STATE OF NEW MEXICO
BEFORE THE WATER QUALITY CONTROL COMMISSION

IN THE MATTER OF PROPOSED AMENDMENTS GROUND AND SURFACE WATER PROTECTION REGULATIONS, 20.6.2 NMAC

No. WQCC 17-03(R)

New Mexico Environment Department

Petitioner.

ORDER AND STATEMENT OF REASONS FOR AMENDMENT OF REGULATIONS

This matter comes before the New Mexico Water Quality Control Commission ("WQCC" or "Commission") upon a petition filed by the Ground Water Quality Bureau ("GWQB") of the New Mexico Environment Department ("NMED" or "Petitioner") proposing amendments to the State of New Mexico's Ground and Surface Water Protection Regulations, which are codified as Title 20, Chapter 6, Part 2 of the New Mexico Administrative Code (20.6.2 NMAC). A four day public hearing was held in Santa Fe, New Mexico from November 14 through November 17, 2017. The Commission deliberated on the proposed amendments at its regularly scheduled meeting on July 10 and 11, 2018, and again at its meeting on August 14, 2018, at which time the Commission voted to approve the proposed amendments set forth below for the reasons that follow:[1]:

[1] In adopting any amendments to its standards or regulations, the Commission "must indicate the reasoning of the Commission and the basis on which it adopted the regulations." *City of Roswell v. New Mexico Water Quality Control Comm'n*, 1972-NMCA-160, ¶ 16, 84 N.M. 561, 505 P.2d 1237; *see also*, *Bokum Resources Corp. v. New Mexico Water Quality Control Comm'n*, 1979-NMSC-090, ¶ 39, 93 N.M. 546, 603 P.2d 285 (holding that "reasons should be given upon which the Commission bases its adoption of regulations"). This Order and Statement of Reasons is the official version of the Commission's action. *See* 20.1.6.306(F) NMAC.

PROCEDURAL HISTORY

1. On May 1, 2017, the Department filed a Petition to Amend the Ground and Surface Water Protection Regulations (20.6.2 NMAC) and Request for Hearing. *See* Pleading No. 1.[2]

2. Legal Notice of the hearing was published in both English and Spanish in the Albuquerque Journal on June 17, 2017, and in the New Mexico register on June 27, 2017. *See* Affidavits of Publication, Pleadings No. 14, 15, and 17.

3. The Petition for rule change was the culmination of a process that began in 2015, when the NMED Ground Water Quality Bureau first set out to identify areas within 20.6.2 NMAC that required updating and develop regulatory language to implement those changes. Part 2 of 20.6 NMAC has not been updated or substantially amended in over 22 years. *See* NMED Exhibit 2, Direct Testimony of Michelle Hunter ("*Hunter Direct*"), at 2:18 – 3:2; 4:5-8.

4. In May of 2016, the Department held a public meeting in Santa Fe, New Mexico, to present an overview of the amendments to 20.6.2 NMAC that the Department was considering for proposal to the Commission. *See Hunter Direct* at 4:8-12.

5. In June of 2016, the Department issued a "Public Discussion Draft" of the proposed amendments for a sixty (60)-day public comment period. Following receipt of comments on that initial draft, the Department revised the proposed amendments and issued a second "Public Discussion Draft" for a thirty (30)-day public comment period. *See Hunter Direct* at 4:12-15.

6. In September of 2016, the Department held four additional public information meetings throughout the State. These meetings were held in Roswell, Las Cruces, Farmington, and Albuquerque. Additionally, the Department held a "web-ex" online listening session in November of 2016. *See Hunter Direct* at 4:15-18.

---

[2] The pleading log including electronic versions of the pleadings are available on the Commission's website at https://www.env.nm.gov/general/wqcc-17-03-r/.

7. In addition to soliciting public comment on proposed amendments and holding public meetings, the Department met and corresponded with numerous stakeholders, including the New Mexico Municipal League, the Dairy and Mining industries, the U.S. Departments of Energy and Defense, Amigos Bravos, the Gila Resources Information Project, William C. Olson, and others to obtain their input on the proposed amendments. *See Hunter Direct* at 4:18-22.

8. The Department continued to engage with stakeholders and make edits to the language of its proposed amendments up through October 29, 2017, when the Department filed its final version of the proposed amendments prior to the hearing in this matter. *See Hunter Direct* at 4:22-5:2.

9. On May 9, 2017, the Commission issued an Order for Hearing and Appointment of Hearing Officer, setting the hearing date for November 14, 2017. In its Order for Hearing, at the Department's request, the Commission specified that the scope of the rulemaking was "limited to the amendments proposed by the Department in its Petition, and any logical outgrowths thereof." *See* Pleading No. 4.

10. The following parties filed an Entry of Appearance in this matter: City of Roswell ("Roswell"); Laun- Dry; Los Alamos National Security, LLC ("LANS"); Amigos Bravos and the Gila Resources Information Project (collectively, "AB/GRIP");[3] the New Mexico Mining Association ("NMMA"); William C. Olson; the Dairy Producers of New Mexico ("DPNM") and the Dairy Industry Group for a Clean Environment ("DIGCE") (collectively, "the Dairies" or "Dairy industry"); the New Mexico Municipal League Environmental Quality Association ("NMML" or "Municipal League"); United States Air Force, Department of Defense

[3] AB/GRIP's counsel, the New Mexico Environmental Law Center ("NMELC"), initially entered an appearance itself. On June 14, 2017, NMELC filed an Amended Notice of Appearance, clarifying that it was appearing as counsel to AB/GRIP.

("USAF/DoD"); the New Mexico Energy, Minerals and Natural Resources Department ("EMNRD"); Rio Grande Resources Corporation ("RGR"); American Magnesium, LLC ("AmMg"); New Mexico Copper Corporation ("NMCC") (collectively, with NMED, the "Parties"). *See* Pleading Log Nos. 2 – 3, 5 – 9, 12 – 13, 16, 20, 22, 43 – 45, and 93.

11. On May 31, 2017, the Hearing Officer issued a Procedural Order and Scheduling Order directing non-petitioning parties to file (1) "a statement indicating their support of, opposition to, or no position taken on the amendments proposed by the Department;" and (2) directing that they submit "any proposed amendments to 20.6.2 NMAC not contained in NMED's Petition, but limited to the logical outgrowths of NMED's proposed amendments ... accompanied by a statement of reasons for the proposed regulatory change." *See* Pleading Log No. 10.

12. The Parties' Statements of Position on the amendments proposed by the Department and Proposed Amendments to 20.6.2 NMAC that were not contained in NMED's Petition were filed on or before July 27, 2017. Certain parties filed corrected Statements of Positions after these initial filings. *See* Pleading Log No. 19, 21 – 28, 30, 32, 34, and 38.

13. On July 27, 2017, NMED filed "Notice of Amended Petition." *See* Pleading No. 31.

14. NMED filed a Notice of Errata with "Corrected Proposed Amendments" to 20.6.2 NMAC on August 7, 2017. *See* Pleading No. 37.

15. On August 11, 2017, the Hearing Officer granted a motion striking the September 29, 2017, deadline for the parties to file "Statements of Position" taken on amendments proposed by parties other than NMED. *See* Pleading No. 39.

16. On August 29, 2017 AB/GRIP filed an Expedited Motion to Stay All Filing Deadlines and Hearing. *See* Pleading No. 41.

17. On September 6, 2017, AB/GRIP and NMED filed a Joint Stipulation Regarding Proposed Changes to 20.6.2 NMAC. *See* Pleading No. 46.

18. On September 11, 2017, all of the parties, with the exception of Rio Grande Resources Corporation, American Magnesium, LLC, and New Mexico Copper Corporation, filed a Notice of Intent to Present Technical Testimony, including the written pre-filed direct testimony of each party. Certain parties filed corrected or amended Notices of Intent following their initial filings. *See* Pleading Nos. 47 – 58.

19. On September 13, 2017, NMED and the Dairy industry filed separate Responses in Opposition to AB/GRIP's Expedited Motion to Stay All Filing Deadlines and Hearing. *See* Pleading No. 59 – 60.

20. On September 20, 2017, AB/GRIP filed a Consolidated Reply to the Dairy industry's and NMED's Responses in Opposition to AB/GRIP's Expedited Motion to Stay All Filing Deadlines and Hearing. *See* Pleading No. 61.

21. On September 25, 2017, the Hearing Officer denied AB/GRIP's Expedited Motion to Stay All Filing Deadlines and Hearing. *See* Pleading No. 62.

22. On September 29, 2017, AB/GRIP filed a Motion to Dismiss in Part NMED's Petition to Amend 20.6.2 NMAC ("Motion to Dismiss in Part"). *See* Pleading No. 64.

23. On October 2, 2017, the Hearing Officer granted a motion by the parties to extend the deadline for submission of rebuttal testimony to October 27, 2017. *See* Pleading No. 65.

24. On October 16, 2017, NMED, LANS, and NMMA filed separate Responses in Opposition to AB/GRIP's Motion to Dismiss in Part. *See* Pleading Nos. 68-70.

25. On October 24, 2017, AB/GRIP filed a Consolidated Reply to Responses by NMED, LANS, and NMMA on their Motion to Dismiss in Part. *See* Pleading No. 73.

26. The Parties, with the exception of Roswell, Laun-Dry, RGR, AmMg, and NMCC, filed Notices of Intent to Present Rebuttal Testimony on or before October 27, 2017, including the written pre-filed rebuttal testimony of each party. *See* Pleading No. 74 – 85.

27. On October 31, 2017, the Hearing Officer issued a Second Procedural Order. *See* Pleading No. 87.

28. On November 7, 2017, NMED filed a Notice of Withdrawal of NMED's Proposed Definition of Discharge Permit Amendment and Related Changes to 20.6.2 NMAC. *See* Pleading No. 88.

29. On November 9, 2017, USAF/DoD filed a Notice of Intent of Filing of Written Sur-Rebuttal Technical Testimony and Sur-Rebuttal Technical Testimony.[4] *See* Pleading No. 90.

30. On November 9, 2017, NMED filed an Amended Notice of Withdrawal of NMED's Proposed Definition of Discharge Permit Amendment and Related Changes to 20.6.2 NMAC. *See* Pleading No. 89.

31. On November 13, 2017, the parties filed a Joint Stipulation Regarding NMED's Notice of Withdrawal of NMED's Proposed Definition of Discharge Permit Amendment and Related Changes to 20.6.2 NMAC. *See* Pleading No. 92.

32. On November 14, 2017, the Commission heard oral argument and deliberated on AB/GRIP's Motion to Dismiss in Part. The Commission voted seven (7) to one (1) with one (1) abstention to deny AB/GRIP's motion. *See* 11-14-17 Motion to Dismiss Tr.

33. On November 14, 2017, a public hearing was held in Santa Fe, New Mexico, concluding on November 17, 2017. During the hearing, the Commission heard technical testimony from NMED; AB/GRIP; NMMA; the Municipal League; the Dairy Groups; EMNRD;

[4] The procedural order did not provide for written sur-rebuttal testimony, so no other party filed written sur-rebuttal.

USAF/DoD; the City of Roswell; Laun-Dry; LANS; and Mr. Olson. Each of the Parties' pre-filed technical testimony was entered into evidence at the hearing. *See* 11-14-17 1 Tr., 11-15-17 2 Tr., 11-16-17 3 Tr., and 11-17-17 4 Tr.

34. On November 21, 2017, the Commission issued an Order Denying AB/GRIP"s Motion to Dismiss in Part NMED Petition to Amend 20.6.2 NMAC. *See* Pleading No. 94.

35. On December 5, 2017, the transcript for the hearing became available. *See* Notice of Transcript Filing, Pleading No. 97.

36. On December 8, 2017, the parties agreed to a Joint Stipulation Regarding the Post Hearing Submittals Filing Deadline, extending the deadline for post-hearing submittals to February 16, 2018. *See* Pleading Nos. 95 and 96.

37. All the Parties except for EMNRD filed post-hearing submittals including closing arguments, proposed statements of reasons, and final proposed rule amendments. *See* Pleading Nos. 99 – 112.

38. On April 6, 2018, the Hearing Officer Report and Post Scheduling Order for Exceptions to the Hearing Officer Report were filed. *See* Pleading Nos. 113 and 114.

39. On April 23, 2018, NMED filed a Second Notice of Errata that included a Corrected NMED Exhibit 43 containing corrections to NMED's final proposed amendments to 20.6.2 NMAC. *See* Pleading No. 115

40. On April 26, 2018, NMED filed a Motion to Withdraw the Hearing Officer's Report and Vacate the Post Scheduling Order. *See* Pleading No. 116.

41. On May 4, 2018, the parties submitted a Joint Motion to Withdraw the Hearing Officer's Report or, Alternatively, to Waive the Deadline Under 20.6.2.305.C NMAC, requiring the Commission reach a final decision in this matter within 60 days. *See* Pleading No. 118.

42. On May 11, 2018, the Commission heard arguments form the parties on the Joint Motion to Withdraw the Hearing Officer's Report. The Commission voted to retain the Hearing Officer's Report, but voted unanimously to postpone deliberations on the proposed regulatory changes based on the parties' representation that they would not raise any challenge to the Commission's final decision on the basis that it was reached after more than 60 days from the date of the filing of the Hearing Officer's report. In addition, the Commission voted to grant the hearing officer discretion to amend or replace the Hearing Officer Report following submission of the parties' joint proposed report; and directed the hearing officer to issue a scheduling order addressing the deadlines for the parties' submissions. *See* 5-11-18 Tr.

43. On May 31, 2018, the Hearing Officer issued a Scheduling Order setting June 15, 2018, as the deadline for the submission of the Joint Proposed Report. *See* Pleading No. 122.

44. On June 13, 2018, NMED filed a Third Notice of Errata that included a Second Corrected NMED Exhibit 43, attached hereto as Exhibit A, containing additional corrections to NMED's final proposed amendments to 20.6.2 NMAC. *See* Pleading No. 123.

45. On June 15, 2018, the parties submitted the Joint Proposed Report. AB/GRIP declined to join the Joint Proposed Report and instead filed Exceptions to the Hearing Officer's Report Filed April 11, 2018, which included a Memorandum on Logical Outgrowth and NMED and the NMMA's Jointly Proposed Amendments to Section 20.6.2.4103(A), (B) NMAC. The legal memorandum argued that NMED's and NMMA's proposed changes to Section 20.6.2.4103 violated the "logical outgrowth doctrine" and should be excluded from the Revised Hearing Officer Report. *See* Pleading No. 124 - 126.

46. On June 22, 2018, NMED filed Motion for Leave to Respond to AB/GRIP's Exceptions to the Hearing Officer's Report filed April 11, 2018, requesting that AB/GRIP's

memorandum on logical outgrowth be treated as a motion and that the other parties should be allowed an opportunity to respond. *See* Pleading No. 127.

47. On June 26, 2018, the hearing officer issued an Order on AB/GRIP's Memorandum on Logical Outgrowth treating AB/GRIP's memorandum as a motion, noting NMED's Motion for Leave to Respond, and denying AB/GRIP's request that NMED's and NMMA's proposed revisions to 20.6.2.4103 NMAC be excluded from the revised hearing officer report. *See* Pleading No. 128.

48. On June 29, 2018, the hearing officer issued a Revised Order on AB/GRIP's Motion and Response Deadlines, reiterating the findings in the initial Order on AB/GRIP's motion and identifying deadlines for filing for filings by the parties on the logical outgrowth issue. The Revised Order on Logical Outgrowth Issues determined that AB/GRIP's Logical Outgrowth Memorandum was a dispositive motion to be decided by the Commission. The Hearing Officer forwarded the briefings to the Commissioners to determine the outcome. *See* Pleading No. 129.

49. On July 10 and 11, 2018, the Commission began deliberations on the proposed regulatory changes, with the exception of those contained in NMED and NMMA's Jointly Proposed Amendments to 20.6.2.4103.A, B NMAC. *See* 7-10-18 1 Tr. and 7-11-18 2 Tr.

50. On August 14, 2018, the Commission heard closing arguments from AB/GRIP, NMED and LANS on AB/GRIP's Motion to Strike the Jointly Proposed Amendments to 20.6.2.4103.A, B NMAC from the Hearing Officer's Revised Report. The Commission voted eight (8) to one (1) to deny AB/GRIP's motion to exclude NMED's and NMMA's proposed language for 20.6.2.4103 NMAC . *See* 8-14-18 Logical Outgrowth Tr.

51. On August 14, 2018, the Commission completed deliberations on the proposed regulatory changes and voted unanimously to approve the amendments to 20.6.2 NMAC set

forth in this Order. *See* 8-14-18 3 Tr.

LEGAL AUTHORITY

52. Under the Water Quality Act, NMSA 1978, §§ 74-6-1 to -17 (1967, as amended through 2013) ("WQA"), the Commission is responsible for adopting water quality standards for surface and ground waters of the state to "protect the public health and welfare, enhance the quality of water and serve the purposes of the [WQA]." NMSA 1978, § 74-6-4(D). Standards must be based on "credible scientific data and other evidence appropriate under the [WQA]." *Id.* In adopting 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." *Id.*

53. The WQA further requires the Commission to adopt regulations to prevent or abate water pollution in the state. NMSA 1978, § 74-6-4(E). In adopting regulations, the Commission shall give weight it deems appropriate to all relevant facts and circumstances, including:

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

Id.

54. Any person, including the Department, may petition the Commission at any time to adopt, amend, or repeal a water quality standard or regulation. NMSA 1978, § 74-6-6(B).

55. The Commission is required to hold a public hearing in order adopt, modify, or repeal a standard or regulation. NMSA 1978, § 74-6-6(A).

56. "At the hearing, the commission shall allow all interested persons reasonable opportunity to submit data, views or arguments orally or in writing and to examine witnesses testifying at the hearing." NMSA 1978, § 74-6-6(D).

57. Any rule changes adopted by the Commission must be supported by substantial evidence in the record. *See* NMSA 1978, § 74-6-7(B)(2).

STATEMENT OF REASONS[5]

20.6.2.7 NMAC Definitions.[6]

58. The Department proposed to reformat the definitions numbering system at 20.6.2.7 NMAC in order to simplify future edits. *See Hunter Direct*, at 5:14-15. No other party took a position these proposed changes.

59. LANS proposed to add the Chemical Abstract Service Registry Number ("CAS Number") for each pollutant listed as a "toxic pollutant" (currently 20.6.2.7(WW) NMAC); proposed by NMED to be restyled 20.6.2.7(T)(2) NMAC. In support of this proposal, LANS submitted testimony stating that reference to the CAS Numbers, as opposed to the generic name, provides an unambiguous way to identify the pollutants listed as toxic pollutants and ensures consistency throughout the ground and surface water regulations. *See* Direct Testimony of Bob Beers, Pleading Log No. 52 at 1:8-12; 3:17 - 4:17.

---

[5] The Statement of Reasons is not required to "state why the Commission adopted each individual provision of the standards or . . . respond to all concerns raised in testimony." *Univ. of Cal. v. N.M. Water Quality Control Comm'n*, 2004-NMCA-073, ¶ 13, 136 N.M. 45, 94 P.3d 788. "Such a requirement would be unduly onerous for the Commission and unnecessary for the purposes of appellate review." *Id.*

[6] The Commission used NMED Ex. 43 attached to NMED's Third Notice of Errata to guide its discussion. *See* Pleading No. 123.Therefore, references to regulations should correspond to Ex. 43, unless otherwise noted.

60. NMED, through the rebuttal testimony of Dennis McQuillan, expressed support for inclusion of LANS' proposed amendment, and included the CAS numbers in its Second Corrected NMED Exhibit 43. *See* Rebuttal Testimony of Dennis McQuillan, Pleading Log No. 81, NMED Ex. 28 ("*McQuillan Rebuttal*") at 4:1-2. No other party took a position on this proposed change.

61. The Department also proposed to move the narrative standard for toxic pollutants from the definitions section to the groundwater standards section at 20.6.2.3103 NMAC, while leaving the list of toxic pollutants in the definitions section. In support of this proposal, the Department presented testimony that this change would result in regulatory clarity since the first part of the toxic pollutant definition is really a narrative groundwater standard. Doing so will also eliminate the need to refer to the toxic pollutant standard elsewhere in the regulations when reference is also made to the groundwater standards of 20.6.2.3103 NMAC. The Department supported this proposal through the testimony of Dennis McQuillan, Chief Scientist of the Department. NMED Exhibit 5, Written Direct Testimony of Dennis McQuillan ("*McQuillan Direct*"), 21:13-18; and 11-15-17 2 Tr. 382:7 - 386:21.

62. NMML argued that the language in the introductory paragraph should be retained, and not moved to 20.6.2.3103(A)(2) NMAC as a narrative standard. NMML asserted that moving the language from the definitions section to the standards section without reference to the definition has the potential to expand the authority beyond the list within the definition. NMML's full testimony can be found in the record at Pleadings Nos. 55 and 83.

63. NMED asserted that because "toxic pollutant" is a defined term in the regulations, moving the narrative standard for "toxic pollutants" does not create the potential to expand that standard beyond the list provided under the definition of the term. *McQuillan*

Rebuttal, 4:6 - 6:17; 11-15-17 2 Tr. 382:7 - 386:21.

64. Based on the weight of the evidence the Commission approved moving the narrative standard to 20.6.2.3103(A)(2) NMAC. *See generally* 7-10-18 1 Tr. 78:16 - 113:19. The Commission took a separate vote on NMED's proposed revision to the narrative standard itself. *See* Section 20.6.2.3103(A)(2) NMAC.

65. The Department also proposed to add 13 chemical constituents to the list of Toxic Pollutants set forth in the existing rule at 20.6.2.7(WW) (this would become 20.6.2.7(T)(2) under the Department's proposed reorganization of the definitions section). The basis for this proposal is that these constituents are either known pollutants of groundwater in New Mexico, or pose a credible threat of polluting groundwater in New Mexico at concentrations of concern to human health. *McQuillan Direct*, 5:3 – 21:17; 21:13-18; 11-15-17 2 Tr. 362:9 - 389:23.

66. NMML argued that all but two of the proposed additions at 20.6.2.7(T) are either regulated or in the regulation development stage under the Safe Drinking Water Act ("SDWA") or the Clean Water Act, and thus are already regulated as a matter of federal law. Docket No. 55, NMML-4, at1:20-22. The remaining two pollutants, prometon (a herbicide) and thiolane 1,1 dioxide (sulfolane) are not regulated and that NMED did not demonstrate the pollutants meet the criteria for regulation under the SDWA; and did not demonstrate that these pollutants are widespread in New Mexico, or present in sufficient concentrations to justify their regulation. Pleading No. 83, NMML Exhibit RT-1, at 1:26-29.

67. Based on the weight of the evidence, the Commission approved the addition of the 13 chemical constituents as they are known pollutants and pose a credible threat to groundwater. Some of the pollutants have been found in New Mexico. Others are likely to be found in the future. *See generally*, 7-11-18 2 Tr. 289:14 - 315:16.

New Section 20.6.2.10 NMAC Limitations.

68. As part of its rebuttal testimony, the Department proposed a new "Limitations" section at 20.6.2.10 NMAC in response to proposals submitted by LANS and USAF/DoD. Ms. Hunter testified that the new Section 20.6.2.10 NMAC mirrors the Limitations section in the WQA at Section 74-6-12. That section clarifies that the WQA does not apply to any activity or condition subject to the authority of the New Mexico Environmental Improvement Board under the New Mexico Hazardous Waste Act, except for abatement of water pollution or controlling the disposal or use of septage and sludge. NMED Exhibit 26, Written Rebuttal Testimony of Michelle Hunter ("*Hunter Rebuttal*"), 4:10 - 5:3; 11-16-17 3 Tr. 595:20 - 597:20. EMNRD stated that it did not object to the proposed language for 20.6.2.10.B NMAC. 11-16-17 3 Tr. 676:3-7.

69. LANS did not object to NMED's amended language for 20.6.2.10 NMAC, which more closely tracks the Water Quality Act. *See* 11-16-17 3 Tr. 685:20 - 686:6. NMED's proposed amendments are identical to LANS' final proposed language for 20.6.2.10 NMAC. Pleading No. 103, Ex. 1, at 1.

70. USAF/DoD, however, proposed alternative language for 20.6.2.10 NMAC, arguing that NMED's proposed language does not clarify when the Rules apply, fails to account for NMED's regulatory controls under other environmental programs, and would continue unnecessary and costly duplicative oversight and permitting requirements. *See* 11-16-17 3 Tr. 697:2 - 698:13. As such, USAF/DoD's proposal for 20.6.2.10 does not contain the carve-out language ("except to abate water pollution or to control the disposal or use of septage and sludge") that is included NMED's proposal. USAF/DoD argued that its proposal will streamline the process and ensure that activities undertaken by the regulated community are

protective of human health and the environment, without adding unnecessary layers of confusing and duplicative requirements. *See* USAF/DoD Ex. 6, at 6:9-12; *see also* 11-16-17 3 Tr. 699:2-7. USAF/DoD believes that the Rules should consider the real-life scenario where the Rules need not apply because of NMED's direct oversight in other environmental programs. *See* 11-16-17 3 Tr. 697:25 – 698:4.

71. The Department opposed USAF/DoD's proposed language. Ms. Hunter testified that the WQA sets forth the regulatory authority of the Commission and the Department and sets limits on that authority. She testified that the Department believed it would be inappropriate to include limitations on such authority in the regulations that go beyond the scope of the WQA. 11-16-17 3 Tr. 595:16 - 596:20.

72. Mr. Olson testified that the language proposed by USAF/DoD did not conform with the language of the WQA and omitted portions of the statutory language. Mr. Olson proposed that USAF/DoD's language be amended to conform with the WQA, as discussed above with respect to NMED's proposed language. Olson Rebuttal Testimony, WCO Rebuttal Ex. 1, at 2-3, 5-6; and 11-16-17 3 Tr. 705:19 - 706:13.

73. Based on the weight of the evidence, the Commission finds that the Department's proposal is more harmonious with the Commission's statutory authority. Therefore, the Commission approved the Department's proposed language for a new Section 20.6.2.10 NMAC. *See generally*, 7-10-18 1 Tr. 20:2 – 23:22.

20.6.2.1201 NMAC Notice of Intent to Discharge.

74. The Department proposed to change the Notice of Intent procedures in 20.6.2.1201 NMAC for certain types of wells. The Department's witness, Michelle Hunter, testified that, in 2016, the New Mexico legislature enacted a new statute called the Geothermal

Resources Development Act. The statute defines geothermal energy as a resource in excess of 250 degrees Fahrenheit which is subject to regulation by the Energy Conservation Management Division of the Energy, Minerals, and Natural Resources Department ("EMNRD"). The changes as proposed by the Department are necessary to make the Commissions regulations consistent with the new statute. Similar changes are proposed throughout 20.6.2 NMAC as identified in Ms. Hunter's written direct testimony. *Hunter Direct,* 5:17 - 6:3.

75. EMNRD provided testimony in support of the Department's proposed amendments in response to the Geothermal Resources Development Act through its witness, William Brancard. 11-16-17 3 Tr. 678:11 - 680:6.

76. Mr. Olson supported NMED's proposed language. *Olson Closing Argument* at 7-8 and *Olson Statement of Reasons* at 8.

77. Based on the weight of the evidence, the Commission finds the Department's proposal to change the Notice of Intent procedures for certain types of wells is well-taken and agrees with the Department's proposed amendments to 20.6.2.1201 NMAC. *See generally*, 7-10-18 1 Tr. 24:4 – 22.

20.6.2.1210 NMAC Variance Petitions.

78. The Department proposed a number of changes to 20.6.2.1210 NMAC, which governs petitions for variances from the Commission's regulations pursuant to Subsection 74-6-4(H) of the WQA. The Department supported these changes through the testimony of Kurt Vollbrecht, Manager of the Mining Environmental Compliance Section in the Department's Ground Water Quality Bureau. 11-14-17 1 Tr. 79:1 - 128:18; NMED Ex. 13, Written Direct Testimony of Kurt Vollbrecht ("*Vollbrecht Direct*"), 13:20 - 15:21.

79. The Department proposed changes at 20.6.2.1210(A)(9), (A)(10), (C), (D),

and (E) that would remove the existing five-year limit on variances and replace it with a requirement that the variance holder submit a compliance report every five years to the Department for the term of the variance. The compliance report would include: (1) a demonstration that the conditions of the variance are being followed; (2) any newly discovered facts; and (3) any changed circumstances. A hearing could be requested by the public or the Department to revoke, modify, or reconsider the variance if the conditions of the variance were not being met based on changed circumstances or newly discovered facts. 11-14-17 1 Tr. 73:18 - 74:9.

80. Subsection 74-6-4(H) of the WQA states that a variance may be granted "for the period of time specified by the Commission." Mr. Vollbrecht testified that limiting all variances to five years is not required under the statute, and is impractical in many circumstances, particularly given the highly prescriptive regulations the Commission has developed in recent years for the dairy and copper mining industries. *See* 11-14-17 1 Tr. 74:19 - 75:20; *Vollbrecht Direct*, 13:20 - 15:21; NMED Ex. 30, Written Rebuttal Testimony of Kurt Vollbrecht ("*Vollbrect Rebuttal*"); and 11-14-17 1 Tr. 79:1 - 128:18. The Department argued that its proposal would bring the regulations in line with the language of the statute, and give the Commission flexibility to determine the appropriate time period for a variance on a case-by-case basis, similar to the variance provisions in the Dairy Rule, at 20.6.6.18 NMAC, which was promulgated under the same authority, namely Subsection 74-6-4(H) of the WQA. 11-14-17 1 Tr. 74:10-18.

81. The Department also incorporated William C. Olson's proposed changes to 20.6.2.1210(A)(5) and (A)(9) regarding the information that must be provided in a variance petition. At 20.6.2.1210(A)(5) NMAC, the person requesting a variance would be required to

"provide information on uses of water that may be affected." At 20.6.2.1210(A)(9) NMAC, the person requesting the variance must also provide information concerning how "any water pollution above standards will be abated." Mr. Vollbrecht testified that this language was included because the Department believes it is important for a variance petition to include an evaluation of existing uses of water that could be affected by the requested variance. 11-14-17 1 Tr. 78:18 - 79:8.

82. Mr. Olson generally supported NMED's proposed language, with the exception of taking no position on the elimination of the five-year term of a variance in 20.6.2.1210(E) NMAC. *See Olson Closing Argument*, at 8; and *Olson Statement of Reasons* at 8-10.

83. RGR, NMCC, and AmMg supported eliminating the five-year limit on variances. RGR, NMCC, and AmMg argued that the five-year limit on variances can be counterproductive in such contexts as mining, where the need for variances longer than five years for long-term projects may be justified. RGR/NMCC/AmMg Post-Hearing Submission, at 3.

84. AB/GRIP opposed the Department's proposal and moved to dismiss in part the New Mexico Environment Department's Petition to Amend 20.6.2 NMAC, arguing in part that the Commission lacked the statutory authority to remove the five-year limit on variances, asserting that variances and discharge permits are linked, and that the public participation would be harmed under the proposed rule. *See* Pleading No. 64.

85. The Commission agreed with the Department that the WQA does not require variances for five years. The Commission also believed that the five-year reporting requirement proposed by the Department would preserve public participation in the variance

process. *See generally*, 11-14-17 Motion to Dismiss Tr. 50:22 – 66:17; 7-10-18 1 Tr. 27:30 – 50:2.

86. AB/GRIP proposed alternative language which would preserve the five-year limit on variances and add additional requirements for variances. *See* AB/GRIP Proposed Statement of Reasons, at 34 – 38.

87. The Department opposed AB/GRIP's proposed alternative on the grounds that it was unsupported by substantive testimony. *See* 11-14-17 1 Tr. 155:2 - 156:3, 186:20 - 188:10.

88. In his rebuttal, Mr. Vollbrecht explained that variances are not necessarily tied to permits, and that the Department's proposal would not eliminate the mandatory public hearing under NMSA 1978, Section 74-6-4(H). *See* 11-14-17 1 Tr. 79:9 - 86:12.

89. Dairies opposed AB/GRIP's proposed revisions to 20.6.2.1210 NMAC arguing that they are not adequately explained and supported by any testimony, they do not reflect the different types of variances contemplated under the Dairy Rule, 20.6.6 NMAC, and because they would impose unduly burdensome requirements. Testimony of Eric Palla, Dairies Ex. C, at 3-4.

90. NMMA opposed AB/GRIP's proposed revisions to 20.6.2.1210 NMAC arguing that they are not adequately explained and supported by any testimony. Testimony of Michael Neumann, NMMA Ex. E, at 5. NMMA also opposed AB/GRIP's legal arguments and position that a variance must be limited to five years. Pleading No. 70, "New Mexico Mining Association's Response to Amigos Bravos's and Gila Resources Information Project's Motion to Dismiss in Part the New Mexico Environment Department's Petition to Amend 20.6.2 NMAC."

91. The Commission agreed that AB/GRIP's proposal was not supported by

substantial evidence. First, the proposed addition of the term "aquifer" in (A)(5) is unnecessary as "aquifer" is not defined and "water" includes subsurface water. Second, the Commission did not think it had the authority to review variances for "compliance with existing federal regulations" as proposed in Subparagraph B by AB/GRIP. Third, striking "among other things" in Paragraph I limits the Commission's discretion. *See* 7-10-18 1 Tr. 40:1 to 45:8.

92. Mr. Olson suggested adding language to NMED's proposed 20.6.2.1210(E) NMAC which addresses compliance reports for variances longer than five years, to address concerns raised by NMMA and Dairies. *Olson Statement of Reasons*, at 9-10. The Dairies and NMMA had proposed language to 20.6.2.1210(E) NMAC to limit those who can request a hearing to revoke or modify a variance to "any person who would have standing to appeal a permit decision." Mr. Olson testified that such language is inconsistent with the WQA Sections 74-6-5(O) and 74-6-7(A) which grant standing to appeal any agency or Commission action to "a person who is adversely affected." Therefore, Mr. Olson suggested adding language specifying that appeals can be made by "any person who is adversely affected." *See* Olson Rebuttal Testimony, Ex. 1, at 6-8, and 10; Olson Testimony 11-15-17 2 Tr. 340:16 – 342:20.

93. NMED did not oppose the compromise language offered by Mr. Olson. *See* 11-14-17 1 Tr. 105:22-25 and 106:13 - 107:9.

94. Mr. Olson's alternative language is consistent with the Dairies' final position set forth in its Written Closing Argument (pg. 3) and its Partial Proposed Statement of Reasons (pp. 9-10).

95. Mr. Olson's alternative language is consistent with NMMA's final position set forth in its Written Closing Argument (pg. 3) and its Partial Proposed Statement of Reasons.

96. Based on the weight of the evidence, the Commission approved Mr. Olson's version of Paragraph E as it is the most consistent with the WQA. *See* 7-10-18 1 Tr. 32:1 – 37:13.

97. RGR, NMCC, and AmMg opposed NMED's proposed language at 20.6.2.1210(A)(5) that would require an applicant to provide an analysis of present and future uses of water that may be affected by the variance. RGR, NMCC, and AmMg argued that this proposed language creates a confusing requirement that would unduly complicate the variance application process for the permittee, would introduce unnecessary uncertainty into the regulations, and would likely be the subject of future controversy, as it has been in the past. RGR/NMCC/AmMg Post-Hearing Submission, at 5.

98. The Commission found that RGR, NMCC, and AmMg failed to present evidence to support their position and therefore rejected their objection to (A)(5). *See* 7-10-18 1 Tr. 37:14-23.

99. Based on the weight of the evidence, the Commission approved the Department's proposed changes to 20.6.2.1210 NMAC with the exception of Paragraph E, in which the Commission approved Mr. Olson's proposed language. *See* 7-10-18 1 Tr. 49:2-10.

20.6.2.3103 NMAC Standards for Groundwater of 10,000 mg/l TDS Concentration or Less.

100. LANS proposed to add the CAS Number for each pollutant listed at 20.6.2.3103 NMAC. In support of its proposal, LANS submitted testimony stating that reference to the CAS Numbers, as opposed to the generic name, provides an unambiguous way to identify the pollutants listed in 20.6.2.3103 and ensures consistency throughout the ground and surface water regulations. *See* Direct Testimony of Bob Beers, Pleading No. 52 at 1:8-12; 3:17 – 4:17.

101. NMED, through the rebuttal testimony of Dennis McQuillan, expressed support for inclusion of this proposed amendment. *McQuillan Rebuttal*, at 4:1-2.

102. No other party took a position on this proposed change.

103. Based on the weight of the evidence, the Commission approved LANS proposed change. 7-10-18 1 Tr. 52:9-10; 55:14-17.

20.6.2.3103(A)(1) NMAC Numerical Standards

104. NMED proposed to add numerical groundwater health standards for 13 constituents at 20.6.2.3103(A)(l) NMAC; to adjust the concentrations of existing WQCC groundwater human- health standards to be numerically equivalent to EPA National Primary-Drinking Water Standards for most constituents, with specific exceptions being chromium, fluoride, and xylenes; and to add groundwater human-health standards for chemical constituents that: (1) have been detected in groundwater in New Mexico, or pose a reasonable threat of contaminating groundwater in New Mexico, (2) are discharged at facilities subject to the authority of 20.6.2.3000 to 3114 NMAC, and (3) have EPA National Primary Drinking Water Standards. 11-15-17 2 Tr. 362:9 - 389:23; *McQuillan Direct*, at 4:9 - 18:13.

105. NMED supported these changes through the testimony of its Chief Scientist, Dennis McQuillan. 11-15-17 2 Tr. 362:9 - 389:23.

106. The Department noted that the Commission adopted numerical groundwater standards for toxic organic contaminants years before the United States Environmental Protection Agency ("EPA") set drinking water standards for the same constituents. Since some WQCC standards now differ from those of EPA, the Department proposed to adjust most standards to be equal to drinking water standards. The Department explained that protecting groundwater as a potential source of drinking water is a common goal of state programs, and EPA's Drinking Water Standards have often been adopted as state groundwater standards. Some WQCC standards will decrease in concentration, and others will increase. The Department proposed to not adjust several existing WQCC standards to be equal to those of

EPA at this time for reasons explained in detail by Mr. McQuillan. 11-15-17 2 Tr. 362:9 - 389:23; *McQuillan Direct*, 4:9 - 18:13, 33:1 - 36:10; NMED Ex. 9, 1985 Testimony of Victor Zalma, M.D.

107. Regarding NMED's proposal to retain the existing lower (i.e. more protective) standard for chromium previously adopted by the WQCC, Mr. McQuillan testified that the EPA is currently evaluating new scientific data regarding chromium toxicity and may proposed to amend its National Primary Drinking Water Standard in the future. 11-15-17 2 Tr. 371:20 – 373:4; *McQuillan Direct*, at 33:14-17.

108. Regarding NMED's proposal to retain the lower (i.e. more protective) standard for fluoride previously adopted by the WQCC, Mr. McQuillan testified that EPA has two different standards for fluoride: one to protect against fluorosis, and another to protect against dental fluorosis. NMED argued that a single standard that is more protective against both of these conditions is simpler, and the existing WQCC-adopted standard is protective against both conditions. 11-15-17 2 Tr. 373:5 – 375:12; *McQuillan Direct*, at 33:18 – 34:10.

109. Regarding NMED's proposal to retain the lower (i.e. more protective) standard for xylenes, NMED presented testimony reflecting that xylenes, toluene, and ethylbenzene occur in gasoline and other petroleum products, and have similar chemical and physical properties. This commission originally set the groundwater standard for toluene at 15 mg/L in 1981, which had to be lowered in 1985 to the existing standard of 0.75 mg/L, for reasons explained by NMED's medical expert at that time. NMED is concerned that raising the groundwater standard for xylenes from the existing concentration of 0.62 mg/L to 10 mg/L, the concentration of the EPA drinking water standard, might create issues similar to those of toluene. 11-15-17 2 Tr. 375:13 - 376:24; *McQuillan Direct*, 34:11 - 36:10; NMED Ex. 9,

1985 Testimony of Victor Zalma, M.D.

110. Mr. Olson supported NMED's proposed language. *Olson Closing Argument*, at 7-8; *Olson Statement of Reasons*, at 8.

111. NMMA opposed NMED's proposal to retain the existing standards for chromium and fluoride and proposed alternative language. NMMA argued that the uncertain possibility of future changes to the fluoride and chromium standards is not a valid reason for the Commission not to make the standards consistent with current EPA standards. With respect to fluoride, NMMA's presented evidence in its Exhibit D that EPA considered and decided that the condition involving tooth discoloration was not a health-based standard, and if NMED wanted to have a non-health-based standard for fluoride, it should have proposed a standard under 20.6.2.3103.B NMAC. *See* 11-15-17 2 Tr. 405-406.

112. NMML supported NMED's proposal to retain the existing standard for chromium, but opposed NMED's proposal to retain the existing standards for fluoride and total xylenes. With respect to the chromium standard, NMML asserted that the U.S. Environmental Protection Agency is considering the adoption of drinking water standards with regard to total chromium and/or hexavalent chromium, which are much stricter than the current MCL. Pleading No. 55, NMML-4, at 2-3, lns.72-82. NMML noted that there is no federal or state MCL specific to the hexavalent form of chromium. With respect to fluoride, NMML argued that since NMED testified that its primary standard was based on EPA's secondary standard, NMED should have proposed a secondary standard for fluoride. NMML also argued that NMED's proposed standard of 1.6 mg/l is vastly different than EPA's secondary standard of 2.0 mg/l, especially since the recommended level of fluoridation for purposes of dental protection in public water supplies is 0.7 mg/l. NMML asserted that based on NMED's

rationale, it should have proposed a standard of 2.0 mg/l for fluoride to be consistent with EPA's secondary standard.

113. In 1977, the Commission set New Mexico's groundwater fluoride standard at 1.6 mg/L. In 1986, the EPA adjusted the National Primary Drinking Water Standard to 4.0 mg/L to protect against skeletal fluorosis, and established a national secondary (non-enforceable) fluoride standard of 2.0 mg/L to protect against dental fluorosis. The existing WQCC groundwater standard of 1.6 mg/L fluoride protects children from manmade groundwater pollution that could cause the harmful effects of dental fluorosis as shown in NMED Exhibit 26. NMED testified, and the commission agrees, that if the groundwater standard were raised up to 4 mg/L, the concentration of the EPA primary drinking water standard, then the groundwater standard would no longer protect children in New Mexico from dental fluorosis. The commission agrees with NMED that it would not be good public policy to allow dischargers to increase groundwater fluoride to a concentration that could cause dental fluorosis. 11-15-17 2 Tr. 373:5 - 375:12; *McQuillan Direct*, at 33:18-34:10.

114. Based on the weight of the evidence the Commission approved the Department's proposal to retain the existing (i.e. more protective) standards for chromium, fluoride, and xylenes. The Commission is concerned about the possible human health effects of adopting less stringent standards for those contaminants. *See generally*, 7-10-18 1 Tr. 52:12 – 77:22.

20.6.2.3103(A)(2) NMAC Standards for Toxic Pollutants.

115. NMED proposed to move the narrative standard for Toxic Pollutants from 20.6.2.7(WW) to 20.6.2.3103(A)(2) NMAC and proposed changes to the relocated language in response to submittals by USAF/DoD. *See* NMED Ex. 28 at 3:20-21; 6:21-22; Second

Corrected NMED Exhibit 43; *see also* 11-15-17 2 Tr. 367:2-9. This amendment was proposed to provide regulatory clarity by eliminating the need to refer to the Toxic Pollutant standard elsewhere in the regulations when reference is also made to the groundwater standards of 20.6.2.3103 NMAC. NMED's Closing Argument and Proposed Statement of Reasons, ¶¶ 25, 26; 11-15-17 2 Tr. 382:14 - 385:6; *McQuillan Direct*, at 21:13-18.

116. LANS supported NMED's proposed language. LANS' Corrected Statement of Position at 2.

117. USAF/DoD argued that NMED's narrative standard proposal offers no clarity into the science used or how NMED makes its decisions because the terms are not defined in the WQA or the Rules. *See* USAF/DoD Ex. 4 at 7. USAF/DoD argued that NMED decisions on the narrative standard could lead to unnecessary litigation. *See* USAF/DoD Ex. 4 at 5-6; 10-11; *see also* 11-15-17 2 Tr. 479:10-16; 482:24 – 484:19. To resolve its concerns, USAF/DoD proposed alternative language including a definition for "credible science" for use by NMED when implementing the narrative standard. *See* Exhibit USAF/DoD 4 at 8 – 9; *see also* 11-15-17 2 Tr. 479:10 – 480:13. USAF/DoD presented testimony suggesting that the language in the toxic pollutant narrative standard be amended to require "best available science." 11-15-17 2 Tr. 477:17 - 484:19; USAF/DoD Ex. 1, Written Direct Testimony of Samuel Brock.

118. NMML concurred with the positions taken by USAF/DoD regarding the standard for toxic pollutants. *See* NMML-4 at 94-10; Pleading No. 55, Municipal League Notice of Intent to Present Technical Testimony and Exhibits, Ex. NMML-1, NMML Comments on NMED Petition, at 1:35-4; Ex. NMML-RT-2, at 1:30-33, 4:2-7.

119. The Department argued that USAF/DoD's proposed language was overly restrictive in the type of information the Department could consider, and that it did not

reflect the language in the Water Quality Act (which does not use the term "best available science," rather it uses the term "credible scientific data"). The Department's witness further testified that the Department would always evaluate the source of any information it uses in making determinations and would never use 'junk science." NMED's Closing Argument and Proposed Statement of Reasons, ¶ 63; 11-15-17 2 Tr. 385:23 - 388:17.

120. William C. Olson testified that in the Department's proposal to move the existing language for determining toxic pollutants from the definitions section of the rule to the standards section preserved the long-standing language on how the Commission determines toxic pollutants. He testified that the USAF/DoD revised language omits portions of existing Commission language about how an appropriate concentration of a toxic pollutant is determined. Mr. Olson also testified that the USAF/DoD proposed language for criteria on acceptable science when determining concentrations of toxic pollutants is reasonable, but is not consistent with the Commission statutory requirement that standards be "based upon credible scientific data and other evidence appropriate under the Water Quality Act," *see* NMSA 1978 74-6-4(D). In addition, Mr. Olson testified that the Commission should not limit appropriate science, as proposed by USAF/DoD, to United States federal agency toxicology information due to the current politicization and suppression of science at the federal level. *See* Olson Statement of Reasons, at 11-12; Olson Rebuttal Testimony, WCO Rebuttal Ex. 1, at 4-5; and Olson Testimony 11-15-17 2 Tr. 502:19 – 505:9. Mr. Olson proposed compromise language to address the issues raised by USAF/DoD regarding sources of scientific information. Olson Rebuttal Testimony, WCO Rebuttal Ex. 1, at 4-5; and Olson Testimony 11-15-17 2 Tr. 502:19 – 505:9. Mr. Olson's proposal would provide examples of accepted sources of scientific information.

121. Based on the weight of the evidence, the Commission finds NMED's proposal to move the narrative standard for toxic pollutant from the definitions section to the groundwater standards section at 20.6.2.3103 NMAC, and to amend the language to better conform with that of the WQA is well-taken and agrees with NMED's proposal to amend 20.6.2.7 and 20.6.2.3103(A)(2) NMAC as proposed. The Commission believes that the narrative standard provides authority to protect the groundwater from contaminants where no numerical standard exists and that NMED's proposed changes will provide clarity to the regulated community. The Commission finds that the USAF/DoD proposal is too restrictive. It is difficult to define what credible science is because it is always evolving. For the same reasons, the Commission rejected Mr. Olson's compromise language. Commissioners DeRose Bamman and Hutchinson opposed adopting NMED's proposal. *See generally*, 7-10-18 1 Tr. 78:11 – 113:23.

20.6.2.3103(B) Other Standards for Domestic Water Supply

122. NMED proposed to add the numerical groundwater standard of 0.1 mg/L for methyl tertiary-butyl ether ("MTBE") that has been set by the Environmental Improvement Board (Petroleum Storage Tank Regulations, 20.5.12.42.A.2 NMAC), to the aesthetic groundwater standards of 20.6.2.3103.B NMAC. NMED supported the addition of this standard through the testimony of its Chief Scientist, Dennis McQuillan. *McQuillan Direct*, at 6:17-19; 14:7-15.

123. Mr. Olson supported NMED's proposed language. *Olson Closing Argument* at 7-8 and *Olson Statement of Reasons* at 8.

124. Based on the weight of the evidence, the Commission finds NMED's proposed changes to 20.6.2.3103(B) to be well taken. *See* 7-10-18 1 Tr. 113:24 – 114:23.

20.6.2.3103 NMAC NOTE

125. In addition, NMED proposed to amend language in 20.6.2.3103[NOTE] NMAC, to provide assurances to sites under abatement for toxic pollutants for which the 20.6.2.3103 standards were proposed to be lowered that the new standards would not take effect until July 1, 2020, and that sites which had completed abatement for these constituents would not be reopened unless ordered by the Secretary. NMED Ex. 28, Rebuttal Testimony of Dennis McQuillan ("*McQuillan Rebuttal*"), at 8:21 - 9:6; 11-15-17 2 Tr. 392:7 - 396-10. NMED also agreed to use the phrase "hazard to public health" rather than "place of withdrawal of water for present or reasonably foreseeable use" based upon a comment and testimony from the NMMA, which was agreed to in Mr. McQuillan's written rebuttal testimony, NMED Ex. 28 at 8-9.

126. Roswell agreed with the inclusion and importance of NMED's proposed Note, but proposed that it be formally codified as 20.6.2.3103(D) NMAC and also proposed alternative language. Roswell expressed concern about potential disagreement over the legal effect of the undisputed important grace period under the footnote. 11-14-17 1 Tr. 51:20. Roswell's technical witness, Jay Snyder, PE ("Snyder") argued that the Note should be "elevated" and codified from a regulatory perspective to provide specific citation to issue responsible party letters regarding re-opening of sites. 11-15-17 2 Tr. 451:5-11.

127. NMML argued that NMED's Note is insufficient to define the applicability of the new standards to past, current or future discharges. NMML asserted that language regarding the clarification of the applicability of the new standards to past and current discharges, with approved discharge and/or abatement plans and application of new administrative standards with approved abatement plans should be included within 20.6.2.3103 and 20.6.2.4103, not respectively. *See* Exhibit NMML-6, lines 75-106. NMML argued alternatively, if the Commission chooses to retain the original regulations, it should make no

changes. NMML did not provide proposed alternative language and only proposed striking the last sentence of the Note. *See* Pleading Nos. 55 and 83.

128. NMED did not oppose Roswell's proposal. NMED witness Dennis McQuillan testified that, regardless of lack of formal codification as a subsection within the rule, the regulated community could rely on the language of the Note being legally effective. 11-15-17 2 Tr. 395:10-16. Mr. McQuillan stated he had no objection to codification unless there was some reason advanced to not codify by Archives and Records Center. 11-15-17 2 Tr. 396:1-7.

129. Based on the weight of the evidence, the Commission finds that NMED's proposed language, as well as Roswell's proposal to formally codify the Note in full as 20.6.2.3103(D) NMAC, are well taken. The Commission also added "ethel benzyne" after each occurrence of "TCE," as the omission of "ethel benzyne" appears to be a drafting oversight. The Commission voted to reject the alternative language proposed by Roswell as too confusing. In addition, the phrase "the place of withdrawal" has been subject to litigation in the past. *See* 7-10-18 1 Tr. 114:24 – 126:10.

20.6.2.3105(A) NMAC Exemptions from Discharge Permit Requirement.

130. The Department proposed changes at 20.6.2.3105(A) NMAC to clarify that if treatment or blending is required for a discharge to meet standards, that discharge does not qualify for an exemption from permitting requirements. Ms. Hunter testified that the exemption in 20.6.2.3105 NMAC only applies when *untreated* effluent meets all water quality standards. Because wastewater treatment is subject to failure, regulatory oversight of the operation, maintenance, and monitoring of wastewater treatment is necessary to protect water quality and public health. 11-16-17 3 Tr. 594:21 - 595:15.

131. Mr. Olson supported NMED's proposed language. *Olson Closing Argument* at 7-8 and *Olson Statement of Reasons* at 8.

132. The Municipal League opposed changes to Section 20.6.2.3105 NMAC because when the source water is drinking water, it is already highly regulated by the Safe Drinking Water Act. 11-16-17 3 Tr. 762. The Municipal League further argued that NMED's proposed changes are unnecessary when the source water is drinking water and the chemical compatibility of the aquifer is compatible with the chemistry of the aquifer, because there is minimal or no risk of contamination. The Municipal League asserted that the compatibility of injected drinking water can be addressed either through authorization-by-rule or another approach that does not require a groundwater discharge permit because the treatment requirements do not justify the burden of permitting. 11-15-17 2 Tr. 764-65. The Municipal League argued that for Aquifer Storage and Recovery ("ASR") projects, the owner/operator would only need to verify that the source water is compatible with the ground water, and without this exemption, the additional costs for permitting and monitoring are significant disincentives. Pleading No. 55, NMML-5, at 3. NMML argued that in practice, NMED had allowed the Water Authority's two ASR programs – at Bear Canyon and the Large-Scale Demonstration Project – to proceed without permitting by NMED under two different Bureau Chiefs. 11-16-17 3 Tr. 725, 766. The Municipal League suggested alternative language which would exempt ASR certain projects from a discharge permit.

133. RGR/NMCC/AmMg opposed NMED's proposed language on exemptions found at 20.6.2.3105(A) NMAC, noting that NMED plans to soon embark on a two or three-year public rulemaking process on issues relating to secondary uses of treated water. *See* 11-16-17 3 Tr. 603:10-21; 609:25 – 610:1-16. RGR/NMCC/AmMg argued that the proposed language offered by NMED is premature and would dramatically and unnecessarily narrow the exemption, particularly in a state such as New Mexico, where fresh water resources are scare,

and treatment and blending to meet standards are commonplace and desirable from the standpoint of maximizing water resources and use. RGR/NMCC/AmMg Post-Hearing Submission, at 6. Therefore, RGR/NMCC/AmMg proposed to leave the language of 20.6.2.3105(A) NMAC as it is in the existing rule.

134. NMED opposed NMML's proposed alternative language. Ms. Hunter testified that ASR projects, which may inject millions of gallons directly or indirectly into an aquifer, should not be exempt from the requirement to obtain a discharge permit even when the recharge water is the same drinking water that is served to utility customers. Ms. Hunter testified that the monitoring requirements for drinking water under the SWDA do not include monitoring the groundwater itself, and they do not contemplate aquifer conditions or potential geochemical interactions that could occur, or potential effects on contamination plumes. 11-16-17 3 Tr. 711:8 – 713:1. Ms. Hunter asserted that because no other state or federal statutory framework requires groundwater monitoring and no other state or federal permitting program monitors potential impacts in the aquifer itself, it is important for NMED to retain its regulatory authority over ASR projects. *Hunter Rebuttal*, at 3-4. Ms. Hunter explained that, while NMED had previously allowed the Water Authority's two ASR programs to proceed without permitting, at that time NMED was not aware of the potential adverse effects on aquifers that ASR projects could have, and emerging science had since indicated that such effects are possible, requiring regulatory oversight. 11-16-17 3 Tr. 724:19 - 726:15.

135. Based on the weight of the evidence, the Commission finds the Department's proposed changes to the first sentence of 20.6.2.3105(A) NMAC are well-taken and are consistent to the changes made to 20.6.2.3103 NMAC. *See generally*, 7-11-18 2 Tr. 184:1 – 204:8.

136. The Commission initially voted five (5) to four (4) to make no changes to 20.6.2.3105(A) as suggested by RGR/NMCC/AmMg. The Commission later voted five (5) to four (4) to approve the second sentence proposed to 20.6.2.3105(A) NMAC by NMED. However, under NMSA 1978, Section 74-6-3(D), "no action of the commission is valid unless concurred in by six or more members present at a meeting." Therefore, the Commission's vote was invalid and the second sentence proposed to 20.6.2.3105(A) NMAC by NMED was not approved. The Commissioners voting against NMED's proposal felt that the proposed change was premature in light of the fact that the Department is considering broader reuse regulations. *See generally*, 7-10-18 1 Tr. 129:9 – 167:6; 7-11-18 2 Tr. 184:1 – 204:8.

137. The Commission rejected the Municipal League's alternative language as not supported by substantial evidence and did not adequately address potential problems with ASR. *See generally*, 7-10-18 1 Tr. 129:9 – 167:6; 7-11-18 2 Tr. 184:1 – 204:8.

20.6.2.3105(J), (L), (M) NMAC

138. EMNRD proposed to amend 20.6.2.3105(L) and (M) NMAC and to add a new subsection N to correct references to statutes and agencies. Direct Testimony of William Brancard, Pleading No. 50, EMNRD Ex. 1 at 1-3.

139. The Department supported proposed changes submitted by EMNRD in 20.6.2.3105(L), and (M) regarding proper statutory authority and current agency references. 11-16-17 3 Tr. 598:8.

140. LANS proposed to delete 20.6.2.3105(J). In support of this proposal, LANS submitted testimony that proposed 20.6.2.10(A) NMAC renders the permit exemptions in 20.6.2.3105(J) redundant. *See* Direct Testimony of Bob Beers, Pleading No. 52 at 5:17 – 6:2.

141. Both NMED and Mr. Olson agreed that subsection J is unnecessary. *See* 11-16-

17 3 Tr. 601:6-8, 708:1-4. No other party took a position on this proposed change.

142. LANS also proposed to delete 20.6.2.3105(M) NMAC. In support of this proposal, LANS submitted testimony that proposed 20.6.2.10(B) renders the permit exemptions in 20.6.2.3105(M) redundant. *See* Direct Testimony of Bob Beers, Pleading No. 52 at 5:17 – 6:2.

143. NMED supported this proposal and EMNRD did not oppose this proposal. No other party took a position on these proposed changes.

144. Based on the weight of the evidence, the Commission finds that the proposed changes to 20.6.2.3105 NMAC set forth above are well taken. *See generally*, 7-10-18 1 Tr. 167:7 – 171:8.

20.6.2.3105 – Proposed New Subsections

145. LANS proposed adding a subsection to exempt discharges from facilities or conditions regulations under the Resource Conservation and Recovery Act ("RCRA") to (1) clarify that the exemptions for hazardous waste and solid waste extend to activities and condition subject to federal authority under the federal Solid Waste Disposal Act, which includes RCRA, but not yet subject to regulation under the New Mexico Hazardous Waste Act or the Solid Waste Act and (2) avoid duplication. Mr. Beers expressed concern that NMED's proposal to not include an exemption for activities regulated under RCRA leaves the potential for residual federal permitting under RCRA, and thus, potentially, dual permitting, for the same activity. 11-16-17 3 Tr. 688:3-8. Mr. Beers testified that LANS' proposed exemption would clarify that activities regulated under the federal Solid Waste Disposal Act are exempt from the discharge permitting requirements because they are already subject to federal authority. Pleading No. 52 at 3-7.

146. NMED opposed LANS' proposal arguing that the WQA sets limits on the authority of the Commission and the Department, and that it would be inappropriate to include additional limitation on such authority in the regulations that go beyond the scope of the WQA. 11-16-17 3 Tr. 594:14-20, 595:20 – 596:20, 622:18 – 623:4. NMED pointed out that the limitations section of the WQA does not mention RCRA, and that RCRA does not cover certain constituents that affect water quality, such as TDS and nitrates. 11-16-17 3 Tr. 701:14 – 704:2.

147. Mr. Olson opposed LANS' proposal testifying that there is no statutory exemption in the WQA for these federal activities, that some RCRA sites have operational discharge permits issued under Commission rules, and that it is necessary for the state to protect its interests in preventing and abating water pollution in New Mexico pursuant to its statutory authority. Olson Rebuttal Testimony, WCO Rebuttal Ex. 1, at 3, 5-6; Olson Testimony, 11-16-17 3 Tr. 706:21 – 708:4; and *William C. Olson Statement of Reasons* at 16-17.

148. USAF/DoD proposed a new subsection at the end of 20.6.2.3105 NMAC adding an exception to the discharge permit requirements for regulated entities engaged in land discharge that are already subject to regulatory oversight pursuant to a permit or consent under the Hazardous Waste Act. *See* 11-16-17 3 Tr. 698:7 – 700:3. USAF/DoD argued that its proposals will streamline the process and ensure that activities undertaken by the regulated community are protective of human health and the environment, without adding unnecessary layers of confusing and duplicative requirements. *See* USAF/DoD Ex. 6 at 6:9-12; *see also* 11-16-17 3 Tr. 699:2-7.

149. NMED opposed USAF/DoD's proposal arguing that the WQA sets limits on the authority of the Commission and the Department, and that it would be inappropriate to include

additional limitations on such authority in the regulations that go beyond the scope of the WQA. 11-16-17 3 Tr. 594:14-20, 595:20 – 596:20, 622:18 – 623:4.

150. Mr. Olson opposed USAF/DoD's proposal testifying that there is no statutory exemption in the WQA for federal activities, that some RCRA sites have operational discharge permits issued under Commission rules and that the state needs to protect its interests in preventing and abating water pollution in New Mexico pursuant to its statutory authority. Olson Rebuttal Testimony, WCO Rebuttal Ex. 1, at 3, 5-6; and Olson Testimony 11-16-17 3 Tr. 706:21 – 708:4; and *William C. Olson Statement of Reasons* at 16-17.

151. Based on the weight of the evidence the Commission rejected both LANS' and USAF/DoD proposed additions to 20.6.2.3105 NMAC. Federal permits are not completely harmonious with the WQA and these exemptions would leave a gap in water quality. *See generally*, 7-10-18 1 Tr. 171:16 – 174:10.

20.6.2.3106 NMAC Application for Discharge Permits, Renewals, and Modifications.

152. The Department proposed changes to 20.6.2.3106(C) NMAC that would add "Modifications" to the title of that section. Mr. Vollbrecht testified that the existing rule does not indicate what information is required for submittal of an application for a discharge permit modification, and no mention of the process for Secretary review of such an application. The Department's proposed changes would address that issue. 11-17-17 4 Tr. 1007:25 - 1008:19.

153. Mr. Olson supported NMED's proposed language. *Olson Closing Argument* at 7-8; and *Olson Statement of Reasons* at 8.

154. The Commission finds NMED's proposed revisions to 20.6.2.3106.C NMAC are well- taken and agrees with NMED's amendments as proposed. *See generally*, 7-10-18 1 Tr. 174:11 – 175:1.

20.6.2.3107 NMAC Monitoring, Reporting and Other Requirements.

155. At 20.6.2.3107(A)(11) NMAC, the Department proposed striking the words "or the presence of a toxic pollutant" following the reference to standards set forth at 20.6.2.3103 NMAC, which addresses toxic pollutant standards.

156. The Commission finds the Department's proposed change reasonable as it eliminates confusion and provides greater clarity. *See generally*, 7-10-18 1 Tr. 175:7 – 176:2.

20.6.2.3108(A) NMAC Public Notice and Participation.

157. The Department proposed changes to 20.6.2.3108(A) NMAC that would extend the time period for the Department to determine that an application for a discharge permit is administratively incomplete and notify an applicant for a discharge permit that additional information is required from 15 days to 30 days. *See* NMED Ex. 43; 11-16-17 3 Tr. 551:19 - 552:20.

158. Mr. Olson supported NMED's proposed language. *Olson Closing Argument* pp. 7-8 and *Olson Statement of Reasons* p. 8. No other party took a position on these proposed changes.

159. Based on the weight of the evidence, the Commission agreed with NMED's proposal. *See generally*, 7-11-18 2 Tr. 204:6 – 205:6.

20.6.2.3108(H) through (N) NMAC

160. The Department proposed changes in response to LANS' proposal that would limit the requirement for the Department to issue fact sheets to draft permits for discharges at federal facilities, except for discharges comprised solely of domestic liquid waste, and for other facilities as determined by the Secretary. These changes were included in NMED Ex. 43. 11-16-17 3 Tr. 549:10 - 550:7.

161. Mr. Olson supported NMED's proposed language. *Olson Closing Argument* at 7-8 and *Olson Statement of Reasons* at 8.

162. LANS did not oppose NMED's proposed amendments to the introductory paragraph of 20.6.2.3108(H), including NMED's proposal to move a portion of the introductory paragraph to a newly proposed Subsection I. However, LANS proposed alternative language adding a requirement to include with the draft permit all proposed effluent limitations or other conditions on the proposed discharge, and all proposed monitoring recordkeeping and reporting requirements. LANS explained that in its experience, even after submission of detailed process information and data showing the type and quantity of constituents within a proposed discharge demonstrates the absence or de minimum presence of many of the listed contaminants, the Department includes conditions in discharge permits and requires broad sampling and analysis for all contaminants listed in 20.6.2.3103 and all toxic pollutants. *See* 11-16-17 3 Tr. 552 – 554. LANS argued that tailoring permit requirements for monitoring, recordkeeping, and reporting requirements to contaminants that have been identified as having a reasonable potential of being present in the effluent and could cause or contribute to concentrations in excess of applicable standards is consistent with Section 74-6-5(D) of the WQA that permit conditions must be "reasonable and necessary to ensure compliance with the [WQA] and applicable regulations, considering site-specific conditions" and efficient for the permittee and the Department. *See* 11-16-17 3 Tr. 553 – 554; Written Direct Testimony of Robert S. Beers, Pleading No. 52 at 10. It would also eliminate unnecessary sampling and analysis of results without any increased threat to the environment. *See* Written Direct Testimony of Robert S. Beers, Pleading No. 52 at 10. LANS asserted that using reasonable potential to constrain effluent limitations is consistent with EPA's approach to NPDES permits under the federal Clean Water Act ("CWA"). LANS Closing Argument at 19-20.

163. LANS proposed adding a Subparagraph 4 to NMED's proposed Paragraph I to include calculations and other information in fact sheets for draft permits. LANS argued that this increases transparency and helps applicants, permitees, and the public understand the source or derivation of effluent limits and other conditions set forth in a proposed discharge permit. *See* 11-16-17 3 Tr. 559:2-5.

164. NMED supported the reasoning behind LANS' proposed changes but testified that those changes were too broad and would significantly increase the time needed to process permit applications and issue draft permits. NMED's Closing Argument and Proposed Statement of Reasons, ¶¶ 71-74; 11-16-17 3 Tr. 549:13 – 550:7.

165. Based on the weight of the evidence, the Commission voted unanimously to amend Paragraph H incorporating language from both NMED's and LANS' proposals as follows: "**H.** Within 60 days after the department makes its administrative completeness determination and all required technical information is available, the department shall make available a [~~proposed approval or disapproval of the~~] draft permit or a notice of intent to deny an application for a discharge permit, modification or renewal[~~, including conditions for approval proposed by the department or the reasons for disapproval~~]. The draft permit shall include all proposed effluent limitations or other conditions on the proposed discharge, and all proposed monitoring, recordkeeping and reporting requirements. A draft permit for a permit modification shall only include those permit conditions proposed to be modified." The Commission believed the language proposed by LANS would help provide clarity for applicants and the public and increase transparency. *See generally*, 7-11-18 2 Tr. 206:10 – 219:9.

166. Based on the weight of the evidence the Commission voted unanimously to

amend Paragraph I as proposed by NMED. The Commission voted to not to accept LANS' proposed Paragraph I(4). The Commission thought that the information in LANS' proposed Paragraph I(4) is already covered by Paragraph I(3) and would place an additional burden on the Department. *See generally*, 7-11-18 2 Tr. 219:13 – 226:5.

20.6.2.3109 NMAC Secretary Approval, Disapproval, Modification or Termination of Discharge Permits and Requirement for Abatement Plans.

167. In response to a proposal by LANS, the Department proposed language, to be codified at 20.6.2.3109(B) NMAC, providing for a response to comments received by the Department within 30 days of the issuance of draft permits. Ms. Hunter testified that the Department agreed with the reasoning of LANS' proposal regarding a response to comments, but was proposing its own language. 11-16-17 3 Tr. 570:13-24; NMED Ex. 43, at 29. LANS agreed with the Department's language and did not offer additional testimony on it at the hearing. 11-16-17 3 Tr. 571:10-14.

168. William C. Olson testified that the Department's proposal incorporated a proposal he had previously submitted, and that he now concurs with the revisions to 20.6.2.3109 NMAC as proposed by the Department. 11-16-17 3 Tr. 572:8-14.

169. The Department also proposed language, to be codified as 20.6.2.3109(E)(4) NMAC, clarifying the notice provided with respect to termination of discharge permits to track more closely with the Water Quality Act. Tr. Vol. 3, 570:6-12; *Hunter Direct,* 6:17-23.

170. No party objected to these changes. Based on the weight of the evidence, the Commission finds the Department's proposal to modify 20.6.2.3109 NMAC to provide for a response to comments and to clarify notifications of termination of a discharge permit is well-taken and agrees with the Department's proposal to amend 20.6.2.3109 NMAC as proposed with any applicable changes to cross-refences. *See generally*, 7-11-18 2 Tr. 229:7 – 2323:17.

20.6.2.3114 NMAC Fees.

171. The Department proposed clerical changes to 20.6.2.3114, Table 1 NMAC, to align with the Department's proposed changes to the abatement regulations at 20.6.2.4103(A) NMAC. *See* NMED Ex. 43.

172. The Commission finds NMED's proposed revisions to 20.6.2.3114, Table 1 NMAC are well-taken and agrees with NMED's amendments as proposed. 8-14-18 3 Tr. 351:20 – 353:13.

20.6.2.4103(A) and (B) NMAC Abatement Standards and Requirements.

173. NMED proposed to add a new subsection dealing with abatement of subsurface water contaminants, to be codified as 20.6.2.4103(B) NMAC. Second Corrected NMED Exhibit 43, p. 35. NMED supported this amendment through the testimony of its Chief Scientist, Dennis McQuillan; Ground Water Bureau Chief, Michelle Hunter; and Expert Witness, Dr. Blayne Hartman. 11-17-17 4 Tr. 901:15 - 922:22; *McQuillan Direct*, at 39:3 - 46:20; *Hunter Direct*, at 3:13 - 4:2, 7:3 - 8:8; NMED Ex. 11, Written Direct Testimony of Blayne Hartman, Ph.D ("*Hartman Direct*").

174. The testimony of Dr. Hartman defined vapor intrusion, discussed the current state of the science on vapor intrusion, noted that 29 states have policies regarding regulation of the vapor intrusion pathway, and concluded by stating "[R]egulatory agencies with the authority to require environmental cleanup should have the regulatory authority to require cleanup of this environmental pathway that impacts human health so readily." *Hartman Direct.*

175. Dr. Hartman was unable to attend the public hearing due to a family medical emergency, but no party objected to the admission of his resume (NMED Ex. 10) and written direct testimony (NMED Ex. 11). 11-17-17 4 Tr. 900:10-22.

176. Ms. Hunter testified that NMED's proposal expressly included oversight of

volatilization of vapor-phase pollution from subsurface impacts, and that the protection of subsurface waters as proposed by NMED included all subsurface water in the vadose zone. Ms. Hunter testified that the Commission's abatement regulations had been adopted in 1995, prior to the general understanding of vapor intrusion as a pathway requiring oversight, and had not been substantially updated since, therefore the need now to re-establish New Mexico as a leader in the regulatory protection of groundwater via the adoption of specific regulatory authority over the vapor intrusion pathway. 11-17-17 4 Tr. 920:11-922:2; *Hunter Direct*, at 3:13 - 4:2, 7:3-8:8.

177. Mr. McQuillan testified as to the definitions of water, including groundwater and subsurface water, as defined in the Water Quality Act; the authority in the Water Quality Act to "injure human health, animal or plant life or property, or unreasonably interfere with the public welfare or the use of property" upon which NMED's proposal was based; provided multiple examples of such occurrences which had taken place in New Mexico in the preceding 30 years; and addressed a number of points in NMMA's written testimony regarding the impacts of subsurface water contaminants on crops and animals. 11-17-17 4 Tr. 901:19 - 919:23; *McQuillan Direct*, at 39:3 - 46:20.

178. NMMA was the only party to present testimony opposing NMED's proposal. 11-17-17 4 Tr. 970:17 - 985:12; NMMA Rebuttal Ex. E, Rebuttal Testimony of Daniel Stephens/Neil Blandford.

179. After the public hearing, NMED and NMMA agreed to an amendment of 20.6.2.4103(A) NMAC, in place of NMED's proposed 20.6.2.4103(B) NMAC. In their proposed Statements of Reasons, each party filed an amended 20.6.2.4103(A) NMAC, which added the phrase "[A]ny constituent listed in 20.6.2.3103 NMAC or any toxic pollutant in the

vadose zone shall be abated so that it is not capable of endangering human health due to inhalation of vapors that may accumulate in structures, utility infrastructure, or construction excavations." NMED Ex. 43.

180. In its Order for Hearing the Commission specified that the scope of the rulemaking was "limited to the amendments proposed by the Department in its Petition, and any logical outgrowths thereof." *See* Pleading No. 4.

181. AB/GRIP argued that NMED's and NMMA's agreed upon amendment of 20.6.2.4103(A) NMAC violated logical outgrowth doctrine and therefore could not properly be considered by the Commission unless the Commission issued new public notice and held another public hearing. *See* Pleading No. 126. AB/GRIP argues that interested parties could not have anticipated the amendment to 20.6.2.4103(A) NMAC based upon the notice published in the *Albuquerque Journal* on June 17, 2017, the pre-hearing submissions file by the parties, and the statements made at the rulemaking hearing. *See* Pleading Log No. 126, Ex. C at 13. AB/GRIP objected to NMED's and NMMA's proposed amendment as changing the scope of the originally proposed rule by limiting abatement in the vadose zone to vapor intrusion and injuries to human health due to the inhalation of vapors. *See id.* at 14-16.

182. A primary limitation on the principle that administrative agencies may make changes to a proposed rule following the comment period without a new round of hearings "is that the final rule must be a 'logical outgrowth' of the proposed rule." *See Zen Magnets, LLC v. Consumer Prod. Safety Comm'n*, 841 F.3d 1141, 1154 (10th Cir. 2016). "A final rule qualifies as a logical outgrowth if interested parties should have anticipated that the change was possible, and thus reasonably should have filed their comments on the subject during the notice-and-comment period." *Id.* (quoting *CSX Transp., Inc. v. Surface Transp. Bd.*, 584 F.3d

1076, 1079-80 (D.C. Cir. 2009)).

183. The Commission found that NMED's and NMMA's proposed compromise language for 20.6.2.4103(A) NMAC was a logical outgrowth of the original language proposed by NMED. *See* 8-14-18 Logical Outgrowth Tr. 39:15 – 54:5; 8-14-18 3 Tr. 324:24 – 337:6. As a preliminary matter, the Commission's rulemaking regulations allow parties to include "revised proposed rule language" in their post-hearing submissions. *See* 20.1.6.304 NMAC. All of the parties stipulated to filing post-hearing submittals by February 16, 2018. *See* Pleading No. 95. The Commission finds that the parties could have anticipated the compromise by NMED and NMMA. First, the first public comment discussion draft presented by NMED on June 16, 2016, specifically mentioned vapor intrusion. *See* Pleading No. 127, at 3. Second, the compromise language was supported by evidence presented at the hearing. NMED Exhibit 3 is the EPA's guidance dealing specifically with vapor intrusion. The Direct Testimony of Dr. Blayne Hartman also specifically dealt with vapor intrusion. *See* NMED Ex. 11. Dr. Daniel B. Stephens specifically stated that NMED's original proposed amendment to 20.6.2.4103 "would likely lead to significant, unneeded increases in investigation costs and regulatory burden for future site closures and remediation. *See* Pleading No. 82, Rebuttal Testimony of Daniel B. Stephens, NMMA Ex. H, at 2-3. In fact, Dr. Stephens suggested limiting 20.6.2.4103(A) to vapor intrusion in response to a question from Chair Dominguez. *See* 11-17-17 4 Tr. 992:14-19.

184. Laun-Dry proposed an additional provision at 20.6.2.4103(B)(2) NMAC. Laun-Dry argued that the term "existing condition" has been interpreted as synonymous with "background" from a regulatory standpoint, and that "existing condition" is a phrase that principally applies to discharge plans pursuant to 20.6.2.3103 NMAC. 11-16-17 3 Tr. 792.

Laun-Dry submitted that the application of 20.6.2.4103(B) as currently applied is problematic where multiple sources of contamination are involved because another responsible party downstream does not necessarily clean up man-made, non-natural conditions. *Id.* As a result, Laun-Dry argued that "background" should be used as the remediation standard rather than "existing condition," because a path to exit abatement as expeditiously as possible is a goal of the regulations, see 20.6.2.4106(C) NMAC.

185. The Department did not necessarily disagree with the concepts articulated by Laun-Dry, but maintained that those changes were unnecessary due to the Department's proposed language in 20.6.2.4103(B) NMAC stating that groundwater pollution shall be abated to meet the standards of Subsections A, B, and C of Section 20.6.2.3103 NMAC, thereby excluding the reference to "existing concentrations" in the preamble to that section. In addition, NMED argued that 20.6.2.4101(B) NMAC establishes that background is the appropriate standard for abatement purposes in the event background exceeds the standards of 20.6.2.4103(A) and (B) NMAC. *Vollbrecht Rebuttal* at 17.

186. NMMA opposed Laun-Dry's proposal to eliminate the "existing conditions" language because it has always been an integral part of the standards in 20.6.2.3103 NMAC and is intended to clarify that a discharger is not responsible for contamination that existed when the discharger's activities commenced. Testimony of Michael Neumann, NMMA Ex. E, at 9-10; 11-16-17 3 Tr. 800 – 801.

187. Based on the weight of the evidence, and the agreement reached by the only two parties to present testimony on this issue, the Commission finds NMED and NMMA's proposal to amend 20.6.2.4103(A) NMAC is well-taken and agrees with the parties' proposal to amend 20.6.2.4103(A) NMAC as proposed. NMED's original proposed language would have

unintended consequences and be difficult to implement. Commissioner Hutchinson opposed the compromise language. *See* 8-14-18 3 Tr. 321:10 – 337:6.

188. Based on the weight of the evidence the Commission approved the Department's proposed language in 20.6.2.4103(B) instead of Laun-Dry's as background is the appropriate standard for abatement purposes in the event background exceeds the standards of 20.6.4103(A) and (B). 8-14-18 3 Tr. 337:7 – 344:18.

20.6.2.4103(D) and (E)(1)(d) NMAC Alternative Abatement Standards.

189. The Department proposed changes to Subsections 20.6.2.4103(D) and (E)(1)(d) NMAC regarding the sampling frequency required for demonstrating completion of abatement and technical infeasibility regarding petitions for alternative abatement standards. Mr. Vollbrecht testified that at many sites under abatement, the frequency of sampling has been reduced because of a lack of change in the analytical data over time. A site nearing the end of abatement has typically been under abatement for many years and there is often no shortage of data available. However, the requirement for eight consecutive quarterly samples of data for closing out the site can mean that the applicant must go back and sample for an additional two years on a quarterly basis not because such additional data is needed, but simply to meet the technical requirement of the rule. 11-17-17 4 Tr. 834:9 - 835:4; *Vollbrecht Direct*, at 18:11; 11-17-17 4 Tr. 831:7-13; *Vollbrecht Direct*, at 16:1 - 18:17. The Department asserted that its proposed changes address this issue by still requiring eight consecutive samples, but expanding the time period over which those samples may be collected. 11-17-17 4 Tr. 835:5-8.

190. Mr. Olson supported NMED's proposed language. *Olson Closing Argument* at 7-8 and *Olson Statement of Reasons* at 8.

191. AB/GRIP opposed the Department's proposed changes and proposed alternative

language increasing the number of sampling events from eight (8) to ten (10). *See* 11-17-17 4 Tr. 869:2-9.

192. Roswell stated that it did not necessarily disagree that eight (8) consecutive quarterly samples from all compliance sampling stations could be a precondition to completing abatement, but submitted that the regulation should be revised and amended to allow discretion to the Secretary. Roswell argued that situations where wells show groundwater is clean with no trend above standard should not require additional eight quarters of sampling which is a remnant of discharge permit requirements. 11-14-17 1 Tr. 52:19 – 53:4. Synder testified that Roswell's proposed language to 20.6.2.4103(D) and 20.6.2.4103(F)(1)(d) provided additional alternatives to the NMED in the situation, but not limited to, release after substantial natural attenuation and that additional discretion given to the Department and Secretary would be an overall benefit for the goals of abatement because it would put the hydrology, the release history, the site conceptual model and related factors into a unified context. 11-17-17 4 Tr. 796:8-15, 797:4-5.

193. The Dairies opposed the changes to 20.6.2.4103(D) offered by Roswell because the change would allow too much discretion to the Department. Testimony of Eric Palla, Dairies' Ex. C, at 4.

194. Mr. Olson opposed Roswell's proposal testifying that the language proposed by Roswell is vague and subjective, allows wide variation in criteria for considering technical infeasibility, will lead to disputes, and would lack an explicit requirement applied from site to site. Mr. Olson also testified about the need for eight consecutive quarters of sampling in making decisions on abatement closure. Olson Rebuttal Testimony, WCO Rebuttal Ex. 1, at 14-15; Olson Testimony 11-17-17 4 Tr. 879:25 – 881:15.

195. Based on the weight of the evidence, the Commission approved NMED's proposed changes to 4103(D) and (E)(1)(d) as consistent with minimum EPA guidelines. The Commission rejected Roswell's proposal to give discretion to the secretary as leading to too much uncertainty. 8-14-18 3 Tr. 344:18 – 348:18.

20.6.2.4103(E) NMAC

196. The Department proposed changes to subsections 20.6.2.4103(E) and (F) regarding petitions for alternative abatement standards. Alternative abatement standards are a form of variance from the Commission's regulations under the authority set forth under Section 74-6-4(H) of the WQA. Thus, alternative abatement standards can only be granted by the Commission following a mandatory public hearing. 11-17-17 4 Tr. 832:20-22; *Vollbrecht Direct*, at 16:12-18. Mr. Vollbrecht testified that the current rule allows the Secretary of the Department to grant alternative standards based on technical infeasibility for contaminant concentrations that are less than or equal to 200 percent of the standard, while proposed alternative standards allowing contaminant concentrations above 200 percent of the standard must be considered by the Commission following a public hearing. 11-17-17 4 Tr. 831:14-22; *Vollbrecht Direct*, at 16:12-16.

197. The Department's proposed changes would eliminate the provisions allowing the Secretary to approve alternative standards based on technical infeasibility where the proposed standard is less than or equal to 200 percent of the existing standard. Instead, all requests for alternative abatement standards would be required to go before the Commission. 11-17-17 4 Tr. 831:23 - 832:5, 832:13-25; *Vollbrecht Direct*, at 16:5-9.

198. In addition, the Department's proposed changes at 20.6.2.4103(F) NMAC would also restructure the four criteria that can be used as the basis for alternative abatement

standards so that they are laid out more clearly, and to expressly define technical infeasibility as one of the four possible bases for obtaining an alternative abatement standard. 11-17-17 4 Tr. 833:1-24; *Vollbrecht Direct*, at 17:3-18:10.

199. These changes align the Commission's regulations with the WQA, which requires that all requests for variances be decided by the Commission following public notice and a public hearing. They provide greater public notification and opportunity for public participation. They also provide greater clarity while maintaining the existing criteria that must be demonstrated in order to obtain alternative abatement standards. 11-17-17 4 Tr. 833:25 - 834:8; *Vollbrecht Direct*, at 16:2-17:5.

200. Mr. Olson supported NMED's proposed language. *Olson Closing Argument* at 7-8 and *Olson Statement of Reasons* at 8.

201. The Dairies opposed NMED's proposal to repeal 20.6.2.4103(E) of the existing rules, which the Dairies argued allow NMED under limited circumstances to make a "technical infeasibility" determination without the need for the Commission to adopt alternative abatement standards. The Dairies proposed to leave Subsection E as it is in the existing rule and renumber the other subsections and cross-references as appropriate. The Dairies explained that when the Commission adopted the existing rule, it relied on testimony presented on behalf of the Department distinguishing between a technical infeasibility determination and a variance. Dairies' Written Closing Argument, at 7-9. The Dairies argued that NMED had not explained why its position in support of the Commission's adoption of the existing rule is incorrect, how its proposed repeal of the current rule would affect prior determinations made under that rule, or any problems that have been encountered with the existing rule. The Dairies supported retaining the existing rule. Testimony of Eric Palla, Dairies Ex. C. at 4.

202. NMMA also opposed NMED's proposal to repeal 20.6.2.4103(E) and proposed leaving Subsection E as is in the existing rule for the same reasons as the Dairies. Testimony of Michael Neumann, NMMA Ex. E at 9.

203. Based on the weight of the evidence the Commission approved NMED's proposed changes to 20.6.2.4103(E). *See generally* 8-14-18 3 Tr. 348:19 – 351:16.

20.6.2.4103(E)(2)(d)

204. The Department proposed changes to 20.6.2.4103(E)(2)(d) NMAC in response to proposed changes submitted by the Dairies that would allow a person who is abating pursuant to an exemption as set forth in 20.6.2.4105 NMAC to petition for alternative abatement standards without being required to submit a Stage 1 and Stage 2 abatement plan. The Department opposed the specific language proposed by the Dairies, but offered alternative language, which the Dairies indicated that they supported. The revised language is included in Subsection E, as Subsection F of the current rule would be renumbered as Subsection E as show in the Second Corrected NMED Exhibit 43. 11-17-17 4 Tr. 836:17 - 837:14; *Vollbrecht Rebuttal*, at 16:4-18.

205. Based on the weight of the evidence, the Commission finds that the Department's proposed changes at 20.6.2.4103(E)(2)(d) are well taken, and agrees with the Department's amendments as proposed. *See* 8-14-18 3 Tr. 348:19 – 351:16.

20.6.2.4103(F) NMAC

206. The Department proposed changes to 20.6.2.4103(F) NMAC providing for post-closure requirements after remediation is complete. Ms. Hunter testified that New Mexico is the only state in the country without an institutional controls program governing land or property restrictions on parcels of land that have undergone environmental remediation but

have not been able to achieve residential standards or risk-based screening levels. Administrative and legal controls can be important tools in helping to minimize the potential for human exposure to contamination or to protect the integrity of the remedy. 11-17-17 4 Tr. 1001:19 - 1002:24.

207. Mr. Olson supported NMED's proposed language. *Olson Closing Argument* at 7-8 and *Olson Statement of Reasons* at 8.

208. No party objected to the proposed change to 20.6.2.4103(F) NMAC. Based on the weight of the evidence, the Commission finds the Department's proposal to modify 20.6.2.4103 NMAC to allow the Department to require deed restrictions or other institutional controls on properties where groundwater does not meet standards required for unrestricted use is well-taken and agrees with the Department's proposal to add new Subsection 20.6.2.4103(F) NMAC as proposed. *See* 8-14-18 3 Tr. 348:19 – 351:16.

20.6.2.4104(C) NMAC Abatement Plan Required.

209. The Department proposed changes to 20.6.2.4104(C) NMAC that would remove the qualifying language restricting the Department's ability to require financial assurance for abatement. The current language only allows the Department to require financial assurance for those sites that operate under a discharge permit. By removing the qualifying language, the Department would have the ability to require financial assurance regardless of whether there is a discharge permit associated with a particular site. 11-17-17 4 Tr. 996:11-20; *Hunter Direct*, at 8:18-9:6. Ms. Hunter testified that the Department has the responsibility to oversee abatement of all impacted groundwater in the state and, regardless of whether a permit is associated with a site under abatement, the responsible party may become financially insolvent or walk away from sites where there are active monitoring wells or remediation systems. Financial assurance

may be necessary so that the State of New Mexico is not saddled with the cost of either abating a site or plugging and abandoning the monitoring or other wells left at those sites. 11-17-17 Tr. 996:9 - 997:22.

210. Laun-Dry opposed the Department's proposed changes to 20.6.2.4104(C) NMAC and proposed to leave the existing language in place. Laun-Dry argued that the requirement of financial assurance on small family type businesses poses a risk that ground water contamination will continue unabated and exact an unnecessary economic drag on New Mexico and its people. Jay Snyder, PE testified that requirement of assurance would inhibit timely implementation of abatement if applied to low to middle capitalized parties. 11-17-17 4 Tr. 818; Synder NOI, at 3.

211. NMMA opposed the Department's amendment of 20.6.2.4104(C) contending that NMED had not identified any legal basis to require financial assurance from a person conducting abatement that does not hold a discharge permit. NMMA presented testimony that requiring financial assurance could impose a burden that a person conducting abatement cannot meet and that the Commission had not adopted financial assurance rules. Testimony of Michael Neumann, NMMA Ex. E, at 10-11.

212. Ms. Hunter testified that there is no principled distinction between sites under abatement with an associated permit, and a site under abatement without an associated permit. At either site, pollution has occurred and cleanup is required. Financial assurance helps ensure that such cleanup is carried out. 11-17-17 4 Tr. 998:9-15.

213. The Department's proposed language would not require financial assurance at all sites. Ms. Hunter testified that, in considering whether to require financial assurance at a given site, the Department would determine whether requiring financial assurance would

impede remediation progress and would decline to require it for entities for which it would cause undue hardship. 11-17-17 4 Tr. 998:16 - 999:16.

214. The Commission has authority to require financial assurance for sites under abatement pursuant to Section 74-6-4(E) of the WQA, which provides that the Commission shall promulgate regulations to prevent and abate water pollution. The entirety of the Commission's abatement regulations at 20.6.2.4000 NMAC were promulgated under that authority, and nothing in the statute precludes the Commission from requiring financial assurance for any site under abatement as part of those regulations. 11-17-17 4 Tr. 997:23 - 998:8.

215. Based on the weight of the evidence, the Commission finds that the Department's proposed changes at 20.6.2.4104(C) NMAC are well taken as the Commission has the authority under the WQA to require, on a site-by-site basis financial assurances for sites under abatement, and agrees with the Department's amendments as proposed. *See generally*, 7-11-18 2 Tr. 236:3 – 250:13.

20.6.2.4104(D) NMAC

216. The Department proposed changes to 20.6.2.4104(D) NMAC that would give the Secretary discretion to require oversite funding agreements at abatement sites. Ms. Hunter testified that the abatement regulations have no mechanism for fees, and oversight of abatement activities requires specific expertise and can be very time-consuming. The only mechanism for funding staff time is the General Fund or the Corrective Action Fund, both of which have been substantially cut in recent years. Funding agreements with responsible parties can help ameliorate the untenable situation for the Department created by the lack of a fee mechanism for abatement sites. 11-17-17 4 Tr. 999:22 - 1000:9; *Hunter Direct*, at 9:7-12.

217. Mr. Olson supported NMED's proposed language. *Olson Closing Argument* at 7-8 and *Olson Statement of Reasons* at 8.

218. Based on the weight of the evidence, the Commission finds that the Department's proposed changes at 20.6.2.4104(D) NMAC are well taken as it will strengthen the ability of the Department to cover its costs, and agrees with the Department's amendments as proposed. *See generally*, 7-11-18 2 Tr. 236:3 – 250:13.

20.6.2.4105 NMAC Exemptions from Abatement Plan Requirements.

219. At 20.6.2.4105(B) NMAC, the Department proposed to add the narrative subsurface water standard that it proposed at 20.6.2.4103(A) NMAC to the list of standards for which lack of compliance could authorize the NMED Cabinet Secretary to require an Abatement Plan for an otherwise exempted abatement activity. *McQuillan Direct*, at 47:1-15.

220. NMED and NMMA jointly proposed a new 20.6.2.4103(A)(2) NMAC which replaces NMED's prior proposal to create a new 20.6.2.4103(B) NMAC addressing subsurface water contaminants, however NMED's proposal to amend 20.6.2.4105(B) NMAC is still applicable based on this amended proposal. NMED Ex. 43, NMED's Final Proposed Changes to 20.6.2 NMAC.

221. Mr. Olson supported NMED's proposed language. *Olson Closing Argument* at 7-8 and *Olson Statement of Reasons* at 8.

222. Based on the weight of the evidence, the Commission finds NMED's proposal to allow the Secretary to require abatement of subsurface water contaminants is well-taken and agrees with NMED's amendments to 20.6.2.4105(B) NMAC as proposed. *See* 8-14-18 3 Tr. 353:14 – 354:6.

20.6.2.4106 NMAC Abatement Plan Proposal.

223. The Department proposed changes at 20.6.2.4106(D) NMAC relating to extensions of time to submit abatement plans. 11-17-17 4 Tr. 835:9 - 836:14; *Vollbrecht Rebuttal*, at 18:18-19:13. Under the existing rule, a Stage 2 abatement plan is required to be submitted within 60 days after Department approval of the Stage 1 final site investigation report, and allows the time frame to be extended to 120 days. As part of the Stage 2 abatement plan, the responsible person is required to submit results of a feasibility study and select and propose an abatement option. 11-17-17 4 Tr. 835:20-24; *Vollbrecht Rebuttal*, at 18:19 - 19:5. Mr. Vollbrecht testified that for complex sites, the time to conduct the feasibility study can be lengthy and can require public and stakeholder involvement as part of the process. In those cases, it may be more appropriate for the responsible person to provide a proposed schedule for completing Stage 2 activities, which the Department would approve, and if an extension of time is necessary the length of that extension should be based on the reasons for which it is being sought, not the set time frame provided in the existing rule. 11-17-17 4 Tr. 835:25 - 836:14; *Vollbrecht Rebuttal*, at 19:2-10. The Department's proposed change addresses this issue by eliminating the specific time period for extensions of time, and instead providing simply that the Secretary may grant approval for an extension of time to submit a Stage 2 abatement plan for good cause shown. 11-17-17 4 Tr. 836:7-14; *Vollbrecht Rebuttal*, at 19:10-13.

224. Mr. Olson supported NMED's proposed language. *Olson Closing Argument* at 7-8 and *Olson Statement of Reasons* at 8.

225. The Dairies requested 20.6.2.4106(C) NMAC be changed to include the term "reasonably" with respect to information the Department may require for abatement plan, as supported by Mr. Palla's direct written testimony, Dairies' Exhibit A.

226. The Department opposed the Dairies' proposed changes at 20.6.2.4106(C) and

(C)(7) NMAC, which would insert the word "reasonably." Mr. Vollbrecht testified that such changes are unnecessary. 11-17-17 4 Tr. 837:25 - 838:3; *Vollbrecht Rebuttal*, at 16:20-24.

227. Based on the weight of the evidence, the Commission finds that the Dairies' proposed changes at 20.6.2.4106(C) NMAC are well taken as they will add context. The Commission also finds that the Department's proposed changes at 20.6.2.4106(D) are well taken but the word "State" should be changed to "Stage." *See generally* 7-11-18 2 Tr. 252:3 – 259:5.

20.6.2.4108 NMAC Public Notice and Participation.

228. NMED and Mr. Olson both proposed separate changes to 20.6.2.4108(B), (C), and (D) NMAC regarding the timing for submittal of public notice for Stage 2 abatement plans. Mr. Olson also proposed new Subparagraphs D and G addressing alternative abatement standards. Roswell proposed changes to Subparagraph B(4).

229. Mr. Olson testified that existing rule language in 20.6.2.4108 NMAC does not address initial public notice of submission of alternate abatement standards petitions and that alternate abatement standards may be petitioned at any time, and could be submitted outside of a Stage 2 abatement plan. Mr. Olson explained that in such instances, adjacent landowners, tribes, pueblos and Natural Resource Trustee and other local, state or federal agencies would not receive initial notice of submission of alternate abatement standards petitions, as occurs for a Stage 2 abatement plan. These public and governmental parties would subsequently not have the opportunity to provide input on whether it may affect them during the Department's review of the petition prior to a Commission hearing on the matter. Mr. Olson testified that receiving information from the public and other governmental agencies upfront in the review process is critical and useful to the Department in evaluating alternate abatement standard petitions,

especially knowledge of area water wells and present and future water and land uses that may be affected, as well as other site specific information. He asserted information contained in an alternate abatement standard petition is highly technical and extensive in nature and that the public should be provided with adequate time to review and assess the petition's effects prior to the Commission's 30-day hearing notice issued pursuant to the Commission's adjudicatory procedures. Mr. Olson proposed new amended language to address these discrepancies and provide initial public notice of submission of a petition for alternate standards, similar to that required for submission of a Stage 2 abatement plan. His proposed amendments to this section also clarified that hearings on alternate abatement standards are before the Commission and not the Secretary of the Department. Mr. Olson also testified that public notice of abatement plan modifications do not cover public notice of alternate abatement standard petitions. Mr. Olson explained that alternate abatement standards petitions are not approved by the Department under the modification process but are a form of variance from the Commission's rules subject to a Commission hearing and approval. If approved by the Commission, alternate abatement standards and the means of achieving them must be later incorporated into an abatement plan modification which is administratively approved by the Department. *See Olson Statement of Reasons*, at 12 – 16; *Olson Direct*, Ex. 1, at 13-15; 11-17-17 4 Tr. 1010:16 – 1013:3, 1014:25 – 1016:23.

230. The Department supported Mr. Olson's proposed language. *Volbrecht Rebuttal*, at 20-22; 11-17-17 4 Tr. 1006:21 – 1007:13.

231. NMED supported its proposed amendments to 20.6.2.4108 NMAC through the testimony of Mr. Vollbrecht, who testified that under the current rules, the process and timelines for submitting a proposed public notice to the Department for approval is unclear.

The proposed revisions provide clarity regarding when the public notice proposal must be submitted, and set out a time frame for Secretary approval of a public notice prior to a final agency determination on the Stage 2 abatement plan itself. 11-17-17 4 Tr. 1005:11 - 1006:1; *Vollbrecht Direct*, at 19:14-21.

232. Mr. Olson supported NMED's proposed language regarding timing of submittals. *Olson Closing Argument* at 7-8 and *Olson Statement of Reasons* at 8.

233. Roswell did not take a position on NMED's proposed language, but submitted its own proposed change to 20.6.2.4108(B)(4) that would reduce the radius within which notice regarding Stage 2 abatement plans would be required. Roswell argued that its amendment is consistent with the public notice and participation requirements regarding discharge permits under 20.6.2.3108 NMAC and that additional public notice is unnecessary, and burdensome. Jay Snyder provided testimony that public notice requirements could be accomplished more efficiently and cost-effectively by publication in newspapers, neighborhood postings or radio advertising and suggested NMED Voluntary Remediation public notice provisions were less cumbersome and should be incorporated in the abatement regulations. 11-16-17 3 Tr. 799:6 – 19. Roswell asserted that its proposed revision to notify the public within a 1/3 mile radius instead of a one-mile radius is sufficient to provide for meaningful public notice and participation.

234. NMED opposed Roswell's proposed language arguing that Roswell had not provided evidence to support the claim that the current requirement is ineffective, unnecessary and overly expensive. Ms. Hunter testifies that in sparsely populated areas, the current require may only result in notification of a few people. The Department asserted that because abatement plans are for contamination that has already occurred, it is important to err on the

side of providing broad public notice for abatement plans. 11-17-17 4 Tr. 1000:15 – 1001:10.

235. Mr. Olson also opposed Roswell's proposed language explaining that the purpose of a discharge permit is to prevent water pollution at a facility and a shorter radius for discharge permits is appropriate because water pollution is not allowed and should not occur. If water pollution does occur, the effects of contamination can extend for large distances and larger landowner public notification radius is warranted under an abatement plan is warranted. Mr. Olson also testified that this issue was addressed at the original Commission abatement hearings in 1995 and that the Commission has been presented with technical testimony at adjudicatory hearings (Dona Ana Dairies and Tyrone mine), alternate abatement standards hearings (LAC Minerals, L-Bar uranium mine) and other rulemaking hearings (Dairy Rule and Copper Mine Rule) regarding the extent of water pollution at facilities and how the effects of that pollution can extend over 1 mile in distance. Mr. Olson testified that during his 25 years of experience in working on water pollution abatement with both NMED and the Oil Conservation Division there were numerous examples of extensive water pollution that in some cases extended over 1 mile. Olson Rebuttal Testimony, WCO Rebuttal Ex. 1, at 15 – 16; and Olson Testimony, 11-17-17 4 Tr. 1013:4 - 1014:24.

236. Based on the weight of the evidence, the Commission agreed to adopt Mr. Olson's proposed changes to 20.6.2.4108 NMAC as it encompasses NMED's proposed language, but is also more comprehensive than NMED's proposed language. The Commission rejected Roswell's proposed change to 20.6.2.4108(B)(4) NMAC for the reasons set forth by Mr. Olson and because it could limit transparency in rural areas. *See generally* 7-11-18 2 Tr. 259:16 - 264:17.

20.6.2.4109 NMAC Secretary Approval or Notice of Deficiency of Submittals.

237. Mr. Vollbrecht testified regarding an inconsistency in 20.6.2.4109(C) NMAC created by other changes proposed by the Department. To address this inconsistency, the Department proposed to change the number of days between when the Department receives a Stage 2 abatement plan proposal and when the Secretary must approve the plan or notify the responsible person of the plan's deficiency from 90 to 120. 11-17-17 4 Tr. 1006:2-17.

238. Mr. Olson supported NMED's proposed language. *Olson Closing Argument* at 7-8 and *Olson Statement of Reasons* at 8.

239. Based on the weight of the evidence, the Commission finds that the Department's proposed changes at 20.6.2.4109 NMAC are well taken, and agrees with the Department's amendments as proposed. However, the Commission deleted "a" before "technical infeasibility demonstration," and "ninety" in Paragraph C. *See* 8-14-18 3 Tr. 354:8 – 355:18.

20.6.2.4113 NMAC Dispute Resolution.

240. The Dairies requested that 20.6.2.4113 NMAC be amended to clarify that there is a right to appeal following a dispute resolution. Testimony of Eric Palla, Dairies' Ex. A, at 9-10.

241. NMED opposed this change and the related change to 20.6.2.4114 NMAC. Mr. Vollbrecht testified that the outcome of a dispute resolution under 20.6.2.4114 NMAC for a particular issue is not a final agency action that can be taken up by the Commission. Rather, the outcome of the dispute resolution would be incorporated into a broader decision or document or approval that could then be appealed to the Commission. 11-16-17 3 Tr. 582:7 - 583:17.

242. Mr. Olson opposed the Dairies proposal for 20.6.2. 4113 NMAC and its related change to 20.6.2.4114 NMAC. Mr. Olson testified that he was a member of the Commission

during the rulemaking hearings adopting the abatement rules and implemented and enforced Commission abatement rules with both NMED and the Oil Conservation Division for 16 years. Mr. Olson testified that the intent of dispute resolution was to allow a responsible party to contest technical decisions of NMED staff by disputing staff requirements to the NMED Secretary for a Secretary decision on a specific technical issue. He also testified that agency actions based on the Secretary's decision are incorporated into an abatement plan approval with conditions (subject to a public hearing for final action) or a notice of deficiency regarding the overall abatement plan and that these final agency actions are explicitly appealable to the Commission under 20.6.2.4114 NMAC. Mr. Olson maintained that the Rule would be unwieldy for both NMED and the Commission if disputes of each individual technical rule requirement are appealed to the Commission outside either approval of an overall abatement plan or agency issuance of a notice of deficiency. In addition, Mr. Olson testified that dispute resolution is a non-public process between the agency and the responsible party for achieving compromise on technical issues and that there is no public participation in this process. He maintained that private resolution of technical issues between the agency and responsible person does not mean that the public may not object to the Secretary's technical resolution decision during a public hearing on the abatement plan where agency actions become final. Olson Rebuttal Testimony, WCO Rebuttal Ex. 1, at 10-11; and Olson Testimony 11-16-17 3 Tr. 584:11 – 586:15.

243. Based on the weight of evidence the Commission declined to adopt Diaries' proposed changes at 20.6.2.4113 as it did not view the outcome of dispute resolution as a final agency action. Such appeals should be heard after a permit is completed. *See generally*, 7-11-18 2 Tr. 266:18 – 268:16.

20.6.2.4114 NMAC Appeals from Secretary's Decision.

244. The Department proposed a conforming change to 20.6.2.4114(A) NMAC to strike the reference to "technical infeasibility demonstration," in line with the proposed changes to 20.6.2.4103(E) NMAC.

245. Mr. Olson supported NMED's proposed language. *Olson Closing Argument* at 7-8 and *Olson Statement of Reasons* at 8.

246. Based on their opposition to the Department's proposed changes at 20.6.2.4103(E) NMAC, the Dairies argued that this change should not be made if the Commission accepts the Dairies' position not to repeal the technical infeasibility provision. Dairies proposed a separate change to clarify that there is a right to appeal following dispute resolution, consistent with Dairies' proposed change to 20.6.2.4113 NMAC. Testimony of Eric Palla, Dairies' Ex. A, at 9-10.

247. NMED opposed this change and the related change to 20.6.2.4113 NMAC. Mr. Vollbrecht testified that the outcome of a dispute resolution under 20.6.2.4114 NMAC for a particular issue is not a final agency action that can be taken up by the Commission. Rather, the outcome of the dispute resolution would be incorporated into a broader decision or document or approval that could then be appealed to the Commission. 11-16-17 3 Tr. 582:7 - 583:17.

248. Mr. Olson opposed Dairies proposal for the same reasons that he testified to in the related proposed Dairies change to 20.6.2.4113 NMAC.

249. Accordingly, based on the weight of evidence the Commission finds that the Department's proposed changes at 20.6.2.4114 NMAC are well taken, and, agrees with the Department's amendment as proposed but striking "Paragraph (4)." *See* 8-14-18 3 Tr. 355:19 – 358:6

20.6.2.5002 NMAC Underground Injection Control Well Classifications.

250. At 20.6.2.5002(B)(5)(b)(iii) NMAC the Department proposed striking "geothermal energy" as the first two words of the clause, as overly repetitious. No parties opposed the proposed change.

251. Based on the weight of the evidence, the Commission finds the Department's proposed change well taken, and agrees with the Department's proposal to amend 20.6.2.5002(B)(5)(b)(iii) NMAC.

20.6.2.5003 NMAC Notification and General Operation Requirements UIC Wells.

252. The Department proposed to add language to include the new Geothermal Resources Development Act, NMSA 1978, §§ 71-9-1 to -11, in the Underground Injection Control ("UIC") regulations contained at 20.6.2.5003 NMAC. *Hunter Direct*, at 9:15-17; NMED Ex. 43, at 44.

253. EMNRD provided testimony in support of the Department's proposed amendments in response to the Geothermal Resources Development Act through its witness, William Brancard. 11-16-17 3 Tr. 678:11 - 680:6.

254. Mr. Olson supported NMED's proposed language. *Olson Closing Argument* at 7-8 and *Olson Statement of Reasons* at 8.

255. Based on the weight of the evidence, the Commission agrees with the Department's proposal to amend 20.6.2.5003 NMAC as proposed. *See generally*, 7-11-18 2 Tr. 269:19 – 271:2.

20.6.2.5004 NMAC Prohibited UIC Activities and Wells.

256. The Department proposed to add language at 20.6.2.5004(A)(4)(a) NMAC of the Underground Injection Control ("UIC") regulations to include geochemical and geophysical parameters in the requirements that must be met to allow operation of certain types of UIC

wells, including aquifer storage and recover ("ASR") projects. 11-16-17 3 Tr. 710:7-20; *Hunter Direct*, at 9:20- 10:5.

257. Ms. Hunter testified that physical and geochemical parameters are important components of water quality that must be reviewed and likely modeled prior to injection into an underground source of drinking water. Injecting water that meets standards into an existing aquifer can adversely impact water by causing unforeseen reactions in the subsurface, such as mobilization of toxic metals that were adhered to soil particles. Ms. Hunter testified that it is important to look at the physical and geochemical parameters of the whole aquifer system, not just contaminants in the source water, in order to address potential contamination that could be created simply by combining two incompatible waters that, on their own, meet all Safe Drinking Water Act standards. 11-16-17 3 Tr. 710:21 - 712:8.

258. Ms. Hunter testified that other states such as California have recognized this issue with ASR projects, and have taken regulatory action to address it. 11-16-17 3 Tr. 712:9 - 713:1.

259. Mr. Olson supported NMED's proposed language. *Olson Closing Argument* at 7-8 and *Olson Statement of Reasons* at 8.

260. Based on the weight of the evidence, the Commission finds that the Department's proposed changes at 20.6.2.5004 NMAC are well taken, and agrees with the Department's amendments as proposed. *See generally* 7-11-18 2 Tr. 271:3-16.

20.6.2.5005 NMAC Pre-Closure Notification and Closure Requirements.

261. The Department proposed to include a provision that requires permittees and responsible parties to provide a copy of their well plugging and abandonment plan. These plans are provided to and approved by the Office of the State Engineer ("OSE"). The proposed

change would require that a copy of the OSE submission be provided to the Department. *Hunter Direct*, at 10:5-8; NMED Ex. 43, at 46.

262. Mr. Olson supported NMED's proposed language. *Olson Closing Argument* at 7-8 and *Olson Statement of Reasons* at 8.

263. No party objected to these changes, based on the weight of the evidence, the Commission agrees with the Department's proposal to amend 20.6.2.5005 NMAC as proposed. *See generally* 7-11-18 2 Tr. 271:17 – 272:12.

20.6.2.5006 NMAC Discharge Permit Requirements for Class V Injection Wells.

264. The Department proposed changes to 20.6.2.5006 NMAC that would include clarifying language to eliminate any perceived exemptions from the UIC permitting regulations for ASR projects. 11-16-17 3 Tr. 713:11 - 716:7; *Hunter Direct*, at 10:11-17; *Hunter Rebuttal*, at 6:14 - 7:21.

265. Ms. Hunter testified that the federal UIC regulations, for which New Mexico has primacy to administer, do not exempt aquifers designated as underground sources of drinking water. Because ASR projects, by definition, inject into such aquifers, those projects cannot be exempt from the UIC regulations as a matter of federal law. 11-16-17 3 Tr. 713:19-24.

266. Mr. Olson supported NMED's proposed language. *Olson Closing Argument* at 7-8 and *Olson Statement of Reasons* at 8.

267. The Municipal League opposed changes to Section 20.6.2.5006 NMAC as unnecessary because underground sources of drinking water only need to be protected from constituents that violate the primary drinking water regulations and that is unnecessary when the source water is drinking water. 11-16-17 3 Tr. 768-69; 782-83. NMML stated that its interest in this proposed change concerns ASR which is designed to maximize the use of New

Mexico's water resources by storing water in underground aquifers for when it was needed during times of drought. 11-16-17 3 Tr. 751-54; Pleading No. 55, NMML-5, at 1-2.

268. NMML proposed alternative language to narrow the scope of monitoring requirements to only those that are present in the source water. NMML argued that because ASR projects are drinking water, the stringent SDWA requirements are already met, similar to the NPDES system. Pleading No. 55, NMML-5, at 3. The Department could utilize "permit-by-rule" under its primacy to administer the UIC program instead of a discharge permit requirement. 11-16-17 3 Tr. 747. This exemption is allowed when there is no exceedance of any groundwater standard or drinking water standard under the SDWA. 11-16-17 3 Tr. 724. In practice, NMED has allowed the Water Authority's two ASR programs – at Bear Canyon and the Large-Scale Demonstration Project – to proceed without permitting by NMED under two different Bureau Chiefs. 11-16-17 3 Tr. 725, 766.

269. The Department opposed the Municipal League's proposed language. Ms. Hunter testified that the Department disagrees that the 20.6.2.3105 NMAC exemptions are in any way applicable to the Department's UIC primacy program. She explained that the federal program does not allow for state exemptions to apply. 11-16-17 3 Tr. 713:25 - 714:18. Ms. Hunter also explained that the Department is the only regulatory agency that evaluates and regulates water quality issues in aquifers associated with ASR projects, which inject enormous amounts of water into an existing aquifer. She noted that the State Engineer regulates the water quantity issues, and the federal Safe Drinking Water Act regulates the quality of the source water, but only the Department looks at water quality issues associated with the aquifer itself, which include evaluation of possible adverse water quality impacts that could result from injections into the aquifer, and the proximity of sites with plumes of contaminated groundwater

and the potential impacts of ASR projects on those sites, as well as the project site. 11-16-17 3 Tr. 714:19 - 716:7.

270. The Department also opposed the second part of the Municipal League's proposal regarding a permittee's ability to petition for reduced monitoring. Ms. Hunter testified that this change is not necessary because permittees already have that ability. 11-16-17 3 Tr. 717:4-7.

271. Based on the weight of the evidence, the Commission finds that the Department's proposed changes at 20.6.2.5006 NMAC are well taken because the Department has primacy and currently, it does not appear that any other entity is regulating ASRs. The Commission did not accept the Municipal Leagues proposed changes. Commissioner DeRose Bamman abstained. 7-11-18 2 Tr. 272:12 – 280:19.

20.6.2.5101 NMAC Discharge Permit and Other Requirements for Class I and III Wells.

272. The Department proposed to remove subsection 20.6.2.5101(D)(1), because it would be redundant with new Section 20.6.2.10 NMAC. The Department also proposed to add language in 20.6.2.5101(D) NMAC to include correct references to the Surface Mining Act, NMSA 1978, §§ 69-25A-1 to -36; the Oil and Gas Act, NMSA 1978, §§ 70-2-1 to -38; the new Geothermal Resources Development Act, NMSA 1978, §§ 71-9-1 to -11, in the UIC regulations for permit applications that should be sent to the Energy, Minerals, and Natural Resources Department. *Hunter Direct*, at 10:17-21; NMED Ex. 43, at 46-47.

273. EMNRD provided testimony in support of the Department's proposed amendments in response to the Geothermal Resources Development Act through its witness, William Brancard. 11-16-17 3 Tr. 678:11 - 680:6.

274. Mr. Olson supported NMED's proposed language. *Olson Closing Argument* at

7-8 and *Olson Statement of Reasons* at 8.

275. No party objected to these changes, and based on the weight of the evidence, the Commission agrees with the Department's proposal to amend 20.6.2.5101 NMAC as proposed.

Statutory Criteria for the Adoption of Proposed Rule.

276. Pursuant to NMSA 1978, §§ 74-6-1 to -17, the Commission is responsible for adopting water quality standards for surface and ground waters of the state to "protect the public health and welfare, enhance the quality of water and serve the purposes of the [WQA]." NMSA 1978, § 74-6-4(D). As noted in the Department's Petition in this matter, 20.6.2 NMAC was originally promulgated in 1977, and the majority of sections had not been revised since 2001.

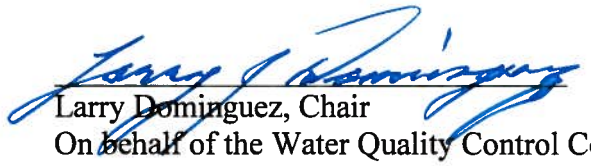
277. In considering the proposed changes to 20.6.2 NMAC, the Commission gave the weight it deemed appropriate to the relevant facts and circumstances presented and factors set forth in NMSA 1978, Section 74-6-4(E).

278. The proposed amendments are adopted for any and all of the reasons stated above.

ORDER

By a unanimous vote of a quorum of the Commission members, the rule changes set forth in this Order were approved by the Commission on August 14, 2018. The rule changes as described in this Order are hereby adopted as of the date of the signature of this Order. *See* 20.1.6.307(C) NMAC. The rule changes shall be filed with the State Records Administrator within fifteen (15) days after the date of this Order. *See* NMSA 1978, § 14-4-5(D). The state records administrator may make minor, nonsubstantive corrections in spelling, grammar and format to the filed rules. *See* NMSA 1978, § 14-4-3(D). The rule changes shall become

effective thirty (30) days after their filing in accordance with the State Rules Act. *See* NMSA 1978, §§ 74-6-6(E), 14-4-5(D) (2017).



Larry Dominguez, Chair
On behalf of the Water Quality Control Comm'n

CERTIFICATE OF SERVICE

I hereby certify that a copy of the **Order and Statement of Reasons for Amendment of Regulations** was sent via the stated methods below to the following parties on November 9, 2018:

Via hand delivery and email:

John Verheul
Lara Katz
Office of General Counsel
New Mexico Environment Department
Post Office Box 5469
Santa Fe, New Mexico 87502
John.Verheul@state.nm.us
Lara.Katz@state.nm.us
Counsel for the New Mexico Environment Department

Via email:

Pete Domenici, Esq.
Lorraine Hollingsworth, Esq.
Reed Easterwood
Domenici Law Firm, P.C.
320 Gold Ave. SW Suite 1000
Albuquerque, New Mexico 87102
pdomenici@domenicilaw.com
lhollingsworth@domenicilaw.com
reasterwood@domenicilaw.com
Counsel for the City of Roswell and Laun-Dry

Louis W. Rose
Kari Olson
Montgomery & Andrews, P.A.
Post Office Box 2307
Santa Fe, New Mexico 87504-2307
lrose@montand.com
Kolson@montand.com
Counsel for Los Alamos National Security, LLC

Timothy A. Dolan
Office of Laboratory Counsel
Los Alamos National Laboratory
Post Office Box 1663, MS A187
Los Alamos, New Mexico 87545
tdolan@lanl.gov
Counsel for Los Alamos National Security, LLC

Dalva L. Mollenberg
Gallagher & Kennedy, P.A.
1239 Paseo de Peralta
Santa Fe, New Mexico 87501
DLM@gknet.com
Counsel for Dairy Producers of New Mexico and the Dairy Industry Group for a Clean Environment

Michael Bowen
Executive Director
1470 Saint Francis Drive
Santa Fe, New Mexico 87505
nmma@comcast.net
On behalf of New Mexico Mining Association

Jaimie Park
Douglas Meiklejohn
Eric Jantz
Johnathan Block
New Mexico Environmental Law Center
1405 Luisa Street, Suite 5
Santa Fe, New Mexico 87505
jpark@nmelc.org
Counsel for Amigos Bravos & Gila Resources Information Project

William C. Olson
14 Cosmic Way
Lamy, New Mexico 87540
billjeanie.olson@gmail.com
Self-Represented

Michael L. Casillo
AFLOA/JACE
1500 W. Perimeter Rd, Suite 1500
Joint Base Andrews, Maryland 20762
michael.l.casillo2civ@mail.mil
Counsel for United States Air Force

William Brancard
Cheryl Bada
1220 South St. Francis Drive
Santa Fe, New Mexico 87505
Bill.Brancard@state.nm.us
Cheryl.Bada@state.nm.us
Counsel for Energy, Minerals and Natural Resources Department

Russel Church, President
NMML EQA Subsection
New Mexico Municipal League
P.O. Box 846
Santa Fe, New Mexico 87504
rchurch@redviver.org
For New Mexico, Municipal League, Environmental Subsection

Jay F. Stein
Stein & Brockmann, P.A.
P.O. Box 2067
Santa Fe, New Mexico 87504-2067
jfstein@newmexicowaterlaw.com
Counsel for New Mexico Municipal League

Stuart R. Butzier
Christina C. Sheehan
American Magnesium, LLC
Rio Grande Resources Corporation
New Mexico Copper Corporation
P.O. Box 2168
Albuquerque, New Mexico 87103-2168
Stuart.butzier@modrall.com
Christina.sheehan@modrall.com
For Rio Grande Resources Corporation, American Magnesium, LLC and New Mexico Copper Corporation

Stephen Vigil
Office of the Attorney General
Post Office Drawer 1508
Santa Fe, New Mexico 87504-1508
svigil@nmag.gov
Counsel for the Water Quality Control Commission

Pam Castañeda, Commission Administrator