apply to waters in this region, particularly as they pertain to sewerage systems." This explanation, however, does not provide the required scientific or other credible data required to adopt this proposal. Moreover, even if the WQCC rejects the proposal, which it should, the effluent limitations in the Groundwater Rule will continue to apply to community sewerage systems. Therefore, the proposal simply is not needed, and it should be rejected.

3. *Based on the weight of the evidence, the Commission finds the Department's proposal to amend 20.6.4.105 NMAC and 20.6.4.106 NMAC well-taken and adopts the Department's proposed amendments;*

   OR,

   For the reasons provided by SJWC, we agree with SJWC that NMED has provided no scientific or other credible data that the effluent limits (discharge restrictions) established in section 20.6.2.2102 of the Groundwater Rule are appropriate surface water quality criteria, and therefore reject NMED's proposal. Effluent limits are not SWQS criteria. SJWC's SOR at 54-55. No other end-of-pipe conditions for dischargers have been incorporated int the SWQS. Id.

20.6.4.106 RIO GRANDE BASIN: [-] The main stem of the Rio Grande from Alameda bridge (Corrales bridge) upstream to the Angostura diversion works, excluding waters on Santa Ana pueblo, and intermittent water in the Jemez river below the Jemez pueblo boundary, excluding waters on Santa Ana and Zia pueblos, that enters the main stem of the Rio Grande. Portions of the Rio Grande in this segment are under the joint jurisdiction of the state and Sandia pueblo.

A. Designated uses: irrigation, marginal warmwater aquatic life, livestock watering, wildlife habitat and primary contact; and public water supply on the Rio Grande.

B. Criteria:

(1) The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses.

(2) At mean monthly flows above 100 cfs, the monthly average concentration for: TDS 1,500 mg/L or less, sulfate 500 mg/L or less and chloride 250 mg/L or less.

(3) Effluent requirements referenced in 20.6.2.2102, NMAC Rio Grande basin-community sewerage systems, apply if the applicability conditions in 20.6.2.2100 NMAC are met.

[20.6.4.106 NMAC - Rp 20 NMAC 6.1.2105.1, 10/12/2000; A, 5/23/2005; A, 12/1/2010; A, XX/XX/XXXX]

20.6.4.105 NMAC and 20.6.4.106 NMAC - Classified Waters Rio Grande Basin (see .105 above)

20.6.4.107 RIO GRANDE BASIN: [-] The Jemez river from the Jemez pueblo boundary upstream to Soda dam near the town of Jemez Springs and perennial reaches of Vallecito creek.

A. Designated uses: coldwater aquatic life, primary contact, irrigation, livestock watering and wildlife habitat; and public water supply on Vallecito creek.

B. Criteria: The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criterion applies: temperature 25°C (77°F).

[20.6.4.107 NMAC - Rp 20 NMAC 6.1.2105.5, 10/12/2000; A, 5/23/2005; A, 12/1/2010]

20.6.4.108 RIO GRANDE BASIN: [-] Perennial reaches of the Jemez river upstream of Soda dam near the town of Jemez Springs and [~~all its~~]perennial reaches of tributaries to the Jemez river except those not specifically identified under other sections of 20.6.4 NMAC [~~above Soda dam near the town of Jemez Springs, except San Gregorio lake and Sulphur creek above its confluence with Redondo creek~~], and perennial reaches of the Guadalupe river and perennial reaches of [~~all its~~] tributaries to the Guadalupe river, and Calaveras canyon.

A. Designated uses: domestic water supply, fish culture, high quality coldwater aquatic life, irrigation, livestock watering, wildlife habitat and primary contact.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: specific conductance 400 µS/cm or less (800 µS/cm or less on Sulphur creek); the monthly geometric mean of *E. coli* bacteria 126 cfu/100 mL or less, single sample 235 cfu/100 mL or less; and pH within the range of 2.0 to 8.8 on Sulphur creek.

[20.6.4.108 NMAC - Rp 20 NMAC 6.1.2106, 10/12/2000; A, 5/23/2005; A, 12/1/2010; A, 7/10/2012; A, XX/XX/XXXX]

[**NOTE:** The segment covered by this section was divided effective 5/23/2005. The standards for the additional segment are under 20.6.4.124 NMAC. The standards for San Gregorio lake are in 20.6.4.134 NMAC, effective 7/10/2012]

20.6.4.109 RIO GRANDE BASIN: [-] Perennial reaches of Bluewater creek excluding Bluewater lake and waters on tribal lands, Rio Moquino upstream of Laguna pueblo, Seboyeta creek, Rio Paguate upstream of Laguna pueblo, the Rio Puerco upstream of the northern boundary of Cuba, and all other perennial reaches of tributaries to the Rio Puerco, including the Rio San Jose in Cibola county from the USGS gaging station at Correo upstream to Horace springs excluding waters on tribal lands.

A. Designated uses: coldwater aquatic life, domestic water supply, fish culture, irrigation, livestock watering, wildlife habitat and primary contact; and public water supply on La Jara creek.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: phosphorus (unfiltered sample) 0.1 mg/L or less; the monthly geometric mean of *E. coli* bacteria 126 cfu/100 mL or less, single sample 235 cfu/100 mL or less.

[20.6.4.109 NMAC - Rp 20 NMAC 6.1.2107, 10/12/2000; A, 5/23/2005; A, 12/1/2010; A, 7/10/2012]
[**NOTE:** The standards for Bluewater lake are in 20.6.4.135 NMAC, effective 7/10/2012]

20.6.4.110 RIO GRANDE BASIN: The main stem of the Rio Grande from Angostura diversion works upstream to Cochiti dam, excluding the reaches on San Felipe, Kewa and Cochiti pueblos.

A. Designated uses: irrigation, livestock watering, wildlife habitat, primary contact, coldwater aquatic life and warmwater aquatic life.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: pH within the range of 6.6 to 9.0 and temperature 25°C (77°F) or less.

[20.6.4.110 NMAC - Rp 20 NMAC 6.1.2108, 10/12/2010; A, 5/23/2005; A, 12/1/2010; A, 3/2/2017]

20.6.4.111 RIO GRANDE BASIN: [-] Perennial reaches of Las Huertas creek from the San Felipe pueblo boundary to the headwaters.

A. Designated uses: high quality coldwater aquatic life, irrigation, livestock watering, wildlife habitat and primary contact.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criterion applies: temperature 25°C (77°F) or less.

[20.6.4.111 NMAC - Rp 20 NMAC 6.1.2108.5, 10/12/2000; A, 7/25/2001; A, 5/23/2005; A-12/1/2010]
[**NOTE:** The segment covered by this section was divided effective 5/23/2005. The standards for the additional segment are under 20.6.4.125 NMAC.]

20.6.4.112 [~~[RESERVED]~~] RIO GRANDE BASIN: - The main stem of the Rio Grande from the headwaters of Caballo reservoir upstream to Elephant Butte dam, perennial reaches of Palomas creek, perennial reaches of Rio Salado, perennial reaches of Percha creek, perennial reaches of Alamosa creek, Las Animas creek, and perennial reaches of Abo arroyo.

A. Designated uses: irrigation, livestock watering, wildlife habitat, marginal coldwater aquatic life, primary contact and warmwater aquatic life.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses.

C. Remarks: flow in this reach of the Rio Grande main stem is dependent upon release from Elephant Butte dam.

[20.6.4.112 NMAC - Rp 20 NMAC 6.1.2109, 10/12/2000; A, 5/23/2005; Repealed, 12/1/2010; A, XX/XX/XXXX]

20.6.4.113 RIO GRANDE BASIN: [-] The Santa Fe river and perennial reaches of its tributaries from the Cochiti pueblo boundary upstream to the outfall of the Santa Fe wastewater treatment facility.

A. Designated uses: irrigation, livestock watering, wildlife habitat, primary contact and coolwater aquatic life.

B. Criteria: The use-specific criteria in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criterion applies: temperature 30°C (86°F) or less.

[20.6.4.113 NMAC - Rp 20 NMAC 6.1.2110, 10/12/2000; A, 10/11/2002; A, 5/23/2005; A, 12/1/2010; A, 2/14/2013]

20.6.4.114 RIO GRANDE BASIN: [-] The main stem of the Rio Grande from the Cochiti pueblo boundary upstream to Rio Pueblo de Taos excluding waters on San Ildefonso, Santa Clara and Ohkay Owingeh pueblos, Embudo creek from its mouth on the Rio Grande upstream to the Picuris Pueblo boundary, the Santa Cruz river from the Santa Clara pueblo boundary upstream to the Santa Cruz dam, the Rio Tesuque except waters on the Tesuque and Pojoaque pueblos, and the Pojoaque river from the San Ildefonso pueblo boundary upstream to the Pojoaque pueblo boundary. Some Rio Grande waters in this segment are under the joint jurisdiction of the state and San Ildefonso pueblo.

A. Designated uses: irrigation, livestock watering, wildlife habitat, marginal coldwater aquatic life, primary contact and warmwater aquatic life; and public water supply on the main stem Rio Grande.

B. Criteria:

(1) The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: 6T3 temperature 22°C (71.6°F) and

maximum temperature 25°C (78.8°F). In addition, the following criteria based on a 12-month rolling average are applicable to the public water supply use for monitoring and public disclosure purposes only:

Radionuclide	pCi/L
Americium-241	1.9
Cesium-137	6.4
Plutonium-238	1.5
Plutonium-239/240	1.5
Strontium-90	3.5
Tritium	4,000

(2) At mean monthly flows above 100 cfs, the monthly average concentration for: TDS 500 mg/L or less, sulfate 150 mg/L or less and chloride 25 mg/L or less.
[20.6.4.114 NMAC - Rp 20 NMAC 6.1.2111, 10/12/2000; A, 5/23/2005; A, 12/1/2010]

20.6.4.115 RIO GRANDE BASIN: [-] The perennial reaches of Rio Vallecitos, [~~and its~~]perennial reaches of tributaries to Rio Vallecitos except Hopewell lake, and perennial reaches of Rio del Oso and perennial reaches of El Rito creek above the town of El Rito.

A. Designated uses: domestic water supply, irrigation, high quality coldwater aquatic life, livestock watering, wildlife habitat and primary contact; public water supply on the Rio Vallecitos and El Rito creek.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: specific conductance 300 µS/cm or less; the monthly geometric mean of *E. coli* bacteria 126 cfu/100 mL or less, single sample 235 cfu/100 mL or less.
[20.6.4.115 NMAC - Rp 20 NMAC 6.1.2112, 10/12/2000; A, 5/23/2005; A, 12/1/2010; A, 7/10/2012; A, XX/XX/XXXX]
[**NOTE:** The standards for Hopewell lake are in 20.6.4.134 NMAC, effective 7/10/2012]

20.6.4.116 RIO GRANDE BASIN: The Rio Chama from its mouth on the Rio Grande upstream to Abiquiu reservoir, perennial reaches of the Rio Tusas, perennial reaches of the Rio Ojo Caliente, perennial reaches of Abiquiu creek and perennial reaches of El Rito creek downstream of the town of El Rito.

A. Designated uses: irrigation, livestock watering, wildlife habitat, coldwater aquatic life, warmwater aquatic life and [~~secondary~~]primary contact.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criterion applies: temperature 31°C (87.8°F) or less.
[20.6.4.116 NMAC - Rp 20 NMAC 6.1.2113, 10/12/2010; A, 5/23/2005; A, 12/1/2010; A, 3/2/2017; A, XX/XX/XXXX]

20.6.4.117 RIO GRANDE BASIN: [-] Abiquiu reservoir.

A. Designated uses: irrigation storage, livestock watering, wildlife habitat, primary contact, coldwater aquatic life and warmwater aquatic life.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criterion applies: temperature 25°C (77°F) or less.
[20.6.4.117 NMAC - Rp 20 NMAC 6.1.2114, 10/12/2000; A, 5/23/2005; A, 12/1/2010]

20.6.4.118 RIO GRANDE BASIN: [-] The Rio Chama from the headwaters of Abiquiu reservoir upstream to El Vado reservoir and perennial reaches of the Rio Gallina and Rio Puerco de Chama north of state highway 96. Some Rio Chama waters in this segment are under the joint jurisdiction of the state and the Jicarilla Apache tribe.

A. Designated uses: irrigation, livestock watering, wildlife habitat, coldwater aquatic life, warmwater aquatic life and primary contact.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criterion applies: temperature 26°C (78.8°F) or less.
[20.6.4.118 NMAC - Rp 20 NMAC 6.1.2115, 10/12/2000; A, 5/23/2005; A, 12/1/2010]

20.6.4.119 RIO GRANDE BASIN: [-] All perennial reaches of tributaries to the Rio Chama above Abiquiu dam, except Canjilon lakes a, c, e and f and the Rio Gallina and Rio Puerco de Chama north of state highway 96 and excluding waters on Jicarilla Apache reservation, and the main stem of the Rio Chama from the headwaters of El Vado reservoir upstream to the New Mexico-Colorado line. Some Cañones creek and Rio Chama waters in this segment are under the joint jurisdiction of the state and the Jicarilla Apache tribe.

A. Designated uses: domestic water supply, fish culture, high quality coldwater aquatic life, irrigation, livestock watering, wildlife habitat and primary contact; and public water supply on the Rio Brazos and Rio Chama.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: specific conductance 500 µS/cm or less (1,000 µS or less for Coyote creek); the monthly geometric mean of *E. coli* bacteria 126 cfu/100 mL or less, single sample 235 cfu/100 mL or less.

[20.6.4.119 NMAC - Rp 20 NMAC 6.1.2116, 10/12/2000; A, 5/23/2005; A, 12/1/2010; A, 7/10/2012]

[**NOTE:** The standards for Canjilon lakes a, c, e and f are in 20.6.4.134 NMAC, effective 7/10/2012]

20.6.4.120 RIO GRANDE BASIN: [-] El Vado and Heron reservoirs.

A. Designated uses: irrigation storage, livestock watering, wildlife habitat, public water supply, primary contact and coldwater aquatic life.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: the monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less, single sample 235 cfu/100 mL or less.

[20.6.4.120 NMAC - Rp 20 NMAC 6.1.2117, 10/12/2000; A. 5/23/2005; A, 12/1/2010]

20.6.4.121 RIO GRANDE BASIN: [-] Perennial tributaries to the Rio Grande in Bandelier national monument and their headwaters in Sandoval county and all perennial reaches of tributaries to the Rio Grande in Santa Fe county unless included in other segments and excluding waters on tribal lands.

A. Designated uses: domestic water supply, high quality coldwater aquatic life, irrigation, livestock watering, wildlife habitat and primary contact; and public water supply on Little Tesuque creek, the Rio en Medio, and the Santa Fe river.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: specific conductance 300 µS/cm or less; the monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less, single sample 235 cfu/100 mL or less.

[20.6.4.121 NMAC - Rp 20 NMAC 6.1.2118, 10/12/2000; A. 5/23/2005; A, 12/1/2010; A, 2/14/2013]

[NOTE: The segment covered by this section was divided effective 5/23/2005. The standards for the additional segments are under 20.6.4.126, 20.6.4.127 and 20.6.4.128 NMAC.]

20.6.4.122 RIO GRANDE BASIN: [-] The main stem of the Rio Grande from Rio Pueblo de Taos upstream to the New Mexico-Colorado line, the Red river from its mouth on the Rio Grande upstream to the mouth of Placer creek, and the Rio Pueblo de Taos from its mouth on the Rio Grande upstream to the mouth of the Rio Grande del Rancho. Some Rio Grande and Rio Pueblo de Taos waters in this segment are under the joint jurisdiction of the state and Taos pueblo.

A. Designated uses: coldwater aquatic life, fish culture, irrigation, livestock watering, wildlife habitat and primary contact.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: the monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less, single sample 235 cfu/100 mL or less.

[20.6.4.122 NMAC - Rp 20 NMAC 6.1.2119, 10/12/2000; A, 5/23/2005; A, 12/1/2010]

20.6.4.123 RIO GRANDE BASIN: [-] Perennial reaches of the Red river upstream of the mouth of Placer creek, all perennial reaches of tributaries to the Red river, and all other perennial reaches of tributaries to the Rio Grande in Taos and Rio Arriba counties unless included in other segments and excluding waters on Santa Clara, Ohkay Owingeh, Picuris and Taos pueblos.

A. Designated uses: domestic water supply, high quality coldwater aquatic life, irrigation, livestock watering, wildlife habitat and primary contact; and public water supply on the Rio Pueblo and Rio Fernando de Taos.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: specific conductance 400 µS/cm or less (500 µS/cm or less for the Rio Fernando de Taos); the monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less, single sample 235 cfu/100 mL or less; and phosphorus (unfiltered sample) less than 0.1 mg/L for the Red river.
[20.6.4.123 NMAC - Rp 20 NMAC 6.1.2120, 10/12/2000; A, 5/23/2005; A, 12/1/2010]
[**NOTE:** The segment covered by this section was divided effective 5/23/2005. The standards for the additional segment are under 20.6.4.129 NMAC.]

20.6.4.124 RIO GRANDE BASIN: Perennial reaches of Sulphur creek from its confluence with Redondo creek upstream to its headwaters.

A. Designated uses: limited aquatic life, wildlife habitat, livestock watering and secondary contact.

B. Criteria: the use-specific criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: pH within the range of 2.0 to 9.0, maximum temperature 30ºC (86ºF), and the chronic aquatic life criteria of Subsections I and J of 20.6.4.900 NMAC.
[20.6.4.124 NMAC - N, 5/23/2005; A, 12/1/2010; A, 3/2/2017]

20.6.4.125 RIO GRANDE BASIN: [-] Perennial reaches of San Pedro creek from the San Felipe pueblo boundary to the headwaters.

A. Designated uses: coldwater aquatic life, irrigation, livestock watering, wildlife habitat and primary contact.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criterion applies: temperature 25°C (77°F) or less.
[20.6.4.125 NMAC - N, 5/23/2005; A, 12/1/2010]

20.6.4.126 RIO GRANDE BASIN: [-] Perennial portions of Cañon de Valle from Los Alamos national laboratory (LANL) stream gage E256 upstream to Burning Ground spring, Sandia canyon from Sigma canyon upstream to LANL NPDES outfall 001, Pajarito canyon from Arroyo de La Delfe upstream into Starmers gulch and Starmers spring and Water canyon from Area-A canyon upstream to State Route 501.

A. Designated uses: coldwater aquatic life, livestock watering, wildlife habitat and secondary contact.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses.
[20.6.4.126 NMAC - N, 5/23/2005; A, 12/1/2010]

20.6.4.126, 128, and 140 NMAC –
Perennial, Ephemeral and Intermittent, and Specified Intermittent Waters Within LANL[18]

1. *The Department proposed to create a new Section, 20.6.4.140 NMAC, breaking out certain intermittent waters within LANL from 20.6.4.128 NMAC, and amending 20.6.4.128 NMAC accordingly. NMED Exhibit 4, pp. 25-48; NMED Exhibit 64; NMED Exhibit 109, pp. 37-78; NMED Exhibit 110; Tr. Vol. 4, 1283:12-1320:15.*

2. *Amigos Bravos expressed support for the reclassification of certain intermittent waters within LANL from 20.6.4.128 NMAC to 20.6.4.140 NMAC. AB Exhibit 3, p. 15; Tr. Vol. 5, 1437:22-1443:20. To wit,*

[18] LANL's Exception No. 3 requested a structural revision to Attachment A such that proposals related to Section 126 are discussed in a standalone section. The HO declined to so revise.

Amigos Bravos supports NMED's proposal, which would upgrade these waters' use from limited aquatic life to marginal warmwater aquatic life. Compare 20.6.4.128 NMAC with proposed 20.6.4.140 NMAC. The Commission should direct NMED to immediately take action to propose upgraded protections for additional LANL intermittent streams. Specifically, LANL intermittent waters should be afforded the same protections as other intermittent waters in the state, that is, all LANL non perennial waters should be protected as intermittent in new segment 20.6.4.140 NMAC unless specifically identified as ephemeral waters, in which case they may be protected in segment 20.6.4.128 NMAC.

3. *LANL opposed certain of the Departments proposed amendments. Central to the disagreement between, LANL characterizes NMED's position as "the segments within Section 128 discovered to have perennial characteristics (i.e., Pajarito Upper and Lower Sections, and Arroyo de la Delfe from Pajarito Canyon to Kieling Spring) cannot be moved to Section 126 because they have allegedly been automatically unclassified to Section 99, without a Commission decision and without any notice or locational information to LANL or other stakeholders." LANL's position is that "the segments in question are not classified under Section 99 because Section 99 only includes perennial waters of the State that have not been previously classified, and the segments were classified by the Commission under Section 128 during the 2003 Triennial Review, and the Commission has made not decision to declassify those waters since that time." LANL Exhibit 2, pp. 6-37 (2020 TR LANL-00028 - 00057); LANL Exhibit 3, pp. 7-31 (2020 TR LANL-00066 - 00090); LANL Exhibit 4, pp. 6-36 (2020 TR LANL-00109 - 00137); LANL Exhibit 57, pp. 17-18 (2020 TR LANL-01075 - 01076); LANL Exhibit 58, pp. 12-23 (2020 TR LANL-01090 - 01101); LANL Exhibit 59 (2020 TR LANL-01116 - 01151); LANL Exhibit 60 (2020 TR LANL-01152 - 01171); Tr. Vol. 4, 1321:8-1394:20, 1404:15-1414:21. 171. LANL contends that the Commission classified all waters within the lands managed by DOE within LANL during the 2003 Triennial Review. Specifically, the Commission classified specific waters within LANL with perennial flow characteristics under Section 126 and classified all remaining water waters within LANL with*

ephemeral and intermittent flow characteristics under Section 128. In 2007 the EPA approved the Commission's classification of all surface waters within LANL under Sections 126 and 128. The Commission has not amended its prior classification of LANL waters under Section 126 and 128 since the completion of the 2003 Triennial Review, including during the 2009 and 2013 Triennial Reviews. 174. In this Triennial Review, LANL proposed to add language to Section 126 to clarify that all "[p]erennial waters within lands managed by the U.S. Department of Energy (DOE) within Los Alamos National Laboratory (LANL)," are classified under Section 126, "including but not limited to," the stream segments that are specifically identified within the section. See LANL Ex. 57 (Proposed Changes to 20.6.4 NMAC). During the 2013 Triennial Review, Amigos Bravos, DOE, Los Alamos National Security LLC and NMED entered into the October 9, 2015 Joint Stipulation Regarding Proposed Changes to 20.6.4.128 NMAC ("2015 Joint Stipulation"). See LANL Ex. 29 (2015 Joint Stipulation). The 2015 Joint Stipulation required that the parties meet, share available data, and confer regarding the appropriate level of water quality protections for ephemeral and intermittent waters classified under 20.6.4.128 NMAC. LANL Ex. 2 at 19-20 (Meyerhoff Direct); LANL Ex. 30 at 8 (Affidavit of M. Saladen). Based on the data collected pursuant to the 2015 Joint Stipulation, LANL has proposed to classify the following two segments under Section 126: (1) Pajarito canyon from 0.5 miles below Arroyo de la Delfe upstream to Homestead Spring; and (2) Arroyo de la Delfe from Pajarito canyon to Kieling Spring. See LANL Ex. 57 (Proposed Changes to 20.6.4 NMAC); see also LANL Ex. 3 at 19 (Gallegos Direct). As described in LANL's proposal, the first segment – Pajarito canyon from 0.5 miles below Arroyo de la Delfe upstream to Homestead Spring – includes the existing Section 126 perennial water in Pajarito canyon from the confluence with Arroyo de la Delfe to Starmers gulch and the following two contiguous reaches: (i) Pajarito canyon from 0.5 miles below Arroyo de la Delfe to the confluence with Arroyo de la Delfe ("Pajarito Upper Section"); and (ii) Pajarito canyon from Starmers Gulch to Homestead Spring ("Pajarito Lower Section"). See LANL Ex. 3 at 19-20 (Gallegos Direct).

LANL proposed amendment:

20.6.4.126 RIO GRANDE BASIN – 20.6.4.126 RIO GRANDE BASIN - Perennial waters within lands managed by the U.S. Department of Energy (DOE) within Los Alamos National Laboratory (LANL), including but not limited to: ~~portions of~~ Canon de Valle from ~~Los Alamos national laboratory~~ (LANL) stream gage E256 upstream to Burning Ground spring, Sandia canyon from Sigma canyon upstream to LANL NPDES outfall 001, Pajarito canyon from 0.5 miles below Arroyo de La Delfe upstream to Homestead Spring, Arroyo de La Delfe from Pajarito canyon to Kieling Spring, ~~into~~ Starmers gulch and Starmers spring and Water canyon from Area-A canyon upstream to State Route 501.

A. Designated Uses: coldwater aquatic life, livestock watering, wildlife habitat and secondary contact.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses.

4. *NMED contends that it provided substantial evidence in response to the objections of LANL. NMED Exhibit 109, pp. 37-78; NMED Exhibit 110; Tr. Vol. 4, 1283:12-1320:15.*

5. *Based on the weight of the evidence, the Commission finds the Department's proposal to create new Section 20.6.4.140 NMAC and amend 20.6.4.128 NMAC accordingly is well-taken and adopts the Department's amendments to these sections as proposed;*

   OR,

   Based on the evidence, the Commission directs NMED to immediately take action to propose upgraded protections for additional LANL intermittent streams such that LANL intermittent waters are afforded the same protections as other intermittent waters in the state and all LANL non-perennial waters should be protected as intermittent in new segment 20.6.4.140 NMAC unless specifically identified as ephemeral waters, in which case they may be protected in segment 20.6.4.128 NMAC,

   OR,

   The Commission finds that LANL's proposed revisions to Section 126 are well taken and supported by the weight of the evidence. The Commission hereby adopts such changes as reflected in the Proposed Final Rule submitted by LANL. The Commission finds that the most reasonable and logical approach is the approach proposed by LANL to move the Pajarito Upper Section, Pajarito Lower Section, and Arroyo de la Delfe from Pajarito canyon to Kieling Spring from Section 128 to Section 126. These

segments are contiguous with existing perennial waters within LANL that are already classified under Section 126. Classification of the Pajarito Upper Section, Pajarito Lower Section, and Arroyo de la Delfe from Pajarito canyon to Kieling Spring under Section 126 is also consistent with the designated uses under Section 126, which include secondary contact. The Commission will consider that amended flowchart in a future amendment to the WQMP/CPP.

20.6.4.127 RIO GRANDE BASIN: [-] Perennial portions of Los Alamos canyon upstream from Los Alamos reservoir and Los Alamos reservoir.

A. Designated uses: coldwater aquatic life, livestock watering, wildlife habitat, irrigation and primary contact.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses.

[20.6.4.127 NMAC - N, 5/23/2005; A, 12/1/2010]

20.6.4.128 RIO GRANDE BASIN: [-] Ephemeral and intermittent [~~watercourses~~]waters within lands managed by U.S. department of energy (DOE) within LANL[-], including but not limited to: Mortandad canyon, Cañada del Buey, Ancho canyon, Chaquehui canyon, Indio canyon, Fence canyon, Potrillo canyon, and portions of Cañon de Valle, Los Alamos canyon, Sandia canyon, Pajarito canyon and Water canyon not specifically identified in 20.6.4.126 NMAC or 20.6.4.140 NMAC. (Surface waters within lands scheduled for transfer from DOE to tribal, state or local authorities are specifically excluded.)

A. Designated uses: livestock watering, wildlife habitat, limited aquatic life and secondary contact.

B. Criteria: the use-specific criteria in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: the acute total ammonia criteria set forth in Subsection [~~K~~]L of 20.6.4.900 NMAC ([~~salmonids~~]*Oncorhynchus* spp. absent).

[20.6.4.128 NMAC - N, 5/23/2005; A, 12/1/2010; A, XX/XX/XXXX]

[**NOTE:** This section was divided effective XX/XX/XXXX. The standards for some intermittent waters within LANL are in 20.6.4.140 NMAC.]

20.6.4.128 NMAC – RIO GRANDE BASIN (Ephemeral and intermittent waters within lands managed by LANL)

1. *LANL contends that NMED's Amended Petition proposed to amend Section 128 by replacing the word "watercourses" with "waters," and by adding language to clarify that Section 128 includes any ephemeral and intermittent portions of waters located within LANL "not specifically identified in 20.6.4.126 or 20.6.4.140 NMAC." See NMED Amended Petition, filed March 12, 2021;* ***NMED Ex. 110*** *(NMED's Revised Proposed Amended Rule). LANL generally supported NMED's proposed amendment to Section 128, but LANL further recommended that the word "specifically" be deleted from the language in Section 128 to be consistent with LANL's proposed language for Section 126. See* ***LANL***

Ex. 57 *(Proposed Changes to 20.4.6 NMAC). LANL's proposed amendments to Section 128 are shown below and presented in LANL's Proposed Final Rule:*

> **20.6.4.128 RIO GRANDE BASIN -** Ephemeral and intermittent portions of ~~watercourses~~ waters within lands managed by U.S. ~~department~~Department of ~~energy~~Energy (DOE) within LANL, including but not limited to: Mortandad canyon, Canada del Buey, Ancho canyon, Chaquehui canyon, Indio canyon, Fence canyon, Potrillo canyon and portions of Canon de Valle, Los Alamos canyon, Sandia canyon, Pajarito canyon and Water canyon not ~~specifically~~ identified in 20.6.4.126 NMAC or 20.6.4.140 NMAC. (Surface waters within lands scheduled for transfer from DOE to tribal, state or local authorities are specifically excluded.)
>
> **A. Designated Uses:** livestock watering, wildlife habitat, limited aquatic life and secondary contact.
>
> **B. Criteria:** the use-specific criteria in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: the acute total ammonia criteria set forth in Subsection K of 20.6.4.900 NMAC (salmonids absent).

2. *The Commission finds that LANL's proposed language for Section 128 is well taken and supported by the weight of the evidence. The Commission hereby adopts such changes as reflected in the Proposed Final Rule submitted by LANL. LANL's proposed language for Section 126, which the Commission adopts, as discussed above, clarifies that all perennial waters located within LANL are classified under Section 126. See LANL Ex. 57 (Proposed Changes to 20.6.4 NMAC). Accordingly, the use of the term "specifically" within Section 128 is no longer appropriate. The Commission also finds that NMED's proposal to delete the word "watercourses" in Section 128 and replacing it with the word "waters" will add clarity to the section;*

OR

3. *Based on the weight of the evidence, the Commission finds the Department's proposal to create new Section 20.6.4.140 NMAC and amend 20.6.4.128 NMAC accordingly is well-taken and adopts the Department's amendments to these sections as proposed*[19]*.*

20.6.4.129 RIO GRANDE BASIN: [-] Perennial reaches of the Rio Hondo.

A. Designated uses: domestic water supply, high quality coldwater aquatic life, irrigation, livestock watering, wildlife habitat and primary contact**.**

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: specific conductance 400 µS/cm or less and phosphorus (unfiltered sample) less than 0.1 mg/L.

[19] Per LANL's Exception No. 5, LANL asserts that the "Commission need not choose between adopting NMED's proposal for Section 140 and LANL's proposal for Section 126."

[20.6.4.129 NMAC - N, 5/23/2005; A, 12/1/2010]

20.6.4.130 RIO GRANDE BASIN: [-] The Rio Puerco from the Rio Grande upstream to Arroyo Chijuilla, excluding the reaches on Isleta, Laguna and Cañoncito Navajo pueblos. Some waters in this segment are under the joint jurisdiction of the state and Isleta, Laguna or Cañoncito Navajo pueblos.

A. Designated uses: irrigation, warmwater aquatic life, livestock watering, wildlife habitat and primary contact.

B. Criteria:

(1) The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses.

(2) At mean monthly flows above 100 cfs, the monthly average concentration for: TDS l,500 mg/L or less, sulfate 500 mg/L or less and chloride 250 mg/L or less.

[20.6.4.130 NMAC - N, 12/1/2010]

20.6.4.131 RIO GRANDE BASIN: [-] The Rio Puerco from the confluence of Arroyo Chijuilla upstream to the northern boundary of Cuba.

A. Designated uses: warmwater aquatic life, irrigation, livestock watering, wildlife habitat and primary contact.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses.

[20.6.4.131 NMAC - N, 12/1/2010]

20.6.4.132 RIO GRANDE BASIN: [-] Rio Grande (Klauer) spring

A. Designated uses: domestic water supply, wildlife habitat, livestock watering, coldwater aquatic life use and primary contact.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses.

[20.6.4.132 NMAC - N, 12/1/2010]

20.6.4.133 RIO GRANDE BASIN: [-] Bull Creek lake, Cow lake, Elk lake, Goose lake, Heart lake, Hidden lake (Lake Hazel), Horseshoe lake, Horseshoe (Alamitos) lake, Jose Vigil lake, Lost lake, Middle Fork lake, Nambe lake, Nat II lake, Nat IV lake, No Fish lake, Pioneer lake, San Leonardo lake, Santa Fe lake, Serpent lake, South Fork lake, Trampas lakes (east and west) and Williams lake.

A. Designated uses: high quality coldwater aquatic life, irrigation, domestic water supply, primary contact, livestock watering and wildlife habitat.

B. Criteria: The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: specific conductance 300 µS/cm or less; the monthly geometric mean of *E. coli* bacteria 126 cfu/100 mL or less, single sample 235 cfu/100 mL or less.

[20.6.4.133 NMAC - N, 7/10/2012]

20.6.4.134 RIO GRANDE BASIN: [-] Cabresto lake, Canjilon lakes a, c, e and f, Fawn lakes (east and west), Hopewell lake and San Gregorio lake.

A. Designated uses: high quality coldwater aquatic life, irrigation, domestic water supply, primary contact, livestock watering and wildlife habitat.

B. Criteria: The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: specific conductance 300 µS/cm or less; the monthly geometric mean of *E. coli* bacteria 126 cfu/100 mL or less, single sample 235 cfu/100 mL or less.

[20.6.4.134 NMAC - N, 7/10/2012]

20.6.4.135 RIO GRANDE BASIN: [-] Bluewater lake.

A. Designated uses: coldwater aquatic life, irrigation, domestic water supply, primary contact, livestock watering and wildlife habitat.

B. Criteria: The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses except that the following segment-specific criteria apply: phosphorus (unfiltered sample) 0.1 mg/L or less; the monthly geometric mean of *E. coli* bacteria 126 cfu/100 mL or less, single sample 235 cfu/100 mL or less.

[20.6.4.135 NMAC - N, 7/10/2012]

20.6.4.136 RIO GRANDE BASIN: [-] The Santa Fe river from the outfall of the Santa Fe wastewater treatment facility to Guadalupe street.

A. Designated uses: limited aquatic life, wildlife habitat, primary contact, livestock watering, and irrigation.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses.

[20.6.4.136 NMAC - N, 2/14/2013]

20.6.4.137 RIO GRANDE BASIN: [-] The Santa Fe river from Guadalupe street to Nichols reservoir.

A. Designated uses: coolwater aquatic life, wildlife habitat, primary contact, livestock watering, and irrigation.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses.

[20.6.4.137 NMAC - N, 2/14/2013]

20.6.4.138 RIO GRANDE BASIN: [-] Nichols and McClure reservoirs.

A. Designated uses: high quality coldwater aquatic life, wildlife habitat, primary contact, public water supply and irrigation.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: specific conductance 300 µS/cm or less; the monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less, single sample 235 cfu/100 mL or less.

[20.6.4.138 NMAC - N, 2/14/2013]

20.6.4.139 RIO GRANDE BASIN: [-] Perennial reaches of Galisteo creek and perennial reaches of its tributaries from Kewa pueblo upstream to 2.2 miles upstream of Lamy.

A. Designated uses: coolwater aquatic life, primary contact, irrigation, livestock watering, domestic water supply and wildlife habitat; and public water supply on Cerrillos reservoir.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: the monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less, single sample 235 cfu/100 mL or less.

[20.6.4.139 NMAC - N, 2/14/2013]

20.6.4.140 RIO GRANDE BASIN: Effluent canyon from Mortandad canyon to its headwaters, intermittent portions of S-Site canyon from monitoring well MSC 16-06293 to Martin spring, and intermittent portions of Twomile canyon from its confluence with Pajarito canyon to Upper Twomile canyon. (Surface waters within lands scheduled for transfer from DOE to tribal, state or local authorities are specifically excluded.)

A. Designated uses: livestock watering, wildlife habitat, marginal warmwater aquatic life and secondary contact.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses.

[20.6.4.140 NMAC - N, XX/XX/XXXX]

20.6.4.140 NMAC - Perennial, Ephemeral and Intermittent, and Specified Intermittent Waters Within LANL

1. *NMED proposed to create a new classified standards section, 20.6.4.140 NMAC ("Section 140") and to reclassify the following intermittent waters within LANL under the new Section 140: Effluent Canyon from Mortandad Canyon to its headwaters, Site Canyon from alluvial monitoring well MSC 16-*

06293 to Martin Spring, and Twomile Canyon from its confluence with Pajarito Canyon to Upper Twomile Canyon. All three of these reaches are currently classified waters under Section 128.

2. NMED proposed the following designated uses for the proposed new Section 140: livestock watering, wildlife habitat, marginal warmwater aquatic life, and secondary contact. See NMED Ex. 4 at 46:11-12 (Fullam Direct). NMED also prepared an Existing Use Analysis for Effluent Canyon, Upper S-Site Canyon and Two-Mile Canyon from Water Canyon upstream to its confluence with Upper Two-Mile Canyon to support its proposed reclassification.

3. LANL generally supported NMED's proposed reclassification under new Section 140, but with two modifications. First, while LANL agreed that the data support a marginal warmwater aquatic life use for intermittent portions of S-Site canyon from monitoring well MSC 16-06293 to Martin Spring and intermittent portions of Twomile canyon from its confluence with Pajarito canyon to upper Twomile canyon, LANL's witnesses testified that their evaluation of additional data in the context of considering NMED's direct testimony raised "questions about the water quality in Effluent canyon from Mortandad canyon to its headwaters," indicating that the canyon may not be capable of supporting a warmwater aquatic life use designation; and therefore, LANL recommended that the Commission not reclassify Effluent Canyon within Section 140 until such time as new data can be collected and analyzed. Second, LANL proposed that the portion of Twomile Canyon to be included in new Section 140 should terminate at stream gage E244, rather that the confluence of Twomile Canyon with Pajarito Canyon. LANL's proposed amendments to Section 140 are shown below and presented in LANL's Proposed Final Rule:

> **20.6.4.140 RIO GRANDE BASIN:** Intermittent portions of S-Site canyon from alluvial groundwater well MSC 16-06293 upstream to Martin Spring, and Twomile canyon from LANL stream gage E244 upstream to its confluence with upper Twomile canyon. (Surface waters within lands scheduled for transfer from DOE to tribal, state or local authorities are specifically excluded.)
>
> **A. Designated uses:** livestock watering, wildlife habitat, marginal warmwater aquatic life, and secondary contact.
>
> **B. Criteria:** the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses.

4. Based on the weight of the evidence, the Commission finds the Department's proposal to create new Section 20.6.4.140 NMAC and amend 20.6.4.128 NMAC accordingly is well-taken and adopts the Department's amendments to these sections as proposed;

OR,

The Commission finds that LANL's proposed amendments to NMED's proposed language for new Section 140 are well taken and supported by the weight of the evidence. The Commission hereby adopts LANL's proposed language as reflected in the Proposed Final Rule submitted by LANL.

20.6.4.~~[140]~~141 - 20.6.4.200 [RESERVED]

20.6.4.201 PECOS RIVER BASIN: [-] The main stem of the Pecos river from the New Mexico-Texas line upstream to the mouth of the Black river (near Loving).

A. Designated uses: irrigation, livestock watering, wildlife habitat, primary contact and warmwater aquatic life.

B. Criteria:

(1) The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criterion applies: dissolved boron for irrigation use 2,000 µg/L or less.

(2) At all flows above 50 cfs: TDS 20,000 mg/L or less, sulfate 3,000 mg/L or less and chloride 10,000 mg/L or less.

[20.6.4.201 NMAC - Rp 20 NMAC 6.1.2201, 10/12/2000; A, 5/23/2005; A, 12/1/2010]

20.6.4.202 PECOS RIVER BASIN: [-] The main stem of the Pecos river from the mouth of the Black river upstream to lower Tansil dam, including perennial reaches of the Black river, the Delaware river and Blue spring.

A. Designated uses: industrial water supply, irrigation, livestock watering, wildlife habitat, primary contact and warmwater aquatic life.

B. Criteria:

(1) The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criterion applies: temperature 34°C (93.2°F) or less.

(2) At all flows above 50 cfs: TDS 8,500 mg/L or less, sulfate 2,500 mg/L or less and chloride 3,500 mg/L or less.

C. Remarks: diversion for irrigation frequently limits summer flow in this reach of the main stem Pecos river to that contributed by springs along the watercourse.

[20.6.4.202 NMAC - Rp 20 NMAC 6.1.2202, 10/12/2000; A, 5/23/2005; A, 12/1/2010]

[**NOTE:** The segment covered by this section was divided effective 5/23/2005. The standards for Lower Tansil Lake and Lake Carlsbad are under 20.6.4.218 NMAC.]

20.6.4.203 PECOS RIVER BASIN: [-] The main stem of the Pecos river from the headwaters of Lake Carlsbad upstream to Avalon dam.

A. Designated uses: industrial water supply, livestock watering, wildlife habitat, primary contact and warmwater aquatic life.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: temperature 34°C (93.2°F) or less; the monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less, single sample 235 cfu/100 mL or less.

[20.6.4.203 NMAC - Rp 20 NMAC 6.1.2203, 10/12/2000; A, 5/23/2005; A, 12/1/2010]

[**NOTE:** The segment covered by this section was divided effective 5/23/2005. The standards for Lower Tansil Lake and Lake Carlsbad are under 20.6.4.218 and for Avalon Reservoir are under 20.6.4.219 NMAC.]

20.6.4.204 PECOS RIVER BASIN: [-] The main stem of the Pecos river from the headwaters of Avalon reservoir upstream to Brantley dam.

A. Designated uses: irrigation, livestock watering, wildlife habitat, [~~secondary~~]primary contact and warmwater aquatic life.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses.

[20.6.4.204 NMAC - Rp 20 NMAC 6.1.2204, 10/12/2000; A, 5/23/2005; A, 12/1/2010; A, XX/XX/XXXX]

[**NOTE:** The segment covered by this section was divided effective 5/23/2005. The standards for Avalon Reservoir are under 20.6.4.219 NMAC.]

20.6.4.205 PECOS RIVER BASIN: [-] Brantley reservoir.

A. Designated uses: irrigation storage, livestock watering, wildlife habitat, primary contact and warmwater aquatic life.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses.

[20.6.4.205 NMAC - Rp 20 NMAC 6.1.2205, 10/12/2000; A, 5/23/2005; A, 12/1/2010]

20.6.4.206 PECOS RIVER BASIN: [~~The main stem of the Pecos river from the headwaters of Brantley reservoir upstream to Salt creek (near Acme), perennial reaches of the Rio Peñasco downstream from state highway 24 near Dunken, perennial reaches of the Rio Hondo and its~~]Perennial reaches of the Rio Felix and perennial reaches of tributaries to the Rio Hondo downstream of Bonney canyon, excluding North Spring river[~~and perennial reaches of the Rio Felix~~].

A. Designated uses: irrigation, livestock watering, wildlife habitat, secondary contact and warmwater aquatic life.

B. Criteria:

(1) The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses.

(2) At all flows above 50 cfs: TDS 14,000 mg/L or less, sulfate 3,000 mg/L or less and chloride 6,000 mg/L or less.

[20.6.4.206 NMAC - Rp 20 NMAC 6.1.2206, 10/12/2010; A, 5/23/2005; A, 12/1/2010; A, 3/2/2017; A, XX/XX/XXXX]

[**NOTE:** This segment was divided effective XX/XX/XXXX. The standards for the main stem of the Pecos river from the headwaters of Brantley reservoir upstream to Salt creek (near Acme), perennial reaches of the Rio Peñasco downstream from state highway 24 near Dunken, and perennial reaches of the Rio Hondo are under 20.6.4.231 NMAC.]

20.6.4.204, 20.6.4.206 and 20.6.4.207 NMAC - PECOS RIVER AMENDMENTS

(FOR FULL ANALYSIS, SEE PROPOSED REASONS, OBJECTIONS AND CITATIONS ABOVE IN 20.6.4.101-899 NMAC - Amendments to Selected Sections that Contain Secondary Contact Uses)

1. *The Department proposed to amend language in 20.6.4.204, 20.6.4.206 and 20.6.4.207 NMAC, and add a new section, 20.6.4.231 NMAC, to remove nonperennial reaches of tributaries from the list of classified perennial sections. NMED Exhibit 3, pp. 5-14. NMED Exhibit 9; NMED Exhibit 56; Tr. Vol. 3, 918:14-936:7.*

2. The Department proposed to amend language in 20.6.4.206, 20.6.4.208, 20.6.4.209, 20.6.4.215, 20.6.4.220 NMAC to remove nonperennial reaches of tributaries from the list of classified perennial sections. NMED Exhibit 3, pp. 14-23. NMED Exhibit 9; NMED Exhibit 59; Tr. Vol. 3, 904:23-916:6.

20.6.4.207 PECOS RIVER BASIN: [-] The main stem of the Pecos river from Salt creek (near Acme) upstream to Sumner dam.

A. Designated uses: irrigation, marginal warmwater aquatic life, livestock watering, wildlife habitat and [~~secondary~~]primary contact.

B. Criteria:

(1) The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses.

(2) At all flows above 50 cfs: TDS 8,000 mg/L or less, sulfate 2,500 mg/L or less and chloride 4,000 mg/L or less.

[20.6.4.207 NMAC - Rp 20 NMAC 6.1.2207, 10/12/2000; A, 5/23/2005; A, 12/1/2010; A, XX/XX/XXXX]

20.6.4.208 PECOS RIVER BASIN: [-] Perennial reaches of the Rio Peñasco above state highway 24 near Dunken, [~~and its~~]perennial reaches of tributaries to the Rio Peñasco above state highway 24 near Dunken, perennial reaches of Cox canyon, perennial reaches of the Rio Bonito downstream from state highway 48 (near Angus), the Rio Ruidoso downstream of the U.S. highway 70 bridge near Seeping Springs lakes, perennial reaches of the Rio Hondo upstream from Bonney canyon and perennial reaches of Agua Chiquita.

A. Designated uses: fish culture, irrigation, livestock watering, wildlife habitat, coldwater aquatic life and primary contact.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: temperature 30°C (86°F) or less, and phosphorus (unfiltered sample) less than 0.1 mg/L.

[20.6.4.208 NMAC - Rp 20 NMAC 6.1.2208, 10/12/2000; A, 5/23/2005; A, 12/1/2010; A, XX/XX/XXXX]

20.6.4.209 PECOS RIVER BASIN: [-] Perennial reaches of Eagle creek upstream of Alto dam to the Mescalero Apache boundary, perennial reaches of the Rio Bonito upstream of state highway 48 (near Angus) excluding Bonito lake, [~~and its~~]perennial reaches of tributaries to the Rio Bonito upstream of state highway 48 (near Angus)[-], [~~and~~] perennial reaches of the Rio Ruidoso upstream of the U.S. highway 70 bridge near Seeping Springs lakes[,] above and below the Mescalero Apache boundary and [~~its~~]perennial reaches of tributaries to the Rio Ruidoso upstream of the U.S. highway 70 bridge near Seeping Springs lakes[,] above and below the Mescalero Apache boundary.

A. Designated uses: domestic water supply, high quality coldwater aquatic life, irrigation, livestock watering, wildlife habitat, public water supply and primary contact.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: specific conductance 600 µS/cm or less in Eagle creek, 1,100 µS/cm or less in Bonito creek and 1,500 µS/cm or less in the Rio Ruidoso; phosphorus (unfiltered sample) less than 0.1 mg/L; the monthly geometric mean of *E. coli* bacteria 126 cfu/100 mL or less, single sample 235 cfu/100 mL or less.

[20.6.4.209 NMAC - Rp 20 NMAC 6.1.2209, 10/12/2000; A, 5/23/2005; A, 12/1/2010; A, 7/10/2012; A, XX/XX/XXXX]

[**NOTE:** The standards for Bonito lake are in 20.6.4.223 NMAC, effective 7/10/2012]

20.6.4.210 PECOS RIVER BASIN: [-] Sumner reservoir.

A. Designated uses: irrigation storage, livestock watering, wildlife habitat, primary contact and warmwater aquatic life.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: the monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less, single sample 235 cfu/100 mL or less.

[20.6.4.210 NMAC - Rp 20 NMAC 6.1.2210, 10/12/2000; A, 5/23/2005; A, 12/1/2010]

20.6.4.211 PECOS RIVER BASIN: [-] The main stem of the Pecos river from the headwaters of Sumner reservoir upstream to Tecolote creek excluding Santa Rosa reservoir.

A. Designated uses: fish culture, irrigation, marginal warmwater aquatic life, livestock watering, wildlife habitat and primary contact.

B. Criteria:

(1) The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses.

(2) At all flows above 50 cfs: TDS 3,000 mg/L or less, sulfate 2,000 mg/L or less and chloride 400 mg/L or less.

[20.6.4.211 NMAC - Rp 20 NMAC 6.1.2211, 10/12/2000; A, 5/23/2005; A, 12/1/2010; A, 7/10/2012]

[**NOTE:** The standards for Santa Rosa reservoir are in 20.6.4.225 NMAC, effective 7/10/2012]

20.6.4.212 PECOS RIVER BASIN: [-] Perennial tributaries to the main stem of the Pecos river from the headwaters of Sumner reservoir upstream to Santa Rosa dam.

A. Designated uses: irrigation, coldwater aquatic life, livestock watering, wildlife habitat and primary contact.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criterion applies: temperature 25°C (77°F) or less.

[20.6.4.212 NMAC - Rp 20 NMAC 6.1.2211.1, 10/12/2000; A, 5/23/2005; A, 12/1/2010]

20.6.4.213 PECOS RIVER BASIN: [-] McAllister lake.

A. Designated uses: coldwater aquatic life, secondary contact, livestock watering and wildlife habitat.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criterion applies: temperature 25°C (77°F) or less.

[20.6.4.213 NMAC - Rp 20 NMAC 6.1.2211.3, 10/12/2000; A, 5/23/2005; A, 12/1/2010]

20.6.4.214 PECOS RIVER BASIN: [-] Storrie lake.

A. Designated uses: coldwater aquatic life, warmwater aquatic life, primary contact, livestock watering, wildlife habitat, public water supply and irrigation storage.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: the monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less, single sample 235 cfu/100 mL or less.

[20.6.4.214 NMAC - Rp 20 NMAC 6.1.2211.5, 10/12/2000; A, 5/23/2005; A, 12/1/2010]

20.6.4.215 PECOS RIVER BASIN: [-] Perennial reaches of the Gallinas river upstream of the diversion for the Las Vegas municipal reservoir, [~~and all its~~]perennial reaches of tributaries to the Gallinas river upstream of the diversion for the Las Vegas municipal reservoir, perennial reaches of Tecolote creek upstream of Blue creek[~~,~~] and all perennial reaches of tributaries [~~of~~]to Tecolote creek upstream of Blue creek.

A. Designated uses: domestic water supply, high quality coldwater aquatic life, irrigation, livestock watering, wildlife habitat, industrial water supply and primary contact; and public water supply on the Gallinas river.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: specific conductance 300 µS/cm or less (450 µS/cm or less in Wright Canyon creek); the monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less, single sample 235 cfu/100 mL or less.

[20.6.4.215 NMAC - Rp 20 NMAC 6.1.2212, 10/12/2000; A, 5/23/2005; A, 12/1/2010; A, 2/13/2018; A, XX/XX/XXXX]

[**NOTE:** This segment was divided effective 2/13/2018. The standards for Tecolote creek from I-25 to Blue creek are under 20.6.4.230 NMAC.]

20.6.4.216 PECOS RIVER BASIN: [-] The main stem of the Pecos river from Tecolote creek upstream to Cañon de Manzanita.

A. Designated uses: irrigation, livestock watering, wildlife habitat, marginal coldwater aquatic life and primary contact.

B. Criteria:

(1) The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criterion applies: temperature 30°C (86°F) or less.

(2) At all flows above 10 cfs: TDS 250 mg/L or less, sulfate 25 mg/L or less and chloride 5 mg/L or less.

[20.6.4.216 NMAC - Rp 20 NMAC 6.1.2213, 10/12/2000; A, 5/23/2005; A, 12/1/2010]

20.6.4.217 PECOS RIVER BASIN: [-] Perennial reaches of Cow creek and all perennial reaches of its tributaries and the main stem of the Pecos river from Cañon de Manzanita upstream to its headwaters, including perennial reaches of all tributaries thereto except lakes identified in 20.6.4.222 NMAC.

A. Designated uses: domestic water supply, fish culture, high quality coldwater aquatic life, irrigation, livestock watering, wildlife habitat and primary contact; and public water supply on the main stem of the Pecos river.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: specific conductance 300 µS/cm or less; the monthly geometric mean of *E. coli* bacteria 126 cfu/100 mL or less, single sample 235 cfu/100 mL or less.

[20.6.4.217 NMAC - Rp 20 NMAC 6.1.2214, 10/12/2000; A, 5/23/2005; A, 12/1/2010; A, 7/10/2012]

[**NOTE:** The segment covered by this section was divided effective 5/23/2005. The standards for the additional segments are under 20.6.4.220 and 20.6.4.221 NMAC.]

20.6.4.218 PECOS RIVER BASIN: [-] Lower Tansil lake and Lake Carlsbad.

A. Designated uses: industrial water supply, livestock watering, wildlife habitat, primary contact and warmwater aquatic life.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criterion applies: temperature 34°C (93.2°F) or less.

[20.6.4.218 NMAC - N, 5/23/2005; A, 12/1/2010]

20.6.4.219 PECOS RIVER BASIN: [-] Avalon reservoir.

A. Designated uses: irrigation storage, livestock watering, wildlife habitat, secondary contact and warmwater aquatic life.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses.

[20.6.4.219 NMAC - N, 5/23/2005; A, 12/1/2010]

20.6.4.220 PECOS RIVER BASIN: [-] Perennial reaches of the Gallinas river and [~~its~~]perennial reaches of tributaries to the Gallinas river from its mouth upstream to the diversion for the Las Vegas municipal reservoir, except Pecos Arroyo.

A. Designated uses: irrigation, livestock watering, wildlife habitat, marginal coldwater aquatic life and primary contact.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criterion applies: temperature 30°C (86°F) or less.

[20.6.4.220 NMAC - N, 5/23/2005; A, 12/1/2010; A, XX/XX/XXXX]

20.6.4.221 PECOS RIVER BASIN: [-] Pecos Arroyo.

A. Designated uses: livestock watering, wildlife habitat, warmwater aquatic life and primary contact.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: the monthly geometric mean of E. coli bacteria 206 cfu/100 mL, single sample 940 cfu/100 mL.

[20.6.4.221 NMAC - N, 5/23/2005; A, 12/1/2010]

20.6.4.222 PECOS RIVER BASIN: [-] Johnson lake, Katherine lake, Lost Bear lake, Pecos Baldy lake, Spirit lake, Stewart lake and Truchas lakes (north and south).

A. Designated uses: high quality coldwater aquatic life, irrigation, domestic water supply, primary contact, livestock watering and wildlife habitat.

B. Criteria: The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: specific conductance 300 µS/cm or less; the monthly geometric mean of *E. coli* bacteria 126 cfu/100 mL or less, single sample 235 cfu/100 mL or less.

[20.6.4.222 NMAC - N, 7/10/2012]

20.6.4.223 PECOS RIVER BASIN: [-] Bonito lake.

A. Designated uses: high quality coldwater aquatic life, irrigation, domestic water supply, primary contact, livestock watering, wildlife habitat and public water supply.

B. Criteria: The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses except that the following segment-specific criteria apply: specific conductance 1100 µS/cm or less; phosphorus (unfiltered sample) less than 0.1 mg/L; the monthly geometric mean of *E. coli* bacteria 126 cfu/100 mL or less, single sample 235 cfu/100 mL or less.

[20.6.4.223 NMAC - N, 7/10/2012]

20.6.4.224 PECOS RIVER BASIN: [-] Monastery lake.

A. Designated uses: coolwater aquatic life, primary contact, livestock watering and wildlife habitat.

B. Criteria: The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: the monthly geometric mean of *E. coli* bacteria 206 cfu/100 mL or less, single sample 940 cfu/100 mL or less.

[20.6.4.224 NMAC - N, 7/10/2012]

20.6.4.225 PECOS RIVER BASIN: [-] Santa Rosa reservoir.

A. Designated uses: coolwater aquatic life, irrigation, primary contact, livestock watering and wildlife habitat.

B. Criteria: The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses.

[20.6.4.225 NMAC - N, 7/10/2012]

20.6.4.226 PECOS RIVER BASIN: [-] Perch lake.

A. Designated uses: coolwater aquatic life, primary contact, livestock watering and wildlife habitat.

B. Criteria: The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses except that the following segment-specific criteria apply: the monthly geometric mean of *E. coli* bacteria 126 cfu/100 mL or less, single sample 235 cfu/100 mL or less.

[20.6.4.226 NMAC - N, 7/10/2012]

20.6.4.227 PECOS RIVER BASIN: [-] Lea lake.

A. Designated uses: warmwater aquatic life, primary contact and wildlife habitat.

B. Criteria: The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses except that the following segment-specific criteria apply: the monthly geometric mean of *E. coli* bacteria 126 cfu/100 mL or less, single sample 235 cfu/100 mL or less.

[20.6.4.227 NMAC - N, 7/10/2012]

20.6.4.228 PECOS RIVER BASIN: [-] Cottonwood lake and Devil's Inkwell.

A. Designated uses: coolwater aquatic life, primary contact and wildlife habitat.

B. Criteria: The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: the monthly geometric mean of *E. coli* bacteria 206 cfu/100 mL or less, single sample 940 cfu/100 mL or less.

[20.6.4.228 NMAC - N, 7/10/2012]

20.6.4.229 PECOS RIVER BASIN: [-] Mirror lake.

A. Designated uses: warmwater aquatic life, primary contact and wildlife habitat.

B. Criteria: The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: the monthly geometric mean of *E. coli* bacteria 206 cfu/100 mL or less, single sample 940 cfu/100 mL or less.
[20.6.4.229 NMAC - N, 7/10/2012]

20.6.4.230 PECOS RIVER BASIN: [-] Perennial reaches of Tecolote creek from I-25 to Blue creek.

A. Designated uses: domestic water supply, coolwater aquatic life, irrigation, livestock watering, wildlife habitat, and primary contact.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: the monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less, single sample 235 cfu/100 mL or less.
[20.6.4.230 NMAC - N, 2/13/2018]

20.6.4.231 PECOS RIVER BASIN: The main stem of the Pecos river from the headwaters of Brantley reservoir upstream to Salt creek (near Acme), perennial reaches of the Rio Peñasco downstream from state highway 24 near Dunken, perennial reaches of North Spring river and perennial reaches of the Rio Hondo downstream of Bonney canyon.

A. Designated uses: irrigation, livestock watering, wildlife habitat, primary contact and warmwater aquatic life.

B. Criteria:

(1) The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses.

(2) At all flows above 50 cfs: TDS 14,000 mg/L or less, sulfate 3,000 mg/L or less and chloride 6,000 mg/L or less.
[N, XX/XX/XXXX]

~~[20.6.4.231]~~20.6.4.232 - 20.6.4.300 [RESERVED]

20.6.4.301 CANADIAN RIVER BASIN: [-] The main stem of the Canadian river from the New Mexico-Texas line upstream to Ute dam, and any flow that enters the main stem from Revuelto creek.

A. Designated uses: irrigation, marginal warmwater aquatic life, livestock watering, wildlife habitat and primary contact.

B. Criteria:

(1) The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses.

(2) TDS 6,500 mg/L or less at flows above 25 cfs.
[20.6.4.301 NMAC - Rp 20 NMAC 6.1.2301, 10/12/2000; A, 5/23/2005; A, 12/1/2010]

20.6.4.302 CANADIAN RIVER BASIN: [-] Ute reservoir.

A. Designated uses: livestock watering, wildlife habitat, public water supply, industrial water supply, primary contact and warmwater aquatic life.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: the monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less, single sample 235 cfu/100 mL or less.
[20.6.4.302 NMAC - Rp 20 NMAC 6.1.2302, 10/12/2000; A, 5/23/2005; A, 12/1/2010]

20.6.4.303 CANADIAN RIVER BASIN: [-] The main stem of the Canadian river from the headwaters of Ute reservoir upstream to Conchas dam, the perennial reaches of Pajarito and Ute creeks and their perennial tributaries.

A. Designated uses: irrigation, marginal warmwater aquatic life, livestock watering, wildlife habitat and primary contact.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses.
[20.6.4.303 NMAC - Rp 20 NMAC 6.1.2303, 10/12/2000; A, 5/23/2005; A, 12/1/2010]

20.6.4.304 CANADIAN RIVER BASIN: [-] Conchas reservoir.

A. Designated uses: irrigation storage, livestock watering, wildlife habitat, public water supply, primary contact and warmwater aquatic life.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: the monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less, single sample 235 cfu/100 mL or less.

[20.6.4.304 NMAC - Rp 20 NMAC 6.1.2304, 10/12/2000; A, 5/23/2005; A, 12/1/2010]

20.6.4.305 CANADIAN RIVER BASIN: The main stem of the Canadian river from the headwaters of Conchas reservoir upstream to the New Mexico-Colorado line, perennial reaches of the Conchas river, the Mora river downstream from the USGS gaging station near Shoemaker, the Vermejo river downstream from Rail canyon and perennial reaches of Raton, Chicorica (except Lake Maloya and Lake Alice) and Uña de Gato creeks.

A. Designated uses: irrigation, marginal warmwater aquatic life, livestock watering, wildlife habitat and primary contact.

B. Criteria:

(1) The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses.

(2) TDS 3,500 mg/L or less at flows above 10 cfs.

[20.6.4.305 NMAC - Rp 20 NMAC 6.1.2305, 10/12/2000; A, 5/23/2005; A, 12/1/2010; A, 3/2/2017]

[**NOTE:** This segment was divided effective 12/1/2010. The standards for Lake Alice and Lake Maloya are under 20.6.4.311 and 20.6.4.312 NMAC, respectively.]

20.6.4.306 CANADIAN RIVER BASIN: [-] The Cimarron river downstream from state highway 21 in Cimarron to the Canadian river and all perennial reaches of tributaries to the Cimarron river downstream from state highway 21 in Cimarron.

A. Designated uses: irrigation, warmwater aquatic life, livestock watering, wildlife habitat and primary contact; and public water supply on Cimarroncito creek.

B. Criteria:

(1) The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses.

(2) TDS 3,500 mg/L or less at flows above 10 cfs.

[20.6.4.306 NMAC - Rp 20 NMAC 6.1.2305.1, 10/12/2000; A, 7/19/2001; A, 5/23/2005; A, 12/1/2010]

20.6.4.307 CANADIAN RIVER BASIN: [-] Perennial reaches of the Mora river from the USGS gaging station near Shoemaker upstream to the state highway 434 bridge in Mora, all perennial reaches of tributaries to the Mora river downstream from the USGS gaging station at La Cueva in San Miguel and Mora counties except lakes identified in 20.6.4.313 NMAC, perennial reaches of Ocate creek downstream of Ocate, [~~and its~~]perennial reaches of tributaries to Ocate creek downstream of Ocate, and perennial reaches of Rayado creek downstream of Miami lake diversion in Colfax county.

A. Designated uses: marginal coldwater aquatic life, warmwater aquatic life, primary contact, irrigation, livestock watering and wildlife habitat.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses.

[20.6.4.307 NMAC - Rp 20 NMAC 6.1.2305.3, 10/12/2000; A, 5/23/2005; A, 12/1/2010; A, 7/10/2012; A, XX/XX/XXXX]

20.6.4.308 CANADIAN RIVER BASIN: [-] Charette lakes.

A. Designated uses: coldwater aquatic life, warmwater aquatic life, secondary contact, livestock watering and wildlife habitat.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses.

[20.6.4.308 NMAC - Rp 20 NMAC 6.1.2305.5, 10/12/2000; A, 5/23/2005; A, 12/1/2010]

20.6.4.309 CANADIAN RIVER BASIN: [-] The Mora river and perennial reaches of its tributaries upstream from the state highway 434 bridge in Mora except lakes identified in 20.6.4.313 NMAC, all

perennial reaches of tributaries to the Mora river upstream from the USGS gaging station at La Cueva, perennial reaches of Coyote creek, [~~and its~~]perennial reaches of tributaries to Coyote creek, the Cimarron river above state highway 21 in Cimarron, [~~and its~~]perennial reaches of tributaries to the Cimarron river above state highway 21 in Cimarron except Eagle Nest lake, all perennial reaches of tributaries to the Cimarron river north and northwest of highway 64 except north and south Shuree ponds, perennial reaches of Rayado creek above Miami lake diversion, [~~and its~~]perennial reaches of tributaries to Rayado creek above Miami lake diversion, Ocate creek and perennial reaches of its tributaries upstream of Ocate, perennial reaches of the Vermejo river upstream from Rail canyon and all other perennial reaches of tributaries to the Canadian river northwest and north of U.S. highway 64 in Colfax county unless included in other segments.

A. Designated uses: domestic water supply, irrigation, high quality coldwater aquatic life, livestock watering, wildlife habitat, and primary contact; and public water supply on the Cimarron river upstream from Cimarron, [~~and~~]on perennial reaches of Rayado creek and on perennial reaches of [~~its~~]tributaries to Rayado creek.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: specific conductance 500 µS/cm or less; the monthly geometric mean of *E. coli* bacteria 126 cfu/100 mL or less, single sample 235 cfu/100 mL or less.

[20.6.4.309 NMAC - Rp 20 NMAC 6.1.2306, 10/12/2000; A, 7/19/2001; A, 5/23/2005; A, 12/1/2010; A, 7/10/2012; A, XX/XX/XXXX]

[**NOTE:** The segment covered by this section was divided effective 5/23/2005. The standards for the additional segment are under 20.6.4.310 NMAC. The standards for Shuree ponds are in 20.6.4.314 NMAC and the standards for Eagle Nest lake are in 20.6.4.315 NMAC, effective 7/10/2012]

20.6.4.310 CANADIAN RIVER BASIN: [-] Perennial reaches of Corrumpa creek.

A. Designated uses: livestock watering, wildlife habitat, irrigation, primary contact and coldwater aquatic life.

B. Criteria:

(1) The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: temperature 25°C (77°F) or less; the monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less, single sample 235 cfu/100 mL or less.

(2) TDS 1,200 mg/L or less, sulfate 600 mg/L or less, chloride 40 mg/L or less.

[20.6.4.310 NMAC - N, 5/23/2005; A, 12/1/2010]

20.6.4.311 CANADIAN RIVER BASIN: Lake Alice.

A. Designated uses: marginal coldwater aquatic life, irrigation, livestock watering, wildlife habitat, primary contact and public water supply.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses.

[20.6.4.311 NMAC - N, 12/1/2010; A, XX/XX/XXXX]

20.6.4.311 NMAC and 20.6.4.312 NMAC - Classified Waters Canadian River Basin

1. *The Department proposes to add the words "Canadian River Basin" to the headers in 20.6.4.311 NMAC and 20.6.4.312 NMAC, as these words are missing in the current regulation and will provide consistency with other 20.6.4.301 NMAC through 20.6.4.318 NMAC. Tr. Vol. 5, 1471:11-1472:2.*

2. *Although the Department did not present technical testimony on this, no party opposed the proposed amendment. The Commission finds the Department's proposal to add the words "Canadian River Basin" to be well-taken and adopts the Department's amendments to 20.6.4.311 and 20.6.4.312 NMAC as proposed.*

20.6.4.312 CANADIAN RIVER BASIN: Lake Maloya.

A. Designated uses: coldwater aquatic life, irrigation, livestock watering, wildlife habitat, primary contact and public water supply.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses.

[20.6.4.312 NMAC - N, 12/1/2010; A, XX/XX/XXXX]

20.6.4.313 CANADIAN RIVER BASIN: [-] Encantada lake, Maestas lake, Middle Fork lake of Rio de la Casa, North Fork lake of Rio de la Casa and Pacheco lake.

A. Designated uses: high quality coldwater aquatic life, irrigation, domestic water supply, primary contact, livestock watering and wildlife habitat.

B. Criteria: The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: specific conductance 300 µS/cm or less; the monthly geometric mean of *E. coli* bacteria 126 cfu/100 mL or less, single sample 235 cfu/100 mL or less.

[20.6.4.313 NMAC - N, 7/10/2012]

20.6.4.314 CANADIAN RIVER BASIN: [-] Shuree ponds (north and south).

A. Designated uses: high quality coldwater aquatic life, irrigation, domestic water supply, primary contact, livestock watering and wildlife habitat.

B. Criteria: The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses except that the following segment-specific criteria apply: specific conductance 500 µS/cm or less; the monthly geometric mean of *E. coli* bacteria 126 cfu/100 mL or less, single sample 235 cfu/100 mL or less.

[20.6.4.314 NMAC - N, 7/10/2012]

20.6.4.315 CANADIAN RIVER BASIN: [-] Eagle Nest lake.

A. Designated uses: high quality coldwater aquatic life, irrigation, domestic water supply, primary contact, livestock watering, wildlife habitat and public water supply.

B. Criteria: The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses except that the following segment-specific criteria apply: specific conductance 500 µS/cm or less; the monthly geometric mean of *E. coli* bacteria 126 cfu/100 mL or less, single sample 235 cfu/100 mL or less.

[20.6.4.315 NMAC - N, 7/10/2012]

20.6.4.316 CANADIAN RIVER BASIN: [-] Clayton lake.

A. Designated uses: coolwater aquatic life, primary contact, livestock watering and wildlife habitat.

B. Criteria: The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: the monthly geometric mean of *E. coli* bacteria 206 cfu/100 mL or less, single sample 940 cfu/100 mL or less.

[20.6.4.316 NMAC - N, 7/10/2012]

20.6.4.317 CANADIAN RIVER BASIN: Springer lake.

A. Designated uses: coolwater aquatic life, irrigation, primary contact, livestock watering, wildlife habitat, and public water supply.

B. Criteria: The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses.

[20.6.4.317 NMAC - N, 07-10-2012; A, 3/2/2017]

20.6.4.318 CANADIAN RIVER BASIN: Doggett creek.

A. Designated uses: Warm water aquatic life, livestock watering, wildlife habitat and primary contact.

B. Criteria: The use-specific criteria in 20.6.4.900 NMAC are applicable to the designated uses, except that the following site-specific criteria apply: the monthly geometric mean of E. coli bacteria 206 cfu/100 mL or less, single sample 940 cfu/100 mL or less.

C. Discharger-specific temporary standard:

(1) Discharger: City of Raton wastewater treatment plant

(2) NPDES permit number: NM0020273, Outfall 001

(3) Receiving waterbody: Doggett creek, 20.6.4.318 NMAC

(4) Discharge latitude/longitude: 36° 52' 13.91" N / 104° 25' 39.18" W

(5) Pollutant(s): nutrients; total nitrogen and total phosphorus

(6) Factor of issuance: substantial and widespread economic and social impacts (40 CFR 131.10(g)(6))

(7) Highest attainable condition: interim effluent condition of 8.0 mg/L total nitrogen and 1.6 mg/L total phosphorus as 30-day averages. The highest attainable condition shall be either the highest attainable condition identified at the time of the adoption, or any higher attainable condition later identified during any reevaluation, whichever is more stringent (40 CFR 131.14(b)(1)(iii)).

(8) Effective date of temporary standard: This temporary standard becomes effective for Clean Water Act purposes on the date of EPA approval.

(9) Expiration date of temporary standard: no later than 20 years from the effective date.

(10) Reevaluation period: at each succeeding review of water quality standards and at least once every five years from the effective date of the temporary standard (Paragraph (8) of Subsection H of 20.6.4.10[~~.F.(8)~~] NMAC, 40 CFR 131.14(b)(1)(v)). If the discharger cannot demonstrate that sufficient progress has been made the commission may revoke approval of the temporary standard or provide additional conditions to the approval of the temporary standard. If the reevaluation is not completed at the frequency specified or the Department does not submit the reevaluation to EPA within 30 days of completion, the underlying designated use and criterion will be the applicable water quality standard for Clean Water Act purposes until the Department completes and submits the reevaluation to EPA. Public input on the reevaluation will be invited during NPDES permit renewals or triennial reviews, as applicable, in accordance with the State's most current approved water quality management plan and continuing planning process.

(11) Timeline for proposed actions. Tasks and target completion dates are listed in the most recent, WQCC-approved version of the New Mexico Environment Department, Surface Water Quality Bureau's "Nutrient Temporary Standards for City of Raton Wastewater Treatment Plant, NPDES No. NM0020273 to Doggett Creek."

[20.6.4.318 NMAC - N, 05/22/2020; A, XX/XX/XXXX]

20.6.4.319 - 20.6.4.400 [RESERVED]

20.6.4.401 SAN JUAN RIVER BASIN: [-] The main stem of the San Juan river from the Navajo Nation boundary at the Hogback upstream to its confluence with the Animas river. Some waters in this segment are under the joint jurisdiction of the state and the Navajo Nation.

A. Designated uses: public water supply, industrial water supply, irrigation, livestock watering, wildlife habitat, primary contact, marginal coldwater aquatic life and warmwater aquatic life.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criterion applies: temperature 32.2°C (90°F) or less.

[20.6.4.401 NMAC - Rp 20 NMAC 6.1.2401, 10/12/2000; A, 5/23/2005; A, 12/1/2010]

[**NOTE:** The segment covered by this section was divided effective 5/23/2005. The standards for the additional segment are under 20.6.4.408 NMAC.]

20.6.4.402 SAN JUAN RIVER BASIN: [-] La Plata river from its confluence with the San Juan river upstream to the New Mexico-Colorado line.

A. Designated uses: irrigation, marginal warmwater aquatic life, marginal coldwater aquatic life, livestock watering, wildlife habitat and primary contact.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criterion applies: temperature 32.2°C (90°F) or less.

[20.6.4.402 NMAC - Rp 20 NMAC 6.1.2402, 10/12/2000; A, 5/23/2005; A, 12/1/2010]

20.6.4.403 SAN JUAN RIVER BASIN: The Animas river from its confluence with the San Juan river upstream to Estes arroyo.

A. Designated uses: Public water supply, industrial water supply, irrigation, livestock watering, wildlife habitat, coolwater aquatic life, and primary contact.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criterion applies: temperature 29°C (84.2°F) or less.

[20.6.4.403 NMAC - Rp 20 NMAC 6.1.2403, 10/12/2010; A, 5/23/2005; A, 12/1/2010; A, 3/2/2017]

20.6.4.404 SAN JUAN RIVER BASIN: The Animas river from Estes arroyo upstream to the Southern Ute Indian tribal boundary.

A. Designated uses: Coolwater aquatic life, irrigation, livestock watering, wildlife habitat, public water supply, industrial water supply and primary contact.

B. Criteria: The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criterion applies: phosphorus (unfiltered sample) 0.l mg/L or less.

[20.6.4.404 NMAC - Rp 20 NMAC 6.1.2404, 10/12/2010; A, 5/23/2005; A, 12/1/2010; A, 3/2/2017]

20.6.4.405 SAN JUAN RIVER BASIN: [-] The main stem of the San Juan river from [~~Canyon~~]Cañon Largo upstream to the Navajo dam.

A. Designated uses: high quality coldwater aquatic life, irrigation, livestock watering, wildlife habitat, public water supply, industrial water supply and primary contact.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: specific conductance 400 µS/cm or less; the monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less, single sample 235 cfu/100 mL or less.

[20.6.4.405 NMAC - Rp 20 NMAC 6.1.2405, 10/12/2000; A, 5/23/2005; A, 12/1/2010; A, XX/XX/XXXX]

20.6.4.405 NMAC and 20.6.4.408 NMAC - Classified Waters San Juan Basin

1. *The Department proposed amendments to 20.6.4.405 NMAC and 20.6.4.408 NMAC in order to correct the spelling of a word from "Canyon" to "Cañon," to be consistent with other referenceable sources, such as topographic maps. NMED Exhibit 110; Tr. Vol. 5, 1473:6-1474:3.*

2. *Although the Department did not present technical testimony on correcting this spelling error, no party opposed the proposed amendments. The Commission finds the Department's proposal to amend the spelling to "Cañon" to be well-taken and adopts the Department's amendments to 20.6.4.405 NMAC and 20.6.4.408 NMAC as proposed.*

20.6.4.406 SAN JUAN RIVER BASIN: [-] Navajo reservoir in New Mexico.

A. Designated uses: coldwater aquatic life, warmwater aquatic life, irrigation storage, livestock watering, wildlife habitat, public water supply, industrial water supply and primary contact.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: phosphorus (unfiltered sample) 0.1 mg/L or less; the monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less, single sample 235 cfu/100 mL or less.

[20.6.4.406 NMAC - Rp 20 NMAC 6.1.2406, 10/12/2000; A, 5/23/2005; A, 12/1/2010]

20.6.4.407 SAN JUAN RIVER BASIN: [-] Perennial reaches of the Navajo river from the Jicarilla Apache reservation boundary to the Colorado border and perennial reaches of Los Pinos river in New Mexico.

A. Designated uses: coldwater aquatic life, irrigation, livestock watering, public water supply, wildlife habitat and primary contact.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: phosphorus (unfiltered sample) 0.1 mg/L or less; the monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less, single sample 235 cfu/100 mL or less.

[20.6.4.407 NMAC - Rp 20 NMAC 6.1.2407, 10/12/2000; A, 5/23/2005; A, 12/1/2010]

20.6.4.408 SAN JUAN RIVER BASIN: [-] The main stem of the San Juan river from its confluence with the Animas river upstream to its confluence with [~~Canyon~~]Cañon Largo.

A. Designated uses: public water supply, industrial water supply, irrigation, livestock watering, wildlife habitat, primary contact, marginal coldwater aquatic life and warmwater aquatic life.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criterion applies: temperature 32.2°C (90°F) or less.

[20.6.4.408 NMAC - N, 5/23/2005; A, 12/1/2010; A, XX/XX/XXXX]

20.6.4.409 SAN JUAN RIVER BASIN: [-] Lake Farmington.

A. Designated uses: public water supply, wildlife habitat, livestock watering, primary contact, coldwater aquatic life and warmwater aquatic life.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criterion applies: temperature 25°C (77°F) or less.

[20.6.4.409 NMAC - N, 12/1/2010]

20.6.4.410 SAN JUAN RIVER BASIN: [-] Jackson lake.

A. Designated uses: coolwater aquatic life, irrigation, primary contact, livestock watering and wildlife habitat.

B. Criteria: The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: the monthly geometric mean of *E. coli* bacteria 206 cfu/100 mL or less, single sample 940 cfu/100 mL or less.

[20.6.4.410 NMAC - N, 7/10/2012]

20.6.4.411 - 20.6.4.450: [RESERVED]

20.6.4.451 LITTLE COLORADO RIVER BASIN: [-] The Rio Nutria upstream of the Zuni pueblo boundary, Tampico draw, Agua Remora, Tampico springs.

A. Designated uses: coolwater aquatic life, livestock watering, wildlife habitat and primary contact.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses.

[20.6.4.451 NMAC - N, 12/1/2010]

20.6.4.452 LITTLE COLORADO RIVER BASIN: [-] Ramah lake.

A. Designated uses: coldwater aquatic life, warmwater aquatic life, irrigation, livestock watering, wildlife habitat and primary contact.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criterion applies: temperature 25°C (77°F) or less.

[20.6.4.452 NMAC - N, 12/1/2010]

20.6.4.453 LITTLE COLORADO RIVER BASIN: [-] Quemado lake.

A. Designated uses: coolwater aquatic life, primary contact, livestock watering and wildlife habitat.

B. Criteria: The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses.

[20.6.4.453 NMAC - N, 7/10/2012]

20.6.4.454 - 20.6.4.500 [RESERVED]

20.6.4.501 GILA RIVER BASIN: [-] The main stem of the Gila river from the New Mexico-Arizona line upstream to Redrock canyon and perennial reaches of streams in Hidalgo county.

A. Designated uses: irrigation, marginal warmwater aquatic life, livestock watering, wildlife habitat and primary contact.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses.

[20.6.4.501 NMAC - Rp 20 NMAC 6.1.2501, 10/12/2000; A, 5/23/2005; A, 12/1/2010]

20.6.4.502 GILA RIVER BASIN: The main stem of the Gila river from Redrock canyon upstream to the confluence of the West Fork Gila river and East Fork Gila river and perennial reaches of tributaries to the Gila river downstream of Mogollon creek.

A. Designated uses: industrial water supply, irrigation, livestock watering, wildlife habitat, marginal coldwater aquatic life, primary contact and warmwater aquatic life.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criterion applies: 28°C (82.4°F) or less.

[20.6.4.502 NMAC - Rp 20 NMAC 6.1.2502, 10/12/2010; A, 5/23/2005; A, 12/1/2010; A, 3/2/2017]

20.6.4.503 GILA RIVER BASIN: All perennial tributaries to the Gila river upstream of and including Mogollon creek.

A. Designated uses: domestic water supply, high quality coldwater aquatic life, irrigation, livestock watering, wildlife habitat and primary contact.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: specific conductance of 400 µS/cm or less for all perennial tributaries except West Fork Gila and tributaries thereto, specific conductance of 300 µS/cm or less; 32.2°C (90°F) or less in the east fork of the Gila river and Sapillo creek downstream of Lake Roberts; the monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less, single sample 235 cfu/100 mL or less.

[20.6.4.503 NMAC - Rp 20 NMAC 6.1.2503, 10/12/2010; A, 5/23/2005; A, 12/1/2010; A, 3/2/2017]

20.6.4.504 GILA RIVER BASIN: [-] Wall lake, Lake Roberts and Snow lake.

A. Designated uses: coldwater aquatic life, irrigation, livestock watering, wildlife habitat and primary contact.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criterion applies: specific conductance 300 µS/cm or less.

[20.6.4.504 NMAC - Rp 20 NMAC 6.1.2504, 10/12/2000; A, 5/23/2005; A, 12/1/2010]

[**NOTE:** The segment covered by this section was divided effective 5/23/2005. The standards for the additional segment are under 20.6.4.806 NMAC.]

20.6.4.505 GILA RIVER BASIN: [-] Bill Evans lake.

A. Designated uses: coolwater aquatic life, primary contact, livestock watering and wildlife habitat.

B. Criteria: The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses.

[20.6.4.505 NMAC - N, 7/10/2012]

20.6.4.506 - 20.6.4.600 [RESERVED]

20.6.4.601 SAN FRANCISCO RIVER BASIN: [-] The main stem of the San Francisco river from the New Mexico-Arizona line upstream to state highway 12 at Reserve and perennial reaches of Mule creek.

A. Designated uses: irrigation, marginal warmwater and marginal coldwater aquatic life, livestock watering, wildlife habitat and primary contact.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses.

[20.6.4.601 NMAC - Rp 20 NMAC 6.1.2601, 10/12/2000; A, 5/23/2005; A, 12/1/2010]

20.6.4.602 SAN FRANCISCO RIVER BASIN: [-] The main stem of the San Francisco river from state highway 12 at Reserve upstream to the New Mexico-Arizona line.

A. Designated uses: coldwater aquatic life, irrigation, livestock watering, wildlife habitat and primary contact.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criterion applies: temperature 25°C (77°F) or less.

[20.6.4.602 NMAC - Rp 20 NMAC 6.1.2602, 10/12/2000; A, 5/23/2005; A, 12/1/2010]

20.6.4.603 SAN FRANCISCO RIVER BASIN: [-] All perennial reaches of tributaries to the San Francisco river above the confluence of Whitewater creek and including Whitewater creek.

A. Designated uses: domestic water supply, fish culture, high quality coldwater aquatic life, irrigation, livestock watering, wildlife habitat and primary contact.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: specific conductance 400 µS/cm or less; the monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less, single sample 235 cfu/100 mL or less; and temperature 25°C (77°F) or less in Tularosa creek.

[20.6.4.603 NMAC - Rp 20 NMAC 6.1.2603, 10/12/2000; A, 5/23/2005; A, 12/1/2010]

20.6.4.604 - 20.6.4.700 [RESERVED]

20.6.4.701 DRY CIMARRON RIVER: [-] Perennial portions of the Dry Cimarron river above Oak creek and perennial reaches of Oak creek.

A. Designated uses: coldwater aquatic life, irrigation, livestock watering, wildlife habitat and primary contact.

B. Criteria:

(1) The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: temperature 25°C (77°F) or less, the monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less, single sample 235 cfu/100 mL or less.

(2) TDS 1,200 mg/L or less, sulfate 600 mg/L or less and chloride 40 mg/L or less.

[20.6.4.701 NMAC - Rp 20 NMAC 6.1.2701, 10/12/2000; A, 5/23/2005 A, 12/1/2010]

[**NOTE:** The segment covered by this section was divided effective 5/23/2005. The standards for the additional segment are under 20.6.4.702 NMAC.]

20.6.4.702 DRY CIMARRON RIVER: [-] Perennial portions of the Dry Cimarron river below Oak creek, and perennial portions of Long canyon and Carrizozo creeks.

A. Designated uses: coolwater aquatic life, irrigation, livestock watering, wildlife habitat and primary contact.

B. Criteria:

(1) The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: the monthly geometric mean of *E. coli* bacteria 126 cfu/100 mL or less, single sample 235 cfu/100 mL or less.

(2) TDS 1,200 mg/L or less, sulfate 600 mg/L or less and chloride 40 mg/L or less.

[20.6.4.702 NMAC - N, 5/23/2005; A, 12/1/2010; A, 7/10/2012]

20.6.4.703 - 20.6.4.800 [RESERVED]

20.6.4.801 CLOSED BASINS: [-] Rio Tularosa upstream of the old U.S. highway 70 bridge crossing east of Tularosa and all perennial tributaries to the Tularosa basin except Three Rivers and Dog Canyon creek, and excluding waters on the Mescalero tribal lands.

A. Designated uses: coldwater aquatic life, irrigation, livestock watering, wildlife habitat, public water supply and primary contact.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: the monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less, single sample 235 cfu/100 mL or less.

[20.6.4.801 NMAC - Rp 20 NMAC 6.1.2801, 10/12/2000; A, 5/23/2005; A, 12/1/2010; A, 2/13/2018]

[**NOTE:** This segment was divided effective 2/13/2018. The standards for Dog Canyon creek are under 20.6.4.810 NMAC.]

20.6.4.802 CLOSED BASINS: [-] Perennial reaches of Three Rivers.

A. Designated uses: irrigation, domestic water supply, high quality coldwater aquatic life, primary contact, livestock watering and wildlife habitat.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: specific conductance 500 µS/cm or less; the monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less, single sample 235 cfu/100 mL or less.

[20.6.4.802 NMAC - Rp 20 NMAC 6.1.2802, 10/12/2000; A, 5/23/2005; A, 12/1/2010]

20.6.4.803 CLOSED BASINS: Perennial reaches of the Mimbres river downstream of the confluence with Allie canyon and all perennial reaches of tributaries thereto.

A. Designated uses: Coolwater aquatic life, irrigation, livestock watering, wildlife habitat and primary contact.

B. Criteria: The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: the monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less, single sample 235 cfu/100 mL or less and temperature of 30°C (86°F) or less.

[20.6.4.803 NMAC - Rp 20 NMAC 6.1.2803, 10/12/2010; A, 5/23/2005; A, 12/1/2010; A, 3/2/2017]

20.6.4.804 CLOSED BASINS: Perennial reaches of the Mimbres river upstream of the confluence with Allie canyon to Cooney canyon, and all perennial reaches of East Fork Mimbres (McKnight canyon) downstream of the fish barrier, and all perennial reaches thereto.

A. Designated uses: Irrigation, domestic water supply, coldwater aquatic life, livestock watering, wildlife habitat and primary contact.

B. Criteria: The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: the monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less, single sample 235 cfu/100 mL or less.

[20.6.4.804 NMAC - Rp 20 NMAC 6.1.2804, 10/12/2010; A, 5/23/2005; A, 12/1/2010; A, 02-28-2018; A, 3/2/2017]

[**NOTE:** The segment covered by this section was divided effective 3/2/2017. The standards for the additional segment are covered under 20.6.4.807 NMAC.]

20.6.4.805 CLOSED BASINS: [-] Perennial reaches of the Sacramento river (Sacramento-Salt Flat closed basin) and all perennial tributaries thereto.

A. Designated uses: domestic water supply, livestock watering, wildlife habitat, marginal coldwater aquatic life and primary contact.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses.

[20.6.4.805 NMAC - Rp 20 NMAC 6.1.2805, 10/12/2000; A, 5/23/2005; A, 12/1/2010]

20.6.4.806 CLOSED BASINS: [-] Bear canyon reservoir.

A. Designated uses: coldwater aquatic life, irrigation, livestock watering, wildlife habitat and primary contact.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criterion applies: specific conductance 300 µS/cm or less.

[20.6.4.806 NMAC - N, 5/23/2005; A, 12/1/2010]

20.6.4.807 CLOSED BASINS: Perennial reaches of the Mimbres river upstream of Cooney canyon and all perennial reaches thereto, including perennial reaches of East Fork Mimbres river (McKnight canyon) upstream of the fish barrier.

A. Designated uses: Irrigation, domestic water supply, high quality coldwater aquatic life, livestock watering, wildlife habitat and primary contact.

B. Criteria: The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: specific conductance 300 µS/cm or less; the monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less, single sample 235 cfu/100 mL or less.

[20.6.4.807 NMAC - N, 3/2/2017]

20.6.4.808 CLOSED BASINS: Perennial and intermittent watercourses within Smelter Tailing Soils Investigation Unit lands at the Chino mines company, excluding those ephemeral waters listed in 20.6.4.809 NMAC and including, but not limited to[-] the mainstem of Lampbright draw, beginning at the confluence of Lampbright Draw with Rustler canyon, all tributaries that originate west of Lampbright draw to the intersection of Lampbright draw with U.S. 180, and all tributaries of Whitewater creek that originate east of Whitewater creek from the confluence of Whitewater creek with Bayard canyon downstream to the intersection of Whitewater creek with U.S. 180.

A. Designated uses: Warmwater aquatic life, livestock watering, wildlife habitat and primary contact.

B. Criteria: The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: the acute and chronic aquatic life criteria for copper set forth in Subsection I of 20.6.4.900 NMAC shall be determined by multiplying that criteria by the water effect ratio ("WER") adjustment expressed by the following equation:

$$WER = \frac{[10^{0.588+(0.703 \times \log DOC)+(0.395 \times \log Alkalinity)}] \times (\frac{100}{Hardness})^{0.9422}}{19.31}$$

For purposes of this section, dissolved organic carbon (DOC) is expressed in units of milligrams carbon per liter or mg C/L; alkalinity is expressed in units of mg/L as $CaCO_3$, and hardness is expressed in units of mg/L as $CaCO_3$. In waters that contain alkalinity concentrations greater than 250 mg/L, a value of 250 mg/L shall be used in the equation. In waters that contain DOC concentrations greater than 16 mg C/L, a value of 16 mg C/L shall be used in the equation. In waters that contain hardness concentrations greater than 400 mg/L, a value of 400 mg/L shall be used in the equation. The alkalinity, hardness and DOC concentrations used to calculate the WER value are those measured in the subject water sample.

[20.6.4.808 NMAC - N, 3/2/2017]

20.6.4.808 NMAC - Classified Waters Closed Basins (Chino)

1. *The Department proposed an amendment to 20.6.4.808 NMAC to remove a period that inexplicably appeared in the middle of a sentence. NMED Exhibit 2, p. 17; NMED Exhibit 110; Tr. Vol. 5, 1472:11-1472:24.*

2. *No party opposed this proposed amendment. The Commission finds the Department's proposal to remove the period in the middle of the sentence well-taken and adopts the Department's amendment to 20.6.4.808 NMAC.*

20.6.4.809 CLOSED BASINS: Ephemeral watercourses within smelter tailing soils investigation unit lands at the Chino mines company, limited to Chino mines property subwatershed drainage A and tributaries thereof, Chino mines property subwatershed drainage B and tributaries thereof (excluding the northwest tributary containing Ash spring and the Chiricahua leopard frog critical habitat transect); Chino mines property subwatershed drainage C and tributaries thereof (excluding reaches containing Bolton spring, the Chiricahua leopard frog critical habitat transect and all reaches in subwatershed C that are upstream of the Chiricahua leopard frog critical habitat); subwatershed drainage D and tributaries thereof (drainages D-1, D-2 and D-3, excluding the southeast tributary in drainage D1 that contains Brown spring) and subwatershed drainage E and all tributaries thereof (drainages E-1, E-2 and E-3).

A. Designated uses: Limited aquatic life, livestock watering, wildlife habitat and secondary contact.

B. Criteria: The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: the acute aquatic life criteria for copper set forth in Subsection I of 20.6.4.900 NMAC shall be determined by multiplying that criteria by the water effect ratio ("WER") adjustment expressed by the following equation:

$$WER = \frac{[10^{0.588+(0.703 \times \log DOC)+(0.395 \times \log Alkalinity)}] \times (\frac{100}{Hardness})^{0.9422}}{19.31}$$

For purposes of this section, dissolved organic carbon (DOC) is expressed in units of milligrams carbon per liter or mg C/L; alkalinity is expressed in units of mg/L as $CaCO_3$, and hardness is expressed in units of mg/L as $CaCO_3$. In waters that contain alkalinity concentrations greater than 250 mg/L, a value of 250 mg/L shall be used in the equation. In waters that contain DOC concentrations greater than 16 mg C/L, a value of 16 mg C/L shall be used in the equation. In waters that contain hardness concentrations greater than 400 mg/L, a value of 400 mg/L shall be

used in the equation. The alkalinity, hardness and DOC concentrations used to calculate the WER value are those measured in the subject water sample.
[20.6.4.809 NMAC - N, 3/2/2017]

20.6.4.810 CLOSED BASINS: Perennial reaches of Dog Canyon creek.

A. Designated uses: coolwater aquatic life, irrigation, livestock watering, wildlife habitat, public water supply, and primary contact.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: the monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less, single sample 235 cfu/100 mL or less.
[20.6.4.810 NMAC - N, 2/13/2018]

20.6.4.811 - 20.6.4.899 [RESERVED]

20.6.4.900 CRITERIA APPLICABLE TO EXISTING, DESIGNATED OR ATTAINABLE USES UNLESS OTHERWISE SPECIFIED IN 20.6.4.97 THROUGH 20.6.4.899 NMAC:

A. Fish culture and water supply: Fish culture, public water supply and industrial water supply are designated uses in particular classified waters of the state where these uses are actually being realized. However, no numeric criteria apply uniquely to these uses. Water quality adequate for these uses is ensured by the general criteria and numeric criteria for bacterial quality, pH and temperature.

B. Domestic water supply: Surface waters of the state designated for use as domestic water supplies shall not contain substances in concentrations that create a lifetime cancer risk of more than one cancer per 100,000 exposed persons. Those criteria listed under domestic water supply in Subsection J of this section apply to this use.

C. Irrigation and irrigation storage: the following numeric criteria and those criteria listed under irrigation in Subsection J of this section apply to this use:

(1)	dissolved selenium	0.13 mg/L
(2)	dissolved selenium in presence of >500 mg/L SO_4	0.25 mg/L.

D. Primary contact: The monthly geometric mean of E. coli bacteria of 126 cfu/100 mL or MPN/100 ml, [~~and~~]a single sample of E. coli bacteria of 410 cfu/100 mL or MPN/100 mL, a single sample of total microcystins of 8 µg/L with no more than three exceedances within a 12-month period and a single sample of cylindrospermopsin of 15 µg/L with no more than three exceedances within a 12-month period, and pH within the range of 6.6 to 9.0 apply to this use. The results for *E. coli* may be reported as either colony forming units (CFU) or the most probable number (MPN) depending on the analytical method used.

20.6.4.900(D) NMAC - Criteria - Primary Contact

1. *The Department proposed to amend 20.6.4.900(D) NMAC in order to add criteria for waters with a primary contact designated use, specifically to adopt EPA's 2019 numeric criteria for toxins associated with harmful algal blooms. NMED Exhibit 2, p. 6; NMED Exhibit 110; Tr. Vol. 4, 1232:18-1233:7.*

2. *SJWC argued that the Commission should not adopt the Department's proposal unless the proposed amendment contained additional clarification. SJWC later withdrew its objection. SJWC [Exhibit] 2, p. 25 (2020 TR SJWC-0028); Tr. Vol. 1233:16.*

3. *The Commission finds the Department's proposal to amend 20.6.4.900(D) NMAC to be well-taken and adopts the Department's proposed amendments;*

OR,

The Commission rejects the Department's proposed amendment.

E. Secondary contact: The monthly geometric mean of E. coli bacteria of 548 cfu/100 mL or MPN/100 mL and single sample of 2507 cfu/100 mL or MPN/100 mL apply to this use. The results for *E. coli* may be reported as either colony forming units (CFU) or the most probable number (MPN), depending on the analytical method used.

F. Livestock watering: the criteria listed in Subsection J of this section for livestock watering apply to this use.

G. Wildlife habitat: Wildlife habitat shall be free from any substances at concentrations that are toxic to or will adversely affect plants and animals that use these environments for feeding, drinking, habitat or propagation; can bioaccumulate; or might impair the community of animals in a watershed or the ecological integrity of surface waters of the state. The numeric criteria listed in Subsection J for wildlife habitat apply to this use.

H. Aquatic life: Surface waters of the state with a designated, existing or attainable use of aquatic life shall be free from any substances at concentrations that can impair the community of plants and animals in or the ecological integrity of surface waters of the state. Except as provided in Paragraph (7) of this subsection, the acute and chronic aquatic life criteria set out in Subsections I, J, K and L of this section and the human health-organism only criteria set out in Subsection J of this section are applicable to all aquatic life use subcategories. In addition, the specific criteria for aquatic life subcategories in the following paragraphs apply to waters classified under the respective designations.

(1) High quality coldwater: dissolved oxygen 6.0 mg/L or more, 4T3 temperature 20°C (68°F), maximum temperature 23°C (73°F), pH within the range of 6.6 to 8.8 and specific conductance a segment-specific limit between 300 µS/cm and 1,500 µS/cm depending on the natural background in the particular surface water of the state (the intent of this criterion is to prevent excessive increases in dissolved solids which would result in changes in community structure). Where a single segment-specific temperature criterion is indicated in 20.6.4.101-899 NMAC, it is the maximum temperature and no 4T3 temperature applies.

(2) Coldwater: dissolved oxygen 6.0 mg/L or more, 6T3 temperature 20°C (68°F), maximum temperature 24°C (75°F) and pH within the range of 6.6 to 8.8. Where a single segment-specific temperature criterion is indicated in 20.6.4.101-899 NMAC, it is the maximum temperature and no 6T3 temperature applies.

(3) Marginal coldwater: dissolved oxygen 6 mg/L or more, 6T3 temperature 25°C (77°F), maximum temperature 29°C (84°F) and pH within the range from 6.6 to 9.0. Where a single segment-specific temperature criterion is indicated in 20.6.4.101-899 NMAC, it is the maximum temperature and no 6T3 temperature applies.

(4) Coolwater: dissolved oxygen 5.0 mg/L or more, maximum temperature 29°C (84°F) and pH within the range of 6.6 to 9.0.

(5) Warmwater: dissolved oxygen 5 mg/L or more, maximum temperature 32.2°C (90°F) and pH within the range of 6.6 to 9.0. Where a segment-specific temperature criterion is indicated in 20.6.4.101-899 NMAC, it is the maximum temperature.

(6) Marginal warmwater: dissolved oxygen 5 mg/L or more, pH within the range of 6.6 to 9.0 and [~~maximum~~]temperatures that may routinely exceed 32.2°C (90°F). Where a segment-specific temperature criterion is indicated in 20.6.4.101-899 NMAC, it is the maximum temperature.

(7) Limited aquatic life: The acute aquatic life criteria of Subsections I and J of this section apply to this subcategory. Chronic aquatic life criteria do not apply unless adopted on a segment-specific basis. Human health-organism only criteria apply only for persistent toxic pollutants unless adopted on a segment-specific basis.

I. Hardness-dependent acute and chronic aquatic life criteria for metals are calculated using the following equations. The criteria are expressed as a function of [~~dissolved~~]hardness (as mg $CaCO_3$/L). With the exception of aluminum, the equations are valid only for [~~dissolved~~]hardness concentrations of 0-400 mg/L. For [~~dissolved~~]hardness concentrations above 400 mg/L, the criteria for 400 mg/L apply. For aluminum the equations are valid only for [~~dissolved~~]hardness concentrations of 0-220 mg/L. For [~~dissolved~~]hardness concentrations above 220 mg/L, the aluminum criteria for 220 mg/L apply. Calculated criteria must adhere to the treatment of significant figures and rounding identified in *Standard Methods For The Examination Of Water And Wastewater*, latest edition, American public health association.

20.6.4.900(I) NMAC - Criteria - Hardness-Based Metals

1. *In response to testimony from SJWC, the Department proposed to remove the word "dissolved" before the word "hardness" in 20.6.4.900(I) NMAC. NMED Exhibit 109, pp. 78-81; NMED Exhibit 110; Tr. Vol. 5, 1482:2-18.*
2. *No party objected to these changes. NMMA contends that the Commission should wholly adopt the Department's proposed changes to 20.6.4.900(I) NMAC. These proposed changes address the NMMA's concerns regarding the numerical limits used in several tables within 20.6.4.900 NMAC.*
3. *Based on the weight of the evidence, the Commission finds the Department's proposal to remove the word "dissolved" before the word "hardness" in 20.6.4.900(I) NMAC is well-taken and agrees with the Department's amendments to 20.6.4.900(I) NMAC as proposed.*

20.6.4.900(I)(1)-(2) NMAC - Criteria - Aluminum

1. *The Department proposed to amend language regarding the applicability of the criteria for aluminum in the tables at 20.6.4.900(I)(1) and (2) NMAC. NMED Exhibit 4, pp. 19-22; NMED Exhibit 109, pp. 78-81; NMED Exhibit 110; Tr. Vol. 4, 1220:12-1224:7.*
2. *LANL objected to these proposed amendments. LANL Exhibit 8 (2020 TR LANL-00205); LANL Exhibit 64, pp. 1-8 (2020 TR LANL-01226 - 01234); Tr. Vol. 3, 688:18-698:9. To wit, LANL opposes these amendments on the basis that NMED's position is not technically supported, "does not reflect the state-of-the-science on aluminum bioavailability and toxicity" and is inconsistent with the 2018 Criteria. See e.g., LANL Ex. 64 at 5 (DeForest Rebuttal) (explaining that credible science does not support applying the 1988 Criteria to apply to waters outside the pH range of 6.5 to 9.0, the range within which all toxicity tests used to support development of the 1988 Criteria were conducted "unless one accounts for 3 water quality parameters – hardness, pH and DOC – in calculating numerical water quality criteria."); Id. at 7; Hrg. Tr., Vol. III, 693:1-16 (DeForest).*

3. *NMED contends it provided substantial evidence in response to the objections of LANL. NMED Exhibit 109, pp. 78-81; NMED Exhibit 110; Tr. Vol. 4, 1220:12-1224:7.*

4. *Based on the weight of the evidence, the Commission finds the Department's proposal to amend the criteria for aluminum in the tables at 20.6.4.900(I)(1) and (2) NMAC is well-taken and agrees with the Department's amendments to 20.6.4.900(I) (1) and (2) NMAC as proposed;*

   OR,

   The Commission finds that NMED's proposal to make the 1988 aluminum criteria applicable outside the pH range of 6.5 to 9.0 is not based on credible scientific data and should be rejected. The Commission accepts NMED's evidence that establishing lack of necessary resources to adopt the 2018 Criteria at this time. However, the Commission concludes that the prudent action to protect public health and welfare and enhance quality of water and serve the purposes of the federal Clean Water Act is to move toward adoption of the 2018 Criteria.

20.6.4.900(I)(1)-(2) NMAC - Criteria - Cadmium

1. *The Department proposed the adoption of acute and chronic hardness-based cadmium criteria in the tables in 20.6.4.900(I)(1) and (2) NMAC based on EPA's current recommended criteria. NMED Exhibit 4, pp. 22-24; NMED Exhibit 110; Tr. Vol. 4, 1219:11-1220:6.*

2. *No party objected to these changes. Based on the weight of the evidence, the Commission finds the Department's proposal to amend acute and chronic hardness-based cadmium criteria in the tables in 20.6.4.900(I)(1) and (2) NMAC based on EPA's current recommended criteria is well-taken and agrees with the Department's amendments to 20.6.4.900(I)(1) and (2) NMAC as proposed.*

20.6.4.900(I)(1)-(2) NMAC - Criteria - Copper

1. *The Department did not propose adopting EPA's recommended aquatic life criteria for copper as a replacement for the current hardness-based water quality standard in 20.6.4.900(I)(1)-(2) NMAC. NMED Exhibit 2, p.14; NMED*

2. *No parties opposed the Department's proposed delay in adopting EPA's recommended copper criteria, and LANL specifically noted its lack of opposition. LANL Exhibit 63, pp. 3-5 (2020 TR LANL-01207 - 01209). To wit: LANL supports NMED's proposal to not adopt EPA's 2007 recommended aquatic life criteria for copper. See LANL Ex. 63 at 3 (Toll Rebuttal); see also Hrg. Tr., Vol. IV at 1261:18-1263:2 (Toll).*

3. *As no party has proposed any amendments to 20.6.4.900(I) NMAC relating to replacing the current hardness-based water quality standard with EPA's criteria for copper, the Commission does not adopt amendments to 20.6.4.900(I)(1)- (2) NMAC on this topic.*

20.6.4.900(I)(3) NMAC - Criteria - Hardness-Based Metals Table

1. *The Department proposed to amend the values in the acute and chronic hardness-based metals criteria table located at 20.6.4.900(I)(3) NMAC consistent with the hardness-dependent equations for acute and chronic aquatic life criteria. NMED Exhibit 3, pp. 23-24; NMED Exhibit 110.*

2. *No party objected to these changes. Based on the weight of the evidence, the Commission finds the Department's proposal to amend the values in the acute and chronic hardness-based metals criteria table located at 20.6.4.900(I)(3) NMAC consistent with the hardness-dependent equations for acute and chronic aquatic life criteria is well-taken and agrees with the Department's amendments to 20.6.4.900(I)(3) NMAC as proposed.*

(1) Acute aquatic life criteria for metals: The equation to calculate acute criteria in µg/L is $\exp(m_A[\ln(\text{hardness})] + b_A)(CF)$. Except for aluminum, the criteria are based on analysis of dissolved metal. For aluminum, the criteria are based on analysis of total recoverable aluminum in a sample that has a pH between 6.5 and 9.0 and is filtered to minimize mineral phases as specified by the department. [~~The EPA has disapproved the hardness-based equation for total recoverable aluminum in waters where the pH is less than 6.5 in the receiving stream for federal purposes of the Clean Water Act.~~]The equation parameters are as follows:

Metal	**m_A**	**b_A**	**Conversion factor (CF)**
Aluminum (Al)	1.3695	1.8308	
Cadmium (Cd)	[~~0.8968~~]0.9789	[~~-3.5699~~]-3.866	1.136672-[(ln hardness)(0.041838)]
Chromium (Cr) III	0.8190	3.7256	0.316
Copper (Cu)	0.9422	-1.700	0.960
Lead (Pb)	1.273	-1.460	1.46203-[(ln hardness)(0.145712)]
Manganese (Mn)	0.3331	6.4676	
Nickel (Ni)	0.8460	2.255	0.998
Silver (Ag)	1.72	-6.59	0.85
Zinc (Zn)	0.9094	0.9095	0.978

(2) Chronic aquatic life criteria for metals: The equation to calculate chronic criteria in µg/L is $\exp(m_C[\ln(\text{hardness})] + b_C)(CF)$. Except for aluminum, the criteria are based on analysis of dissolved metal. For aluminum, the criteria are based on analysis of total recoverable aluminum in a sample that has a pH between 6.5 and 9.0 and is filtered to minimize mineral phases as specified by the department. [~~The EPA has disapproved the hardness-based equation for total recoverable aluminum in waters where the pH is less than 6.5 in the receiving stream for federal purposes of the Clean Water Act.~~]The equation parameters are as follows:

Metal	m_C	b_C	Conversion factor (CF)
Aluminum (Al)	1.3695	0.9161	
Cadmium (Cd)	[~~0.7647~~]0.7977	[~~-4.2180~~]-3.909	1.101672-[(ln hardness)(0.041838)]
Chromium (Cr) III	0.8190	0.6848	0.860
Copper (Cu)	0.8545	-1.702	0.960
Lead (Pb)	1.273	-4.705	1.46203-[(ln hardness)(0.145712)]
Manganese (Mn)	0.3331	5.8743	
Nickel (Ni)	0.8460	0.0584	0.997
Zinc (Zn)	0.9094	0.6235	0.986

(3) Selected values of calculated acute and chronic criteria (µg/L).

Hardness as $CaCO_3$, dissolved (mg/L)		Al	Cd	Cr III	Cu	Pb	Mn	Ni	Ag	Zn
[~~25~~]25.0	Acute	512	[~~0.51~~] 0.490	[~~180~~] 183	[~~4~~] 3.64	[~~14~~] 13.9	[~~1,881~~] 1,880	[~~140~~] 145	[~~0.3~~] 0.30	[~~45~~] 45.4
	Chronic	205	[~~0.17~~] 0.253	[~~24~~] 23.8	[~~3~~] 2.74	[~~1~~] 0.541	1,040	[~~16~~] 16.1		[~~34~~] 34.4
[~~30~~]30.0	Acute	658	[~~0.59~~] 0.581	[~~210~~] 212	[~~4~~] 4.32	[~~17~~] 17.0	[~~1,999~~] 2,000	[~~170~~] 169	[~~0.4~~] 0.40	[~~54~~] 53.5
	Chronic	263	[~~0.19~~] 0.290	[~~28~~] 27.6	[~~3~~] 3.20	[~~1~~] 0.664	[~~1,105~~] 1,100	[~~19~~] 18.8		[~~41~~] 40.5
[~~40~~]40.0	Acute	975	[~~0.76~~] 0.761	[~~270~~] 269	[~~6~~] 5.67	[~~24~~] 23.5	2,200	[~~220~~] 216	[~~0.7~~] 0.66	[~~70~~] 69.5
	Chronic	391	[~~0.23~~] 0.360	[~~35~~] 35.0	[~~4~~] 4.09	[~~1~~] 0.916	[~~1,216~~] 1,220	[~~24~~] 24.0		[~~53~~] 52.7
[~~50~~]50.0	Acute	[~~1,324~~] 1,320	[~~0.91~~] 0.938	[~~320~~] 323	[~~7~~] 6.99	[~~30~~] 30.1	2,370	260	[~~1.0~~] 0.98	[~~85~~] 85.2
	Chronic	530	[~~0.28~~] 0.426	[~~42~~] 42.0	[~~5~~] 4.95	[~~1~~] 1.17	[~~1,309~~] 1,310	[~~29~~] 28.9		[~~65~~] 64.5
[~~60~~]60.0	Acute	[~~1,699~~] 1,700	[~~1.07~~] 1.11	[~~370~~] 375	[~~8~~] 8.30	[~~37~~] 36.9	[~~2,519~~] 2,520	[~~300~~] 304	1.3	[~~101~~] 100
	Chronic	681	[~~0.31~~] 0.489	[~~49~~] 48.8	[~~6~~] 5.79	[~~1~~] 1.44	[~~1,391~~] 1,390	[~~34~~] 33.8		[~~76~~] 76.2
[~~70~~]70.0	Acute	[~~2,099~~] 2,100	[~~1.22~~] 1.28	[~~430~~] 425	[~~10~~] 9.60	[~~44~~] 43.7	[~~2,651~~] 2,650	[~~350~~] 346	1.7	116
	Chronic	841	[~~0.35~~] 0.549	[~~55~~] 55.3	[~~7~~] 6.60	[~~2~~] 1.70	[~~1,465~~] 1,460	[~~38~~] 38.5		[~~88~~] 87.6
[~~80~~]80.0	Acute	2,520	[~~1.37~~] 1.46	[~~470~~] 474	[~~11~~] 10.9	[~~51~~] 50.6	[~~2,772~~] 2,770	[~~390~~] 388	2.2	131
	Chronic	1,010	[~~0.39~~] 0.607	[~~62~~] 61.7	[~~7~~] 7.40	[~~2~~] 1.97	[~~1,531~~] 1,530	[~~43~~] 43.0		[~~99~~] 98.9
[~~90~~]90.0	Acute	[~~2,961~~] 2,960	[~~1.51~~] 1.62	[~~520~~] 523	[~~12~~] 12.2	[~~58~~] 57.6	[~~2,883~~] 2,880	[~~430~~] 428	2.7	145
	Chronic	[~~1,186~~] 1,190	[~~0.42~~] 0.664	[~~68~~] 68.0	[~~8~~] 8.18	[~~2~~] 2.24	[~~1,593~~] 1,590	[~~48~~] 47.6		110

Hardness as $CaCO_3$, dissolved (mg/L)		Al	Cd	Cr III	Cu	Pb	Mn	Ni	Ag	Zn
100	Acute	[~~3,421~~] 3,420	[~~1.65~~] 1.79	570	[~~13~~] 13.4	[~~65~~] 64.6	[~~2,986~~] 2,980	[~~470~~] 468	3.2	160
	Chronic	1,370	[~~0.45~~] 0.718	[~~74~~] 74.1	[~~9~~] 8.96	[~~3~~] 2.52	1,650	[~~52~~] 52.0		121
200	Acute	[~~8,838~~] 8,840	[~~2.98~~] 3.43	[~~1,010~~] 1,000	[~~26~~] 25.8	[~~140~~] 136	[~~3,761~~] 3,760	[~~840~~] 842	[~~11~~] 10	[~~301~~] 300
	Chronic	[~~3,541~~] 3,540	[~~0.75~~] 1.21	[~~130~~] 131	[~~16~~] 16.2	[~~5~~] 5.30	[~~2,078~~] 2,080	[~~90~~] 93.5		228
220	Acute	[~~10,071~~] 10,100	[~~3.23~~] 3.74	[~~1,087~~] 1,090	[~~28~~] 28.2	151	[~~3,882~~] 3,880	912	[~~13~~] 12	328
	Chronic	[~~4,035~~] 4,030	[~~0.80~~] 1.30	141	[~~18~~] 17.6	[~~6~~] 5.87	[~~2,145~~] 2,140	101		248
300	Acute		[~~4.21~~] 5.00	1,400	[~~38~~] 37.8	[~~210~~] 208	[~~4,305~~] 4,300	[~~1190~~] 1,190	21	[~~435~~] 434
	Chronic		[~~1.00~~] 1.64	[~~180~~] 182	[~~23~~] 22.9	[~~8~~] 8.13	[~~2,379~~] 2,380	[~~130~~] 132		329
400 and above	Acute		[~~5.38~~] 6.54	1,770	[~~50~~] 49.6	[~~280~~] 281	[~~4,738~~] 4,740	[~~1510~~] 1,510	35	564
	Chronic		[~~1.22~~] 2.03	[~~230~~] 231	[~~29~~] 29.3	[~~11~~] 10.9	[~~2,618~~] 2,620	[~~170~~] 168		428

J. Use-specific numeric criteria.

20.6.4.900(J)(1) NMAC - Criteria - Acute and Chronic Aluminum

1. *The Department proposed to add language regarding the pH range for hardness-based criteria for total recoverable aluminum and to remove language regarding EPA's disapproval of hardness-based aluminum criteria in 20.6.4.900(J)(1) and 20.6.4.900(J)(2) NMAC. NMED Exhibit 4, pp. 19-22; NMED Exhibit 109, pp. 78-81; NMED Exhibit 110; Tr. Vol. 4, 1220:12-1224:7.*
2. *LANL objected to these proposed amendments. LANL Exhibit 8 (2020 TR LANL-00205); LANL Exhibit 64, pp. 1-8 (2020 TR LANL-01226 - 01234); Tr. Vol. 3, 688:18-698:9. To wit, LANL opposes these amendments on the basis that NMED's position is not technically supported, "does not reflect the state-of -the-science on aluminum bioavailability and toxicity" and is inconsistent with the 2018 Criteria.*
3. *NMED contends it provided substantial evidence in response to the objections of LANL. NMED Exhibit 109, pp. 78-81; NMED Exhibit 110; Tr. Vol. 4, 1220:12-1224:7.*

4. *Based on the weight of the evidence, the Commission finds the Department's proposal to add language regarding the pH range for hardness-based criteria for total recoverable aluminum and to remove language regarding EPA's disapproval of hardness-based aluminum criteria in 20.6.4.900(J)(1) and (2) NMAC is well-taken and agrees with the Department's amendments to 20.6.4.900(J) (1) and (2) NMAC as proposed;*

   OR,

   The Commission finds that NMED's proposal to make the 1988 aluminum criteria applicable outside the pH range of 6.5 to 9.0 is not based on credible scientific data and should be rejected. The Commission accepts NMED's evidence that establishing lack of necessary resources to adopt the 2018 Criteria at this time. However, the Commission concludes that the prudent action to protect public health and welfare and enhance quality of water and serve the purposes of the federal Clean Water Act is to move toward adoption of the 2018 Criteria.

20.6.4.900(J)(1) NMAC - Criteria - Tributyltin

The New Mexico Environment Department ("NMED" or "Department") submits this Notice of Errata to its Closing Argument and Proposed Statement of Reasons, filed in the above-captioned case on September 24, 2021. NMED inadvertently omitted a discussion supporting the proposed addition of Tributyltin to its proposed Closing Argument and Statement of Reasons. NMED obtained the positions of all other parties regarding this proposed correction and understands that the filing of this Notice of Errata is unopposed.

1. *The Department proposed to add Tributyltin, along with other EPA-recommend criteria, to the table of numeric criteria in 20.6.4.900(J)(1) NMAC. NMED proposed the addition of these pollutants in accordance with the requirement to consider adoption of new or revised criteria for which EPA has published new or updated recommendations in accordance with Section 304(a) of the federal Clean Water Act. NMED Exhibit 2, pp. 6-9; Tr. Vol. 4, 1242:14-1243:23.*

2. *NMMA objected to the adoption of total iron chronic aquatic life criteria in its proposed nontechnical testimony, but later withdrew its objection. NMMA NOI, pp. 7-8; Tr. Vol. 4, 1243:7-1243:13.*

3. *SJWC objected to the addition of Tributyltin to the table of numeric criteria without including a specific Chemical Abstract System ("CAS") number, on the basis that lack of a specific CAS number creates uncertainty in determining which analyses need to be run to determine compliance with a particular water quality criterion. SJWC's SOR at 101-102; SJWC [Exhibit] 2, p. 25; Tr. Vol 4, 1265:22-1268:13. To wit, SJWC contends NMED did not respond to SJWC's proposal in its written rebuttal technical testimony. At the Triennial Review hearing, NMED's technical witness testified that Tributyltin is comprised of various compounds, four of which were used in the development of the numeric criteria. Each of those compounds have CAS numbers that could be included in the table at 20.6.4.900(J)(1) NMAC. [Barrios, Tr. at 1246:2-16] The hearing record contains no information concerning the Tributyltin compounds or appropriate CAS numbers. [DeRose-Bamman, Tr. at 1268:8-13] However, NMED did supply the CAS numbers for every other pollutant it petitioned to add to the table in 20.6.4.900(J)(1) NMAC.*

4. *Based on the weight of the evidence, and given that other pollutants listed in the numeric criteria table in 20.6.4.900(J)(I) NMAC do not have listed CAS numbers, the Commission finds the Department's proposal to add criteria to 20.6.4.900(J)(1) NMAC in accordance with EPA's new or updated federal Clean Water Act, Section 304(a), recommendations, to include Tributyltin, to be well-taken and adopts the Department's amendment to 20.6.4.900(J)(1) NMAC as proposed*;

   OR,

   The Commission declines to adopt the Department's amendment because NMED has not submitted evidence concerning the applicable CAS numbers for Tributyltin, and for the other reasons provided by SJWC.

20.6.4.900(J)(1) NMAC - Criteria - 304(a)

1. *The Department did not propose amendments to 20.6.4.900(J)(1) NMAC regarding criteria for copper, selenium, arsenic, and manganese, although EPA recommended updates to these criteria. The Department may propose these amendments in the future and is working with testing laboratories to develop the capacity to analyze samples. NMED Exhibit 2, pp. 13-16; Tr. Vol. 4, 1239:8-1242:8.*
2. *No party objected to the Department's delay in adopting EPA's criteria. The Commission therefore does not adopt any amendments to 20.6.4.900(J)(1) NMAC relating to copper, selenium, arsenic, or manganese.*

20.6.4.900(J)(2) NMAC - Criteria - Applicable Notes

1. *The Department proposed to add a note at 20.6.4.900(J)(2)(i) NMAC pertaining to the numeric criteria table at 20.6.4.900(J)(1) NMAC to provide guidance as to when acute and chronic hardness-based aquatic life total recoverable aluminum criteria is applicable and when the acute and chronic numeric aquatic life dissolved aluminum criteria is applicable. NMED Exhibit 4, pp. 21-22; NMED Exhibit 110; Tr. Vol. 4, 1224:11-1225:21.*
2. *No party objected to these changes. Based on the weight of the evidence, the Commission finds the Department's proposal to add a note under the numeric criteria table at 20.6.4.900(J)(2) NMAC to provide guidance as to when acute and chronic hardness-based aquatic life total recoverable aluminum criteria is applicable and when the acute and chronic numeric aquatic life dissolved aluminum criteria is applicable is well-taken and agrees with the Department's amendments to 20.6.4.900(J)(2)(i) NMAC as proposed.*

(1) Table of numeric criteria: The following table sets forth the numeric criteria applicable to existing, designated and attainable uses. For metals, criteria represent the total sample fraction unless otherwise specified in the table. Additional criteria that are not compatible with this table are found in Subsections A through I, K and L of this section.

Pollutant	**CAS Number**	**DWS**	**Irr/Irr storage**	**LW**	**WH**	**Aquatic Life**			**Type**
						Acute	Chronic	HH-OO	
Aluminum, dissolved	7429-90-5		5,000			750 i	87 i		

Pollutant	CAS Number	DWS	Irr/Irr storage	LW	WH	Aquatic Life			Type
						Acute	Chronic	HH-OO	
Aluminum, total recoverable	7429-90-5					a	a		
Antimony, dissolved	7440-36-0	6						640	P
Arsenic, dissolved	7440-38-2	10	100	200		340	150	9.0	C,P
Asbestos	1332-21-4	7,000,000 fibers/L							
Barium, dissolved	7440-39-3	2,000							
Beryllium, dissolved	7440-41-7	4							
Boron, dissolved	7440-42-8		750	5,000					
Cadmium, dissolved	7440-43-9	5	10	50		a	a		
Chloride	1688-70-06					860,000	230,000		
Chlorine residual	7782-50-5				11	19	11		
Chromium III, dissolved	16065-83-1					a	a		
Chromium VI, dissolved	18540-29-9					16	11		
Chromium, dissolved	7440-47-3	100	100	1,000					
Cobalt, dissolved	7440-48-4		50	1,000					
Copper, dissolved	7440-50-8	1300	200	500		a	a		
Cyanide, total recoverable	57-12-5	200			5.2	22.0	5.2	[~~140~~] 400	
Iron	7439-89-6						1,000		
Lead, dissolved	7439-92-1	15	5,000	100		a	a		
Manganese, dissolved	7439-96-5					a	a		
Mercury	7439-97-6	2		10	0.77				
Mercury, dissolved	7439-97-6					1.4	0.77		
Methylmercury	22967-92-6							0.3 mg/kg in fish tissue	P
Molybdenum, dissolved	7439-98-7		1,000						
Molybdenum, total recoverable	7439-98-7					7,920	1,895		
Nickel, dissolved	7440-02-0	700				a	a	4,600	P
Nitrate as N		10 mg/L							
Nitrite + Nitrate				132 mg/L					
Selenium, dissolved	7782-49-2	50	b	50				4,200	P
Selenium, total recoverable	7782-49-2				5.0	20.0	5.0		
Silver, dissolved	7440-22-4					a			
Thallium, dissolved	7440-28-0	2						0.47	P
Uranium, dissolved	7440-61-1	30							
Vanadium, dissolved	7440-62-2		100	100					
Zinc, dissolved	7440-66-6	10,500	2,000	25,000		a	a	26,000	P
Adjusted gross alpha		15 pCi/L		15 pCi/L					
Radium 226 + Radium 228		5 pCi/L		30.0 pCi/L					
Strontium 90		8 pCi/L							
Tritium		20,000 pCi/L		20,000 pCi/L					
Acenaphthene	83-32-9	2,100						[~~990~~] 90	

Pollutant	CAS Number	DWS	Irr/Irr storage	LW	WH	Aquatic Life			Type
						Acute	Chronic	HH-OO	
Acrolein	107-02-8	18				3.0	3.0	[9] 400	
Acrylonitrile	107-13-1	0.65						[2.5] 70	C
Aldrin	309-00-2	0.021				3.0		[0.00050] 0.0000077	C,P
Anthracene	120-12-7	10,500						[40,000] 400	
Benzene	71-43-2	5						[510] 160	C
Benzidine	92-87-5	0.0015						[0.0020] 0.11	C
Benzo(a)anthracene	56-55-3	0.048						[0.18] 0.013	C
Benzo(a)pyrene	50-32-8	0.2						[0.18] 0.0013	C,P
Benzo(b)fluoranthene	205-99-2	0.048						[0.18] 0.013	C
Benzo(k)fluoranthene	207-08-9	0.048						[0.18] 0.13	C
alpha-BHC	319-84-6	0.056						[0.049] 0.0039	C
beta-BHC	319-85-7	0.091						[0.17] 0.14	C
[G]gamma-BHC (Lindane)	58-89-9	0.20				0.95		[1.8] 4.4	
Bis(2-chloroethyl) ether	111-44-4	0.30						[5.3] 22	C
Bis([2-chloroisopropyl] 2-chloro-1-methylethyl) ether	108-60-1	1,400						[65,000] 4,000	
Bis(2-ethylhexyl) phthalate	117-81-7	6						[22] 3.7	C
Bis(chloromethyl) ether	542-88-1							0.17	C
Bromoform	75-25-2	44						[1,400] 1,200	C
Butylbenzyl phthalate	85-68-7	7,000						[1,900] 1	C
Carbaryl	63-25-2					2.1	2.1		
Carbon tetrachloride	56-23-5	5						[16] 50	C
Chlordane	57-74-9	2				2.4	0.0043	[0.0081] 0.0032	C,P
Chlorobenzene	108-90-7	100						[1,600] 800	
Chlorodibromomethane	124-48-1	4.2						[130] 210	C
Chloroform	67-66-3	57						[4,700] 2,000	[C]
Chlorpyrifos	2921-88-2					0.083	0.041		
2-Chloronaphthalene	91-58-7	2,800						[1,600] 1,000	
2-Chlorophenol	95-57-8	175						[150] 800	
Chrysene	218-01-9	0.048						[0.18] 1.3	C
Demeton	8065-48-3						0.1		
Diazinon	333-41-5					0.17	0.17		

Pollutant	CAS Number	DWS	Irr/Irr storage	LW	WH	Aquatic Life			Type
						Acute	Chronic	HH-OO	
2,4-Dichlorophenoxyacetic acid	94-75-7							12,000	
Dichlorodiphenyldichloroethane (DDD)	72-54-8							0.0012	C
Dichlorodiphenyldichloroethylene (DDE)	72-55-9							0.00018	C
Dichlorodiphenyltrichloroethane (DDT)	50-29-3							0.0003	C,P
4,4'-DDT and derivatives		1.0			0.001	1.1	0.001	[0.0022]	[C,P]
Dibenzo(a,h)anthracene	53-70-3	0.048						[0.18] 0.0013	C
Dibutyl phthalate	84-74-2	3,500						[4,500] 30	
1,2-Dichlorobenzene	95-50-1	600						[1,300] 3,000	
1,3-Dichlorobenzene	541-73-1	469						[960] 10	
1,4-Dichlorobenzene	106-46-7	75						[190] 900	
3,3'-Dichlorobenzidine	91-94-1	0.78						[0.28] 1.5	C
Dichlorobromomethane	75-27-4	5.6						[170] 270	C
1,2-Dichloroethane	107-06-2	5						[370] 6,500	C
1,1-Dichloroethylene	75-35-4	7						[7,100] 20,000	[C]
2,4-Dichlorophenol	120-83-2	105						[290] 60	
1,2-Dichloropropane	78-87-5	5.0						[150] 310	C
1,3-Dichloropropene	542-75-6	3.5						[210] 120	C
Dieldrin	60-57-1	0.022				0.24	0.056	[0.00054] 0.000012	C,P
Diethyl phthalate	84-66-2	28,000						[44,000] 600	
Dimethyl phthalate	131-11-3	350,000						[1,100,000] 2,000	
2,4-Dimethylphenol	105-67-9	700						[850] 3,000	
Dinitrophenols	25550-58-7							1,000	
2,4-Dinitrophenol	51-28-5	70						[5,300] 300	
2,4-Dinitrotoluene	121-14-2	1.1						[34] 17	C
Dioxin	1746-01-6	3.0E-05						5.1E-08	C,P
1,2-Diphenylhydrazine	122-66-7	0.44						2.0	C
alpha-Endosulfan	959-98-8	62				0.22	0.056	[89] 30	
beta-Endosulfan	33213-65-9	62				0.22	0.056	[89] 40	
Endosulfan sulfate	1031-07-8	62						[89] 40	
Endrin	72-20-8	2				0.086	0.036	[0.060] 0.03	
Endrin aldehyde	7421-93-4	10.5						[0.30] 1	
Ethylbenzene	100-41-4	700						[2,100] 130	
Fluoranthene	206-44-0	1,400						[140] 20	
Fluorene	86-73-7	1,400						[5,300] 70	
Guthion	86-50-0						0.01		

Pollutant	CAS Number	DWS	Irr/Irr storage	LW	WH	Aquatic Life			Type
						Acute	Chronic	HH-OO	
Heptachlor	76-44-8	0.40				0.52	0.0038	[0.00079] 0.000059	C
Heptachlor epoxide	1024-57-3	0.20				0.52	0.0038	[0.00039] 0.00032	C
Hexachlorobenzene	118-74-1	1						[0.0029] 0.00079	C,P
Hexachlorobutadiene	87-68-3	4.5						[180] 0.1	C
Hexachlorocyclohexane (HCH)-Technical	608-73-1							0.1	C
Hexachlorocyclopen-tadiene	77-47-4	50						[1,100] 4	
Hexachloroethane	67-72-1	25						[33] 1	C
Ideno(1,2,3-cd)pyrene	193-39-5	0.048						[0.18] 0.013	C
Isophorone	78-59-1	368						[9,600] 18,000	C
Malathion	121-75-5						0.1		
Methoxychlor	72-43-5						0.03	0.02	
Methyl bromide	74-83-9	49						[1,500] 10,000	
3-Methyl-4-chlorophenol	59-50-7							2,000	
2-Methyl-4,6-dinitrophenol	534-52-1	14						[280] 30	
Methylene chloride	75-09-2	5						[5,900] 10,000	C
Mirex	2385-85-5						0.001		
Nitrobenzene	98-95-3	18						[690] 600	
Nitrosamines	Various							12.4	C
Nitrosodibutylamine	924-16-3							2.2	C
Nitrosodiethylamine	55-18-5							12.4	C
N-Nitrosodimethylamine	62-75-9	0.0069						30	C
N-Nitrosodi-n-propylamine	621-64-7	0.050						5.1	C
N-Nitrosodiphenylamine	86-30-6	71						60	C
N-Nitrosopyrrolidine	930-55-2							340	C
Nonylphenol	84852-15-3					28	6.6		
Parathion	56-38-2					0.065	0.013		
[Polychlorinated Biphenyls (PCBs)]	[1336-36-3]	[0.50]			[0.014]	[2]	[0.014]	[0.00064]	[C,P]
Pentachlorobenzene	608-93-5							0.1	
Pentachlorophenol	87-86-5	1.0				19	15	[30] 0.4	C
Phenol	108-95-2	10,500						[860,000] 300,000	
Polychlorinated Biphenyls (PCBs)	1336-36-3	0.50			0.014	2	0.014	0.00064	C,P
Pyrene	129-00-0	1,050						[4,000] 30	
1,2,4,5-Tetrachlorobenzene	95-94-3							0.03	
1,1,2,2-Tetrachloroethane	79-34-5	1.8						[40] 30	C

Pollutant	CAS Number	DWS	Irr/Irr storage	LW	WH	Aquatic Life			Type
						Acute	Chronic	HH-OO	
Tetrachloroethylene	127-18-4	5						[~~33~~] 290	C,P
Toluene	108-88-3	1,000						[~~15,000~~] 520	
Toxaphene	8001-35-2	3				0.73	0.0002	[~~0.0028~~] 0.0071	C
1,2-Trans-dichloroethylene	156-60-5	100						[~~10,000~~] 4,000	
Tributyltin (TBT)	Various					0.46	0.072		
1,2,4-Trichlorobenzene	120-82-1	70						[~~70~~] 0.76	C
1,1,1-Trichloroethane	71-55-6	200						200,000	
1,1,2-Trichloroethane	79-00-5	5						[~~160~~] 89	C
Trichloroethylene	79-01-6	5						[~~300~~] 70	C
2,4,5-Trichlorophenol	95-95-4							600	
2,4,6-Trichlorophenol	88-06-2	32						[~~24~~] 28	C
2-(2,4,5-Trichlorophenoxy)propionic acid (Silvex)	93-72-1							400	
Vinyl chloride	75-01-4	2						[~~24~~] 16	C

(2) Notes applicable to the table of numeric criteria in Paragraph (1) of this subsection.

(a) Where the letter "a" is indicated in a cell, the criterion is hardness-based and can be referenced in Subsection I of 20.6.4.900 NMAC.

(b) Where the letter "b" is indicated in a cell, the criterion can be referenced in Subsection C of 20.6.4.900 NMAC.

(c) Criteria are in µg/L unless otherwise indicated.

(d) Abbreviations are as follows: CAS - chemical abstracts service (see definition for "CAS number" in 20.6.4.7 NMAC); DWS - domestic water supply; Irr/Irr storage- irrigation [~~or~~]and irrigation storage; LW - livestock watering; WH - wildlife habitat; HH-OO - human health-organism only; C – criteria based on cancer-causing endpoint; P - persistent toxic pollutant.

(e) The criteria are based on analysis of an unfiltered sample unless otherwise indicated. The acute and chronic aquatic life criteria for aluminum are based on analysis of total recoverable aluminum in a sample that is filtered to minimize mineral phases as specified by the department.

(f) The criteria listed under human health-organism only (HH-OO) are intended to protect human health when aquatic organisms are consumed from waters containing pollutants. These criteria do not protect the aquatic life itself; rather, they protect the health of humans who ingest fish or other aquatic organisms.

(g) The dioxin criteria apply to the sum of the dioxin toxicity equivalents expressed as 2,3,7,8-TCDD dioxin.

(h) The criteria for polychlorinated biphenyls (PCBs) apply to the sum of all congeners, to the sum of all homologs or to the sum of all aroclors.

(i) The acute and chronic aquatic life criteria for dissolved aluminum only apply when the concurrent pH is less than 6.5 or greater than 9.0 S.U. If the concurrent pH is between 6.5 and 9.0 S.U. then the hardness-dependent total recoverable aluminum criteria in Paragraphs (1) and (2) of Subsection I of 20.6.4.900 NMAC apply.

~~**[K.** Acute aquatic life criteria for total ammonia are dependent on pH and the presence or absence of salmonids. The criteria in mg/L as N based on analysis of unfiltered samples are as follows:~~

~~pH~~	~~Where Salmonids Present~~	~~Where Salmonids Absent~~
~~6.5 and below~~	~~32.6~~	~~48.8~~
~~6.6~~	~~31.3~~	~~46.8~~
~~6.7~~	~~29.8~~	~~44.6~~
~~6.8~~	~~28.1~~	~~42.0~~
~~6.9~~	~~26.2~~	~~39.1~~

pH	Where Salmonids Present	Where Salmonids Absent
7.0	24.1	36.1
7.1	22.0	32.8
7.2	19.7	29.5
7.3	17.5	26.2
7.4	15.4	23.0
7.5	13.3	19.9
7.6	11.4	17.0
7.7	9.65	14.4
7.8	8.11	12.1
7.9	6.77	10.1
8.0	5.62	8.40
8.1	4.64	6.95
8.2	3.83	5.72
8.3	3.15	4.71
8.4	2.59	3.88
8.5	2.14	3.20
8.6	1.77	2.65
8.7	1.47	2.20
8.8	1.23	1.84
8.9	1.04	1.56
9.0 and above	0.885	1.32

L. Chronic aquatic life criteria for total ammonia are dependent on pH, temperature and whether fish in early life stages are present or absent. The criteria are based on analysis of unfiltered samples and are calculated according to the equations in Paragraphs (1) and (2) of this subsection. For temperatures from below 0 to 14°C, the criteria for 14°C apply; for temperatures above 30°C, the criteria for 30°C apply. For pH values below 6.5, the criteria for 6.5 apply; for pH values above 9.0, the criteria for 9.0 apply.

(1) Chronic aquatic life criteria for total ammonia when fish early life stages are present:

(a) The equation to calculate chronic criteria in mg/L as N is:

$$((0.0577/(1 + 10^{7.688-pH})) + (2.487/(1 + 10^{pH-7.688})) \times MIN (2.85, 1.45 \times 10^{0.028 \times (25-T)})$$

(b) Selected values of calculated chronic criteria in mg/L as N:

pH	Temperature (°C)									
	14 and below	15	16	18	20	22	24	26	28	30 and above
6.5 and below	6.67	6.46	6.06	5.33	4.68	4.12	3.62	3.18	2.80	2.46
6.6	6.57	6.36	5.97	5.25	4.61	4.05	3.56	3.13	2.75	2.42
6.7	6.44	6.25	5.86	5.15	4.52	3.98	3.50	3.07	2.70	2.37
6.8	6.29	6.10	5.72	5.03	4.42	3.89	3.42	3.00	2.64	2.32
6.9	6.12	5.93	5.56	4.89	4.30	3.78	3.32	2.92	2.57	2.25
7.0	5.91	5.73	5.37	4.72	4.15	3.65	3.21	2.82	2.48	2.18
7.1	5.67	5.49	5.15	4.53	3.98	3.50	3.08	2.70	2.38	2.09
7.2	5.39	5.22	4.90	4.31	3.78	3.33	2.92	2.57	2.26	1.99
7.3	5.08	4.92	4.61	4.06	3.57	3.13	2.76	2.42	2.13	1.87
7.4	4.73	4.59	4.30	3.78	3.32	2.92	2.57	2.26	1.98	1.74
7.5	4.36	4.23	3.97	3.49	3.06	2.69	2.37	2.08	1.83	1.61
7.6	3.98	3.85	3.61	3.18	2.79	2.45	2.16	1.90	1.67	1.47
7.7	3.58	3.47	3.25	2.86	2.51	2.21	1.94	1.71	1.50	1.32
7.8	3.18	3.09	2.89	2.54	2.23	1.96	1.73	1.52	1.33	1.17
7.9	2.80	2.71	2.54	2.24	1.96	1.73	1.52	1.33	1.17	1.03
8.0	2.43	2.36	2.21	1.94	1.71	1.50	1.32	1.16	1.02	0.897

pH	Temperature (°C)									
	14 and below	15	16	18	20	22	24	26	28	30 and above
8.1	2.10	2.03	1.91	1.68	1.47	1.29	1.14	1.00	0.879	0.773
8.2	1.79	1.74	1.63	1.43	1.26	1.11	0.973	0.855	0.752	0.661
8.3	1.52	1.48	1.39	1.22	1.07	0.941	0.827	0.727	0.639	0.562
8.4	1.29	1.25	1.17	1.03	0.906	0.796	0.700	0.615	0.541	0.475
8.5	1.09	1.06	0.990	0.870	0.765	0.672	0.591	0.520	0.457	0.401
8.6	0.920	0.892	0.836	0.735	0.646	0.568	0.499	0.439	0.386	0.339
8.7	0.778	0.754	0.707	0.622	0.547	0.480	0.422	0.371	0.326	0.287
8.8	0.661	0.641	0.601	0.528	0.464	0.408	0.359	0.315	0.277	0.244
8.9	0.565	0.548	0.513	0.451	0.397	0.349	0.306	0.269	0.237	0.208
9.0 and above	0.486	0.471	0.442	0.389	0.342	0.300	0.264	0.232	0.204	0.179

(2) Chronic aquatic life criteria for total ammonia when fish early life stages are absent.

(a) The equation to calculate chronic criteria in mg/L as N is:

$$((0.0577/(1 + 10^{7.688-pH})) + (2.487/(1 + 10^{pH-7.688})) \times 1.45 \times 10^{0.028 \times (25-MAX(T,7))}$$

(b) Selected values of calculated chronic criteria in mg/L as N:

pH	Temperature (°C)								
	7 and below	8	9	10	11	12	13	14	15 and above
6.5 and below	10.8	10.1	9.51	8.92	8.36	7.84	7.35	6.89	6.46
6.6	10.7	9.99	9.37	8.79	8.24	7.72	7.24	6.79	6.36
6.7	10.5	9.81	9.20	8.62	8.08	7.58	7.11	6.66	6.25
6.8	10.2	9.58	8.98	8.42	7.90	7.40	6.94	6.51	6.10
6.9	9.93	9.31	8.73	8.19	7.68	7.20	6.75	6.33	5.93
7.0	9.60	9.00	8.43	7.91	7.41	6.95	6.52	6.11	5.73
7.1	9.20	8.63	8.09	7.58	7.11	6.67	6.25	5.86	5.49
7.2	8.75	8.20	7.69	7.21	6.76	6.34	5.94	5.57	5.22
7.3	8.24	7.73	7.25	6.79	6.37	5.97	5.60	5.25	4.92
7.4	7.69	7.21	6.76	6.33	5.94	5.57	5.22	4.89	4.59
7.5	7.09	6.64	6.23	5.84	5.48	5.13	4.81	4.51	4.23
7.6	6.46	6.05	5.67	5.32	4.99	4.68	4.38	4.11	3.85
7.7	5.81	5.45	5.11	4.79	4.49	4.21	3.95	3.70	3.47
7.8	5.17	4.84	4.54	4.26	3.99	3.74	3.51	3.29	3.09
7.9	4.54	4.26	3.99	3.74	3.51	3.29	3.09	2.89	2.71
8.0	3.95	3.70	3.47	3.26	3.05	2.86	2.68	2.52	2.36
8.1	3.41	3.19	2.99	2.81	2.63	2.47	2.31	2.17	2.03
8.2	2.91	2.73	2.56	2.40	2.25	2.11	1.98	1.85	1.74
8.3	2.47	2.32	2.18	2.04	1.91	1.79	1.68	1.58	1.48
8.4	2.09	1.96	1.84	1.73	1.62	1.52	1.42	1.33	1.25
8.5	1.77	1.66	1.55	1.46	1.37	1.28	1.20	1.13	1.06
8.6	1.49	1.40	1.31	1.23	1.15	1.08	1.01	0.951	0.892
8.7	1.26	1.18	1.11	1.04	0.976	0.915	0.858	0.805	0.754
8.8	1.07	1.01	0.944	0.855	0.829	0.778	0.729	0.684	0.641
8.9	0.917	0.860	0.806	0.756	0.709	0.664	0.623	0.584	0.548
9.0 and above	0.790	0.740	0.694	0.651	0.610	0.572	0.536	0.503	0.471
At 15°C and above, the criterion for fish early life stages absent is the same as the criterion for fish early life stages present (refer to table in Paragraph (1) of this subsection).									

]

K. The criteria for total ammonia consider sensitive freshwater mussel species in the family Unionidae, freshwater non-pulmonate snails, and *Oncorhynchus* spp. (a genus of fish in the family Salmonidae), hence further protecting the aquatic community. The total ammonia criteria magnitude is measured as Total Ammonia Nitrogen (TAN) mg/L. TAN is the sum of NH_4^+ and NH_3. TAN mg/L magnitude is derived as a function of pH and temperature (EPA 2013).

20.6.4.900(K)-(M) NMAC - Criteria - Ammonia

1. *The Department proposed to update the aquatic life ammonia criteria in 20.6.4.900(K), (L) and (M) NMAC to be consistent with the federal aquatic life ambient water quality criteria for total ammonia, including acute and chronic aquatic life criteria for Total Ammonia Nitrogen ("TAN"). NMED Exhibit 3, pp. 24-25; NMED Exhibit 110.*
2. *No party objected to these changes. Based on the weight of the evidence, the Commission finds the Department's proposal to update the aquatic life ammonia criteria in 20.6.4.900(K), (L) and (M) NMAC to be consistent with the federal aquatic life ambient water quality criteria for total ammonia, including acute and chronic aquatic life criteria for Total Ammonia Nitrogen ("TAN") is well-taken and adopts the Department's amendments to 20.6.4.900(K), (L) and (M) NMAC as proposed.*

L . The acute aquatic life criteria for TAN (mg/L) was derived by the EPA (2013) as the one-hour average concentration of TAN mg/L that shall not be exceeded more than once every three years on average. The EPA acute criterion magnitude was derived using the following equation:

Acute TAN Criterion Magnitude for 1-hour average=

$$\text{MIN}\left(\left(\frac{0.275}{1+10^{7.204-pH}}+\frac{39}{1+10^{pH-7.204}}\right),\left(0.7249\text{x}\left(\frac{0.0114}{1+10^{7.204-pH}}+\frac{1.6181}{1+10^{pH-7.204}}\right)\text{x}\left(23.12\times 10^{0.036(20-T)}\right)\right)\right)$$

T (temperature °C) and *pH* are defined as the paired values associated with the TAN sample.

	Temperature (°C)																					
pH	**0-10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**
6.5	51	48	44	41	37	34	32	29	27	25	23	21	19	18	16	15	14	13	12	11	9.9
6.6	49	46	42	39	36	33	30	28	26	24	22	20	18	17	16	14	13	12	11	10	9.5
6.7	46	44	40	37	34	31	29	27	24	22	21	19	18	16	15	14	13	12	11	9.8	9
6.8	44	41	38	35	32	30	27	25	23	21	20	18	17	15	14	13	12	11	10	9.2	8.5
6.9	41	38	35	32	30	28	25	23	21	20	18	17	15	14	13	12	11	10	9.4	8.6	7.9
7.0	38	35	33	30	28	25	23	21	20	18	**17**	15	14	13	12	11	10	9.4	8.6	7.9	7.3
7.1	34	32	30	27	25	23	21	20	18	17	15	14	13	12	11	10	9.3	8.5	7.9	7.2	6.7
7.2	31	29	27	25	23	21	19	18	16	15	14	13	12	11	9.8	9.1	8.3	7.7	7.1	6.5	6
7.3	27	26	24	22	20	18	17	16	14	13	12	11	10	9.5	8.7	8	7.4	6.8	6.3	5.8	5.3
7.4	24	22	21	19	18	16	15	14	13	12	11	9.8	9	8.3	7.7	7	6.5	6	5.5	5.1	4.7
7.5	21	19	18	17	15	14	13	12	11	10	9.2	8.5	7.8	7.2	6.6	6.1	5.6	5.2	4.8	4.4	4

7.6	18	17	15	14	13	12	11	10	9.3	8.6	7.9	7.3	6.7	6.2	5.7	5.2	4.8	4.4	4.1	3.8	3.5
7.7	15	14	13	12	11	10	9.3	8.6	7.9	7.3	6.7	6.2	5.7	5.2	4.8	4.4	4.1	3.8	3.5	3.2	2.9
7.8	13	12	11	10	9.3	8.5	7.9	7.2	6.7	6.1	5.6	5.2	4.8	4.4	4	3.7	3.4	3.2	2.9	2.7	2.5
7.9	11	9.9	9.1	8.4	7.7	7.1	6.6	3	5.6	5.1	4.7	4.3	4	3.7	3.4	3.1	2.9	2.6	2.4	2.2	2.1
8.0	8.8	8.2	7.6	7	6.4	5.9	5.4	5	4.6	4.2	3.9	3.6	3.3	3	2.8	2.6	2.4	2.2	2	1.9	1.7
8.1	7.2	6.8	6.3	5.8	5.3	4.9	4.5	4.1	3.8	3.5	3.2	3	2.7	2.5	2.3	2.1	2	1.8	1.7	1.5	1.4
8.2	6	5.6	5.2	4.8	4.4	4	3.7	3.4	3.1	2.9	2.7	2.4	2.3	2.1	1.9	1.8	1.6	1.5	1.4	1.3	1.2
8.3	4.9	4.6	4.3	3.9	3.6	3.3	3.1	2.8	2.6	2.4	2.2	2	1.9	1.7	1.6	1.4	1.3	1.2	1.1	1	0.96
8.4	4.1	3.8	3.5	3.2	3	2.7	2.5	2.3	2.1	2	1.8	1.7	1.5	1.4	1.3	1.2	1.1	1	0.93	0.86	0.79
8.5	3.3	3.1	2.9	2.7	2.4	2.3	2.1	1.9	1.8	1.6	1.5	1.4	1.3	1.2	1.1	0.98	0.9	0.83	0.77	0.71	0.65
8.6	2.8	2.6	2.4	2.2	2	1.9	1.7	1.6	1.5	1.3	1.2	1.1	1	0.96	0.88	0.81	0.75	0.69	0.63	0.58	0.54
8.7	2.3	2.2	2	1.8	1.7	1.6	1.4	1.3	1.2	1.1	1	0.94	0.87	0.8	0.74	0.68	0.62	0.57	0.53	0.49	0.45
8.8	1.9	1.8	1.7	1.5	1.4	1.3	1.2	1.1	1	0.93	0.86	0.79	0.73	0.67	0.62	0.57	0.52	0.48	0.44	0.41	0.37
8.9	1.6	1.5	1.4	1.3	1.2	1.1	1	0.93	0.85	0.79	0.72	0.67	0.61	0.56	0.52	0.48	0.44	0.4	0.37	0.34	0.32
9.0	1.4	1.3	1.2	1.1	1	0.93	0.86	0.79	0.73	0.67	0.62	0.57	0.52	0.48	0.44	0.41	0.37	0.34	0.32	0.29	0.27

(1) Temperature and pH-dependent values of the acute TAN criterion magnitude -when *Oncorhynchus* spp. absent.

(2) Temperature and pH-dependent values for the acute TAN criterion magnitude- when *Oncorhynchus* spp. are present.

	Temperature (°C)																	
pH	**0-14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**
6.5	33	33	32	29	27	25	23	21	19	18	16	15	14	13	12	11	9.9
6.6	31	31	30	28	26	24	22	20	18	17	16	14	13	12	11	10	9.5
6.7	30	30	29	27	24	22	21	19	18	16	15	14	13	12	11	9.8	9
6.8	28	28	27	25	23	21	20	18	17	15	14	13	12	11	10	9.2	8.5
6.9	26	26	25	23	21	20	18	17	15	14	13	12	11	10	9.4	8.6	7.9
7.0	24	24	23	21	20	18	**17**	15	14	13	12	11	10	9.4	8.6	8	7.3
7.1	22	22	21	20	18	17	15	14	13	12	11	10	9.3	8.5	7.9	7.2	6.7
7.2	20	20	19	18	16	15	14	13	12	11	9.8	9.1	8.3	7.7	7.1	6.5	6
7.3	18	18	17	16	14	13	12	11	10	9.5	8.7	8	7.4	6.8	6.3	5.8	5.3
7.4	15	15	15	14	13	12	11	9.8	9	8.3	7.7	7	6.5	6	5.5	5.1	4.7
7.5	13	13	13	12	11	10	9.2	8.5	7.8	7.2	6.6	6.1	5.6	5.2	4.8	4.4	4
7.6	11	11	11	10	9.3	8.6	7.9	7.3	6.7	6.2	5.7	5.2	4.8	4.4	4.1	3.8	3.5
7.7	9.6	9.6	9.3	8.6	7.9	7.3	6.7	6.2	5.7	5.2	4.8	4.4	4.1	3.8	3.5	3.2	3
7.8	8.1	8.1	7.9	7.2	6.7	6.1	5.6	5.2	4.8	4.4	4	3.7	3.4	3.2	2.9	2.7	2.5
7.9	6.8	6.8	6.6	6	5.6	5.1	4.7	4.3	4	3.7	3.4	3.1	2.9	2.6	2.4	2.2	2.1
8.0	5.6	5.6	5.4	5	4.6	4.2	3.9	3.6	3.3	3	2.8	2.6	2.4	2.2	2	1.9	1.7
8.1	4.6	4.6	4.5	4.1	3.8	3.5	3.2	3	2.7	2.5	2.3	2.1	2	1.8	1.7	1.5	1.4
8.2	3.8	3.8	3.7	3.5	3.1	2.9	2.7	2.4	2.3	2.1	1.9	1.8	1.6	1.5	1.4	1.3	1.2
8.3	3.1	3.1	3.1	2.8	2.6	2.4	2.2	2	1.9	1.7	1.6	1.4	1.3	1.2	1.1	1	1
8.4	2.6	2.6	2.5	2.3	2.1	2	1.8	1.7	1.5	1.4	1.3	1.2	1.1	1	0.9	0.9	0.8
8.5	2.1	2.1	2.1	1.9	1.8	1.6	1.5	1.4	1.3	1.2	1.1	1	0.9	0.8	0.8	0.7	0.7
8.6	1.8	1.8	1.7	1.6	1.5	1.3	1.2	1.1	1	1	0.9	0.8	0.8	0.7	0.6	0.6	0.5
8.7	1.5	1.5	1.4	1.3	1.2	1.1	1	0.9	0.9	0.8	0.7	0.7	0.6	0.6	0.5	0.5	0.5
8.8	1.2	1.2	1.2	1.1	1	0.9	0.9	0.8	0.7	0.7	0.6	0.6	0.5	0.5	0.4	0.4	0.4
8.9	1	1	1	0.9	0.9	0.8	0.7	0.7	0.6	0.6	0.5	0.5	0.4	0.4	0.4	0.3	0.3

9.0	0.88	0.9	0.9	0.8	0.7	0.7	0.6	0.6	0.5	0.5	0.4	0.4	0.4	0.3	0.3	0.3	0.3

M. The chronic aquatic life criteria for TAN (mg/L) was derived by the EPA (2013) as a thirty-day rolling average concentration of TAN mg/L that shall not be exceeded more than once every three years on average. In addition, the highest four-day average within the 30-day averaging period should not be more than 2.5 times the CCC (e.g., 2.5 x 1.9 mg TAN/L at pH 7 and 20°C, or 4.8 mg TAN/L) more than once in three years on average. The EPA chronic criterion magnitude was derived using the following equation:

Chronic TAN Criterion Magnitude for 30-day average=

$$0.8876 \times \left(\frac{0.0278}{1+10^{7.688-pH}} + \frac{1.1994}{1+10^{pH-7.688}}\right) \times \left(2.126 \times 10^{0.028\times(20-MAX(T,7))}\right)$$

T (temperature °C) and *pH* are defined as the paired values associated with the TAN sample.

(1) Temperature and pH-Dependent Values of the Chronic TAN Criterion Magnitude.

	Temperature (°C)																							
pH	**0-7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**
6.5	4.9	4.6	4.3	4.1	3.8	3.6	3.3	3.1	2.9	2.8	2.6	2.4	2.3	2.1	2	1.9	1.8	1.6	1.5	1.5	1.4	1.3	1.2	1.1
6.6	4.8	4.5	4.3	4	3.8	3.5	3.3	3.1	2.9	2.7	2.5	2.4	2.2	2.1	2	1.8	1.7	1.6	1.5	1.4	1.3	1.3	1.2	1.1
6.7	4.8	4.5	4.2	3.9	3.7	3.5	3.2	3	2.8	2.7	2.5	2.3	2.2	2.1	1.9	1.8	1.7	1.6	1.5	1.4	1.3	1.2	1.2	1.1
6.8	4.6	4.4	4.1	3.8	3.6	3.4	3.2	3	2.8	2.6	2.4	2.3	2.1	2	1.9	1.8	1.7	1.6	1.5	1.4	1.3	1.2	1.1	1.1
6.9	4.5	4.2	4	3.7	3.5	3.3	3.1	2.9	2.7	2.5	2.4	2.2	2.1	2	1.8	1.7	1.6	1.5	1.4	1.3	1.2	1.2	1.1	1
7.0	4.4	4.1	3.8	3.6	3.4	3.2	3	2.8	2.6	2.4	2.3	2.2	2	**1.9**	1.8	1.7	1.6	1.5	1.4	1.3	1.2	1.1	1.1	1
7.1	4.2	3.9	3.7	3.5	3.2	3	2.8	2.7	2.5	2.3	2.2	2.1	1.9	1.8	1.7	1.6	1.5	1.4	1.3	1.2	1.2	1.1	1	1
7.2	4	3.7	3.5	3.3	3.1	2.9	2.7	2.5	2.4	2.2	2.1	2	1.8	1.7	1.6	1.5	1.4	1.3	1.3	1.2	1.1	1	1	0.9
7.3	3.8	3.5	3.3	3.1	2.9	2.7	2.6	2.4	2.2	2.1	2	1.8	1.7	1.6	1.5	1.4	1.3	1.3	1.2	1.1	1	1	0.9	0.9
7.4	3.5	3.3	3.1	2.9	2.7	2.5	2.4	2.2	2.1	2	1.8	1.7	1.6	1.5	1.4	1.3	1.3	1.2	1.1	1	1	0.9	0.9	0.8
7.5	3.2	3	2.8	2.7	2.5	2.3	2.2	2.1	1.9	1.8	1.7	1.6	1.5	1.4	1.3	1.2	1.2	1.1	1	1	0.9	0.8	0.8	0.7
7.6	2.9	2.8	2.6	2.4	2.3	2.1	2	1.9	1.8	1.6	1.5	1.4	1.4	1.3	1.2	1.1	1.1	1	0.9	0.9	0.8	0.8	0.7	0.7
7.7	2.6	2.4	2.3	2.2	2	1.9	1.8	1.7	1.6	1.5	1.4	1.3	1.2	1.1	1.1	1	0.9	0.9	0.8	0.8	0.7	0.7	0.6	0.6
7.8	2.3	2.2	2.1	1.9	1.8	1.7	1.6	1.5	1.4	1.3	1.2	1.2	1.1	1	1	0.9	0.8	0.8	0.7	0.7	0.7	0.6	0.6	0.5
7.9	2.1	1.9	1.8	1.7	1.6	1.5	1.4	1.3	1.2	1.2	1.1	1	1	0.9	0.8	0.8	0.7	0.7	0.7	0.6	0.6	0.5	0.5	0.5
8.0	1.8	1.7	1.6	1.5	1.4	1.3	1.2	1.1	1.1	1	0.9	0.9	0.8	0.8	0.7	0.7	0.6	0.6	0.6	0.5	0.5	0.4	0.4	0.4
8.1	1.5	1.5	1.4	1.3	1.2	1.1	1.1	1	0.9	0.9	0.8	0.8	0.7	0.7	0.6	0.6	0.6	0.5	0.5	0.5	0.4	0.4	0.4	0.4
8.2	1.3	1.2	1.2	1.1	1	1	0.9	0.8	0.8	0.7	0.7	0.7	0.6	0.6	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.3	0.3	0.3
8.3	1.1	1.1	1	0.9	0.9	0.8	0.8	0.7	0.7	0.6	0.6	0.6	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3
8.4	1	0.9	0.8	0.8	0.7	0.7	0.7	0.6	0.6	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2
8.5	0.8	0.8	0.7	0.7	0.6	0.6	0.6	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2
8.6	0.7	0.6	0.6	0.6	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
8.7	0.6	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1
8.8	0.5	0.5	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1
8.9	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1
9.0	0.4	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

[20.6.4.900 NMAC - Rp 20 NMAC 6.1.3100, 10/12/2010; A, 10/11/2002; A, 5/23/2005; A, 7/17/2005; A, 12/1/2010; A, 3/2/2017; A, XX/XX/XXXX]

20.6.4.901 PUBLICATION REFERENCES: These documents are intended as guidance and are available for public review during regular business hours at the offices of the surface water quality bureau. Copies of these

documents have also been filed with the New Mexico state records center in order to provide greater access to this information.

20.6.4.901 NMAC - Publication References

1. *The Department proposed to amend the publication references section at 20.6.4.901 NMAC to be consistent with the most current versions of these documents. Overall, some references needed updates, some were removed because they were no longer the correct reference and replaced with the correct references, and some were reworded for consistency within the reference section. These changes will facilitate appropriate implementation of the State's water quality standards. NMED Exhibit 3, p. 5.*

2. *No party objected to these changes. Based on the weight of the evidence, the Commission finds the Department's proposal to update the publication references section at 20.6.4.901 NMAC to be consistent with the most current versions of these documents is well-taken and adopts the Department's amendments to 20.6.4.901 NMAC as proposed.*

A. American public health association. 1992. *Standard Methods For The Examination Of Water And Wastewater, 18th Edition.* Washington, D.C. 1048 p.

B. American public health association. 1995. *Standard Methods For The Examination Of Water And Wastewater, 19th Edition.* Washington, D.C. 1090 p.

C. American public health association. 1998. *Standard Methods For The Examination Of Water And Wastewater, 20th Edition.* Washington, D.C. 1112 p.

D. American public health association. 2018. *Standard Methods For The Examination Of Water And Wastewater, 23rd Edition.* Washington, D.C. 1796 p.

[D]E. United States geological survey. [1987]1989. *Methods For Determination Of Inorganic Substances In Water And Fluvial Sediments, Techniques Of Water-Resource Investigations Of The United States Geological Survey.* Washington, D.C. [80]545 p.

[E]F. United States geological survey. 1987. *Methods [f]For [t]The [d]Determination [o]Of [o]Organic [s]Substances [i]In [w]Water [a]And [f]Fluvial [s]Sediments, [t]Techniques [o]Of [w]Water-[r]Resource [i]Investigations [o]Of [t]The [U.S.] United States Geological [s]Survey.* Washington, D.C. 80 p.

[F]G. United States environmental protection agency. [1974]1983. *Methods For Chemical Analysis Of Water And Wastes.* [National environmental research center, Cincinnati, OhioOffice of research and development, Washington, DC]. [(EPA-625-/6-74-003)](EPA/600/4-79/020). [298]491 p.

[G]H. New Mexico water quality control commission. [2003]2020. *(208) State Of New Mexico Water Quality Management Plan and Continuing Planning Process*. Santa Fe, New Mexico. [85]277 p.

[H]I. Colorado river basin salinity control forum. [2014]2020. *[2014]2020 Review, Water Quality Standards For Salinity, Colorado River System.* Phoenix, Arizona. [99]97 p.

[I]J. United States environmental protection agency. 2002. *Methods For Measuring The Acute Toxicity Of Effluents And Receiving Waters To Freshwater And Marine Organisms.* Office of research and development, Washington, D.C. (5th Ed., EPA 821-R-02-012). 293 p. [http://www.epa.gov/ostWET/disk2/atx.pdf]

[J]K. United States environmental protection agency. 2002. *Short-Term Methods For Estimating The Chronic Toxicity Of Effluents And Receiving Waters To Freshwater Organisms.* Environmental monitoring systems laboratory, Cincinnati, Ohio. ([4th Ed., EPA 821-R-02-013). 335 p.

[~~K~~]L. [~~Ambient induced mixing, in~~]United States environmental protection agency. 1991. Ambient-induced mixing, in *Technical Support Document For Water Quality-Based Toxics Control*. Office of water, Washington, D.C. (EPA/505/2-90-001). [~~2~~]335 p.

[~~L~~]M. United States environmental protection agency. 1983. *Technical Support Manual: Waterbody Surveys And Assessments For Conducting Use Attainability Analyses, Volume I:*. Office of water, regulations and standards, Washington, D.C. [~~251~~]232 p. [~~http://www.epa.gov/OST/library/wqstandards/uaavol123.pdf~~]

[~~M~~]N. United States environmental protection agency. 1984. *Technical Support Manual: Waterbody Surveys And Assessments For Conducting Use Attainability Analyses, Volume [~~ii~~]III: Lake Systems*. Office of water, regulations and standards, Washington, D.C. 208 p.
[~~http://www.epa.gov/OST/library/wqstandards/uaavol123.pdf~~]
[20.6.4.901 NMAC - Rp 20 NMAC 6.1.4000, 10/12/2010; A, 5/23/2005; A, 12/1/2010; A, 3/2/2017; A, XX/XX/XXXX]

HISTORY of 20.6.4 NMAC:
Pre-NMAC History:
Material in the part was derived from that previously filed with the commission of public records - state records center and archives:
WQC 67-1, Water Quality Standards, filed 7-17-67, effective 8-18-67
WQC 67-1, Amendment Nos. 1-6, filed 3-21-68, effective 4-22-68
WQC 67-1, Amendment No. 7, filed 2-27-69, effective 3-30-69
WQC 67-1, Amendment No. 8, filed 7-14-69, effective 8-15-69
WQC 70-1, Water Quality Standards for Intrastate Waters and Tributaries to Interstate Streams, filed July 17, 1970;
WQC 67-1, Amendment Nos. 9 and 10, filed 2-12-71, effective 3-15-71
WQC 67-1, Amendment No. 11, filed 3-4-71, effective 4-5-71
WQC 73-1, New Mexico Water Quality Standards, filed 9-17-73, effective 10-23-73
WQC 73-1, Amendment Nos. 1 and 2, filed 10-3-75, effective 11-4-75
WQC 73-1, Amendment No. 3, filed 1-19-76, effective 2-14-76
WQC 77-2, Amended Water Quality Standards for Interstate and Intrastate Streams in New Mexico, filed 2-24-77, effective 3-11-77
WQC 77-2, Amendment No. 1, filed 3-23-78, effective 4-24-78
WQC 77-2, Amendment No. 2, filed 6-12-79, effective 7-13-79
WQCC 80-1, Water Quality Standards for Interstate and Intrastate Streams in New Mexico, filed 8-28-80, effective 9-28-80
WQCC 81-1, Water Quality Standards for Interstate and Intrastate Streams in New Mexico, filed 5-5-81, effective 6-4-81
WQCC 81-1, Amendment No. 1, filed 5-19-82, effective 6-18-82
WQCC 81-1, Amendment No. 2, filed 6-24-82, effective 7-26-82
WQCC 85-1, Water Quality Standards for Interstate and Intrastate Streams in New Mexico, filed 1-16-85, effective 2-15-85
WQCC 85-1, Amendment No. 1, filed 8-28-87, effective 9-28-87
WQCC 88-1, Water Quality Standards for Interstate and Intrastate Streams in New Mexico, filed 3-24-88, effective 4-25-88
WQCC 91-1, Water Quality Standards for Interstate and Intrastate Streams in New Mexico, filed 5-29-91, effective 6-29-91
WQCC 91-1, Amendment No. 1, filed 10-11-91, effective 11-12-91

History of the Repealed Material:
WQC 67-1, Water Quality Standards, - Superseded, 10-23-73
WQC 73-1, New Mexico Water Quality Standards, - Superseded, 3-11-77
WQC 77-2, Amended Water Quality Standards for Interstate and Intrastate Streams in New Mexico, - Superseded, 9-28-80
WQCC 80-1, Water Quality Standards for Interstate and Intrastate Streams in New Mexico, - Superseded, 6-4-81
WQCC 81-1, Water Quality Standards for Interstate and Intrastate Streams in New Mexico, - Superseded, 2-15-85
WQCC 85-1, Water Quality Standards for Interstate and Intrastate Streams in New Mexico, - Superseded, 4-25-88
WQCC 88-1, Water Quality Standards for Interstate and Intrastate Streams in New Mexico, - Superseded, 6-29-91
WQCC 91-1, Water Quality Standards for Interstate and Intrastate Streams in New Mexico, - Superseded, 1-23-95

20 NMAC 6.1, Standards for Interstate and Intrastate Streams, - Repealed, 2-23-00
20 NMAC 6.1, Standards for Interstate and Intrastate Surface Waters, - Repealed, 10/12/2000

END OF ATTACHMENT A

Certificate of Service

I hereby certify that on January 8, 2022 a copy of the foregoing was emailed to the persons listed below. A copy will be mailed first class upon request.

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