STATE OF NEW MEXICO
NEW MEXICO 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)**

SAN JUAN WATER COMMISSION'S CLOSING LEGAL ARGUMENTS AND PROPOSED STATEMENT OF REASONS

By:

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COMES NOW San Juan Water Commission ("SJWC"), by and through its counsel of record, Taylor & McCaleb, P.A., and in accordance with 20.1.6.304 NMAC, Paragraph 11 of the Hearing Officer's November 9, 2020, Procedural Order, and the August 9, 2021, Notice of Transcript Filing, hereby submits its Closing Legal Arguments and Proposed Statement of Reasons for the Triennial Review hearing held virtually through video conferencing from July 13 through July 16, 2021, and July 21, 2021.

I. SJWC'S INTERESTS AND POSITIONS IN THIS TRIENNIAL REVIEW

SJWC is a political subdivision of the State of New Mexico formed in 1986 under the New Mexico Joint Powers Agreements Act, NMSA 1978, Sections 11-1-1 to -7 (1961, as amended through 2009). SJWC's purpose is to acquire and protect raw water supplies for municipal, industrial and domestic use for almost all water users in San Juan County living outside of tribal lands. Currently, San Juan County has a population of approximately 122,000 residents.

SJWC is comprised of twelve other political subdivisions of the State of New Mexico: (i) the cities of Aztec, Bloomfield and Farmington; (ii) San Juan County; and (iii) San Juan Rural Water Users Association, which itself is comprised of eight non-profit mutual domestic community water associations organized under the Sanitary Projects Act, NMSA 1978, Sections 3-29-1 to -21 (1965,

as amended through 2017). To fulfill its mission, SJWC is a participant in the Animas-La Plata Project ("ALP Project"), and it holds a permit for 20,800 acre feet of water diversions from that Project. SJWC also holds permits for water diversions totaling more than 10,000 acre feet per year from the San Juan River Basin unassociated with the ALP Project. These water rights are separate from, and in addition to, the water rights of SJWC's individual member entities. The New Mexico surface water quality standards found in 20.6.4 NMAC ("SWQS") directly impact the operations of SJWC's member entities (some of which discharge into the surface waters of the State), the health of San Juan County's citizens, and the economy of the region. For that reason, SJWC has participated in the Triennial Review process since the 1990s.

In this proceeding, SJWC has continued its decades-long history of participation in the Triennial Review process for two primary reasons. First, to assist the New Mexico Water Quality Control Commission ("WQCC") in ensuring that its decisions are based on credible scientific data and other appropriate evidence in conformance with the federal Clean Water Act and associated federal regulations, U.S. Environmental Protection Agency ("EPA") water quality standards guidance, the New Mexico Water Quality Act, SWQS, and applicable SWQS implementation documents, such as the Water Quality Management Plan and Continuing Planning Process ("WQMP/CPP"). Second, to promote procedures that ensure fair and adequate notice of, and opportunity for public participation in, the Triennial Review hearing process and the development of technical analyses conducted by the Surface Water Quality Bureau of the New Mexico Environment Department ("NMED"), such as existing use analyses.

The purposes of this submission are:

1. to set forth the legal standards that govern this proceeding;

2. to oppose adoption of a climate change objective (20.6.4.6(D) NMAC) and "climate change" definition (20.6.4.7(C) NMAC);

3. to oppose the adoption of the associated definitions for "baseflow" (20.6.4.7(B) NMAC) and "effluent dominated" (20.6.4.7(E) NMAC);

4. to oppose adoption of a definition of "contaminants of emerging concern" (20.6.4.7(C) NMAC);

5. to oppose modification of the existing definition of "marginal coldwater" (20.6.4.7(M) NMAC);

6. to oppose modification of the existing definition of "toxic pollutants" (20.6.4.7(T)(2) NMAC);

7. to oppose NMED's proposed new subsection 20.6.4.10(B) NMAC concerning existing uses;

8. to support the language for 20.6.4.10(B) NMAC concerning existing uses proposed by Triad National Security, LLC and the U.S. Department of Energy ("LANL");

9. to oppose any reference to "contaminants of emerging concern" in the narrative standard for toxic pollutants (20.6.4.13(F)(1) NMAC);

10. to oppose any reference in the narrative standard for toxic pollutants (20.6.4.13(F)(1)) to the list of toxic pollutants found in the Ground and Surface Water Protection Rule (20.6.2.7(T) NMAC) or to 40 C.F.R. § 401.15;

11. to oppose adding a reference to effluent conditions for community sewerage systems found in the Ground and Surface Water Protection Rule (20.6.2.2102 NMAC) in the water quality criteria for Rio Grande stream segments 20.6.4.105(B) and 20.6.4.106(B) NMAC;

12. to request that NMED be directed to develop a formal framework for developing existing use analyses, including public participation in the development of the framework and WQCC approval of the framework;

13. to oppose NMED's proposal to designate primary contact recreation as an existing use for five stream segments (20.6.4.103/112, 116, 204, 207, and 206/231 NMAC);

14. to oppose adoption of numeric criteria for Tributyltin in 20.6.4.900 NMAC absent specification of an appropriate Chemical Abstract System number(s); and

15. to provide reasons that may be adopted by the WQCC for its decisions concerning the issues addressed by SJWC herein.

II. GENERAL LEGAL PRINCIPLES GOVERNING THE WQCC'S ADOPTION OF A NEW, OR MODIFICATION OF AN EXISTING, SURFACE WATER QUALITY STANDARD

Under Section 303(c)(1) of the federal Clean Water Act, the State must hold a public hearing at least every three years for the purpose of reviewing and revising the SWQS, or adopting new standards, as appropriate. 33 U.S.C. § 1313(c)(1) (2021). That responsibility is assigned to the WQCC by the New Mexico Water Quality Act, which also requires a public hearing before adopting new or revised SWQS. NMSA 1978, §§ 74-6-3(E) (1967, as amended through 2007), 74-6-4(D) (1967, as amended through 2019); 74-6-6(A) (1967, as amended through 1993). New or revised standards adopted by the WQCC must be submitted to, and approved by, EPA. 33 U.S.C. § 1313(c)(2)(A) (2021). Any SWQS adopted by the WQCC must comply with both the federal Clean Water Act and the state Water Quality Act. *See generally* NMSA 1978, §§ 74-6-3(E), 74-6-4(C), (D); *New Mexico Pharm. Ass'n v. State*, 1987-NMSC-054, ¶ 9, 106 N.M. 73 (agency's rule or regulation "must yield" to statutory guidelines); *Gallegos v. State Bd. of Educ.*, 1997-NMCA-040, ¶ 23, 123 N.M. 362 (statute prevails over conflicting regulation).

Discrete legal requirements applicable to specific SWQS amendments proposed by NMED or other parties, and under consideration by the WQCC, are identified below in SJWC's proposed statement of reasons on each topic.

A. The WQCC Has Discretion to Consider All Facts and Circumstances When Promulgating a New Surface Water Quality Standard or Amending an Existing Surface Water Quality Standard but Must Base Its Decision on Credible Scientific Evidence or Other Appropriate Information.

The boundaries of the WQCC's discretion in adopting SWQS are set by both the federal Clean Water Act and the state Water Quality Act. As noted in the Water Quality Act, the WQCC

> shall adopt water quality standards for surface and ground waters 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.

NMSA 1978, § 74-6-4(D) (emphasis added). This language mimics federal law governing the adoption of water quality standards under the Clean Water Act. *See, e.g.*, 33 U.S.C. §§ 1251, 1313(c); 40 C.F.R. §§ 131.2, 131.10 (2021). "Credible scientific data" includes peer-reviewed scientific studies and supporting data. *See N.M. Mining Ass'n v. WQCC*, 2007-NMCA-010, ¶¶ 30-34, 141 N.M. 41 (finding substantial evidence existed in the record to support WQCC action based on credible scientific data in the form of peer-reviewed studies and epidemiological data). Further, as established by federal regulation, all water quality criteria adopted by the WQCC "must be based on sound scientific rationale . . . ." 40 C.F.R. §§ 131.5(a)(2), 131.11(a)(1) (2021).

In sum, the WQCC has reasonable discretion to consider all relevant and credible scientific or technical evidence and all other relevant facts and circumstances, and to give the weight it deems proper to such evidence, when adopting or amending SWQS. The party proposing a change to existing SWQS bears the burden of demonstrating that the proposed changes are warranted and appropriate. *Tenneco Oil Co. v. WQCC*, 1987-NMCA-153, ¶ 8, 107 N.M. 469.

B. <u>The WQCC May Promulgate a New Surface Water Quality Standard or Modify an Existing Standard Only If the Standard Is Supported by Substantial Evidence.</u>

However, the WQCC's discretion is not limitless. Under the Water Quality Act, any standard adopted by the WQCC that is found to be "(1) arbitrary, capricious or an abuse of discretion; (2) not supported by substantial evidence in the record; or (3) otherwise not in accordance with law" will be set aside on appeal after a whole record review. NMSA 1978, § 74-6-7(B) (1967, as amended through 1993); *Tenneco Oil Co.*, 1987-NMCA-153, ¶¶ 3-6 (upholding water quality standards after whole record review as supported by substantial evidence); *Kerr-McGee Nuclear Corp. v. WQCC*, 1982-NMCA-015, ¶ 16, 98 N.M. 240 (upholding definition of "toxic pollutant" as supported by substantial evidence after whole record review). Thus, if the evidence presented at the Triennial Review does not, as a whole, support a decision made by the WQCC, then the decision is not supported by substantial evidence and will not be upheld on appeal. *Tenneco Oil Co.*, 1987-NMCA-153, ¶¶ 38-39 (agency decision will not be upheld if evidence "as a whole" does not support decision because decision must be based on substantial evidence; "[s]ubstantial evidence is such relevant evidence as a reasonable mind might accept as adequate to support a conclusion"); *cf. Colonias Dev. Council v. Rhino Envtl. Servs., Inc.*, 2003-NMCA-141, ¶ 5, 134 N.M. 637, *rev'd on other grounds*, 2005-NMSC-024, 138 N.M. 133 (action is arbitrary and capricious if there is "no rational connection between the facts found and the choices made"); *Pacheco v. Sullivan*, 931 F.2d 695, 697 (10th Cir.

1991) (decision is not supported by substantial evidence if there is overwhelming evidence to the contrary or if only a mere scintilla of evidence supports the decision).

The WQCC's discretion in weighing the evidence is further limited by the fact that the WQCC cannot disregard expert testimony that is either uncontradicted or is only contradicted by lay witness testimony. *See Bokum Resources Corp. v. WQCC*, 1979-NMSC-090, ¶ 51, 93 N.M. 546 (testimony of expert witness cannot be disregarded when contradicted only by lay witness); *City of Albuquerque v. Browner*, 865 F. Supp. 733, 737 (D. N.M. 1993) (existence of conflicting technical opinions gives agency broad discretion).

C. NMED's Positions Are Not Entitled to Special Deference.

In deciding whether to adopt an amendment proposed by any party, the WQCC is required to consider the whole record. NMSA 1978, § 74-6-7(B) (1967, as amended through 1993). 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, §§ 74-6-9(F), (G) (1967, as amended through 1993) (NMED, as constituent agency, carries same burden as any other person proposing change to existing water quality standards); *Tenneco Oil Co.*, 1987-NMCA-153, ¶ 8 (party proposing change to SWQS bears burden of proving proposal is warranted and appropriate); *Morningstar Waters Users Ass'n v. N.M. Public Utility Comm'n*, 1995-NMSC-062, ¶ 11, 120 N.M. 579 (court not bound by agency's interpretation of law if that interpretation is unreasonable or unlawful; court can employ whole record review to determine whether agency's factual determination is supported by substantial evidence).

III. SJWC REQUESTS THAT THE WQCC PROVIDE GUIDANCE THAT THE PETITION REQUIREMENTS IN 20.1.6.200 NMAC REQUIRE A PETITIONER'S STATEMENT OF REASONS TO IDENTIFY THE LEGAL AND TECHNICAL SUPPORT FOR THE PETITION

On August 19, 2020, NMED filed its *Petition to Amend the Standards for Interstate and Intrastate Surface Waters (20.6.4 NMAC) and Request for Hearing* ("Petition"). The Petition included a *Statement of Reasons for Proposed Amendments to 20.6.4 NMAC* ("Statement of Reasons"). Seven months later, on March 12, 2021, NMED filed its *Notice of Amended Petition* ("Amended Petition"), which summarized its amendments. As explained in her written direct technical testimony, SJWC's expert witness, Ms. DeRose-Bamman, was hampered in her review and analysis of, and recommendations to SJWC concerning, NMED's Amended Petition (and the initial Petition before it) because of insufficient information concerning the technical bases or other reasons for the proposed amendments to the SWQS. She had to wait to learn the foundations for those proposals through the written technical testimony of NMED's experts, which was not filed until almost nine months after the Petition, on May 3, 2021. *Direct Technical Testimony of Jane DeRose-Bamman* (May 3, 2021) (Ex. SJWC 2) at 2-4. Other parties' technical witnesses were similarly hampered in their preparations for this Triennial Review hearing. *Direct Testimony of Richard D. Meyerhoff* (May 3, 2021) (LANL Ex. 2) at 25:8-16 (2020 TR LANL-00047) (NMED did not provide the existing use analysis prepared to support its petition to reclassify many waters on LANL property; because NMED provided no technical basis for its proposal, the appropriateness of the proposal could not be evaluated and addressed in written direct testimony).

NMED's Statement of Reasons for its Petition and later summary of revisions in its Amended Petition did little more than provide a listing or general description of NMED's proposals. They provided essentially no legal or factual bases for the proposals. Nearly all technical and legal bases for NMED's proposed amendments to the SWQS remained unknown until NMED filed its written

direct technical testimony on May 3, 2021, including complex technical documents called existing use analyses. For example, NMED provided only this explanation in its Statement of Reasons for its proposal to amend the recreational designated use for certain stream segments: "The Department proposes to amend the recreational designated use from secondary contact to primary contact in sections 20.6.4.103 NMAC, 20.6.4.116 NMAC and 20.6.4.204 as demonstrated through an existing use analysis." Statement of Reasons at 3, ¶ 19.

In past Triennial Reviews, NMED's petition has included extensive descriptions of the justifications for its proposals. For example, NMED's last Triennial Review Petition (Hearing No. 14-05(R)), filed with the WQCC on June 25, 2014 (Ex. SJWC 2-B), contained extensive "bases" for the proposed SWQS amendments, including the history of pertinent amendments in prior Triennial Reviews (*e.g.*, at 11), references to and discussions of applicable federal regulations (*e.g.*, at 3, 7-8, 17, 29), and the technical grounds for changes to specific water quality criteria (*e.g.*, at 29, 30). That petition also attached supporting documents, including detailed technical memoranda and a draft Use Attainability Analysis ("UAA") (attachments 1-4), and included hyperlinks to UAAs for 22 streams and five drainages (*see, e.g.*, Table of Contents at 2020 TR SJWC-0040). That information aided interested parties in their review of the scientific and/or regulatory appropriateness of each proposed change to a standard and enabled expert witnesses to provide thorough analyses of the proposals in their written direct technical testimony.

By contrast, NMED's failure to provide technical bases or detailed explanations in this Triennial Review created a severe time disadvantage for SJWC and all other parties that participated. As a result, preparation of the testimony and exhibits was rushed, and a vigorous examination of NMED's proposals was lacking. A thorough examination of any party's proposal, including NMED's proposals, contributes to better decision-making by the WQCC and provides the

credible scientific rationale that is required of the WQCC to make changes in the SWQS. The WQCC, therefore, should provide guidance for the Triennial Review process requiring that NMED provide full and detailed information concerning the technical bases for its petition when it is filed, not nine months later on the virtual eve of trial.

IV. SJWC'S WITHDRAWAL OF CERTAIN OBJECTIONS

NMED's originally proposed amendments to the SWQS were set forth in its Petition. NMED's Amended Petition significantly revised its Petition. NMED then revised its Amended Petition twice, in NMED Exhibits 9 and 110. Amigos Bravos ("AB") also ultimately withdrew one of its proposals that had drawn an objection from SJWC. Those modifications/withdrawals resolved several of SJWC's original objections, which were addressed in the written direct and rebuttal testimony of SJWC's technical witness. For that reason, on the first day of the Triennial Review hearing, undersigned counsel withdrew several of SJWC's objections. The withdrawn objections are identified in Exhibit SJWC 3-K. Specifically, SJWC no longer objects to the following proposals:

1. NMED's proposed definition of "hardness" in 20.6.4.7(H) NMAC and the use of the term "dissolved hardness" in 20.6.4.12(F) NMAC and 20.6.4.900(I) NMAC;
2. NMED's proposed definition of "unclassified waters of the state" in 20.6.4.7(U) NMAC and the associated modification of 20.6.4.11(H) NMAC;
3. NMED's proposal to add a new subsection, 20.6.4.10(D) NMAC, concerning when a UAA is required;
4. NMED's proposed modifications to 20.6.4.15 NMAC concerning UAAs;
5. NMED's proposal concerning non-perennial tributaries in sections 20.6.4.108, 115, 206, 208, 209, 215, 307 and 309 NMAC;

6. NMED's proposed revisions to the antidegradation policy in 20.6.4.8(A)(2) NMAC (withdrawn by NMED);

7. AB's proposed definition of "existing use" in 20.6.4.7(E) NMAC (withdrawn by AB); and

8. NMED's proposed adoption of criteria for microcystins and cylindrospermopsin in 20.6.4.900(D) NMAC.

V. PROPOSED STATEMENTS OF REASON FOR SPECIFIC WATER QUALITY STANDARDS PROPOSALS TO WHICH SJWC HAS CONTINUING OBJECTIONS

Based on the evidence and argument in the record of this proceeding, SJWC proposes the following statements of reason for consideration by the WQCC with respect to each topic on which SJWC has taken a position. For ease of discussion and reference, and as ordered by the Hearing Officer on the last day of hearing (Hearing Transcript ("Tr.") at 1496:9-14), this submission is organized in accordance with the order of topics set forth in the Excel spreadsheet that governed the presentation of evidence during the Triennial Review hearing. Each topic below also references the applicable SWQS section number set out in the New Mexico Administrative Code, Title 20, Chapter 6, Part 4. Citations to evidence supporting the proposed statements of reason are set out in *italics* in bracketed paragraphs following each statement.

TOPIC 1—CLIMATE CHANGE

NMED proposes adoption of both a climate change objective and a definition of "climate change" for the SWQS. Like NMED and other parties participating in this Triennial Review, SJWC is very concerned about climate change and its potential adverse impacts on water supplies and water quality in the State, particularly in the San Juan River Basin. However, SJWC is uneasy about NMED's proposal to adopt a distinct climate change objective for the SWQS that arguably

elevates climate change above all other sources of water quality impairment. Climate change is not a matter within the expertise or statutory charge of the WQCC, and the WQCC should not be the first regulatory body in the State to adopt a definition of climate change.

The purpose of the SWQS is not to address the causes of climate change, but to protect the State's surface waters from all sources of water quality impairment, including climate change. NMED has not provided any justification for elevating climate change above, or treating it differently from, any other cause of water quality impairment. No other source of water quality impairment is highlighted in the objectives section of the SWQS. Moreover, as NMED has acknowledged, the SWQS already provide the tools for responding to the adverse impacts of climate change on water quality.

Moreover, the fact that the parties to this Triennial Review do not agree on the proper definition of climate change, and the fact that NMED's climate change objective had three iterations over a ten-month period, indicate that the WQCC should proceed cautiously and reject NMED's proposals at this time. Rejecting NMED's climate change proposals in no way limits the authority of the WQCC to address the impacts of climate change in the same manner as any other source of surface water quality impairment. Finally, if the WQCC accepts SJWC's recommendation to reject the climate change objective, the proposed definition is not needed.

The following reasons support rejection of NMED's climate change proposals.

A. 20.6.4.6(D) NMAC: SJWC Urges the WQCC to Reject NMED's Proposed Climate Change Objective, Including the Modifications to That Objective Proposed by Other Parties.

1. NMED proposes adoption of a climate change objective at 20.6.4.6(D) NMAC to expressly "acknowledge" or "recognize" that climate change is a threat to surface water quality and to "clarify" that the SWQS protect against threats posed by climate change. [*Lemon Direct, NMED Ex. 1, at 12:12-14, 20-23; Lemon Rebuttal, NMED Ex. 106, at 10:7-9; Lemon, Tr. at 116:20-23 (proposed objective identifies "goal" of SWQS is to respond to impacts associated with climate change)*]

2. A review of NMED's written and oral technical testimony shows NMED has provided no proof of a need to adopt a climate change objective to "acknowledge," "recognize" or "clarify" that the SWQS protect against climate change threats to surface water quality.

3. NMED has argued that the proposed objective is warranted because climate change, unlike other sources of impairment, "is a global concern." [*Lemon, Tr. at 120:6-14, 120:24-121:5*]

4. NMED has not explained why water quality impairment resulting from a matter of "global" concern should be treated differently from impairment resulting from a matter of "local" concern. However, Ms. DeRose-Bamman testified on behalf of SJWC that the SWQS do not treat impairment resulting from global causes differently from impairment resulting from local causes. [*DeRose-Bamman, Tr. at 228:20-229:4*] The WQCC agrees.

New Objective Is Not Needed Because Current Standards Address Climate Change

5. NMED has admitted that the existing SWQS already protect the State's surface waters from all sources of impairment, including climate change. [*Lemon Direct, NMED Ex. 1 at 11:20-12:3 (the SWQS "protect, and have always protected, water quality from anthropogenic impacts" and "protect the State's water resources against all foreseen and unforeseen sources*

threatening surface water quality, including climate change"), 12:20-23 (the SWQS "already accommodate for impacts to water quality (either local or global)"); Lemon Rebuttal, NMED Ex. 106 at 12:14-17, 13:21-14:2, 16:22-23 (the SWQS already have narrative and numeric criteria for pollutants associated with climate change and "currently provide resiliency against pollutants associated with climate change through the protection of existing uses and through the requirement of a UAA to lessen or remove a designated use"; SWQS protect against climate change by protecting water quality necessary to maintain existing aquatic life and recreation uses); Lemon, Tr. at 120:1-5 (Water Quality Act and Clean Water Act "provide authority to address or respond to climate change by adopting standards that protect water quality and public health and welfare against the impacts associated with climate change"); Lemon, Tr. at 144:18-24 (current SWQS protect water quality from anthropogenic impacts, including climate change)]

6. SJWC agrees with NMED's conclusion that existing SWQS protect against effects from climate change and argues, therefore, that the new objective is not needed. [*DeRose-Bamman Rebuttal, Ex. SJWC 3 at 2-3 (Ms. Lemon states proposed objective does not affect implementation as standards already accommodate impacts to water quality; proposal therefore has no purpose and is not needed); DeRose-Bamman, Tr. at 233:6-11 (WQCC already has authority to take climate change into account)*]

7. NMED also has admitted that adoption of a climate change objective is not intended to, and will not, affect SWQS implementation. [*Lemon Direct, NMED Ex. 1, at 12:20-21; Lemon Rebuttal, NMED Ex. 106, at 10:6-7; DeRose-Bamman Rebuttal, SJWC Ex. 3, at 2-3; Lemon, Tr. at 145:2-6, 160:6-17*]

8. Further, the same best management practices used for other causes of water quality impairment will be effective for climate change impacts. [*Lemon, Tr. at 173:2-19*] The objective, therefore, is not necessary.

9. NMED asserts, however, that the proposed climate change objective will provide direction that future investigations and rulemakings should consider climate change. [*Lemon, Tr. at 121:6-13, 122:14-18, 162:18-21, 171:4-11*]

10. AB agrees that adoption of a climate change objective simply "focuses the attention" on climate change but provides no new authority to the WQCC. [*Conn, Tr. at 203:24-204:5*]

11. Communities for Clean Water and Gila Resources Information Project ("CCW/GRIP") similarly support adoption of a climate change objective because "a policy statement provides permission, even direction, to investigate how and whether the Standards could mitigate the impacts of climate change." [*Homer Rebuttal, CCW/GRIP Ex. 5 at 4; Homer, Tr. at 260:18-21*]

12. However, adopting an objective to create "focus" is unnecessary because, as already noted, Ms. Lemon testified it will not affect SWQS implementation, existing SWQS already protect against impairment caused by climate change, and best management practices already required by the SWQS effectively address the impacts of climate change.

13. NMED has identified "reduction in flow, increased sediment loading, and increased water temperatures" as water quality impacts associated with climate change. [*Lemon Rebuttal, NMED Ex. 106, at 10:15-17, 12:14-17 (noting pollutants associated with climate change include temperature, dissolved oxygen, plant nutrients, bottom deposits, suspended or settleable solids, and metals, all of which currently have assigned narrative or numeric criteria)*] NMED has failed

to show that these or other water quality impacts are different from similar impacts caused by other sources of water quality impairment, such as drought, floods or wildfires.

14. As reflected in the *2020-2022 State of New Mexico Clean Water Act § 303(d)/§ 305(b) Integrated Report* (Dec. 8, 2020) ("Integrated Report"), "[t]here are many challenges in meeting the objectives of the [Clean Water Act] and the [Water Quality Act], namely climate change, stormwater management, the 2020 Navigable Waters Protection Rule, watershed management, wildfire, nutrient reductions strategies, and inadequate funding to identify and address water quality issues in New Mexico." [*Ex. SJWC 2-F at 6 (emphasis added)*] NMED has not explained why climate change should be the only "challenge" to be specifically highlighted in the SWQS objectives.

NMED's Proposed Objective Has Changed Over Time and Thus Is Not Well Developed

15. During the course of this Triennial Review, NMED has proposed three different versions of a climate change objective for 20.6.4.6(D) NMAC. The first proposal, found in NMED's August 19, 2020, Petition, stated: "In accordance with Executive Order on Addressing Climate Change and Energy Waste Prevention (2019-003), these standards serve to address the inherent threats to water quality due to climate change by setting water quality goals and fostering resiliency." The second proposal, found in NMED's March 12, 2021, Amended Petition, stated: "These surface water quality standards serve to address the inherent threats to water quality due to climate change." Finally, NMED's third proposal, found in NMED's Exhibit 110 (filed with NMED's written rebuttal testimony on June 22, 2021), stated: "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." [*Lemon, Tr. at 138:8-14, 139:1-13, 143:6-24 (confirming three proposals)*]

16. These several iterations of the proposed climate change objective show NMED has had difficulty crafting appropriate language for the objective.

Objective B Encompasses Climate Change, So the Proposed Objective Is Unnecessary

17. Existing Objective B at 20.6.4.6 NMAC states, in general, that the goal of the SWQS is to protect the public health and welfare, enhance the quality of water, and serve the purposes of the New Mexico Water Quality Act.

18. Ms. DeRose-Bamman testified that Objective B already authorizes the WQCC to address impacts of climate change. [*DeRose-Bamman, Tr. at 239:2-20*] Therefore, the new objective is not needed. We agree.

No New Authority Would Result from the Proposed Objective, So It Is Superfluous

19. 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. [*Lemon, Tr. at 145:7-24 (WQCC currently has authority to consider climate change when developing SWQS; proposed objective provides a "trigger" to remind WQCC to consider climate change); Conn, Tr. at 200:7-12, 203:24-204:5 (WQCC has authority to adopt SWQS responding to water quality impacts from climate change even without adopting climate change objective); DeRose-Bamman, Tr. at 225:20-226:1, 226:17-19 (existing SWQS give WQCC authority to address impacts from climate change; WQCC can take action without adopting the proposed objective); Gallegos, Tr. at 249:17-250:1 (WQCC currently has authority to respond to impairments of surface water caused by climate change, such as temperature, sediment and dissolved oxygen), 253:21-24, 254:21-255:1 (WQCC already has authority to address climate change issues, so proposed objective and definition are not necessary)*]

A Climate Change Objective Could Result in Confusion or Unintended Consequences

20. SJWC is concerned that singling out climate change as one objective of the SWQS is unnecessary and will cause confusion rather than clarity and could result in unintended consequences. [*DeRose-Bamman Direct, Ex. SJWC 2 at 6; DeRose-Bamman Rebuttal, Ex. SJWC 3 at 3 (potential impact of NMED's proposal is unknown; WQCC should protect against unintended consequences); DeRose-Bamman, Tr. at 223:22-224:6 (NMED has not adequately explained "why climate change should be singled out and elevated above all the other sources of impairment that are addressed by the standards")*]

21. For example, AB urges NMED to determine whether impairment is "attributable to natural variability or human-caused climate change" and indicates that a UAA cannot be used to downgrade a use if low flows "may be a response to climate change and therefore not natural." [*Conn Direct, AB Ex. 3 at 6; Conn, Tr. at 1184:1-21, 1185:20-23, 1187:2-10; Conn Rebuttal, AB Ex. 11 at 18*] Such considerations, which could be impacted by the adoption of the climate change objective and the climate change definition proposed by NMED, could have significant consequences that are unintended at this time. In fact, AB seems to contend that certain exemptions from criteria (such as temperature and sediment) should not apply if exceedances are caused by anthropogenic vs. natural climate change and stream segments should not be "downgraded" from perennial to intermittent if the reduction in flow is caused by anthropogenic vs. natural climate change. [*Conn Rebuttal, AB Ex. 11 at 9-10; Conn, Tr. at 1185:8-23*] NMED also testified that the climate change objective will require a determination whether climate change impacts are "really a natural cause . . . ." [*Lemon, Tr. at 163:10-16*] Such determination will impact the result of a UAA conducted to determine whether a designated use should be changed because of warming water temperature. [*Lemon, Tr. at 165:4-166:3; Conn, Tr. at 202:3-20*]

22. Similarly, LANL is concerned that, through the objective, "NMED is proposing to characterize the water quality effects of climate change as 'inherent threats' and to treat parameters that could be affected by climate change (e.g. July air temperature, annual precipitation) as pollutants in the standards. However, NMED has not provided enough detail in its testimony to understand what additional changes to 20.6.4 NMAC, not yet proposed, would have to be adopted in order to meet this new objective for the Standards." [*Gallegos Rebuttal, LANL Ex. 59 at 34:15-21 (2020 TR LANL-01149)*]

23. LANL also is concerned that adoption of the climate change objective "could set false expectations about how administration and enforcement of the Standards can affect climate change." [*Gallegos Rebuttal, LANL Ex. 59 at 36:5-7 (2020 TR LANL-01151)*] LANL therefore also recommends that the WQCC not adopt the proposed climate change objective and definition. [*Gallegos Rebuttal, LANL Ex. 59 at 34:6-13 (2020 TR LANL-01149), 35:17-21 (2020 TR LANL-01150); Gallegos, Tr. at 244:15-245:3, 246:3-5*]

24. The New Mexico Mining Association is concerned that adoption of a "climate change" definition will "create unnecessary confusion for regulators and the regulated community." [*NMMA Notice of Intent to Present Technical Testimony (May 3, 2021) ("NMMA NOI") at 4 (non-technical testimony)*]

25. We agree with the concerns voiced by these parties.

The Amigos Bravos Proposal Is Not an Objective

26. AB has proposed alternate language for a climate change objective to "encourage[] NMED to develop and propose and the Commission to adopt surface water quality standards that respond to the very real threat of climate change based on evolving science." [*Conn Direct, AB Ex. 3 at 4*]

27. The first six sentences of the AB proposal simply assert that the climate is changing, and climate change affects surface water quality.[1] [*AB Ex. 1 at 1; DeRose-Bamman Rebuttal, Ex. SJWC 3 at 4; Conn Direct, AB Ex. 3 at 4*] As explained by NMED, AB's proposed language does not constitute an objective "but rather a proclamation of the current understanding of evolving science related to climate change and its impacts on watersheds and water quality." [*Lemon Rebuttal, Ex. 106 at 10:1-5; Lemon Tr. at 126:15-23, 128:4-8*]

28. Both SJWC and NMED urge the WQCC to reject AB's proposed climate change objective. [*DeRose-Bamman Rebuttal, Ex. SJWC 3 at 4; Lemon Rebuttal, NMED Ex. 106 at 10:4-5*]

Conclusion

29. 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. [*DeRose-Bamman Direct, Ex. SJWC 2 at 7*]

30. Considering all of the evidence, the WQCC rejects NMED's proposal to add an objective specifically addressing climate change, including the modifications proposed by AB and CCW/GRIP.

B. 20.6.4.7(C) NMAC: SJWC Urges the WQCC to Reject NMED's Proposed "Climate Change" Definition, Including the Modifications to That Definition Proposed by Other Parties.

1. NMED proposes to add a definition of climate change "to coincide with its reference in the objectives." [*Lemon Direct, NMED Ex. 1 at 12:15-17*]

[1] AB later amended its proposed language but retained all of the language of the original proposal. [*AB Ex. 10 at 1*]

2. The term "climate change" is not currently used in the SWQS. Therefore, a definition is unnecessary if the WQCC rejects NMED's proposal to adopt a climate change objective. [*DeRose-Bamman Direct, Ex. SJWC 2 at 6; DeRose-Bamman Rebuttal, SJWC Ex. 3 at 4; DeRose-Bamman, Tr. at 236:7-9*]

3. NMED has proposed two "climate change" definitions during this proceeding, one in its Petition and one in its Amended Petition.

NMED Mischaracterizes Climate Change Information on EPA's Archived Website as a "Definition"

4. According to NMED, the proposed definition of climate change "is taken almost directly from EPA's definition of climate change, as provided on its website (NMED Exhibit 33)." [*Lemon Direct, NMED Ex. 1 at 12:18-19; NMED Ex. 33; Lemon, Tr. at 129:19-21*] The website NMED references is a historical webpage from 2017. [*Lemon, Tr. at 146:5-7; NMED Ex. 33*]

5. However, SJWC's technical witness has testified that the archived EPA webpage does not provide a definition of climate change but just a general description of climate change. [*DeRose-Bamman, Tr. at 229:14-17*] Nor does the proposed definition exactly match the EPA description of climate change on its archived 2017 webpage. [*NMED Ex. 33; Lemon, Tr. at 146:5-7*]

6. NMED is unaware of any EPA Clean Water Act regulation that defines climate change, and NMED did not search for a definition of "climate change" in the Code of Federal Regulations, the New Mexico Administrative Code, or the New Mexico statutes. [*Lemon, Tr. at 147:8-148:4*]

7. SJWC's technical expert found that such a search would not have located a definition. 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. [*DeRose-Bamman Direct, Ex. SJWC 2 at 7*]

8. Both Ms. DeRose-Bamman, on behalf of SJWC, and Ms. Lemon, on behalf of NMED, testified that there is no definition of "climate change" in the New Mexico Administrative Code. Thus, the WQCC would be the first regulatory body in the State to adopt a definition for climate change. [*DeRose-Bamman, Tr. at 230:5-13; Lemon, Tr. at 174:5-11*]

9. NMED is unaware whether another state has adopted a climate change objective and/or climate change definition in its SWQS. [*Lemon, Tr. at 158:5-9*]

The Amigos Bravos Proposed Definition Is Vague and Ambiguous

10. AB proposes modifying NMED's definition to state that "[h]umans are largely responsible for recent climate change." [*Conn Rebuttal, AB Ex. 11 at 11; Conn, Tr. at 185:1-4, 191:5-7*] The basis for this proposal is "a large header with a link that reads 'Humans are largely responsible for recent climate change'" found on the same 2017 EPA webpage cited by NMED. [*Conn Rebuttal, AB Ex. 11 at 11; NMED Ex. 33; Conn, Tr. at 192:6-12*]

11. NMED opposes AB's proposed modification because it contains words that are vague and ambiguous and it "does not add any clarity or provide any additional value." [*Lemon, Tr. at 130:13-25*] Also, the Intergovernmental Panel on Climate Change "says that climate change can be due to natural variability or as a result of human activity." [*Lemon, Tr. at 156:20-22*]

12. NMED admits that the disagreement over the proper definition of climate change "is whether we explicitly state that climate change is human-caused and mostly human-caused." [*Lemon, Tr. at 176:18-177:2*]

13. No party has provided credible scientific evidence on this topic. NMED's definition is cobbled from EPA's 2017 webpage that does not define climate change, but only describes its effects. AB relies on the title of a hyperlink on a 2017 webpage.

14. The WQCC will 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.

TOPIC 2—DEFINITIONS

A. "Baseflow" and "Effluent Dominated": Sections 20.6.4.7(B) and 20.6.4.7(E) NMAC

NMED has proposed adoption of a definition of "baseflow" because it is used in a proposed new definition of "effluent dominated." SJWC does not support adoption of either definition because neither term is used elsewhere in the SWQS. The definitions are therefore not needed and could create confusion concerning their applicability to other SWQS. The appropriate time to adopt these definitions is when another SWQS incorporates the terms "baseflow" and/or "effluent dominated." Further, it is not possible to determine whether the proposed definitions are appropriate without knowing the context in which they may be used, if ever, in future SWQS.

The following reasons support rejection of both definitions.

Neither "Baseflow" nor "Effluent Dominated" Currently Appears in the SWQS

1. NMED has proposed adoption of a definition of "baseflow" only because it is used in a proposed definition of "effluent dominated." [*Lemon Direct, NMED Ex. 1, at 13:12-13, 17-19; Meyerhoff Rebuttal, LANL Ex. 58 at 2020 TR LANL-01103:5-11; Meyerhoff, Tr. at 398:2-5; Gallegos Rebuttal, LANL Ex. 59 at 32:3-5 (2020 TR LANL-01147)*]

2. The purpose of 20.6.4.7 NMAC is to provide definitions for terms used in 20.6.4 NMAC. [*Meyerhoff Rebuttal, LANL Ex. 58 at 2020 TR LANL-01102:27-28*] Neither the term

"baseflow" nor the term "effluent dominated" is used in the SWQS. [*Lemon Direct, NMED Ex. 1, at 13:14-16 (baseflow), 13:23-14:3 (effluent dominated); Lemon, Tr. at 276:1-4, 11-14 (baseflow), 281:1-4 (effluent dominated); DeRose-Bamman Direct, Ex. SJWC 2 at 7; Meyerhoff Rebuttal, LANL Ex. 58 at 2020 TR LANL-01102:28-01103:4; Meyerhoff, Tr. at 397:13-14; Gallegos Rebuttal, LANL Ex. 59 at 2020 TR LANL-01147:3-5; Conn, Tr. at 430:5-9 (baseflow)*]

3. Other states that have adopted definitions for "effluent dominated" or similar terms have done so because their SWQS contain use classifications or numeric water quality criteria specific to those types of waterbodies. [*Meyerhoff Rebuttal, LANL Ex. 58 at 2020 TR LANL-01104:14-01105:12*]

4. NMED urges adoption of both definitions on the ground they will assist the agency in the implementation of the SWQS, the goals of the Clean Water Act, and technical and guidance documents, including NPDES permitting, Total Maximum Daily Load ("TMDL") development, and "state certification pursuant to Section 401 of the CWA (33 U.S.C. 1341)." [*Lemon Direct, NMED Ex. 1, at 13:14-19, 14:3-4; Lemon Rebuttal, NMED Ex. 106, at 14:13-15, 15:11-15, 18:20-19:2; Meyerhoff, Tr. at 397:2-9*] According to Ms. Lemon, the term "effluent dominated" is used in the WQMP/CPP and an EPA technical support document regarding NPDES permits. [*Lemon Direct, NMED Ex. 1, at 13:23-14:3; Lemon, Tr. at 296:14-22, 299:5-25; Meyerhoff Rebuttal, LANL Ex. 58 at 2020 TR LANL-01103:12-16*] NMED reiterated this position through oral testimony at hearing and also noted for the first time that "baseflow" is evaluated when conducting certain assessments in accordance with NMED's Comprehensive Assessment and Listing Methodology ("CALM"). [*Lemon, Tr. at 276:1-22, 277:15-278:2, 279:19-280:2, 281:1-16, 282:10-19, 284:23-285:2, 296:14-22, 299:5-25*]

5. NMED also urges adoption of a definition of "effluent dominated" in case the WQCC adopts a designated aquatic life use for "effluent dominated" waters in the future. [*Lemon Direct, NMED Ex. 1, at 14:4-6; Meyerhoff Rebuttal, LANL Ex. 58 at 2020 TR LANL-01104:4-11; Meyerhoff, Tr. at 397:2-9*]

A Definition of "Effluent Dominated" Is Premature and Unnecessary

6. LANL contends that adoption of a definition of "effluent dominated" is premature because NMED has not yet proposed adoption of a designated aquatic life use for "effluent dominated" waters. The definition would therefore currently be inapplicable. [*Lemon, Tr. at 284:3-8; Meyerhoff Rebuttal, LANL Ex. 58 at 2020 TR LANL-01104:12-14; Meyerhoff, Tr. at 397:19-22*] The WQCC agrees.

7. SJWC and LANL oppose adoption of both definitions because the terms are not used elsewhere in the SWQS and therefore are not necessary. [*DeRose-Bamman Direct, Ex. SJWC 2 at 7; Lemon, Tr. at 277:6-9, 279:3-13, 281:17-282:4, 283:19-24; Meyerhoff Rebuttal, LANL Ex. 58 at 01102:27-01103:11; Meyerhoff, Tr. at 397:11-14; DeRose-Bamman, Tr. at 413:3-5*]

8. AB originally opposed adoption of definitions for the terms "effluent dominated" and "baseflow" on the same ground, asserting the proposed definitions serve no regulatory purpose and are not needed. [*Conn, AB Ex. 3 at 11, 12; Lemon, Tr. at 281:17-282:4*] Further, AB asserted that NMED's proposal to add a definition of "effluent dominated" attempts to "fix a problem that doesn't exist." [*Conn Direct, AB Ex. 3 at 11; Conn, Tr. at 424:2-4*] AB continues to maintain a definition of "effluent dominated" is not needed. [*Conn, Tr. at 424:2-4, 426:9-11*] On July 8, 2021, AB withdrew its objection to the definition of "baseflow" but proposed modifying the definition as set forth in AB Ex. 24 (replacing the term "effluent dominated" with the word "some"). [*AB Ex. 24 (at 4); Conn, Tr. at 425:18-426:13*]

9. With respect to the use of the terms "baseflow" and/or "effluent dominated" in regulatory documents, NMED contends adoption of a single definition for each term will provide regulatory certainty and consistency when the terms are applied and implemented across different programmatic activities. [*Lemon, Tr. at 285:7-17, 293:16-24*]

10. However, a review of the entire record shows that NMED has failed to provide either the referenced exhibits or testimony identifying where those terms are used in the referenced NPDES permitting, TMDL development, Section 401 certification, WQMP/CPP or CALM implementation documents. [*Lemon, Tr. at 296:14-298:8, 300:17-301:25; DeRose-Bamman, Tr. at 413:25-415:1*]

11. Of all the documents referenced by Ms. Lemon in her testimony, only two have been offered into evidence by NMED. NMED exhibits 63 and 64 are portions of the WQMP/CPP. However, neither exhibit contains the term "effluent dominated."

12. According to the testimony of Dr. Meyerhoff on behalf of LANL, the term "effluent dominated" is not used anywhere in the WQMP/CPP. [*Meyerhoff Rebuttal, LANL Ex. 58 at 2020 TR LANL-01103:18-19; Meyerhoff, Tr. at 398:22-399:11, 401:3-6, 403:23-25*]

13. The second referenced document that has been provided is NMED Ex. 115. That exhibit is Section 401 of the Clean Water Act, which does not reference either "baseflow" or "effluent dominated." [*DeRose-Bamman, Tr. at 414:19-415:1*]

14. With respect to the CALM, which NMED did not introduce into evidence, Dr. Meyerhoff testified on behalf of LANL that the term "effluent dominated" is only used once in that document. [*Meyerhoff, Tr. at 399:20-400:2, 403:25-404:1, 404:12-15*]

15. An excerpt from the 1991 EPA Technical Support Document for Water Quality-Based Toxics Control referenced by Ms. Lemon has been provided as NMED Exhibit 138.

However, the excerpt in that exhibit does not appear to contain the term "effluent dominated." Dr. Meyerhoff testified that he reviewed EPA's Technical Support Document in full and found it uses the term "effluent dominated" only six times in the 145-page main body of the document (not provided by NMED). [*Meyerhoff Rebuttal, LANL Ex. 58 at 2020 TR LANL-01103:20-23; Meyerhoff, Tr. at 404:1-3*] Further, he testified that any definition of "effluent dominated" adopted by the WQCC likely will not influence EPA's NPDES permitting process. [*Meyerhoff Rebuttal, LANL Ex. 58 at 2020 TR LANL-01103:21-01104:4*]

16. Another regulatory document, the Antidegradation Policy Implementation Procedures appended to the WQMP/CPP, does not use the term "effluent dominated" but rather uses, and defines, the term "effluent dependent." [*Meyerhoff, Tr. at 399:12-17, 404:16-19*]

17. Adding a definition of "effluent dominated" to 20.6.4 NMAC would therefore create confusion. [*Meyerhoff, Tr. at 400:20-401: 2, 404:23-405:4*]

NMED Failed to Provide the Regulatory Context Needed to Properly Evaluate the Proposed Definitions

18. NMED has not provided any evidence how it currently defines or uses the term "effluent dominated." [*Meyerhoff, Tr. at 406:9-13*]

19. NMED, LANL and SJWC agree that, before adopting definitions for the terms "baseflow" and "effluent dominated," it is important for the WQCC to know the context in which the definitions will be used in order to determine whether the proposed definitions are appropriate. Otherwise, the WQCC would be adopting a definition in a vacuum. [*Lemon, Tr. at 297:20-298:3; Meyerhoff, Tr. at 406:15-407:1; DeRose-Bamman Direct, Ex. SJWC 2 at 7; DeRose-Bamman, Tr. at 413:8-24*]

20. SJWC and LANL contend that, if the terms "baseflow" and/or "effluent dominated" are used in regulatory documents, then the appropriate place to define those terms is in those

documents. [*Lemon, Tr. at 283:25-284:2; Meyerhoff Rebuttal, LANL Ex. 58 at 2020 TR LANL-01103:16-18; Meyerhoff, Tr. at 397:15-18, 404:5-10; DeRose-Bamman, Tr. at 413:8-17*] The WQCC agrees.

21. In addition, LANL objects to the last sentence of NMED's proposed definition of "effluent dominated" and requests that it be deleted should the WQCC decide to adopt a definition. [*Meyerhoff Rebuttal, LANL Ex. 58 at 2020 TR LANL-01105:13-25; Gallegos, Tr. at 408:19-409:1*] That sentence reads: "Waters that are effluent dominated are of significant value by providing aquatic life and wildlife habitat." [NMED Ex. 110 at 3] According to LANL, this sentence is a non-hydrology related "value" statement that has no place in a definition describing the hydrologic characteristics of a waterbody. [*Meyerhoff Rebuttal, LANL Ex. 58 at 2020 TR LANL-01105:13-25*] NMED has provided no technical basis for retaining this sentence in the definition. Rather, Ms. Lemon opined that "[t]he value of these waters is a characteristic that should be recognized and included in their definitions." [*Gallegos, Tr. at 409:19-410:1; Lemon, Tr. at 287:6-8*]

22. We agree with LANL that the last sentence of the proposed definition is improper; a value statement does not belong in a definition. NMED has not provided evidence of other definitions containing similar value statements.

23. LANL also has requested that, should the WQCC decide to adopt a definition of "effluent dominated," the WQCC make clear that NPDES-permitted dischargers are not required to continue discharging in perpetuity. [*Gallegos Rebuttal, LANL Ex. 59 at 32:11-22 (2020 TR LANL-01147); Gallegos, Tr. at 409:10-16*] LANL is concerned about a statement made in Ms. Lemon's written testimony supporting NMED's proposed "effluent dominated" definition. Ms. Lemon opined that cessation of a discharge "would eliminate a reliable source of baseflow for aquatic life and wildlife." [*Gallegos Rebuttal, LANL Ex. 59 at 32:11-22 (2020 TR LANL-01147);*

Lemon Direct, NMED Ex. 1 at 14:6-9] Currently, LANL has a zero discharge goal that it would like to continue to pursue. [*Gallegos Rebuttal, LANL Ex. 59 at 2020 TR LANL-01147:18-20; Gallegos, Tr. at 409:10-16*]

24. SJWC agrees with LANL's proposal. [*DeRose-Bamman, Tr. at 415:2-416:5*] SJWC supports LANL's request because permittees should be allowed a zero discharge option, including the possibility of reusing wastewater, if that is the most economical option for the permittee. [*DeRose-Bamman, Tr. at 415:1-416:6*]

Conclusion

25. Because neither the term "effluent dominated" nor the term "baseflow" currently is used in the SWQS, and because NMED has not provided sufficient evidence concerning the context in which those terms are used in other documents, we will not adopt a definition of either term at this time.

B. "Marginal Coldwater": Section 20.6.4.7(M) NMAC

NMED has proposed to amend the definition of "marginal coldwater" as follows:

> "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)~~].

[NMED Ex. 110 at 47] 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." 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." SJWC therefore recommends that the WQCC reject NMED's proposal to remove the temperature criterion from the definition of "marginal coldwater."

The following reasons support rejection of NMED's proposed changes to the definition of "marginal coldwater."

NMED's Justification for Removing the Temperature Criterion Is Flawed

1. NMED has proposed to make several changes to the definition of "marginal coldwater" found in 20.6.4.7(M)(2), including removal of the temperature criterion. [*Fullam, Tr. at 332:18-21*]

2. In written testimony, Jennifer Fullam, on behalf of NMED, contended that removal of the temperature criterion would "make[] the definition consistent with the other six designated aquatic life use designations." [*Fullam Rebuttal, NMED Ex. 109, at 3:15-16; DeRose-Bamman, Tr. at 416:25-417:7*]

3. We disagree because, as SJWC's technical witness noted, the temperature criterion remains in the definition of "marginal warmwater." [*DeRose-Bamman, Tr. at 417:9-11*] In fact, in this Triennial Review, NMED has proposed modifying the temperature criterion for the marginal warmwater designated use in 20.6.4.900(H)(6) NMAC "to be consistent with the definition [of 'marginal warmwater'] in 20.6.4.7(M)(2) . . . ." [*Fullam Direct, NMED Ex. 4, at 7:9-11; Fullam, Tr. at 1217:15-21*] According to Ms. Fullam:

> Because the definition for "marginal warmwater" provides clarity in the differences between warmwater and marginal warmwater and describes the attainable temperature criterion for the aquatic life use, the Department is proposing to amend the temperature criterion for "marginal warmwater" in 20.6.4.900(H)(6) NMAC. Amending the temperature criterion for the marginal warmwater aquatic life use to

> be consistent with the definition provides the ability to assess these waters appropriately.

[*Fullam Direct, NMED Ex. 4, at 7:10-15 (emphasis added)*]

4. NMED's position on the "marginal warmwater" definition/criteria issue directly contradicts its position that the temperature criterion should be removed from the definition of "marginal coldwater" for consistency purposes.

5. In her oral testimony at the Triennial Review hearing, Ms. Fullam contended for the first time that "[t]he temperature identified in the definition is different from the criteria established in 20.6.4.900(H)(3) NMAC." [*Fullam, Tr. at 336:17-20*] However, this statement is misleading. A comparison of the definition with the temperature criteria in 20.6.4.900 NMAC shows that both establish the 6T3 temperature as 25 degrees Celsius. [*NMED Ex. 110 at 4 (20.6.4.7(M)(1) NMAC), 49 (20.6.4.900(H)(3) NMAC); Fullam, Tr. at 336:5-9; Fulton Direct, LANL Ex. 6 at 2020 TR LANL-00170:3-7, 00171:18-22 (criteria for marginal coldwater are 6T3 of 25°C and max temperature of 29°C)*] An additional "instantaneous maximum or an acute exposure" of 29 degrees Celsius is contained in 20.6.4.900(H)(3) NMAC. [*Fullam, Tr. at 336:9-11*] Therefore, there is no conflict between the applicable marginal coldwater aquatic life criteria and the current definition of "marginal coldwater," which states "the temperature in the surface water of the state may exceed 25° C (77° F)."

Consistency Between the Marginal Coldwater and Marginal Warmwater Use Definitions Should Be Maintained

6. SJWC and LANL urge that the consistency between the definitions of "marginal coldwater" and "marginal warmwater" be maintained. [*DeRose-Bamman Direct, Ex. SJWC-2 at 9; DeRose-Bamman, Tr. at 417:24-418:5; Fulton Direct, LANL Ex. 6 at 2020 TR LANL-00170:18-*

00171:2, 2020 TR LANL-00171:21-22; Fulton Rebuttal, LANL Ex. 62 at 2020 TR LANL-01191:5-8, 01191:17-20, 01192:16-19; Fulton, Tr. at 368:12-17, 368:23-369:1]

7. As NMED has noted, consistency between definitions aids in the implementation of water quality standards. [*Fullam Direct, NMED Ex. 4 at 7:3-4*]

8. Further, as LANL has noted, retaining the temperature criterion in the definition of "marginal coldwater" will "provide greater regulatory certainty when classifying and assessing surface waters based on temperature data." [*Fulton Rebuttal, LANL Ex. 62 at 2020 TR LANL-01192:16-19*]

9. The current definition of "marginal coldwater" has been in the SWQS for many years. [*DeRose-Bamman, Tr. at 418:4-5*]

10. For all of 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.

TOPIC 3—TOXIC POLLUTANTS

A. Contaminants of Emerging Concern: 20.6.4.7(C)(7) and 20.6.4.13(F)(1) NMAC

NMED proposes to specifically refer to "contaminants of emerging concern" ("CECs") in the SWQS regulation for toxic pollutants at 20.6.4.13(F)(1) NMAC. For that reason, NMED also proposes adding a definition of CECs.

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 "will cause" death or other significant adverse effects. 20.6.4.7(T)(2) NMAC (emphasis added).

SWQS must be based on "sound scientific rationale" and "credible scientific data." 40 C.F.R. §§ 131.5(a)(2), 131.11(a)(1) (Ex. SJWC 2-J) (state-adopted water quality criteria to protect designated uses must be based on "sound scientific rationale"); NMSA 1978, § 74-6-4(D) (Ex. SJWC 2-K) (WQCC "shall adopt water quality standards for surface and ground waters of the state based on credible scientific data"). As noted, NMED proposes to define CECs as water contaminants that "may cause" negative ecological or human health impacts, and those potential "negative impacts have not been fully quantified." Given those qualifiers, NMED has provided neither the "sound scientific rationale" nor the "credible scientific data" proving CECs are toxic pollutants. It therefore is premature to include CECs as toxic pollutants in the SWQS because no data has been presented to show the "amounts, concentrations, or combinations" that are toxic to humans, livestock, wildlife, other animals, fish, or other aquatic life, as required by the express terms of the toxic pollutants regulation at 20.6.4.13(F)(1) NMAC. Moreover, 20.6.4.13(F) NMAC already provides authority to regulate any CEC that meets the definition of a toxic pollutant.

Because it is not proper to refer to CECs in 20.6.4.13(F)(1) NMAC, no definition of CECs is needed in 20.6.4.7(C) NMAC. Further, the proposed definition conflicts with EPA's description of CECs, conflicts with the definition of "toxic pollutant," is not based on credible scientific evidence, and is internally contradictory.

The following reasons support rejecting the NMED proposals.

NMED's Proposal to Add CECs to the Narrative Toxic Pollutants Standard

1. In its Petition and Amended Petition, NMED proposed to modify the narrative toxic pollutants standard in 20.6.4.13(F)(1) NMAC to include "contaminants of emerging concern" ("CECs"). [*Barrios Direct, NMED Ex. 2 at 3:13-19; Barrios, Tr. at 450:5-8, 475:5-12; DeRose-Bamman, Tr. at 581:19-582:1*] The purpose of this proposal is to "clarify that the general criterion for toxic pollutants in 20.6.4.13(F) NMAC includes contaminants of emerging concern . . . ." [*Barrios Direct, NMED Ex. 2 at 3:24-4:2, 4:17-19*]

2. In its Petition and Amended Petition, NMED also proposed to add a definition of CECs. That definition stated that CECs are only "suspected to potentially have impacts," "do not" or "may not have regulatory standards," and the concentrations causing negative impacts "have not been fully studied." [*Petition; Amended Petition; DeRose-Bamman, Tr. at 582:2-7*]

3. SJWC objected to NMED's proposals because, by NMED's own originally proposed definition, CECs are not toxic pollutants as defined in the SWQS at 20.6.4.7(T)(2) NMAC. [*DeRose-Bamman Direct, SJWC Ex. 2 at 17; DeRose-Bamman, Tr. at 582:8-13*] Further, if CECs "are only 'suspected to potentially have impacts' and those potential 'negative' impacts 'have not been fully studied,' then neither the 'sound scientific rationale' federal requirement nor the 'credible scientific data' state requirement have been met." [*DeRose-Bamman Direct, SJWC Ex. 2 at 16-17*] Finally, 20.6.4.13(F) NMAC "already provides authority to regulate any contaminant that meets the [*20.6.4.7(T)(2) NMAC*] definition of a toxic pollutant," including CECs. [*DeRose-Bamman Direct, SJWC Ex. 2 at 16-17; DeRose-Bamman, Tr. at 590:25-591:4*]

4. LANL agrees with SJWC's objections. [*Toll Rebuttal, LANL Ex. 63 at 14:5-10 (2020 TR LANL-01218)*]

5. NMED has now proposed three different definitions for CECs. [Compare *Petition, Amended Petition, and NMED Ex. 110*] The definition informs our decision concerning the applicability of the toxic pollutants narrative standard to CECs.

NMED's Proposal Improperly Identifies All CECs as Toxic Pollutants

6. NMED contends that CECs are "known or suspected toxins" and "are acknowledged as substances in need of further study." [*Barrios Rebuttal, NMED Ex. 107 at 16:15-16; Barrios, Tr. at 436:7-9*] The other parties disagree that CECs are "known" toxins.

7. According to the Buckman Direct Diversion Board ("BDD") CECs are chemicals that are "suspected" to have adverse ecological or human health effects. [*Bearzi, Tr. at 644:24-645:4*]

8. The SWQS define a "toxic pollutant" as follows:

> "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)(2) NMAC (emphasis added); Barrios, Tr. at 475:20-476:4*] Thus, by definition, a toxic pollutant is one that "will" cause death, shortened life spans or other adverse consequences. [*Barrios, Tr. at 476:6-9*]

9. CECs do not meet the 20.6.4.7(T)(2) NMAC definition of "toxic pollutant." [*DeRose-Bamman Direct, Ex. SJWC 2 at 17; Toll Rebuttal, LANL Ex. 63 at 14:6-7 (2020 TR LANL-01218); Barrios, Tr. at 476:22-477:1 (final proposed definition indicates CECs "may cause," not "will cause," significant ecological or human health effects)*]

10. AB agrees that toxic pollutants and CECs "represent two different categories of pollutants" and CECs are a "group of potentially harmful contaminants." [*Conn, Tr. at 565:18-20, 566:2-3; Conn Rebuttal, AB Ex. 11 at 7; DeWitt Rebuttal, AB Ex. 17 at 1*]

11. Similarly, BDD objects to NMED's inclusion of CECs as toxic pollutants under the narrative criterion for toxic pollutants because "it would conflate CECs and toxic pollutants, inappropriately impose compliance requirements for toxic pollutants on CECs, and assume that all CECs are toxic pollutants where no such determination has been made." [*Bearzi Rebuttal, BDD Ex. 1 at 10 (2020 TR BDD 0010); Bearzi, Tr. at 644:19-21, 646:4-10, 648:21-649:1, 656:4-10 (BDD concern is about NMED's inclusion of CECs in "same bucket" as toxic pollutants); Barrios, Tr. at 456:9-16*]

12. The scientific understanding of CECs is constantly evolving. As more data is collected, some CECs are found to have impacts, including some personal care products. But not all pharmaceuticals and not all personal care products are considered CECs. [*Barrios, Tr. at 482:22-483:14*]

NMED's Proposal Is Unnecessary Because Once CECs Are Found to be Toxic, They Are Treated as Toxic Pollutants

13. Once a CEC has been studied enough to establish toxicity, it is no longer a CEC but is a toxic pollutant. [*Conn, Tr. at 568:10-16, 580:1-7; DeRose-Bamman, Tr. at 582:15-25 (constituent considered to be CEC shifts to be a toxic pollutant once there is scientific evidence of toxicity); Bearzi, Tr. at 649:10-13 (once a CEC meets the definition of toxic pollutant, it is no longer a CEC but is a toxic pollutant)*]

14. Once a CEC is documented as a toxic pollutant it is regulated by the narrative toxic pollutant standard in 20.6.4.13(F) NMAC. [*Barrios, Tr. at 477:18-21; Conn, Tr. at 568:5-9; DeRose-Bamman, Tr. at 587:12-18, 588:2-6, 590:25-591:4*]

15. LANL, SJWC, NMMA, BDD, and CCW/GRIP object to NMED's proposal. [*Barrios, Tr. at 451:10-22; Dail Direct, LANL Ex. 5 at 8:8-10 (2020 TR LANL-00147), 11:15-18 (2020 TR LANL-00150); Toll Rebuttal, LANL Ex. 63 at 12:1-2, 25 (2020 TR LANL-01216); Judd Rebuttal, LANL Ex. 65 at 7:17-19 (2020 TR LANL-01242), 9:18-23 (2020 TR LANL-01244); NMMA NOI at 4-5 (nontechnical testimony); Bearzi Rebuttal, BDD Ex. 1 at 10 (2020 TR BDD 010); DeRose-Bamman Direct, Ex. SJWC 2 at 16-17*]

NMED's Proposal to Refer to CECs in the Toxic Pollutants Narrative Standard Would Create Regulatory Uncertainty, Including Mischaracterizing All CECs as Toxic

16. LANL is concerned that the addition of CECs to 20.6.4.13(F)(1) NMAC will create regulatory uncertainty because it is unknown what levels are detrimental or toxic to aquatic life and human health and many CECs are not toxic. [*Dail, Tr. at 499:18-25, 500:13-501:2, 512:22-25, 513:13-25; Barrios, Tr. at 451:25-452:12*] There is no toxicological information for many CECs. [*Dail, Tr. at 516:23-15, 519:7-9; Judd, Tr. at 535:8-16*]

17. EPA has not developed numeric criteria for CECs. [*Barrios Direct, NMED Ex. 2 at 4:17*]

18. AB agrees that CECs are "suspected to potentially have impacts . . . and the concentrations at which negative impacts are observed have not been fully studied." [*DeWitt Direct, AB Ex. 9 at 8, ¶ 31; Conn Rebuttal, AB Ex. 11 at 6 ("CECs are a widely accepted group of potentially harmful contaminants"); DeWitt Rebuttal, AB Ex. 17 at 1*]

19. NMED contends that only some, but not all, CECs meet the definition for "toxic pollutants" in 20.6.4.7(T)(2) NMAC. [*Barrios Rebuttal, NMED Ex. 107 at 3:10-12, 15:18-23; Barrios, Tr. at 440:16-19, 441:18-24, 450:14-16 ("many" meet the definition), 456:19-22 ("Not all CECs are toxic pollutants" but many are), 476:10-13 (not all CECs are toxic pollutants), 491:17 (same), 496:4-7*]

20. NMED's intent is that CECs meeting the definition for toxic pollutants be evaluated under 20.6.4.13(F) NMAC. [*Barrios, Tr. at 495:25-496:7*]

21. NMED agrees that the language proposed for Section 20.6.4.13(F)(1) NMAC could be read to determine that all CECs are toxic pollutants. [*Barrios, Tr. at 476:14-21*]

22. "To avoid the mistaken assumption that all CECs are toxic pollutants," NMED has indicated that "the Commission may wish to reference CECs in the general criterion for toxic pollutants as, quote, those CECs meeting the definition of toxic pollutants, end quote." [*Barrios, Tr. at 457:4-10, 476:18-21 ("[P]erhaps we do need to add a statement saying CECs that meet the definition of toxic pollutants" are toxic pollutants), 477:2-7 (NMED is open to language making clear not all CECs are toxic pollutants), 496:19-497:4 (same); Bearzi, Tr. at 647:12-648:2 (BDD will not withdraw its objections to NMED's CECs proposals because NMED has not yet proposed any such language)*]

23. NMED has not proposed any such language for consideration by the parties and the WQCC. Further, it is unnecessary and redundant to refer to "CECs meeting the definition of toxic pollutants" in the narrative standard addressing toxic pollutants.

The SWQS Currently Give NMED Authority to Regulate CECs That Are Toxic Pollutants

24. The narrative standard for toxic pollutants at 20.6.4.13(F) NMAC currently provides authority to regulate CECs once there is evidence that they meet the definition of a "toxic pollutant." [*DeRose-Bamman Direct, Ex. SJWC-2 at 17; DeRose-Bamman, Tr. at 590:25-591:4; Barrios Rebuttal, NMED Ex. 107 at 15:4-6; Judd, Tr. at 537:15-21 (CECs with toxicology information can be considered toxic pollutants); Toll Rebuttal, LANL Ex. 63 at 14:7-9 (2020 TR LANL-01218) (20.6.4.13(F) NMAC already provides authority to regulate any contaminant meeting the definition of toxic pollutant in 20.6.4.7(T)(2) NMAC); Conn Rebuttal, AB Ex. 11 at 7-*

8 (CECs that have been identified as toxic pollutants are subject to the narrative standard for toxic pollutants at 20.6.4.13(F) NMAC; where it has been determined that a CEC is toxic to humans and wildlife, it should be categorized as a toxic pollutant and no longer considered a CEC)]

25. NMED admits the general criterion for toxic pollutants in 20.6.4.13(F) NMAC is a narrative criterion for "harmful substances" and currently covers CECs with "harmful effects" on aquatic life or human health. [*Barrios Rebuttal, NMED Ex. 107 at 12:2-4, 12:14-15, 14:16-19*]

26. NMED does not intend for the reference to CECs to expand its regulatory authority under 20.6.4.13(F) NMAC. [*Barrios Rebuttal, NMED Ex. 107 at 16:4-5; Barrios, Tr. at 454:18-19, 455:16-17*]

27. NMED's proposal to reference CECs in 20.6.4.13(F) NMAC was not intended to expand the definition of toxic pollutants but rather to be illustrative of the pollutants that may be considered to be toxic pollutants. [*Barrios, Tr. at 467:7-22*]

28. NMED already is "obligated to regulate any CEC demonstrating toxic properties through an analysis of credible scientific data as indicated in the general criterion for toxic pollutants, 20.6.4.13F NMAC." [*Barrios, Tr. at 453:14-18*]

NMED's Final Proposed Definition of CECs Is Not Based on Any Current EPA Definition

29. NMED also proposes adding a definition of CECs: "Since 'contaminants of emerging concern' is a proposed addition to the general criteria for toxic pollutants in 20.6.4.13(F)(1) NMAC, a definition is necessary to provide an attributable reference." [*Barrios Direct, NMED Ex. 2 at 4:15-17*]

30. In its Petition and Amended Petition, NMED's proposed definition stated that CECs are only "suspected to potentially have impacts, also may not have regulatory standards, and

the concentrations causing negative impacts have not been fully studied." [*Petition; Amended Petition; DeRose-Bamman Direct, Ex. SJWC 2 at 16; DeRose-Bamman, Tr. at 582:2-7*]

31. As already noted, NMED has proposed three different definitions of CECs during this Triennial Review.

32. NMED's originally proposed definition was based on information about CECs provided on EPA's website. [*Barrios Direct, NMED Ex. 2 at 4:6-10; NMED Ex. 35*] NMED Exhibit 35, which is the EPA webpage discussing CECs, provides no definition. Further, it states that CECs "may have an impact" on aquatic life. Nowhere does the EPA discussion state that CECs are compounds "recognized as having deleterious effects at environmental concentrations," as NMED asserts in its final proposed definition found in NMED Ex. 110. [*NMED Ex. 35*]

33. There is no current regulatory definition of CECs. [*Barrios, Tr. at 484:7-10, 481:7-15 (NMED Ex. 35, which is the page from the EPA website that NMED represents is EPA's "definition" of CECs, is not a definition found in the Code of Federal Regulations)*]

NMED's Revised Definition Does Not Resolve Earlier Concerns Because It Still Conflicts with the Definition of "Toxic Pollutant," Is Not Based on Credible Scientific Evidence, Conflicts with EPA's Proposed Definition of CECs, and Is Internally Contradictory

34. "Recogniz[ing] that the [originally] proposed definition may be interpreted to allow arbitrary assignment of the 'CEC' label to substances with no demonstrated environmental harm," and in response to concerns regarding the phrase "suspected to potentially have impacts," NMED revised its proposed definition to:

> (7) "Contaminants of emerging concern" or "CECs" refer to water contaminants including, but not limited to, per- and polyflouroalkyl substances, pharmaceuticals, and personal care products that may cause significant ecological or human health effects, particularly at low concentrations. CECs 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.

[*NMED Ex. 110 (emphasis added); Barrios Rebuttal, NMED Ex. 107 at 4:13-5:2, 15:15-17; Barrios, Tr. at 440:7-13*]

35. The revised definition does not resolve the concerns raised by other parties that it conflicts with the definition of "toxic pollutant." The definition states CECs "may cause" significant ecological or human health effects, but a "toxic pollutant" is one that "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)(2) NMAC*]

36. NMED admits its proposed definition for CECs indicates that CECs "may cause," rather than "will cause," significant ecological or human health effects. [*Barrios, Tr. at 476:22-477:1*]

37. NMED's final proposed definition of CECs does not meet the definition of toxic pollutant. [*DeRose-Bamman, Tr. at 604:18-605:8; NMMA NOI at 4 (nontechnical testimony)*] As succinctly explained by NMED, SJWC asserts that "CECs that may cause environmental harm should not be conflated with toxic pollutants that will cause environmental harm." [*Barrios, Tr. at 454:11-15; DeRose-Bamman Direct, Ex. SJWC 2 at 17*]

38. Further, NMED has provided no technical explanation for its shifting definitions of CECs. NMED's originally proposed definition stated that "CECs are "suspected to potentially have impacts." The final proposed definition affirmatively states that CECs have "are recognized as having deleterious effects." [*Petition; NMED Ex. 110; DeRose-Bamman, Tr. at 587:1-11*]

39. NMED has provided no testimony defining the term "environmental concentrations" in the final proposed definition or explaining how to interpret that term. [*DeRose-Bamman, Tr. at 586:4-8*]

40. NMED's final proposed definition conflicts with the information provided on the EPA website on which NMED relies. The website states "there is concern that these compounds may have an impact on aquatic life." It does not say CECs are "recognized as having deleterious effects." [*NMED Ex. 35 at 1*] Further, another EPA webpage states only that CECs have "potential" significant impacts on human health and aquatic life. [*LANL Ex. 49 at 2020 TR LANL-00854*]

41. The Emerging Contaminants Workgroup of the EPA Office of Water/Office of Research and Development has proposed a definition of CECs. [*Toll Rebuttal, LANL Ex. 63 at 12:2-18 (2020 TR LANL-01216); LANL Ex. 84 at 2020 TR LANL-01737-01738*] That definition states CECs "potentially cause deleterious effects in aquatic life at environmentally relevant concentrations." [*Toll Rebuttal, LANL Ex. 63 at 2020 TR LANL-01216:8-12; Toll, Tr. at 557:13-18, 560:24-561:7; LANL Ex. 84 at 2020 TR LANL-01737-38 (emphasis added)*] Similarly, EPA's website indicates CECs have "potential significant impact on human health and aquatic life." [*LANL Ex. 49 at 2020 TR LANL-00854 (emphasis added); Dail Direct, LANL Ex. 5 at 5:12-22 (2020 TR LANL-00144) (NMED's originally proposed definition of CECs was consistent with EPA descriptions of CECs)*]

42. AB agrees that EPA has defined CECs as substances that "potentially cause deleterious effects in aquatic life at environmentally relevant concentrations" and that "may have potential significant impact on human health." [*DeWitt Direct, AB Ex. 9 at 7 ¶ 28, 9 ¶ 32 (by definition, CECs are contaminants that "may cause significant harm to human or ecological health"); DeWitt Rebuttal, AB Ex. 17 at 1*]

43. The EPA's proposed definition of CECs, which indicates that CECs only "potentially" cause deleterious effects, conflicts with the definition of "toxic pollutant" in the SWQS. [Toll, Tr. at 561:12-562:10]

44. NMED's final proposed definition of CECs conflicts with EPA's guidance that CECs only have "potential" effects or impacts because it states "CECs are generally chemical compounds recognized as having deleterious effects at environmental concentrations . . . ." Dr. Toll, on behalf of LANL, agrees. [Toll, Tr. at 559:21-561:10 (NMED's revised proposed definition of CECS conflicts with the definition proposed by EPA's Emerging Contaminants Workgroup)]

45. Finally, NMED's final proposed definition also is internally contradictory. On one hand, it states CECs "may cause significant ecological or human health effects" and "negative impacts have not been fully quantified." On the other hand, it states CECs are "recognized as having deleterious effects." [NMED Ex. 110 at 3]

Conclusion

46. For all of these reasons, we find that NMED has not provided sound scientific rationale or credible scientific data to support its CEC proposals.

47. The WQCC will 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.

48. Because the reference to toxic pollutants will not be added, no definition of CECs is needed. [DeRose-Bamman Direct, Ex. SJWC 2 at 8] Further, the proposed definition conflicts with EPA information on CECs and is internally contradictory.

B. General Criteria for Toxic Pollutants—Ground and Surface Water Protection Rule: 20.6.4.13(F)(1) and 20.6.2 NMAC

NMED proposes to incorporate the toxic pollutants listed in the Groundwater Rule into the narrative toxic pollutant standard in the SWQS. SWJC urges the WQCC to reject this proposal, which mixes apples and oranges. LANL also opposes this proposal.

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.

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.

The following reasons support rejecting the NMED proposal.

NMED's Proposal to Incorporate Groundwater Rule Toxic Pollutants into the Narrative Standard for Toxic Pollutants Found in the SWQS

1. NMED proposes to modify the narrative toxic pollutant standard in 20.6.4.13(F)(1) to incorporate the toxic pollutants listed in the Ground and Surface Water Protection Rule at 20.6.2.7(T) NMAC. [*Barrios Direct, NMED Ex. 2 at 3:19-23*]

2. The Ground and Surface Water Protection Rule is commonly referred to as the "Groundwater Rule" and the list of toxic pollutants in 20.6.2.7(T) NMAC as "groundwater toxic pollutants." [DeRose-Bamman, Tr. at 601:20-22; Dail Direct, LANL Ex. 5 at 5:8 (2020 TR LANL-00144), 7:14-16 (2020 TR LANL-00146) (referring to 20.6.2 NMAC as "groundwater regulations" and "groundwater rules"); Dail Rebuttal, LANL Ex. 61 at 3:12-14 (2020 TR LANL-01176) (same), 3:18-20 (2020 TR LANL-01176) (referring to "groundwater toxic pollutants")]

3. Although 20.6.2.7(T) NMAC is titled a "definition" of "toxic pollutants," it really is just a list of toxic pollutants. [Barrios, Tr. at 478:21-23; DeRose-Bamman Direct, Ex. SJWC 2 at 17; DeRose-Bamman, Tr. at 588:16-20]

The Groundwater Rule's List of Toxic Pollutants Applies Only to Groundwater, and NMED Failed to Show the Pollutants Meet the Definition of Toxic Pollutants in the SWQS

4. LANL and SJWC object to any incorporation of the Groundwater Rule's list of toxic pollutants into the SWQS. [Dail Direct, LANL Ex. 5 at 8:25-9:3 (2020 TR LANL-00147-00148); Dail Rebuttal, LANL Ex. 61 at 4:17-20 (2020 TR LANL-01177); Dail, Tr. at 502:21-

503:4; DeRose-Bamman Direct, Ex. SJWC 2 at 17; DeRose-Bamman, Tr. at 582:8-13, 590:1-4; Barrios, Tr. at 450:23-451:22]

5. CCW/GRIP propose to move the reference to the Groundwater Rule's list of toxic pollutants to the definition of "toxic pollutants" in 20.6.4.7(T)(2). [Barrios, Tr. at 457:11-19]

6. SJWC asserts that the list of toxic pollutants at 20.6.2.7(T) applies only to groundwater. [DeRose-Bamman, Tr. at 583:10-17) (no evidence the list was adopted for any purpose other than groundwater)] The Groundwater Rule only references toxic pollutants in connection with groundwater. [DeRose-Bamman, Tr. at 583:18-23, 595:17-21 (specific sections of the Groundwater Rule apply to surface water and specific sections apply to groundwater), 601:7-19 (Groundwater Rule refers to "toxic pollutants" only in connection with groundwater, never with regard to surface water)]

7. We disagree with NMED's assertion that the list of toxic pollutants in the Groundwater Rule also applies to surface water simply because 20.6.2 NMAC is titled "Ground and Surface Water Protection Rule." [Barrios, Tr. at 445:14-24, 478:9-20]

8. NMED failed to provide evidence showing that the pollutants listed in the Groundwater Rule at 20.6.2.7(T)(2) NMAC meet the definition of "toxic pollutant" as defined in the SWQS at 20.6.4.7(T)(2). [DeRose-Bamman Direct, Ex. SJWC 2 at 17-18; DeRose-Bamman, Tr. at 582:18-13, 583:5-9, 583:24-584:3, 588:21-23, 596:11-17] The definition of "toxic pollutant" in the SWQS states that they "will cause death, shortened life spans, disease" or other adverse impacts:

> **"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, <u>will cause</u> 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)(2) NMAC (emphasis added)*] The benchmark for toxic pollutants in the Groundwater Rule, however, is significantly different because it requires only proof that a pollutant has "potential for causing" certain adverse effects—adverse effects that are different from those contained in the definition of "toxic pollutant" in the SWQS:

> **Standards for Toxic Pollutants.** A toxic pollutant shall not be present at a concentration shown by credible scientific data and other evidence appropriate under the Water Quality Act, currently available to the public, to have potential for causing one or more of the following effects upon exposure, ingestion, or assimilation either directly from the environment or indirectly by ingestion through food chains: (1) unreasonably threatens to injure human health, or the health of animals or plants which are commonly hatched, bred, cultivated or protected for use by man for food or economic benefit; as used in this definition injuries to health include death, histopathologic change, clinical symptoms of disease, behavioral abnormalities, genetic mutation, physiological malfunctions or physical deformations in such organisms or their offspring; or (2) creates a lifetime risk of more than one cancer per 100,000 exposed persons.

[*20.6.2.3103(A)(2) NMAC (emphasis added);DeRose-Bamman, Tr. at 603:16-604:13, 605:9-17*]

9. Because the SWQS and the Groundwater Rule use different factors to qualify a constituent as a toxic pollutant, it cannot be assumed that the toxic pollutants listed in 20.6.2.7(T)(2) meet the definition of "toxic pollutant" in the SWQS. For that reason, there may be justification for different lists of toxic pollutants in the Groundwater Rule and the SWQS. [*DeRose-Bamman, Tr. at 583:24-584:8; 589:5-16, 602:11-16*]

10. NMED did not evaluate the history of the definition of toxic pollutants in the Groundwater Rule to determine whether it was intended to apply to surface water as well as groundwater. [*Barrios, Tr. at 465:15-23, 478:24-479:2*]

11. NMED does not know what criteria or standard was applied when the Groundwater Rule list of toxic pollutants was adopted. NMED just "see[s] them listed as toxic pollutants." [*Barrios, Tr. at 479:14-22*]

12. Mr. Barrios, who testified on behalf of NMED in support of its proposal, does not know whether the use of the term "toxic pollutant" in the Groundwater Rule has ever been applied to surface water. [*Barrios, Tr. at 479:6-9*]

NMED's Proposal Would Create Confusion Because Some Pollutants Already Are Contained in Both the SWQS and the Groundwater Rule, and Some of Them Have Different Criteria Assigned by the SWQS and the Groundwater Rule

13. The Groundwater Rule lists approximately 99 "toxic pollutants." [*Dail, Tr. at 501:12-14*] Some of the "toxic pollutants" listed in the Groundwater Rule already are incorporated into the SWQS and have numeric criteria assigned to them. NMED proposes to add several more in this Triennial Review. [*Dail Direct, LANL Ex. 5 at 9:19-21 (2020 TR LANL-00148) (there is crossover between the list in the Groundwater Rule and criteria adopted in the SWQS); Dail, Tr. at 501:15-16; Barrios, Tr. at 479:10-13; DeRose-Bamman, Tr. at 589:5-16, 602:3-16*]

14. The criteria for groundwater toxic pollutants, as set out in the Groundwater Rule at 20.6.2.3103 NMAC, are not the same in all cases as the criteria for those pollutants in the SWQS at 20.6.4.900 NMAC. Without a line-by-line review, NMED cannot identify which are different. [*Barrios, Tr. at 492:13-24*]

15. NMED's proposal to refer to the list of groundwater toxic pollutants in the SWQS narrative toxic pollutant standard would therefore cause confusion because of conflicts between the criteria assigned in the SWQS and the criteria assigned in the Groundwater Rule.

16. NMED has provided no scientific or other credible evidence that the Groundwater Rule toxic pollutants not already incorporated into the SWQS meet the definition of a "toxic

pollutant" found in the SWQS at 20.6.4.7(T)(2). [*DeRose-Bamman Direct, Ex. SJWC 2 at 17-18; DeRose-Bamman, Tr. at 582:18-13, 583:5-9, 583:24-584:3, 588:21-23, 596:11-17*]

17. A toxic pollutant listed as a toxic pollutant in 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. [*Barrios, Tr. at 479:23-480:3; DeRose-Bamman Direct, Ex. SJWC 2 at 18*]

18. For all of these reasons, we reject NMED's proposal to include a reference to the Groundwater Rule toxic pollutants in the narrative standard for toxic pollutants found in 20.6.4.13(F)(1) NMAC. The proposal is unnecessary, confusing, and not supported by credible scientific or other evidence, as required by Section 74-6-4(D) of the New Mexico Water Quality Act.

C. <u>Definition of Toxic Pollutants—20.6.4.7(T)(2) NMAC</u>

CCW/GRIP proposes 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 opposes this proposal on the same grounds that it opposes incorporating the Groundwater Rule's list of toxic pollutants into the SWQS narrative standard for toxic pollutants (*see* Topic 3(B) above). In addition, incorporating the reference to the federal regulation would 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 toxics 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.

The following reasons support rejecting the CCW/GRIP proposal.

CCW/GRIP's Proposal to Incorporate Groundwater Rule Toxic Pollutants, and 40 C.F.R. § 401.15, into the SWQS Definition of "Toxic Pollutants" Is Not Supported by Credible Scientific Evidence

1. CCW/GRIP, in the rebuttal testimony of Ms. Pamela Homer, propose amending the definition of "toxic pollutants" in the SWQS at 20.6.4.7(T)(2) NMAC to include the toxic pollutants listed in the Groundwater Rule (20.6.2.7(T)(2) NMAC) and identified in 40 C.F.R. § 401.15. [*Homer Rebuttal, CCW/GRIP Ex. 5 at 5-6; CCW/GRIP Ex. 1 at 2:3-5; Barrios, Tr. at 447:19-448:3*]

2. SJWC opposes the CCW/GRIP proposal on the same grounds it objected to NMED's proposal to incorporate the Groundwater Rule toxic pollutants into the narrative standard for toxic pollutants (20.6.4.13(F)(1) NMAC). [*DeRose-Bamman, Tr. at 588:7-590:4*]

3. NMED opposes the specific language proposed by CCW/GRIP. [*Barrios, Tr. at 448:24-449:2*]

4. We reject CCW/GRIP's proposal to incorporate the toxic pollutants listed in the Groundwater Rule into the definition of "toxic pollutants" found in the SWQS for the same reasons we rejected NMED's proposal to incorporate those toxic pollutants into the narrative standard for toxic pollutants at 20.6.4.13(F)(1).

5. With respect to 40 C.F.R. § 401.15, that regulation contains groupings or categories of pollutants instead of simply a list of individual pollutants. The groupings do not clearly specify

which pollutants are included. [*DeRose-Bamman, Tr. at 588:21-589:4*] Therefore, adoption of CCW/GRIP's proposal would create confusion for the regulated community.

6. CCW/GRIP did not provide any technical testimony showing that the pollutants identified in 40 C.F.R. § 401.15 meet the definition of "toxic pollutant" found in the SWQS. [DeRose-Bamman, Tr. at 589:3-4 (no technical testimony supports the proposal)]

7. Ms. Homer, on behalf of CCW/GRIP, stated in her written rebuttal testimony only that "[i]t would be appropriate to reference the CWA list here." [Homer Rebuttal, CCW/GRIP Ex. 5 at 5-6] In her oral testimony, Ms. Homer stated only that "[a]dding specific lists of contaminants avoids unnecessary future arguments about whether the listed contaminants qualify as toxic pollutants." [Homer, Tr. at 619:18-21]

8. CCW/GRIP did not provide 40 C.F.R. § 401.15 as an exhibit in this matter, so we have no information concerning the pollutants to which that regulation applies.

9. For these reasons, we reject CCW/GRIP's proposal to include references to the Groundwater Rule and 40 C.F.R. § 401.15 in the definition of "toxic pollutant" found in 20.6.4.7(T)(2) NMAC. The proposal is unnecessary, confusing, and not supported by credible scientific or other evidence, as required by Section 74-6-4(D) of the New Mexico Water Quality Act.

TOPIC 4—IMPLEMENTATION

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 also 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.

The following reasons support rejection of NMED's proposal

A. NMED's Proposal to Add Effluent Conditions as Criteria to Rio Grande Segments 20.6.4.105(B) and 20.6.4.106(B) NMAC

The Proposal

1. Sections 20.6.4.101 through 20.6.4.899 NMAC define the classified waters of the State. Each section identifies the designated uses and water quality criteria applicable to that particular waterbody segment. [*DeRose-Bamman, Tr. at 883:24-884:2 (emphasis added)*]

2. NMED proposes to incorporate effluent conditions for community sewerage systems found in the Groundwater Rule into the surface water quality criteria for sections 20.6.4.105 and 20.6.4.106 NMAC. [*Lemon Direct, NMED Ex. 1 at 15:11-14; Lemon, Tr. at 726:9-15; DeRose-Bamman Direct, Ex. SJWC 2 at 20; DeRose-Bamman, Tr. at 884:3-5*] Section 105 is the Rio Grande from the Alameda bridge in Corrales to Elephant Butte. Section 106 is the Rio Grande from the Angostura diversion works to the Alameda bridge. [*20.6.4.105, 106 NMAC; DeRose-Bamman Direct, Ex. SJWC 2 at 20; DeRose-Bamman, Tr. at 884:6-9; Lemon, Tr. at 726:18-22*]

3. The effluent conditions NMED proposes to add to the criteria for stream segments 105 and 106 are effluent discharge quality limits established in section 20.6.2.2102 of the Groundwater Rule. [*DeRose-Bamman Direct, Ex. SJWC 2 at 20; DeRose-Bamman, Tr. at 884:10-15; Lemon Direct, NMED Ex. 1 at 15:6-8; Lemon, Tr. at 726:18-727:8*] They are temporary limits that apply only after a community sewerage system violates its NPDES permit conditions for more than 30 days and receives a notice of violation. The temporary limits no longer apply after the community sewerage system comes back into compliance with its NPDES permit. [*DeRose-Bamman Direct, Ex. SJWC 2 at 20; DeRose-Bamman, Tr. at 884:15-21; Lemon, Tr. at 727:15-23*]

Effluent Limits Are Not SWQS Criteria, but NMED's Proposal Identifies Them as "Criteria," and Sections 20.6.4.105 and 106 Contain only "Designated Uses" and "Criteria"

4. Section 303(c) requires the State to develop SWQS (*i.e.*, designated uses, criteria to protect the uses, and an antidegradation policy) for all waters of the United States within the State's jurisdiction. Effluent limits are not SWQS (criteria) under Section 303(c) of the Clean Water Act. Rather, effluent limits are restrictions on the amount (concentration and load) of a pollutant that can be in a point source discharge. [*DeRose-Bamman Direct, Ex. SJWC 2 at 20-21; DeRose-Bamman Rebuttal, Ex. SJWC 3 at 10; DeRose-Bamman, Tr. at 884:22-885:13, 889:1-3*]

5. NMED does not intend for the effluent limits to become surface water quality criteria. [*Lemon, Tr. at 735:13-17*]

6. However, standards for stream segments 105(B) and 106(B) are titled "criteria." In fact, sections 20.6.4.105 and 106 NMAC only contain "designated uses" (subsection A) and "criteria" (subsection B). [*20.6.4.105(B), 106(B) NMAC, NMED Ex. 110; Lemon, Tr. at 736:6-10*]

7. SJWC contends that, if the WQCC adopts the effluent limits as proposed by NMED, they will become surface water quality criteria for stream segments 105(B) and 106(B). [*DeRose-Bamman, Tr. at 885:14-20, 896:1-6*] We agree with SJWC.

8. The effluent limits of the Groundwater Rule are end-of-pipe effluent discharge limits. [*Lemon, Tr. at 736:17-21*] No other end-of-pipe conditions for dischargers have been incorporated into the SWQS. Instead, they are incorporated into NPDES permits. [*Lemon, Tr. at 736:25-737:5*]

NMED's Proposal Should Be Rejected Because It Would Create Confusion Given Conflicts Between the Groundwater Rule and the SWQS with Regard to Applicable Criteria and Monitoring Requirements and Also Because "Community Sewerage System" Is Undefined

9. According to NMED, the purpose of its effluent limits proposal is to "clarify and make sure that there is no confusion about these requirements." [*Lemon, Tr. at 738:3-5*]

10. However, the effluent limits conflict with the SWQS with respect to at least one constituent. The pH range in 20.6.2.2102 NMAC is more stringent than the range specified in 20.6.4.900(H) for marginal warmwater aquatic life (6.6 to 8.6 vs. 6.6 to 9.0). [*DeRose-Bamman, Tr. at 886:5-9, 889:1-3*]

11. NMED's proposal will cause confusion for permittees in several additional ways:

a. The term "community sewerage system" is not defined in either the SWQS or the Groundwater Rule, so it is unclear which dischargers will be subject to the effluent limits if they are incorporated into the SWQS;

b. 20.6.2.2102 NMAC sets effluent limits on chemical oxygen demand ("COD"), but NPDES permits do not routinely require dischargers to monitor for COD;

c. 20.6.2.2102 NMAC sets effluent limits on settleable solids, but NPDES permits do not routinely require dischargers to monitor for settleable solids;

d. 20.6.2.2102 NMAC sets effluent limits on fecal coliform, but NPDES permittees are required to monitor for *E. coli* instead of fecal coliform;

e. The effluent limitations in 20.6.2.2102 are temporary; and

f. Some testing requirements are different.

[*Lemon, Tr. at 730:12-14 ("community sewerage system" is not defined), 728:2-8 (20.6.2.2102 NMAC sets effluent limits on COD, settleable solids, fecal coliform and pH), 730:22-731:4 (effluent requirements in 20.6.2.2102 are not exactly aligned with typical effluent limitations in NPDES permits or the surface water quality criteria for stream segments 105 and 106), 727:15-23 (effluent limitations are temporary), 731:5-9 (it is "likely" temporary limitations will cause confusion); DeRose-Bamman Direct, Ex. SJWC 2 at 20 ("community sewerage system" is not defined), 21 (20.6.2.2102 NMAC specifies limits for COD, settleable solids, fecal coliform and pH; many NPDES permittees are not required to monitor for COD or settleable solids; NPDES permittees are required to monitor for E. coli instead of fecal coliform; the pH range is more stringent); DeRose-Bamman Rebuttal, Ex. SJWC 3 at 10 (temporary); DeRose-Bamman, Tr. at 887:7-21 ("community sewerage system" is not defined), 885:23-886:1 (NMAC sets effluent limits on COD, settleable solids, fecal coliform and pH), 886:1-4 (NPDES permits do not routinely require dischargers to monitor for COD or settleable solids; permittees are required to monitor for E. coli instead of fecal coliform), 886:10-887:1 (some NPDES testing requirements are different from the requirements in 20.6.2102 NMAC), 889:4-13 (same)*]

12. The effluent limits in 20.6.2.2102 NMAC have existed in the Groundwater Rule since at least 2001. [*DeRose-Bamman, Tr. at 888:9-11*]

13. The conflicts between the SWQS, NPDES permit conditions and 20.6.2.2102 NMAC with respect to pH criteria and *E. coli* vs. fecal coliform criteria indicate the effluent

conditions in 20.6.2.2102 NMAC are out of date. [*DeRose-Bamman, Tr. at 888:1-4, 889:14-16, 893:20-894:7*]

14. In support of its proposal, NMED states that "[t]he inclusion of this language aids in the implementation of appropriate water quality protections that apply to waters in this region, particularly as they pertain to sewerage systems." [*Lemon Rebuttal, NMED Ex. 106 at 22:3-5*] This explanation does not provide sufficient support for the adoption of the Groundwater Rule effluent limits into the SWQS as criteria applicable to an entire stream segment. [*DeRose-Bamman, Tr. at 888:5-889:23*]

15. The effluent limitations in 20.6.2.2102 NMAC will continue to apply regardless of whether they are adopted into the SWQS. [*Lemon, Tr. at 732:13-19, 739:11-16; DeRose-Bamman, Tr. at 892:11-16*]

16. For all these reasons, 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. [*DeRose-Bamman, Tr. at 895:5-25*] We therefore reject NMED's proposal.

TOPIC 5—MISCELLANEOUS—EXISTING USES

A. Existing Use Analyses: 20.6.4.10(B) NMAC

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" 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.

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. 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 in light of 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 ability to make an informed decision based on credible scientific evidence.

The way to correct this problem is to define—in regulation—the process for developing an EUA, including public participation requirements and the amount and type of data required for an EUA to provide sufficient "supporting evidence" of an existing use. Stakeholders and the public should be involved in developing that EUA framework or process, and the WQCC should give it final approval after a public hearing. A proper EUA framework is critical because an existing use, once adopted, cannot be removed, existing water quality cannot be degraded, and any dischargers must protect the existing use even if the existing use is no longer attainable. Further, an established EUA framework will ensure future WQCC existing use determinations are consistent and based on a comprehensive analysis of all appropriate data. SJWC therefore urges the WQCC to instruct

NMED to work with stakeholders to develop a framework for future EUAs to be incorporated into the SWQS or the WQMP/CPP.

The following reasons support rejection of NMED's proposal.

1. *NMED's Existing Use Analysis Proposal Should Be Rejected for Lack of Clarity.*

a. NMED proposes to add a new subsection B to 20.6.4.10 NMAC to reflect the requirements of 40 C.F.R. §131.10(i) concerning existing uses.

b. 40 C.F.R. § 131.10(i) states: "Where existing water quality standards specify designated uses less than those which are presently being attained, the State shall revise its standards to reflect the uses actually being attained." [*Ex. SJWC 2-I (emphasis added)*] In laymen's terms, the regulation addresses when a designated use must be upgraded to protect an existing use. [*Fullam, Tr. at 954:16-19; DeRose-Bamman, Tr. at 1203:7-11*]

c. In accordance with 40 C.F.R. § 131.10, for this Triennial Review, NMED prepared what it calls an "Existing Use Analysis" or "EUA" to support its proposal to upgrade five stream segments from the secondary contact designated use to the primary contact designated use. [*NMED Exhibit 56*] NMED also prepared an EUA to evaluate whether the existing aquatic life and recreational uses of three tributaries on LANL property have more stringent criteria than the current designated uses ("LANL Waters EUA"). [*NMED Ex. 73; Fullam Direct, NMED Ex. 4 at 27:7-13, 31:5-6*]

d. The purpose of NMED's proposal for 20.6.4.10(B) is to "clarify the required process for amending a designated use where the existing use is more stringent than the designated use." [*Fullam Direct, NMED Ex. 4 at 10:13-15*]

e. The applicable federal regulation focuses on uses, not water quality. [*Gallegos Rebuttal, LANL Ex. 59 at 8:3-5 (2020 TR LANL-01123); DeRose-Bamman Direct, Ex. SJWC 2 at 14; DeRose-Bamman Rebuttal, Ex. SJWC 3 at 7*]

f. Rather than simply cite or quote the federal regulation, NMED has made three attempts to paraphrase it. [*Compare Petition, Amended Petition and NMED Ex. 110*] The latest version of NMED's proposal reads:

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

[*NMED Ex. 110 (emphasis added)*]

g. This revised proposal still creates confusion by focusing on water quality and using the terms "higher quality water" and "criteria no less stringent than the existing use." [*Fulton, Tr. at 1017:11-25 (term "'higher quality'" in reference to an existing use may create confusion because subcategories of aquatic life uses are not necessarily of higher or lesser quality relative to one another"); DeRose-Bamman Direct, Ex. SJWC 2 at 14 (reference to "higher quality water" is confusing because it conflicts with the federal regulation, which focuses on use rather than water quality); DeRose-Bamman Rebuttal, Ex. SJWC 3 at 7 (same); DeRose-Bamman, Tr. at 1203:12-16 (NMED's proposal creates confusion because federal regulation focuses on uses rather than water quality; it would be better to cite the federal regulation or adopt the language of 40 C.F.R. § 131.10(i))*]

h. NMED has not defined "higher quality water." Without a definition, it is unclear whether a designated use must be upgraded simply because the quality of one single

constituent is better than the numeric criterion for the designated use. [*DeRose-Bamman Direct, Ex. SJWC 2 at 14*]

i. NMED's proposal also lacks clarity because NMED has not defined what "supporting evidence" is required to demonstrate an existing use or the process for modifying existing uses. [*Gallegos Direct, LANL Ex. 3 at 36:11-23 (2020 TR LANL-00095) (term could lead to arbitrary existing use determinations); Gallegos, Tr. at 1102:6-9; DeRose-Bamman Direct, Ex. SJWC 2 at 14-15*]

j. Given our concerns about the EUA process used for this Triennial Review (discussed below in Topic 5(A)(3)), it is clear that NMED's proposal for 20.6.4.10(B) NMAC does not meet its asserted goals of "specify[ing] the regulatory process necessary for amending water quality standards," "clarify[ing] the required process for amending a designated use where the existing use is more stringent than the designated use," or "provid[ing] clarity and transparency with respect to the regulatory process . . . ." [*Fullam Direct, NMED Ex. 4 at 10:1-2, 10:13-15, 11:20-22 (emphasis added)*]

k. We disagree with NMED's assertion that the language "is clear and implementable as written." [*Fullam, Tr. at 958:20-21; Fullam Direct, NMED Ex. 4 at 9:18-20 (proposal clarifies when and how designated use may be amended)*] Given the lack of clarity, we reject NMED's proposal.

2. *LANL's Proposed Language for Section 20.6.4.10(B) Should Be Adopted.*

a. In response to NMED, LANL has proposed the following language for Section 10(B):

> In accordance with 40 CFR 131.10, when an existing use of a water, as defined in 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.

[*LANL Ex. 57 at 5:15-23 (2020 TR LANL-01063)*]

b. SJWC supports LANL's proposal. [*DeRose-Bamman Rebuttal, Ex. SJWC 3 at 7-8, 9; DeRose-Bamman, Tr. at 1203:17-23 (LANL's proposal focuses on designated uses, removes references to water quality, and captures the federal requirement of new evidence)*]

c. LANL's proposed language properly reflects our decision (discussed below in Topic 5(A)(3)) that a formal EUA procedure should be adopted through a public process.

d. LANL's proposal also appropriately focuses on designated uses, removes the references to water quality, and captures the federal requirement of 40 C.F.R. § 131.20(a) that there be "new" evidence establishing the existence of a particular use. [*DeRose-Bamman Rebuttal, Ex. SJWC 3 at 8*]

e. We adopt the language proposed by LANL for 20.6.4.10(B) NMAC and direct NMED to begin developing the EUA process and bring it to the WQCC for approval, as discussed in more detail below.

3. *NMED Should Be Directed to Develop a Formal EUA Procedure.*

a. NMED proposes to upgrade the recreation designated use for five stream segments from secondary contact to primary contact based on a technical document titled "Existing Use Analysis of Recreational Use for Classified Waters 20.6.4.101 through 20.6.4.899 NMAC" ("Primary Contact EUA") (NMED Ex. 56). NMED prepared its Primary Contact EUA and its LANL Waters EUA without input from affected permittees, the public or other stakeholders,

including SJWC, which participated in the last Triennial Review concerning this same primary contact issue. [*DeRose-Bamman Rebuttal, Ex. SJWC 3 at 9, 29-30; DeRose-Bamman, Tr. at 1208:5-19, 1209:3-6, 1212:13-20; Goering Rebuttal, LANL Ex. 60 at 16:20-23 (2020 TR LANL-01169) (LANL Waters EUA was developed unilaterally by NMED in very short timeframe with no input or review from LANL)*]

b. Even though NMED filed the Petition initiating this Triennial Review in August 2020, NMED did not provide its Primary Contact EUA or its LANL Waters EUA to the parties until it filed written direct technical testimony on May 3, 2021, almost nine months after it filed its Petition and only two months before the Triennial Review hearing began. [*Fullam, Tr. at 973:2-12, 1316:19-22; DeRose-Bamman Rebuttal, Ex. SJWC 3 at 29-30; DeRose-Bamman, Tr. at 1208:18-19; Gallegos Rebuttal, LANL Ex. 59 at 27 n.4 (2020 TR LANL-01142)*]

c. NMED's Primary Contact EUA was not finalized until May 2021. [*Fullam, Tr. at 973:13-20*]

d. NMED had to modify its original proposal to upgrade the recreation designated use for the entirety of stream segment 20.6.4.103 NMAC because the finalized Primary Contact EUA did not support the upgrade because of a lack of water quality data. [*Compare Petition with Amended Petition (dividing stream segment 20.6.4.103 NMAC); Aranda, Tr. at 925:6-21, 984:8-985:1, 1057:17-1058:22*]

e. NMED rejected a public request for a copy of the draft Primary Contact EUA made by Ms. DeRose-Bamman in November 2020 on behalf of SJWC. [*DeRose-Bamman Direct, Ex. SJWC 2 at 22; DeRose-Bamman Rebuttal, Ex. SJWC 3 at 30; DeRose-Bamman, Tr. at 1210:10-19; Fullam, Tr. 974:1-975:5*] NMED also failed to share its LANL Waters EUA with

LANL before May 3, 2021, despite the fact it engaged with LANL on a workplan for the EUA. [*Gallegos, Tr. at 1109:23-1111:8*]

f. NMED did not provide the EUAs until the parties already had submitted written direct technical testimony, and its late disclosure adversely impacted the ability of other parties to adequately prepare for the Triennial Review hearing held in July 2021. [*DeRose-Bamman Rebuttal, Ex. SJWC 3 at 29 (SJWC forced to react on short notice; no time to review validity of analytical data NMED has relied on, much less present other data for consideration by the WQCC); DeRose-Bamman, Tr. at 1208:20-22, 1210:20-1211:14*]

g. Concerns about the data used in the EUAs (including the lack of evidence of primary contact use, which could have been provided by other parties) could have been resolved in advance of the Triennial Review hearing if there had been more stakeholder engagement. [*Gallegos, Tr. at 1111:6-11; DeRose-Bamman, Tr. at 1209:6-11*]

h. For reasons discussed below (in Topic 5(B)), we have determined that NMED's Primary Contact EUA is insufficient to support the proposed upgrades to the primary contact designated use.

i. Given our concerns about the contents of NMED's Primary Contact EUA, and the lack of a transparent process during the development of the Primary Contact and LANL Waters EUAs, we disagree with NMED's assertion that the general standards amendment process set forth in the WQMP/CPP, and followed in this Triennial Review, is sufficient. [*Fullam Rebuttal, NMED Ex. 109 at 11:21-12:9, 13:6-8, 22:14-22, 75:18-76:6; Fullam, Tr. at 969:21-970:6, 970:25-971:7*]

j. In fact, NMED testimony concerning its current process for developing an EUA was inconsistent. [*Meyerhoff, Tr. at 1088:8-1089:14; Gallegos, Tr. at 1108:21-1109:14*]

One NMED technical witness testified that "there are no regulations prescribing how a state determines existing uses." [*Aranda, Tr. at 929:3-4*]

k. NMED does not believe the framework it used for the Primary Contact EUA and the LANL Waters EUA is "actually required" or that NMED is obligated to have any framework for an EUA. [*Aranda Rebuttal, NMED Ex. 108 at 5:17-20 ("40 C.F.R. § 131.10(i) does not contain a formally named demonstration requirement, nor does it mandate the submittal of an evidence-based analysis explaining the basis of support for a more stringent designated use"; Fullam, Tr. at 972:2-15*]

l. However, NMED "recognize[s] the value of some general guidance when determining existing uses, as they pertain to water quality standards" and has indicated it would consider inclusion of such guidance in the WQMP/CPP. [*Fullam Rebuttal, NMED Ex. 109 at 13:8-11*]

m. NMED also agrees that water quality standards amendments "must be based on defensible data and done in a manner that provides opportunity for public engagement . . . ." [*Fullam Rebuttal, NMED Ex. 109 at 71:3-4*]

n. Finally, NMED agrees that the "functionality of the work plan [it prepared for its review of LANL waters before preparing the LANL Waters EUA] was to establish the regulatory mechanisms supporting such a proposal, demonstrate that there were no regulatory barriers to proceeding with such analysis, and to determine if there was sufficient defensible data to conduct an analysis to determine the existing use." [*Fullam Rebuttal, NMED Ex. 109 at 78:1-5*]

o. We believe the benefits of the workplan for the LANL Waters EUA would apply to all future existing use analyses.

p. Because of the lack of public involvement in the EUA process in this Triennial Review, the delay in providing the Primary Contact EUA to the parties, and our determination that NMED's Primary Contact EUA is flawed, we have determined that the framework and process for developing an EUA, including public participation requirements and the amount and type of data required for an EUA to provide sufficient "supporting evidence" of an existing use, should be defined in Section 20.6.4.10(B) NMAC or the WQMP/CPP.

q. LANL and SJWC support development of such an EUA framework and process, including stakeholder and public involvement in the development of the framework and process and final approval by the WQCC. [*Meyerhoff Direct, LANL Ex. 2 at 30:1-6 (2020 TR LANL-00052), 33:11-35:8 (2020 TR LANL-00055-00057) (proposing a five-step process to re-classify waters based on an EUA); Meyerhoff Rebuttal, LANL Ex. 58 at 2020 TR LANL-01084:19-23, 2020 TR LANL-01099:23-01101:16 (proposing process to evaluate existing uses and conduct EUA); Meyerhoff, Tr. at 1086:20-24, 1091:19-23, 1099:9-13; Gallegos Direct, LANL Ex. 3 at 34:23-27 (2020 TR LANL-00093), 35:6-10 (2020 TR LANL-00094), 37:23-26 (2020 TR LANL-00096); Gallegos Rebuttal, LANL Ex. 59 at 8:10-16 (2020 TR LANL-01123), 12:1-8 (2020 TR LANL-01127), 13:4-8 (2020 TR LANL-01128), 20:10-17 (2020 TR LANL-01135); Gallegos, Tr. at 1102:3-6; Dail Direct, LANL Ex. 5 at 17:13-18:2 (2020 TR LANL-00156-00157), 19:10-14 (2020 TR LANL-00158), 21:11-17 (2020 TR LANL-00160); Goering Rebuttal, LANL Ex. 60 at 16:26-27 (2020 TR LANL-01169), 17:15-23 (2020 TR LANL-01170); DeRose-Bamman Direct, Ex. SJWC 2 at 14-15 (amount and type of data required for EUA should be defined); DeRose-Bamman Rebuttal, Ex. SJWC 3 at 7, 9, 29-31; DeRose-Bamman, Tr. at 1202:22-1203:3, 1209:16-25*]

r. Development of an EUA framework and process is important because, once adopted, an existing use cannot be removed, existing water quality cannot be degraded, and any discharges must protect the existing use even if the existing use is no longer attainable. [*40 C.F.R. § 131.10(h), Ex. SJWC 2-I at 3 (existing use, once designated, cannot be removed), 20.6.4.15(A)(2) NMAC (same); 20.6.4.8(A)(1) NMAC (water quality must be maintained); Aranda, Tr. at 920:17-21, 921:1-5, 921:18-22; Dail, Tr. at 1070:1-2; Meyerhoff Direct, LANL Ex. 2 at 24:14-18 (2020 TR LANL-00046), 28:15-23 (2020 TR LANL-00050); Meyerhoff, Tr. at 1082:1-2, 1126:19-1127:9, 1132:20-1133:21, 1134:7-9*]

s. In fact, in a 2008 letter to the State of Oklahoma Water Resources Board (referred to by the parties as the "Smithee Letter"), the EPA warned it is critical to have a high degree of confidence when making an existing use determination, including evaluating appropriate available data and engaging the public in meaningful discussions regarding "getting uses right." [*NMED Ex. 62 (Smithee Letter) at 7; 2006 EPA Memorandum (Mar. 13, 2006), LANL Ex. 33 at 2 (important to have meaningful discussion with public regarding "getting uses right"); Meyerhoff Direct, LANL Ex. 2 at 24:14-18 (2020 TR LANL-00046), 25:21-26:8 (2020 TR LANL-00047-00048); Meyerhoff Rebuttal, LANL Ex. 58 at 2020 TR LANL-01089:1-18; Meyerhoff, Tr. at 1081:17-25, 1127:12-16; Gallegos Direct, LANL Ex. 3 at 36:5-10 (2020 TR LANL-00095); DeRose-Bamman Rebuttal, Ex. SJWC 3 at 28*]

t. We conclude that defining the elements of, and procedure for developing, an EUA will ensure that future WQCC existing use decisions are consistent and based on a comprehensive analysis of all appropriate existing data. The framework should identify the amount and type of evidence required for an EUA. [*DeRose-Bamman Rebuttal, Ex. SJWC 3 at 9-10; DeRose-Bamman, Tr. at 1209:21-25; Gallegos Direct, LANL Ex. 3 at 36:15-23 (2020 TR*

LANL-00095) (NMED proposal for 20.6.4.10(B) NMAC may create significant regulatory uncertainty and lead to disparate results across the state), 41:24-42:3 (2020 TR LANL-00101) (development of procedural framework will provide consistency in decision-making and ensure required new information is properly developed to support decision-making); Dail Direct, LANL Ex. 5 at 17:13-18:2 (2020 TR LANL-00156-00057)]

u. LANL has proposed a five-step process for evaluating existing uses and preparing an EUA. [*Meyerhoff Direct, LANL Ex. 2 at 33:11-35:8 (2020 TR LANL-00055-00057); Meyerhoff Rebuttal, LANL Ex. 58 at 2020 TR LANL-01099:17-01101:16*] LANL's proposal provides a foundation for the crafting of an EUA process and framework.

v. The EUA procedure should undergo a thorough vetting process, including stakeholder and public input, and final approval by the WQCC. [*Meyerhoff Direct, LANL Ex. 2 at 34:12-15 (2020 TR LANL-00056); Gallegos Direct, LANL Ex. 3 at 34:23-35:3 (2020 TR LANL-00093-00094), 37:19-22 (2020 TR LANL-00096); Meyerhoff, Tr. at 1091:15-1092:8*]

w. For these reasons, we instruct NMED to work with stakeholders to develop a process and framework for future EUAs to be incorporated into the SWQS or the WAMP/CPP. The proposal shall include a public process for conducting an EUA and describe the amount and type of evidence required. The proposal shall be submitted to the WQCC for final approval in the appropriate public hearing process.

B. Proposed Upgrade of the Recreation Designated Use of Five Stream Segments from Secondary to Primary Contact: 20.6.4.103/112, 116, 204, 207, and 206/231 NMAC

NMED proposes to upgrade the recreation designated use for five stream segments from secondary contact to primary contact based on its Primary Contact EUA. SJWC opposes the proposed designated use changes because the Primary Contact EUA ignores applicable federal regulations and EPA guidance, as well as the State's definition of "primary contact," and provides

no factual evidence of primary contact use. Thus, NMED has failed to provide sufficient and credible legal and evidentiary support for its proposal.

Although the stream segments at issue are not located in San Juan County, this matter is of significant concern to SJWC because each action taken by the WQCC establishes a precedent for future proceedings. For example, in the future, NMED may conduct EUAs for waters in the San Juan River Basin and petition the WQCC to designate or modify designated uses based on those EUAs. It therefore is imperative to ensure that NMED's EUAs, and the WQCC's decisions based on those analyses, comport with applicable federal and state regulations and EPA guidance. SJWC objects to NMED's proposal to upgrade the recreation designated use for these stream segments, as it did during the 2015 Triennial Review, because NMED has failed to provide any evidence that primary contact activities, such as swimming, are occurring or even possible in these stream segments.

During the last Triennial Review, the WQCC rejected NMED's petition to upgrade the recreation designated use for these five stream segments because of the lack of evidence (such as photos) of primary contact use. Rather than visit these stream segments and collect evidence that primary contact use is (or is not) occurring in these segments, NMED now contends, for the first time, that an existing use can be established solely through evidence of compliance with assigned water quality criteria just once since 1975 (in this case, pH and *E. coli* criteria specified in 20.6.4.900 NMAC). The WQCC should reject NMED's approach as an improper end-run around the definition of "primary contact." The definition of "primary contact" as a use "involving considerable risk of ingesting water in quantities sufficient to pose a significant health hazard" does not indicate that the use is established by water quality. 20.6.4.7(P)(5) NMAC.

In addition, when analyzing existing uses, EPA expects the State to look at all available data and information concerning both water quality and actual use. NMED has not done so, and it has provided no reasonable excuse for its failure to do so. EPA guidance does indicate that, in limited circumstances, the WQCC has discretion to establish an existing use based on water quality alone. However, NMED has not made the required showings that evidence of actual use is unavailable and that physical conditions in these stream segments do not prevent primary contact use. Nor has NMED complied with the requirement that an existing use analysis be based on "new" information. Instead, NMED relies solely on years-old water quality data.

Finally, as explained above in Topic 5(A), the EUA process used by NMED during this Triennial Review has been unfair to the parties and the public. NMED did not involve the public or stakeholders in the development of the Primary Contact EUA. NMED did not share a copy of the draft EUA when it was requested by SJWC's technical witness, Ms. DeRose-Bamman. NMED did not provide a copy of the Primary Contact EUA with its Petition or its Amended Petition. Instead, NMED waited until May 2021 to provide the Primary Contact EUA to the other parties—only two months before the Triennial Review hearing commenced. That was the same day the other parties were required to file written technical testimony concerning NMED's proposal. For this reason alone, the WQCC should retain the secondary contact designated use for these stream segments until evidence of actual or attainable primary contact recreation use by humans is presented through a publicly vetted and WQCC-approved EUA process.

To conclude, SJWC agrees that existing uses must be protected. SJWC does not object to the assignment of the primary contact designated use to stream segments where appropriate data and other information shows it is an existing use. However, SJWC does not believe that old water quality data showing that the stream segments at issue have met the currently existing numeric

criteria for pH and *E. coli* on one occasion since 1975 is sufficient evidence that primary contact recreation is an existing use. The WQCC also should require evidence that primary contact recreation is occurring. If access is difficult, hazards (such as dam releases) exist, legal access is restricted, or water flow is insufficient to allow immersion, then the primary contact designated use should be rejected. EPA guidance indicates the WQCC has that discretion. During the last Triennial Review, the WQCC indicated that evidence on these issues is required—or at least is relevant information that must be considered. In this Triennial Review, NMED chose to ignore the WQCC's instruction.

EPA leaves it to the WQCC to use its "reasonable" or "best professional" judgment, considering both evidence of actual use and water quality sufficient to support the use, to determine whether primary contact recreation is an existing use in the stream segments at issue.

The following reasons support a WQCC decision to reject NMED's proposal to upgrade the recreation designated use for five stream segments to primary contact.

1. *NMED's Primary Contact Proposal*

a. In its original Petition filed August 19, 2020, NMED proposed to upgrade the recreation designated use of four stream segments (20.6.4.103, 116, 204 and 207 NMAC) from the secondary contact to the primary contact recreation designated use. NMED also proposed to upgrade the recreation use for select tributaries in segment 20.6.4.206 NMAC and move them to a new stream segment, 20.6.4.231 NMAC. [*Petition; Statement of Reasons at 3 (¶ 19), 4 (¶ 25), 24, 27, 33, 37; Aranda, Tr. at 918:19-919:2*]

b. In its Amended Petition filed March 12, 2021, NMED altered its proposal to assign the primary contact designated use to all of stream segment 20.6.4.103 NMAC. Instead, it proposed assigning primary contact only to certain tributaries and to move those tributaries from

stream segment 20.6.4.103 NMAC to a new stream segment, 20.6.4.112 NMAC. [*Amended Petition at 3 (¶¶ 23, 26); Aranda Direct, NMED Ex. 3 at 14:1-8*]

c. NMED's proposal is based on its conclusion that the select stream segments "have been demonstrated to have an existing use of primary contact" based on the findings of its Primary Contact EUA. [*Amended Petition Summary (¶¶ 23, 26); NMED Ex. 56; Aranda Direct, NMED Ex. 3 at 6:2-6; Aranda Rebuttal, NMED Ex. 108 at 4:19-21, 5:8-11, 5:15-17 (NMED submitted Primary Contact EUA to support proposed amendments); Aranda, Tr. at 919:5-18*]

d. The Primary Contact EUA relies primarily on old water quality data already available during one or more past Triennial Reviews. It provides no evidence that primary contact use is occurring in any of these stream segments—only that, at least once since November 28, 1975, the stream segments' water quality met the criteria established for the primary contact recreation designated use. [*DeRose-Bamman Rebuttal, Ex. SJWC 3 at 20; Meyerhoff Rebuttal, LANL Ex. 58 at 2020 TR LANL-01095:1-27, 2020 TR LANL-01100:14-16 (Primary Contact EUA relies on water quality data and indicates existing use can be determined from a single sample; NMED's sole focus is on limited water quality data to evaluate existing uses)*]

e. According to NMED, the Primary Contact EUA is based solely on water quality data because federal regulations do not specify any methodology. [*Aranda, Tr. at 993:24-994:6, 994:14-18*]

2. *The WQCC Rejected NMED's Proposal to Upgrade the Same Stream Segments During the 2014 Triennial Review Because of a Lack of Evidence of Primary Contact Use.*

a. During the last Triennial Review (Hearing No. WQCC 14-05(R)), NMED proposed that the same stream segments and several others "be upgrade[d] . . . from secondary to primary contact recreation uses and criteria. However, the [WQCC] . . . decided to reject

[NMED's] proposed changes and instead adopt the arguments raised by [SJWC] in opposition to [NMED's] proposed changes, and retain secondary contact for the . . . segments." [*Statement of Reasons and Final Order in No. WQCC 14-05(R) (Jan. 10, 2017) ("Final Order"), Ex. SJWC 2-M at 36, 40 (¶¶ 92, 100); Aranda Direct, NMED Ex. 3 at 6:14-21; Meyerhoff Rebuttal, LANL Ex. 58 at 2020 TR LANL-01089:21-01090:2*]

b. During that Triennial Review, SJWC objected to NMED's proposal to upgrade these stream segments on several grounds, including the ground that NMED failed to provide any credible scientific data or other evidence appropriate under the Water Quality Act supporting the proposal to upgrade them from the secondary contact designated use to the primary contact designated use because NMED's proposal relied on vague and anecdotal evidence of primary contact use. [*DeRose-Bamman Rebuttal, Ex. SJWC 3 at 12-15; Rebuttal Technical Testimony of Charles L. Nylander (Hearing No. WQCC 14-05(R)) (Feb. 13, 2015) ("Nylander Rebuttal"), Ex. SJWC 3-F at 25-28; Transcript of Proceedings (Hearing No. WQCC 14-05(R)) (Oct. 15, 2015) ("Hearing Trans.) at 467:12-468:4, 511:6-15, 513:3-16, 525:16-526:5, 558:7-560:4, 581:22-582:24 (NMED provided only "scant" anecdotal evidence of primary contact use; a guess that people can swim in the water is not enough; documented observations are needed); DeRose-Bamman, Tr. at 1204:7-10 (during last Triennial Review, NMED provided only anecdotal evidence that swimming might occur and anecdotal evidence of secondary contact uses)*]

c. NMED had asserted there was "new information" indicating "that primary contact uses and criteria may exist or be attainable" in these stream segments. That "new information" was provided in oral testimony and an undated staff memo titled *Review of Clean Water Act ("CWA") §101(a) Uses–Contact Recreation Uses for Selected Segments* ("Dail Memo"), which was prepared to rebut SJWC's contention that NMED had provided no evidence

of primary contact use. [*Dail Memo, Ex. SJWC 3-C at 3; Rebuttal Testimony of James Hogan (Hearing No. WQCC 14-05(R)) ("Hogan Rebuttal"), Ex. SJWC 3-D at 11-22:268 to 12-22:276; Hearing Trans. (Oct. 13, 2015), Ex. SJWC 3-E at 81:23-82:9 (Pintado and Lemon), 92:9-12 (Lemon)*]

d. NMED witnesses Dr. Hogan (in written rebuttal testimony) and Shelly Lemon, Kristine Pintado and Dr. Dail (in oral hearing testimony) relied on the Dail Memo as evidence of existing primary contact use in the five stream segments again at issue in this Triennial Review. [*Hogan Rebuttal, Ex. SJWC 3-D at 11-22:268 to 13-22:306; Hearing Trans. (Oct. 13, 2015), Ex. SJWC 3-E at 80:20-83:8, 92:9-12 (Pintado, Lemon, Dail)*]

e. The information concerning alleged primary contact use contained in the Dail Memo was anecdotal. For example, there was reference to a website indicating swimming was "at your own risk" in stream segment 20.6.4.103 NMAC, and there were assertions that primary contact recreation had been observed on some stream segments by NMED staff or staff from the Department of Game & Fish. However, NMED provided no documentation or testimony describing what was observed, when, and by whom. Nor did NMED provide information from the referenced websites. [*Dail Memo (Table 1), Ex. SJWC 3-C at 3-6; DeRose-Bamman Rebuttal, Ex. SJWC 3 at 13-14; Hogan Rebuttal, Ex. SJWC 3-D at 12-22:283-286, 12-22:286-290 & n.3, 13-22:295-301*]

f. In the 2014 Triennial Review, SJWC presented expert evidence that NMED failed to provide any credible scientific data or other appropriate evidence showing that primary contact recreation use was occurring in these stream segments. In particular, SJWC's expert witness, Charles Nylander, testified that accessibility of a waterbody does not mean that primary contact recreation is an existing use, the secondary contact designated use is appropriate where

swimming or other primary contact recreation is at the public's own risk, fishing and boating are secondary contact uses, and NMED failed to provide evidence of the alleged primary contact activities described in the Dail Memo. [*DeRose-Bamman Rebuttal, Ex. SJWC 3 at 15; Nylander Rebuttal, Ex. SJWC 3-F at 24-31; Hearing Trans. (Oct. 15, 2015), Ex. SJWC 3-G at 467:12-468:4, 511:6-15, 513:3-5, 10-16, 525:16-526:5, 558:13-24, 559:7-560:4, 581:22-582:24*]

g. The WQCC adopted SJWC's reasoning. As explained in the Primary Contact EUA submitted for the current Triennial Review,

> On January 10, 2017, the WQCC provided its final order towards the petition to amend designated secondary contact use to primary contact which stated: 'The upgrade from secondary contact to primary contact suggested by the Department in Sections 20.6.4.103, .116, .124, .204, .206, .207, .213, .219, and .308 is rejected by the Commission. <u>The Commission instead accepts the reasoning proposed by the San Juan Water Commission to maintain secondary contact for the nine enumerated segments.</u>' (WQCC 2017).

[*NMED Ex. 56 at 10 (emphasis added); Final Order, Ex. SJWC 2-M at 40 (same; NMED did not present sufficient technical information to support the upgrades)*]

h. In support of its decision to retain the secondary contact recreation designated use for these stream segments, the WQCC further held:

> The Department has not presented sufficient technical information to support its proposal to upgrade the . . . segments to primary contact. <u>Adopting more stringent water quality standards absent information and data proving use is attainable is unadvised.</u> Federal regulations require <u>new and substantive information</u> to upgrade a designated use, which the Department has failed to provide. Upgrading the . . . segments to primary contact would burden the State of New Mexico with unwarranted transactional costs. Maintaining secondary contact for the . . . segments is in compliance with CWA Section 101(a)(2). Therefore, the . . . segments will retain their secondary contact use designations. Based on the weight of the evidence, the Commission finds San Juan Water Commission's proposal to maintain secondary contact uses in certain segments is well taken, and therefore accepted.

[*DeRose-Bamman Direct, Ex. SJWC 2 at 23 (emphasis added); Final Order, Ex. SJWC 2-M at 40-41, ¶¶ 101-105 (paragraph numbering and internal citations omitted); Meyerhoff Rebuttal, LANL Ex. 58 at 2020 TR LANL-01089:21-01090:2*]

i. During the 2014 Triennial Review, NMED never asserted that water quality data supported its petition. More significantly, NMED never asserted that water quality data alone can establish that primary contact recreation is an existing use. In fact, NMED provided no water quality data at all. Instead, NMED focused on activities of the type identified in the definition of "primary contact":

> Finally, and most importantly, as shown in Table 1, NMED found significant information to indicate that primary contact recreation as defined in Subparagraph 20.6.4.7.P (5) NMAC may be an existing use for water bodies in most of these segments and is likely an attainable use. Of particular note is documentation of boating access and recreation. Based on NMED's experience where boating occurs primary contact recreations *[sic]* is almost always an existing use and is almost certainly an attainable use. To collect this information, NMED reviewed surface water quality monitoring data records, conducted website reviews, and consulted with NMED permits staff. NMED also reviewed field observations with NMED monitoring staff and with the New Mexico Department of Game and Fish. Therefore, the consideration to assign primary contact use and criteria to the nine segments is appropriate in context of the information on recreation contact uses in these segments and the new EPA guidance on criteria.

[*Dail Memo, Ex. SJWC 3-C at 3*]

j. A review of the 2015 Triennial Review record shows that the WQCC did not request water quality data but rather requested evidence that primary contact recreation was actually occurring. [*DeRose-Bamman, Tr. at 1204:2-16*] The issue of water quality was never addressed in the context of proving the primary contact recreation use. [*Aranda, Tr. at 979:4-8 (NMED did not present any water quality data during the last Triennial Review); DeRose-Bamman*

Rebuttal, Ex. SJWC 3 at 12-16; Dail Memo, Ex. SJWC 3-C at 306; Hogan Rebuttal, Ex. SJWC 3-D at 11-22:268 to 13-22:306; Hearing Trans. (Oct. 13, 2015), Ex. SJWC 3-E at 80:20-83:8, 92:9-12 (Pintado, Lemon, Dail); DeRose-Bamman, Tr. at 1204:16-18] Clearly, the WQCC never suggested that water quality data alone can prove that primary contact recreation is an existing use.

k. NMED witness Diana Aranda assisted in preparing the Primary Contact EUA and was the only NMED witness who provided written and oral testimony concerning the EUA. [*Aranda, Tr. at 977:17-20*]

l. Ms. Aranda testified that NMED concluded that, for this Triennial Review, the WQCC requested only "quantitative data" (water quality data) to prove the recreation designated use, rather than any "qualitative data" (proof of primary contact use), because the WQCC found the "qualitative data" presented by NMED to be insufficient during the last Triennial Review. [*Aranda, Tr. at 935:4-7*] Further, no evidence of primary contact use was collected because "40 C.F.R. § 131.10(i) does not contain a formally named demonstration requirement, nor does it mandate the submittal of an evidence-based analysis explaining the basis of support for a more stringent designated use." *[Aranda Rebuttal, NMED Ex. 108 at 5:17-20]* Ms. Aranda was not employed by NMED during the last Triennial Review. [*Aranda, Tr. at 978:7-10*]

m. We disagree with NMED's conclusion that the WQCC requires only water quality data, to the exclusion of evidence of use, to support an existing use determination.

3. *NMED's EUA Process Was Unfair to the Public and the Parties.*

a. On January 10, 2017, the WQCC entered its Final Order in the last Triennial Review, which rejected NMED's proposal to upgrade these stream segments from the secondary contract to the primary contact recreation use. [*Final Order, Ex. SJWC 2-M at 36, 40 (¶¶ 92, 100);*

Aranda Direct, NMED Ex. 3 at 6:14-21; Meyerhoff Rebuttal, LANL Ex. 58 at 2020 TR LANL-01089:21-01090:2]

b. NMED has worked on the Primary Contact EUA for this Triennial Review for "a year-and-a-half or two years." [*Aranda, Tr. at 981:14-17*]

c. In the Statement of Reasons for its original Petition, which initiated this Triennial Review, NMED stated that the proposed designated use upgrades to the primary contract recreational use are "demonstrated through an existing use analysis." [*Statement of Reasons, ¶¶ 19, 25*] However, the Primary Contact EUA was not completed at the time the Petition was filed on August 19, 2020. In fact, it was not completed until it was submitted with NMED's written direct testimony on May 3, 2021. [*Fullam, Tr. at 973:14-20; Aranda, Tr. at 984:4-7*]

d. NMED had to modify its original proposal to upgrade the recreation designated use for the entirety of stream segment 20.6.4.103 because the finalized Primary Contact EUA did not support the upgrade because of a lack of water quality data. [*Aranda, Tr. at 925:6-21, 984:8-985:1, 1057:14-1058:22*]

e. In January 2021, NMED sent an e-mail to potentially affected permittees notifying them of the proposed recreation designated use amendment. [*Aranda, Tr. at 924:5-16; NMED Ex. 58*] A review of that e-mail indicates that NMED did not send a copy of the draft Primary Contact EUA to those permittees. [*NMED Ex. 58; Aranda Direct, NMED Ex. 3 at 10:12-14; DeRose-Bamman Rebuttal, Ex. SJWC 3 at 30*]

f. NMED did not provide its Primary Contact EUA to the parties until it filed written direct technical testimony on May 3, 2021, almost nine months after it filed its Petition and only two months before the Triennial Review hearing began. [*Fullam, Tr. at 972:24-973:12; DeRose-Bamman Rebuttal, Ex. SJWC 3 at 29-30; DeRose-Bamman, Tr. at 1208:16-19*]

g. NMED rejected a public request for a copy of the draft Primary Contact EUA made by Ms. DeRose-Bamman in November 2020 on behalf of SJWC. [*DeRose-Bamman Direct, Ex. SJWC 2 at 22; DeRose-Bamman Rebuttal, Ex. SJWC 3 at 30; DeRose-Bamman, Tr. at 1210:10-19; Fullam, Tr. 974:1-975:5*]

h. NMED's late disclosure adversely impacted the ability of other parties to adequately prepare for the Triennial Review hearing held in July 2021. NMED did not provide the Primary Contact EUA until the parties already had submitted written direct technical testimony. [*DeRose-Bamman Rebuttal, Ex. SJWC 3 at 29 (SJWC forced to react on short notice; no time to review validity of analytical data NMED has relied on, much less present other data for consideration by the WQCC); DeRose-Bamman, Tr. at 1208:20-22, 1210:20-1211:14; Meyerhoff Direct, LANL Ex. 2 at 25:8-16 (2020 TR LANL-00047) (timing of disclosure of LANL Waters EUA meant appropriateness of proposal could not be evaluated and addressed in written direct testimony)*]

i. Generally, NMED tries to obtain information concerning site-specific conditions from the public before finalizing an EUA. [*Fullam, Tr. at 966:11-14*] There is no evidence that it attempted to obtain such information for the Primary Contact EUA.

j. We concur with SJWC's position that NMED's Primary Contact EUA process was unfair and disadvantaged the other parties. Concerns about NMED's approach to the EUA (specifically, the lack of evidence of primary contact use) could have been resolved in advance of the Triennial Review hearing if there had been more stakeholder engagement. [*Gallegos, Tr. at 1111:9-11 (regarding LANL Waters EUA); DeRose-Bamman, Tr. at 1209:6-11*]

4. *Historically, the WQCC Has Required Proof of Actual Primary Contact Use.*

a. Historically, the WQCC has relied on evidence of actual use, such as photographs of someone swimming in the water, rather than water quality data when upgrading the recreation designated use. [*DeRose-Bamman, Tr. at 1204:23-25*] For example, in the 2005 Triennial, the WQCC upgraded the recreational use for the Gallinas River near Montezuma Hot Springs based on photographs of swimming provided by AB:

> During the 2005 Triennial Review, Amigos Bravos provided evidence to the Commission and NMED of current and historic swimming in the Gallinas River near the Montezuma Hot Springs outside Las Vegas through photographs. Based on this evidence, NMED proposed to upgrade the recreational use in this segment of the river from secondary to primary contact in its proposed amendments. The Commission adopted NMED's proposal, referencing Amigos Bravos' evidence as a reason for upgrading the designated use in its final Statement of Reasons for the 2005 Triennial Review.

[*Conn Direct, AB Ex. 3 at 14; Fullam Rebuttal, NMED Ex. 109 at 17:22-18:2*]

b. Similarly, the WQCC has relied on evidence concerning recreational use rather than water quality when designating a recreation use in the first instance. For example, waters within 20.6.4.126 NMAC and 20.6.4.128 NMAC became classified waters in 2005. [*Meyerhoff Direct, LANL Ex. 2 at 8:7-9, 8:23-9:8 (2020 TR LANL-00030 to -00031)*] At that time, the WQCC assigned the secondary contact recreation use to those stream segments, finding that "secondary contact is the appropriate subcategory of recreation because full-body contact in these small streams is unlikely and infrequent, and if it does occur the proposed criteria offer a proper level of protection." [*Meyerhoff Direct, LANL Ex. 2 at 13:22-23, 33-36, 14:8-9, 20-23 (2020 TR LANL-00035-00036)*] EPA took no action on the WQCC's secondary contact use designations, indicating that a UAA was required to support the designations. [*Meyerhoff Direct, LANL Ex. 2 at 15:1-16:11 (2020 TR LANL-00037-00038)*]

In response to EPA, NMED submitted a UAA stating:

> Hydrologic modifications do not currently affect recreational opportunities, and water quality likely supports both secondary and primary contact activities. Nevertheless, primary contact is not an attainable use because flows and water levels are generally too low for full body immersion or prolonged and intimate contact with the water. This is the factor identified in 40 CFR 131.10(g)(2): 'Natural, ephemeral, intermittent or low flow conditions or water levels prevent the attainment of the use . . .' Hazardous high-flow conditions and restricted access also limit the feasibility of primary contact recreation.

[*Meyerhoff Direct, LANL Ex. 2 at 16:13-28 (2020 TR LANL-00038) (emphasis added); Meyerhoff Rebuttal, LANL Ex. 58 at 2020 TR LANL-01091:8-24*] Based on these findings, EPA approved the classification of stream segments 126 and 128 and the secondary contact designated use. [*Meyerhoff Direct, LANL Ex. 2 at 17:5-21 (2020 TR LANL-00039)*]

c. There is no evidence in the record that the WQCC ever has approved upgrading a designated use, or making an existing use determination, based solely on water quality data.

5. *NMED's Primary Contact EUA Provides No Evidence of Primary Contact Recreation Use and Improperly Relies Solely on Pre-Existing Evidence of Water Quality Sufficient to Protect the Use.*

a. By regulation, EPA has defined "existing uses" as "those uses actually attained in the waterbody on or after November 28, 1975, whether or not they are included in the water quality standards." [*40 C.F.R. § 131.3(e), NMED Ex. 26 at 1*] In all pertinent respects, the definition of "existing use" in the SWQS mirrors the federal regulation: "'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." [*20.6.4.7(E)(3) NMAC; DeRose-Bamman Direct, Ex. SJWC 3 at 5*]

b. The 2008 EPA Smithee Letter instructs that an existing use analysis should be conducted on a site-specific basis: "A state or tribe should determine existing uses on a site-

specific basis to ensure it has identified the highest degree of uses and water quality necessary to support the uses that have been achieved since November 28, 1975." [*NMED Ex. 62 at 5 (emphasis added); DeRose-Bamman Rebuttal, Ex. SJWC 3 at 25-26; DeRose-Bamman, Tr. at 1206:7-9; Meyerhoff Direct, LANL Ex. 2 at 29:13-30:2 (2020 TR LANL-00051-00052); Meyerhoff, Tr. at 1087:4-5, 1128:9-12*]

c. Nevertheless, NMED elected to base the Primary Contact EUA solely on water quality data, arguing that federal regulations do not specify any methodology. [Aranda, Tr. at 993:24-994:6, 994:14-18; *Aranda Rebuttal, NMED Ex. 108 at 5:17-20*]

6. *The Primary Contact EUA Does Not Provide Evidence of Primary Contact Use.*

a. The WQCC has adopted a definition of "primary contact" requiring proof of swimming or other activities "involving considerable risk of ingesting water in quantities sufficient to pose a significant health hazard":

> **"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.

[*20.6.4.7(P)(5) NMAC; DeRose-Bamman Rebuttal, Ex. SJWC 3 at 11; DeRose-Bamman, Tr. at 1205:7-13*]

b. Other than quoting the definition of "primary contact," the Primary Contact EUA essentially ignores the issue of actual human use of these five stream segments involving "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." [*NMED Ex. 56 at 9*] Instead, the Primary Contact EUA refers, in one short paragraph,

to the anecdotal "evidence of these uses" NMED provided during the last Triennial Review and states NMED does not collect information on recreational use:

> [NMED] does not monitor or gather information on recreational use demonstrating full immersion, such as swimming and wading. However, visitor brochures and recreational websites encourage popular recreational activities, such as swimming, kayaking and wading, in waters related to the five classified segments evaluated as part of this EUA. Several sections, including the Rio Grande between Elephant Butte and Caballo Reservoirs, the Rio Chama between Abiquiu Reservoir and the Rio Grande, and the Rio Ojo Caliente, are noted in guides to river rafting in New Mexico. Furthermore, as stated in direct written testimony of [NMED], entered into the pleadings log as part of the last triennial review (WQCC Docket 14-05(R)), evidence of these uses has not only been encouraged, but also has been recorded.

[*NMED Ex. 56 at 23; Meyerhoff Rebuttal, LANL Ex. 58 at 2020 TR LANL-01093:11-01094:8*]

c. We note that wading, kayaking and river rafting are secondary contact uses.

[*20.6.4.7(S)(1) NMAC (wading and boating)*]

7. *<u>The Primary Contact EUA Is Not Based on "New" Information.</u>*

a. 40 C.F.R. section 131.20(a) requires that, during this Triennial Review, the WQCC evaluate "<u>any</u> new information [that] <u>has become available</u>" since the last Triennial Review about waters where section 101(a)(2) uses are not adopted:

> (a) *State review*. The State shall from time to time, but at least once every 3 years, hold public hearings for the purpose of reviewing applicable water quality standards adopted pursuant to §§ 131.10 through 131.15 and Federally promulgated water quality standards and, as appropriate, modifying and adopting standards. The State shall also re-examine any waterbody segment with water quality standards that do not include the uses specified in section 101(a)(2) of the Act every 3 years to determine <u>if any new information has become available.</u> If such <u>new information</u> indicates that the uses specified in section 101(a)(2) of the Act are attainable, the State shall revise its standards accordingly. Procedures States establish for identifying and reviewing water bodies for review should be incorporated into their Continuing Planning Process . . . .

[*NMED Ex. 21 (emphasis added); DeRose-Bamman Rebuttal, Ex. SJWC 3 at 19*]

b. As stated by NMED, a designated use must be "re-evaluated if new information becomes available." [*Fullam Rebuttal, NMED Ex. 109 at 18:21-23*]

c. NMED has explained that "[e]ach existing use determination is dependent on the available information and the site-specific conditions occurring at a particular point in time" and "[d]esignated uses may be amended if new information determines that the existing use has changed (the water quality is attaining more stringent criteria) . . . ." [*Fullam Rebuttal, NMED Ex. 109 at 22:7-8, 23:16-19*]

d. Despite recognizing that "[e]ach existing use determination is dependent on the available information and the site-specific conditions occurring at a particular point in time" and "[d]esignated uses may be amended if new information determines that the existing use has changed (the water quality is attaining more stringent criteria)," NMED chose to base its Primary Contact EUA on pH and *E. coli* water quality data "that it had at hand" (from as far back as 2004). NMED apparently made this choice because "[a]ny other proposal would need additional resources, money and methodologies to meet a need that [NMED was] able to fulfill simply by using the vetted water quality data." [*Fullam Rebuttal, NMED Ex. 109 at 22:7-8, 23:16-19*; *Aranda, Tr. at 932:8-17, 932:22-23, 985:14-986:16, 988:1-18; NMED Ex. 56*]

e. NMED's conclusion that the EUA supports the proposed designated use upgrades to primary contact is based solely on pH and *E. coli* data sets from as far back as 2004. [*Aranda, Tr. at 985:23-986:1; Meyerhoff Rebuttal, LANL Ex. 58 at 2020 TR LANL-01083:17-20*] Because the data sets show each stream segment attained the pH and *E. coli* criteria for primary contact recreational use at least once, NMED concluded that primary contact is an existing use for these stream segments. [*Aranda Direct, NMED Ex. 3 at 12:1-9, 13:14-16; Aranda, Tr. at 925:22-*

926:21, 986:3-10; Meyerhoff Rebuttal, LANL Ex. 58 at 2020 TR LANL-01084:14-16; NMED Ex. 56]

f. The *E. coli* and pH data NMED relies on is archived data collected before the Primary Contact EUA process began, and most of it is not recent. That data is summarized in Appendix B of the EUA. [*Meyerhoff, Tr. at 1130:14-22; Aranda Direct, NMED Ex. 3 at 11:5-12; NMED Ex. 56 at 38-48; DeRose-Bamman Rebuttal, Ex. SJWC 3 at 23-24*] The data summarized in Appendix B was collected between 2004 and 2019, and only a small percentage of that data was collected after the last Triennial Review was initiated in 2014.

Segment	Number of Results in Appendix B	Number of complete *E. coli* and pH sets	Number collected in 2019	Number Collected in 2014	Number collected prior to 2014
103	69	60	10	14	36
116	36	35	0	0	36
204	9	6	0	0	6
206	66	57	0	0	57
207	46	40	2	0	38
TOTAL	226	198	12	14	173

As shown in this table, of the 198 complete sets of data provided by NMED, only 12 (or about 6 percent) were collected after the last Triennial Review concluded and can be considered "new information" that has "become available." No new data is provided for stream segments 116 (most recent data was collected in 2012), 204 (most recent data was collected in 2013) or 206 (most recent data was collected in 2013). [*DeRose-Bamman Rebuttal, Ex. SJWC 3 at 23-24*]

g. NMED considers "new information" to be information that "the Department, the Commission and the public have not seen before." [*Aranda, Tr. at 922:13-15*] Because the water quality data supporting the Primary Contact EUA was not considered in the last

Triennial Review, NMED considers it to be "new" data. [*Aranda, Tr. at 935:9-12; Fullam, Tr. at 967:4-16 (new information is information that "has not been evaluated before" by NMED)*]

h. SJWC's technical witness asserts that the 40 C.F.R. § 131.20(a) requirement that new information "has become available" means information that has become available since the last existing use decision was made and not old water quality data that was available during the last Triennial Review. [*DeRose-Bamman Rebuttal, Ex. SJWC 3 at 19-20, 24, 32; DeRose-Bamman, Tr. at 1214:10-22*]

i. We agree with SJWC, given that an EUA should evaluate "site-specific conditions occurring at a particular point in time" and determine whether "the existing use has changed," as explained by Ms. Fullam. [*Fullam Rebuttal, NMED Ex. 109 at 22:7-8, 23:16-19; 40 C.F.R. § 131(20)(a)*]

j. The five stream segments covered by the Primary Contact EUA have been designated as secondary contact recreation waters since 1988. [*Dail Memo, Ex. SJWC 3-C at 3-5 (Table 1)*] There is no evidence that these stream segments failed to meet the criteria for primary contact when they were designated as secondary contact in 1988. [*DeRose-Bamman, Tr. at 1215:19-1216:2 (NMED has provided no evidence concerning water quality existing at time WQCC originally assigned secondary contact designated use; it is possible water quality actually met primary contact criteria at that time)*] There is no evidence that the water quality in these stream segments has improved from secondary contact criteria to primary contact criteria since the secondary contact designated use was originally assigned. [*DeRose-Bamman, Tr. at 1216:10-15; Aranda, Tr. at 987:1-988:4*] Nor is there evidence that the WQCC assigned the secondary contact use at that time based on water quality data rather than evidence of secondary contact use. [*DeRose-Bamman, Tr. at 1207:16-18*]

k. It is quite possible that these stream segments met the primary contact criteria at the time the WQCC assigned them the secondary contact use. If that is the case, then there is no evidence that anything has changed. [*DeRose-Bamman Rebuttal, Ex. SJWC 3 at 20, 24*]

l. NMED has provided limited "new" water quality data (collected since the last Triennial Review) for stream segments 20.6.4.103 NMAC and 20.6.4.207 NMAC—and none for stream segments 20.6.4.116, 204 and 206 NMAC. [*DeRose-Bamman Rebuttal, Ex. SJWC 3 at 23-24]*

m. We reject NMED's contention that reviewing old water quality data and presenting it to the WQCC for the first time during this Triennial Review meets the federal requirement of "new" evidence that has "become available" since the last Triennial Review. [*40 C.F.R. § 131.20(a), NMED Ex. 21; DeRose-Bamman, Tr. at 1207:8-15 (reviewing old water quality data and choosing to present it to the WQCC for the first time does not meet the federal requirement of new evidence)*]

n. Most of the water quality data presented by NMED was collected before the 2014 Triennial Review hearing took place in 2015 and was available to NMED during that Triennial. According to technical testimony presented by SJWC, of the 198 data sets used by NMED, only 12 were collected after the last Triennial Review hearing. The "new" data sets only relate to stream segments 103 and 207. [*DeRose-Bamman Rebuttal, Ex. SJWC 3 at 23-24*] Thus, even assuming water quality data alone is sufficient evidence to support an upgrade to primary contact, there is no new data for three of the five stream segments.

o. For these reasons, we find NMED has failed to provide any new information showing that the "existing use has changed" since the last Triennial Review. [*40 C.F.R. § 131.20(a), NMED Ex. 21; Fullam Rebuttal, NMED Ex. 109 at 18:21-23, 22:7-8, 23:16-19*]

8. *NMED's EUA Does Not Conform with EPA Guidance on Existing Uses Because It Is Not Based on Site-Specific Conditions.*

a. NMED agrees that an EUA should be based on site-specific conditions and that EPA guidance in the Smithee Letter "outlines the various ways in which an existing use should be evaluated and determined, all of which are based on site-specific conditions" and that "[w]hen conducting a designated use analysis, site-specific conditions can be used to inform the decision and justify the amendment." [*Fullam Rebuttal, NMED Ex. 109 at 7:7-11; Fullam, Tr. at 964:24-965:4; NMED Ex. 56 at 18*]

b. Put another way, "[e]ach existing use determination is dependent on the available information and the site-specific conditions occurring at a particular point in time." [*Fullam Rebuttal, NMED Ex. 109 at 22:7-8*] In fact, NMED's Primary Contact EUA states that site-specific conditions "can be used to inform the decision . . . ." [*NMED Ex. 56 at 18*]

c. According to NMED, "each existing use analysis is temporal in scale and unique to the conditions at the time of analysis . . . ." [*Fullam Rebuttal, NMED Ex. 109 at 73:1-3*]

d. The Primary Contact EUA states that "NMED reviewed site conditions to assist in the determination of the existing use and appropriate designated use." However, NMED staff did not conduct any site visits to these stream segments for this EUA. The only site visits occurred years ago when field staff collected the water samples for the now-archived water quality data. [*DeRose-Bamman, Tr. at 1206:9-11, 1206:20-1207:1; Aranda, Tr. at 992:13-993:12; Meyerhoff, Tr. at 1129:23-1130:22; NMED Ex. 56 at 18*]

e. The discussion of "site conditions" contained in the Primary Contact EUA is general, describes the applicable ecoregions (such as Chihuahuan Desert), and provides no specific information about the conditions of the five stream segments under consideration because "NMED determined that the general site conditions (e.g., physiographic and ecological conditions, land use, ownership) do not provide direct evidence to support or refute the proposed amendments." [*DeRose-Bamman Rebuttal, Ex. SJWC 3 at 24-25; NMED Ex. 56 at 19-20*]

f. NMED contends it was not necessary to conduct site visits for the Primary Contact EUA to determine whether primary contact recreational use is occurring—or even possible—in these stream segments because the EUA relies on water quality data collected prior to the Primary Contact EUA. [*Fullam, Tr. at 965:5-966:2*] We disagree.

g. Ms. Fullam indicated that NMED would like to observe a site if it has the resources to do so. [*Fullam, Tr. at 964:9-13, 965:18-24*] We do not believe an asserted lack of resources releases NMED from its obligation to conduct an EUA on a "site-specific basis," as EPA guidance instructs in the Smithee Letter. [*NMED Ex. 62 at 4, 5; DeRose-Bamman Rebuttal, Ex. SJWC 3 at 24-25; DeRose-Bamman, Tr. at 1206:7-9; Meyerhoff Direct, LANL Ex. 2 at 29:13-24; Meyerhoff, Tr. at 1087:4-5, 1128:9-12*] This is especially true given EPA's admonition in the Smithee Letter that there should be a "high degree of confidence" when establishing an existing use because it cannot be removed, even if it becomes unattainable. [*NMED Ex. 62 at 7*]

h. Contrary to EPA guidance, NMED failed to investigate site-specific conditions to determine whether primary contact recreation is an existing use.

i. If NMED intends to conduct an EUA, actual site visits should be made.

9. ***NMED's EUA Does Not Conform with EPA Guidance on Existing Uses Because It Does Not Include All Available Evidence of Both Use and Water Quality.***

a. With respect to the proof required to prove an existing use, the Smithee Letter states that an existing use is actually attained if both the actual use of the water (such as swimming) and the water quality necessary to support that actual use have been attained: "It is appropriate to describe the existing uses of a waterbody in terms of both actual use and water quality because doing so provides the most comprehensive means of describing the baseline conditions that must be protected." [*NMED Ex. 62 at 3, 7 (emphasis added); Meyerhoff Direct, LANL Ex. 2 at 29:1-12; Meyerhoff Rebuttal, LANL Ex. 58 at 2020 TR LANL-01085:2-10 (NMED's proposal to base existing use decision solely on water quality data is contrary to the intent of federal law), 2020 TR LANL-01086:6-26 (existing use evaluation includes both the use of the water and the water quality necessary to support the use); 2020 TR LANL-01089:3-15; 2020 TR LANL-01109:8-11; Meyerhoff, Tr. at 1082:7-16; Meyerhoff, Tr. at 1087:11-14; DeRose-Bamman Rebuttal, Ex. SJWC 3 at 25; DeRose-Bamman, Tr. at 1206:1-4; Gallegos Direct, LANL Ex. 3 at 36:2-5 (2020 TR LANL-00095)*]

b. EPA guidance stresses the importance of consideration of all available evidence concerning both use and water quality: "EPA has found that, in practice, taking into account all the available information results in a more accurate articulation of the existing uses. . . ." [*NMED Ex. 62 at 6; Meyerhoff Direct, LANL Ex. 2 at 32:22-24 (2020 TR LANL-00054); Meyerhoff Rebuttal, LANL Ex. 58 at 2020 TR LANL-01087:20-01088:26; Meyerhoff, Tr. 1118:2-8*] States must "consider the quantity, quality, and reliability of the different types of available data to describe the existing use as accurately and completely as possible and to resolve any apparent discrepancies based upon that evaluation." [*NMED Ex. 62 at 5; DeRose-Bamman*

Rebuttal, Ex. SJWC 3 at 26; Meyerhoff Direct, LANL Ex. 2 at 29:13-30:2 (2020 TR LANL-00051-00052)]

c. NMED agrees that, in accordance with the Smithee Letter, an existing use determination must be based on "all available evidence of use and water quality." *[Fullam Rebuttal, NMED Ex. 109 12:17-18 ; NMED Ex. 62 at 3 ("EPA considers the phrase 'existing uses are those uses actually attained' to mean the use and water quality necessary to support the use that have been achieved in the waterbody on or after November 28, 1975"); Fullam Rebuttal, NMED Ex. 109 at 8:7-9; Fullam, Tr. at 962:3-11 (existing use is attained when the use and the water quality necessary to support the use are achieved); 962:17-21 (same); 957:18-22 (water quality is "not the only component" of existing use determination); Fullam, Tr. at 960:1-7 ("each waterbody must be evaluated on a site-specific basis, based on the uses that . . . the water is exhibiting . . . and the water quality"), 960:22-24 (all available information should be evaluated), 962:21-963:5 (existing use determination is based on both observational evidence of use and water quality if both are available; EPA recommends that evidence of both be used)*]

d. In addition to the contentions of SJWC that the Primary Contact EUA should not have been focused only on water quality, Ms. Conn, on behalf of AB, testified that NMED should have reviewed "all types of data," such as photos and testimonials, and "shouldn't have been focused only on water quality for looking at these waters." [*Conn, Tr. at 1180:9-15, 1182:5-12*]

e. Dr. Meyerhoff, on behalf of LANL, testified that he has low confidence in any EUA when only water quality, and not the actual use of the water, is evaluated. This is especially true for the Primary Contact EUA because recreation use relates to how a waterbody is used by people and the definition of primary contact is "built around full immersion and the risk

of exposure through ingestion." [*Meyerhoff, Tr. at 1127:21-1128:8*] Dr. Dail, on behalf of LANL, urged "caution" in using "just the water quality data" to designate the existing use for a waterbody. [*Dail, Tr. at 1071:17-24*]

f. We agree with the opinions of the LANL and SJWC technical witnesses that, when conducting an EUA, NMED should conduct a site visit to determine whether primary contact use is occurring—or whether it is even possible given site conditions. Failure to conduct a site visit does not make evidence of primary contact use "unavailable." [*Meyerhoff, Tr. at 1130:23-1131:1; DeRose-Bamman, Tr. at 1205:20-21 (EPA guidance stresses proof of primary contact use is critical), 1207:2-7*] That was our intent during the last Triennial Review, and we reiterate it here.

g. LANL contends it is reasonable to expect NMED to make a thorough effort to collect evidence of both use and water quality when conducting an EUA. [*Meyerhoff Rebuttal, LANL Ex. 58 at 2020 TR LANL-01088:31-01089:3*] Without an evaluation of actual use, there cannot be a high degree of confidence in an existing use determination. [*Meyerhoff Rebuttal, LANL Ex. 58 at 2020 TR LANL-01089:17-20, 01090:14-16*] We agree.

h. During the last Triennial Review, NMED "reviewed field observations with [NMED] monitoring staff and with the New Mexico Department of Game and Fish" and asserted staff had witnessed boating and other human activity (though secondary contact activity) on some of the stream segments during prior water quality surveys. [*Dail Memo, Ex. SJWC 3-C at 3, 4-5 & n.3; Hearing Trans. (Oct. 13. 2015), Ex. SJWC 3-E at 81:10-22 (Lemon); DeRose-Bamman Rebuttal, Ex. SJWC 3 at 12-14, 22*]

i. During the last Triennial Review, the WQCC rejected these unsupported assertions, finding they did not constitute sufficient evidence of primary contact use. [*DeRose-*

Bamman Direct, Ex. SJWC 2 at 23; DeRose-Bamman Rebuttal, Ex. SJWC 3 at 21; Final Order, Ex. SJWC 2-M at 36, 40-41 (¶¶ 92, 101-105)]

j. NMED has made no effort to support these assertions with actual evidence here. Instead, NMED inexplicably states it did not gather such information because there is no standard operating procedure for recreational field use observations and "NMED staff is not specifically required . . . to consistently observe what kind of recreational use is actually occurring at the site." [*NMED Ex. 56 at 23 (NMED does not monitor or gather information on recreational use); Aranda, Tr. at 933:2-9)*]

k. We disagree with any assertion that evidence concerning primary contact use is unavailable. SJWC's technical expert testified that NMED staff often document information about site conditions (*e.g.*, weather, flow) in field notes. [*DeRose-Bamman Rebuttal, Ex. SJWC 3 at 21*]

l. Clearly, NMED could have gathered information on recreational use activity in these five stream segments. [*DeRose-Bamman, Ex. SJWC 3 at 21 (Hydrology Protocol surveys include site visits and photo documentation); WQMP/CPP Hydrology Protocol, NMED Ex. 63 at 13-14*]. We note that NMED made site visits and took photos of site conditions when evaluating hydrologic conditions for the LANL Waters EUA. [*E.g., NMED Ex. 73 at 63-67; Fullam Direct, NMED Ex. 4 at 35:7-13; 35:15-36:13*]

m. Again, an asserted lack of resources does not excuse NMED's failure to conduct site visits to obtain information concerning primary contact activities, especially given guidance in the Smithee Letter that there should be a "high degree of confidence" when establishing an existing use because it cannot be removed, even if it becomes unattainable. [*NMED Ex. 62 at 7*]

10. ***Even Assuming Evidence of Primary Contact Use Is Unavailable, and NMED's Water Quality Data Constitutes "New" Information, Primary Contact Recreation Cannot Be Designated as an Existing Use Because NMED Failed to Provide Evidence that No Physical Conditions Prevent Primary Contact Use.***

a. If information concerning use or water quality is unavailable, the existing use may be determined "based on the strength of evidence that a use has actually been achieved or the strength of evidence that water quality supporting a use has been achieved." [*NMED Ex. 62 at 5, 6; DeRose-Bamman Rebuttal, Ex. SJWC 3 at 27-28; Meyerhoff Direct, LANL Ex. 2 at 29:13-30:2*]

b. As explained in EPA's 2015 revisions to 40 C.F.R. Part 131, although EPA guidance states an existing use is actually attained when the use has actually occurred and the water quality necessary to support the use has been attained, a state has "substantial flexibility" to make an existing use decision if data is "limited, inconclusive or insufficient regarding whether the use has occurred and the water quality necessary to support the use has been attained." [*LANL Ex. 31 at 51027 (2020 TR LANL-00540); Meyerhoff Rebuttal, LANL Ex. 58 at 2020 TR LANL-01088:1-26*]

c. Significantly, however, federal regulations go on to specify that an existing use cannot be established solely through water quality data if "there are physical problems, such as substrate or flow, that prevent the use from being attained." [*EPA Water Quality Standards Handbook § 4.4, Ex. SJWC 3-B at 4; NMED Ex. 62 at 6; DeRose-Bamman Rebuttal at 6, 27; DeRose-Bamman, Tr. at 1206:11-18; Meyerhoff Rebuttal, LANL Ex. 58 at 2020 TR LANL-01109:5-17, 01110:6-20, 01112:20-23 (physical limitations may limit attainability of a use regardless of water quality); Meyerhoff, Tr. at 1128:19-1129:5*]

d. In fact, when conducting prior use attainability analyses, NMED has determined that primary contact use cannot be attained if flow conditions prevent such use. [*Meyerhoff, Tr. at 1083:17-1084:2, 1323:5-10*]

e. We agree with SJWC and LANL that a site visit is critical to determine whether site conditions prevent primary contact recreation. [*E.g., DeRose-Bamman Rebuttal, Ex. SJWC 3 at 6, 27; DeRose-Bamman, Tr. at 1206:7-18; Meyerhoff, Tr. at 1128:13-1129:5*]

f. NMED actually evaluated hydrologic conditions in its LANL Waters EUA, including conducting Hydrology Protocol surveys involving observation and photo documentation of the sites. [*Fullam Direct, NMED Ex. 4 at 35:7-13, 35:15-36:13; NMED Ex. 73*]

g. However, for the Primary Contact EUA, NMED chose not to visit the five stream segments to see whether they are accessible or deep enough for swimming or similar primary contact activities. NMED therefore failed to provide the required evidence that physical problems do not prevent primary contact use. [*Aranda, Tr. at 991:10-15 (EUA does not address access, streamflow or other site-specific conditions that would impact primary contact recreation such as swimming); Meyerhoff, Tr. at 1129:6-10, 1129:23-1130:13; DeRose-Bamman, Tr. at 1206:16-18*]

h. SJWC's technical witness, on the other hand, provided photos from a recent visit to the Rio Hondo near the effluent outfall for the City of Roswell Wastewater Treatment Plant, which is in stream segment 20.6.5.206 NMAC. [*DeRose-Bamman Rebuttal, Ex. SJWC 3 at 22; Ex. SJWC 3-I; DeRose-Bamman, Tr. at 1206:18-20*] In her opinion, the photos show that primary contact use is not possible in at least a portion of that stream segment because of physical difficulty in reaching the river. [*DeRose-Bamman Rebuttal, Ex. SJWC 3 at 22, 27; DeRose-Bamman, Tr. at 1206:18-20*] In addition, at that point, the Rio Hondo flows through private

property and the depth does not appear to accommodate swimming (or even the secondary contact uses of boating or wading). Upstream, the Rio Hondo flows through the City of Roswell through concrete channels also not conducive to primary contact recreation. [*DeRose-Bamman Rebuttal, Ex. SJWC 3 at 22*]

i. NMED's failure to provide the required evidence of lack of physical problems preventing primary contact use, coupled with SJWC's evidence that portions of the Rio Hondo are physically and legally inaccessible and have water depth insufficient for swimming, mandates the conclusion that NMED's water quality data alone is insufficient to establish primary contact recreation as an existing use for the five stream segments at issue.

11. *Based on the Findings Above, and Using Its Discretion and Best Professional Judgment, the WQCC Should Find That NMED Has Not Proved That Primary Contact Is an Existing Recreation Use on the Five Stream Segments.*

a. Historically, the WQCC has required evidence of primary contact activities before assigning the primary contact use. [*See Reasons in Topic 5(B)(4)*]

b. During the last Triennial Review, we 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. [*See Reasons in Topic 5(B)(2)*]

c. We agree with SJWC that the WQCC should remain consistent and require evidence of primary contact activities before making an existing use determination. [*DeRose-Bamman Rebuttal, Ex. SJWC 3 at 16-17*]

d. As explained in the Smithee Letter, it is critical that the WQCC not upgrade a designated use without appropriate evidence and a "high degree of confidence" that it is an existing use because an existing use may not be removed even it becomes unattainable in the future. Further, existing water quality cannot be degraded because the use must be protected, and

any discharge into the stream segments at issue must protect the existing use, even if it becomes unattainable. [*NMED Ex. 62; Meyerhoff, Tr. at 1126:24-1127:9*]

e. 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. [*See Reasons in Topic 5(B)(7)*]

f. The Primary Contact EUA does not provide any credible scientific evidence or other information that primary contact use is occurring in these stream segments. [*See Reasons in Topic 5(B)(6)*]

g. The Primary Contact EUA does not conform with EPA guidance in the Smithee Letter because it is not based on site-specific conditions. [*See Reasons in Topic 5(B)(8)*]

h. 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. [*See Reasons in Topic 5(B)(9)*]

i. 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. [*See Reasons in Topic 5(B)(3)*]

j. We do not believe it is possible to have a "high degree of confidence" in an existing use designation absent a site visit to determine whether a use actually is occurring. 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*]

k. Pursuant to EPA guidance in the Smithee Letter, the WQCC has discretion to designate an existing use based solely on water quality data supporting the use if information concerning actual use is unavailable. [*NMED Ex. 62 at 6, 7, 10*] As noted, we do not agree that information concerning use is unavailable.

l. However, even assuming such information is unavailable, federal regulations specify that an existing use cannot be established solely through water quality data "if there are physical problems, such as substrate or flow, that prevent the use from being attained." [*See Reasons in Topic 5(B)(10); EPA Water Quality Standards Handbook § 4.4 (Ex. SJWC 3-B at 4); Smithee Letter (NMED Ex. 62 at 6)*]

m. NMED provided no evidence whether physical conditions prevent primary contact use in these stream segments because it did not conduct site visits.

n. 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*]

o. 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. Evidence provided by SJWC indicates physical site conditions prevent primary contact use. Our existing use determination therefore cannot be based solely on the water quality data provided by NMED. [*See Reasons in Topic 5(B)(10)*]

p. Even assuming our existing use determination could be based solely on water quality data, the decision is left to our discretion using our "best professional" judgment.

[*Smithee Letter, NMED Ex. 62 at 10*] EPA guidance in the Smithee Letter provides instructive examples showing water quality data alone does not require a determination that primary contact recreation is an existing use in these stream segments. [*NMED Ex. 62 at 6, 9-10*]

q. Approving the Primary Contact EUA and adopting NMED's proposal to upgrade the recreational designated use for these stream segments would establish a troubling precedent of making existing use determinations without site-specific information about actual use.

r. Based on the Smithee Letter, NMED asserts that where recreation activity has occurred, but the water quality cannot support the activity without due harm, it would be inappropriate to assert primary contact as an existing use (such as where people recreate in combined sewer overflows). [*Fullam Rebuttal, NMED Ex. 109 at 7:15-18*] We believe the converse also is true. If water quality can support primary contact activity, but the use is not occurring, then it would be inappropriate to determine primary contact is an existing use.

s. NMED has not provided sufficient credible evidence that primary contact is an existing use in these stream segments. Proof that the pH and *E. coli* water quality criteria have been met in these stream segments at least once since 1975 is not enough. Evidence of swimming or similar human activity showing actual use is necessary, especially given the definition of "primary contact" in the SWQS.

t. As noted in the Primary Contact EUA, five NPDES-permitted treatment plants are located on the stream segments NMED proposes to upgrade to primary contact, and four of them "currently have *E. coli* discharge limits greater than the primary contact numeric criteria and may be affected by the proposed amendments." [*NMED Ex. 56 at 21; Aranda Direct, NMED Ex. 3 at 10:7-10*] Because an existing use cannot be downgraded, the designation of the use could

impose unnecessary burdens "to restore a water to an unachievable quality." [*Fullam Rebuttal, NMED Ex. 109 at 7:22-8:1*]

u. In addition, we agree with SJWC and LANL that NMED's proposed designated use changes are premature given our decision mandating development of an EUA process and framework. NMED should re-evaluate these stream segments after a formal EUA process is approved by the WQCC and defined in either the SWQS or the WQMP/CPP.

v. It is within our discretion to determine whether primary contact recreation is an existing use in these stream segments. For all of the reasons set forth above, we reject NMED's proposal to designate primary contact recreation use as an existing use on these stream segments.

w. In addition, we direct NMED to conduct a site-specific investigation to determine whether primary contact recreation occurs on these stream segments. That investigation shall be conducted in accordance with the EUA framework we have ordered to be developed.

TOPIC 6—CRITERIA

A. Tributyltin: 20.6.4.900(J)(1) NMAC

1. NMED proposes to add numeric criteria for Tributyltin to the SWQS for the first time at 20.6.4.900(J)(1) NMAC. [*NMED Ex. 110; DeRose-Bamman Direct, Ex. SJWC 2 at 25; DeRose-Bamman, Tr. at 1265:22-1266:2*]

2. The table of use-specific numeric criteria at 20.6.4.900(J)(1) NMAC has a column for the Chemical Abstract System or "CAS" number. The CAS number is very useful because there can be name variations for chemical substances. Specifying the CAS number for Tributyltin will notify permittees which pollutant must be monitored and clarify which analytical method will

be used to determine compliance with the numeric criteria. [*DeRose-Bamman Direct, Ex. SJWC 2 at 25; DeRose-Bamman, Tr. at 1266:3-16*]

3. NMED has specified only "various" for the Tributyltin CAS number. [*NMED Ex. 110; DeRose-Bamman Direct, Ex. SJWC 3 at 25; DeRose-Bamman, Tr. at 1266:12-13*]

4. SJWC requests that the WQCC reject the proposed designation of numeric criteria for Tributyltin until NMED specifies a CAS number or provides additional information concerning which analytical method(s) will be used to ensure compliance with the proposed criteria. [*Barrios, Tr. at 1243:20-23; DeRose-Bamman Direct, Ex. SJWC 3 at 25; DeRose-Bamman, Tr. at 1266:17-20, 1267:4-7*]

5. 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*]

6. The hearing record contains no information concerning the Tributyltin compounds or appropriate CAS numbers. [*DeRose-Bamman, Tr. at 1268:8-13*]

7. Because NMED has not submitted evidence concerning the applicable CAS numbers for Tributyltin, we reject NMED's proposal to add numeric criteria for Tributyltin to 20.6.4.900(J)(1) NMAC.

Respectfully submitted,

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CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a copy of San Juan Water Commission's Closing Legal Arguments and Proposed Statement of Reasons was served on the following persons by e-mail this 24th day of September 2021:

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