

**STATE OF NEW MEXICO
BEFORE THE WATER QUALITY CONTROL COMMISSION**

IN THE MATTER OF:)
THE PETITION FOR A HEARING ON)
DISCHARGE PERMIT NO. DP-1840)
FOR THE COPPER FLAT MINE,)
)
TURNER RANCH PROPERTIES, L.P.,)
HILLSBORO PITCHFORK RANCH, LLC,)
AND GILA RESOURCES INFORMATION)
PROJECT,)
)
Petitioners.)
_____)

Docket No.
WQCC-19-02(A)



**JOINT REPLY BRIEF OF PETITIONERS
TURNER RANCH PROPERTIES, L.P., HILLSBORO PITCHFORK RANCH, LLC,
AND THE GILA RESOURCES INFORMATION PROJECT**

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TABLE OF CONTENTS

Table of Contents	i
Table of Authorities	ii
I. The Future Pit Lake Will Be a Surface Water of the State	2
II. The Andesite Bedrock Has Not Been Adequately Evaluated	5
III. The Discharge Would Pose an Undue Risk to Property	10
IV. The Groundwater Monitoring Well Network Is Inadequate	14
V. The Financial Assurance Proposal Is Inadequate and Incomplete	16
Conclusion	18
Certificate of Service	20

TABLE OF AUTHORITIES

Cases

<i>Colonias Dev. Council v. Rhino Eenvtl. Servs.</i> , 2005-NMSC-024, 138 N.M. 133, 117 P.3d 939	4, 14
<i>N.M. Mining Ass'n v. N.M. Water Quality Control Comm'n</i> , 2007-NMCA-010, 141 N.M. 41, 150 P.3d 991	11-12
<i>Pickett Ranch, LLC v. Curry</i> , 2006-NMCA-082, 140 N.M. 49, 139 P.3d 209	12
<i>Regents of the Univ. of N.M. v. N.M. Fed'n of Teachers</i> , 1998-NMSC-020, 125 N.M. 401, 962 P.2d 1236.....	12

Statutes

Water Quality Act, NMSA 1978, §§ 74-6-1 to 74-6-17 (2006)	1
NMSA 1978, § 74-6-2(H).....	3
NMSA 1978, § 74-6-5(E)(3).....	2, 4, 12
NMSA 1978, § 74-6-5(H).....	16
NMSA 1978, § 74-6-8	17

Regulations

20.1.3.16.A(4)(a) NMAC.....	1
Water Quality Regulations, 20.6.2 NMAC.....	1
20.6.2.3103 NMAC.....	11
20.6.4.7.S(5) NMAC.....	3
Copper Mine Regulations, 20.6.7 NMAC	1
20.6.7.10.J NMAC.....	10, 12, 14

20.6.7.10.J(1) NMAC10, 14, 15, 18

20.6.7.10.J(3) NMAC12

20.6.7.11.U NMAC.....16, 17, 18

20.6.7.21 NMAC.....5

20.6.7.21.B(1)(d)(vi) NMAC.....5, 10

20.6.7.28.B NMAC.....14, 15

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Pursuant to the Water Quality Control Commission's Adjudicatory Procedures, 20.1.3.16.A(4)(a) NMAC, and the Hearing Officer's Scheduling Order dated May 17, 2019, the Petitioners, Turner Ranch Properties, L.P.; Hillsboro Pitchfork Ranch, LLC; and the Gila Resources Information Project (respectively, the "Ranches" and "GRIP"), hereby submit their Reply Brief in this matter. The Ranches and GRIP seek review of the groundwater discharge permit, DP-1840, that the New Mexico Environment Department ("Department") Secretary issued to New Mexico Copper Corporation ("N.M. Copper Corp."). The permit authorizes the discharge into groundwater of pollutants from various proposed facilities at the Copper Flat Mine located near Hillsboro, in Sierra County, New Mexico. The Department issued the permit under the New Mexico Water Quality Act ("WQA"), NMSA 78, §§ 74-6-1 to 74-6-17 (1993), and under the Water Quality Regulations, 20.6.2 NMAC, and the Copper Mine Regulations, 20.6.7 NMAC, both adopted under the WQA.

The (former) Department Secretary issued a Final Order approving the discharge permit on December 19, 2018, and he issued the permit on the same day. The Ranches and GRIP timely filed a Petition for Review of the permit with the New Mexico Water Quality Control Commission ("Commission") on January 18, 2019. Elephant Butte Irrigation District also filed a timely Petition for Review on that date. On January 25, 2019, the Commission clerk filed a Notice of Docketing. During its meeting on April 9, 2019, the Commission appointed a Hearing Officer. On May 17, 2019, the Hearing Officer issued a Scheduling Order, establishing the schedule for briefing and oral argument. On June 18, 2019, the Ranches and GRIP filed their Opening Brief ("Ranches-GRIP Opening Brief"). On July 16, 2019, N.M. Copper Corp. and the Department filed separate answer

briefs (respectively “NMCC Answer Brief”; “NMED Response Brief”). This Reply Brief addresses both answer briefs.

In their Petition for Review, the Ranches and GRIP raise five objections to the groundwater discharge permit that the Secretary approved and issued for the Copper Flat Mine. N.M. Copper Corp. and the Department support the permit and dispute each of the objections. Each of the five issues is discussed below.

I. THE FUTURE PIT LAKE WILL BE A SURFACE WATER OF THE STATE

The first issue in this proceeding is whether the future pit lake that will form in the open pit is a “water of the state” as defined in the surface water regulations. *See* 20.6.4.7.S(5) NMAC. This issue is important because surface water quality standards will apply to the future pit lake if it is a “surface water of the state”; the standards will not apply if it is not a “surface water of the state.” In issuing the permit, the Secretary concluded that the future pit lake is not a “surface water of the state.” Final Order at 4, ¶ 11. N.M. Copper Corp. and the Department support that conclusion. The conclusion, however, is erroneous.

After mining operations at the Copper Flat Mine cease, the open pit will fill with water, and a 161-acre pit lake will form. Discharges from the Copper Flat Mine into the future pit lake will cause its water to exceed New Mexico surface water standards for mercury, selenium, and vanadium. *See* Ranches-GRIP Opening Brief at 18-19. The WQA expressly states that the Department Secretary must deny a discharge permit application if “the discharge would cause or contribute to water contaminant levels in excess of any state or federal standard.” NMSA 1978, § 74-6-5(E)(3).

N.M. Copper Corp. and the Department argue that state surface water standards will not apply to the future pit lake because the lake will not be a “surface water of the state” as defined in the surface water regulations. The future pit lake, they maintain, will be entirely on private property and

therefore, they further maintain, it is subject to the exception for “private waters.” As they point out, the definition of “surface waters of the state,” though capacious, does not extend to “private waters that do not combine with other surface or subsurface waters.” 20.6.4.7.S(5) NMAC. *See* Ranches-GRIP Opening Brief at 19.

But the “private waters” exception does not apply to the future pit lake. First, the future pit lake will draw in clean groundwater from the surrounding property and combine with that water. *Id.* at 20. Second, assuming the pit lake will be on private property, the pit lake water itself is not private water; it is public water subject to appropriation for beneficial use. *Id.* at 21-22.

In their response briefs, both N.M. Copper Corp. and the Department put forth two counter arguments, both of which have been refuted. First, they argue that the phrase “combine with other surface or subsurface waters” applies only if lake water flows out of the lake and combines with the surrounding waters, but not if the surrounding waters flow into the lake and combine with the lake water. NMCC Answer Brief at 6-7; NMED Response Brief at 6. Second, they argue that the Copper Mine Regulations lend authority to their interpretation. NMCC Answer Brief at 7; NMED Response Brief at 6.

The first argument is contrary to the plain wording of the “private waters” exception. Neither the definition of “surface waters of the state” in the surface water regulations, nor the definition of “water” in the WQA – from which the “private waters” exception derives – makes or even implies any distinction based on the direction of flow. *See* 20.6.4.7.S(5) NMAC; NMSA 1978, § 74-6-2(H). Private waters that combine with other surface or ground waters are “waters of the state” regardless where the combining takes place. Ranches-GRIP Opening Brief at 20. The argument is also contrary to the Department’s prior interpretation of the “private waters” exception, as articulated by Marcy Leavett in testimony before this Commission in 2003. Ms. Leavett explained that water

combines with other water when it moves “from areas where water is clean to areas where water is contaminated and vice versa.” *Id.* at 21; *see* *Ranches Ex. 41*. Ms. Leavett served for many years as Chief of the Department’s Ground Water Quality Bureau, Chief of its Surface Water Quality Bureau, and Director of its Water and Waste Management Division (now Water Protection Division), which includes both those bureaus. *Id.* The argument is also contrary to the mandate of the New Mexico Supreme Court that the Environment Department must interpret a law such as the WQA liberally to effectuate its purpose. *Colonias Dev. Council v. Rhino Envtl. Servs.*, 2005-NMSC-024, ¶ 34, 138 N.M. 133, 142, 117 P.3d 939, 948. *Ranches-GRIP Opening Brief* at 22-23.

The second argument that N.M. Copper Corp. and the Department make is also wrong. The Copper Mine Regulations do not support the proposition that a mine pit lake – even one that is a hydrologic sink – is exempt from surface water standards. Granted, the Copper Mine Regulations create an ill-conceived exemption from *groundwater* standards within an “area of open pit hydrologic containment.” But the regulations do not address surface water standards at all. They do not exempt surface water standards within any area of a copper mine. They do not alter or amend the definition of “surface waters of the state.” The Copper Mine Regulations are inapposite. *See Ranches-GRIP Opening Brief* at 23.

Thus, we respectfully request that the Commission vacate the discharge permit because the permitted discharge will cause or contribute to water contaminant levels in the pit lake that are in excess of state surface water standards. *See* NMSA 1978, § 74-6-5(E)(3). The Commission should remand the matter and instruct the Department to revise the permit to require long-term treatment of the pit lake water or other measures to meet the surface water standards.

II. THE ANDESITE BEDROCK HAS NOT BEEN ADEQUATELY EVALUATED

The second issue in this permit review proceeding is whether N.M. Copper Corp. has adequately evaluated the andesite bedrock that underlies a large portion of the Copper Flat Mine. This issue is important, in particular, because the andesite bedrock underlies the area where N.M. Copper Corp. plans to construct two unlined waste rock piles. These rock piles will cover approximately 171 acres. The Secretary concluded that the andesite had been adequately evaluated, and declined to require further evaluation in the discharge permit. Final Order at 3, ¶ 7. N.M. Copper Corp. and the Department support the Secretary's conclusion. Yet N.M. Copper Corp. has conducted remarkably little evaluation of the andesite, and that evaluation does not meet the requirements of the regulations.

The Copper Mine Regulations establish design requirements for waste rock piles at copper mines, particularly waste rock piles that are located outside an "area of open pit hydrologic containment." 20.6.7.21 NMAC. Two of the proposed waste rock piles (designated WR-2 and WR-3) fall within this category. The regulations provide that an applicant for a discharge permit must submit a design report that includes "[a]n aquifer evaluation to determine the potential nature and extent of impacts to ground water from the waste rock stockpile." 20.6.7.21.B(1)(d)(vi) NMAC. The aquifer evaluation must include a "complete description of aquifer characteristics . . . based on actual field data." *Id.*

The key technical question about the andesite that remains unresolved is its overall hydraulic conductivity, taking into consideration the very real possibility that the rock may be substantially fractured, especially near the surface. Andesite is an extrusive igneous or volcanic rock that is often fractured. Fractures can serve as conduits for the movement of water and contaminants.

N.M. Copper Corp. maintains that the andesite has a very low overall hydraulic conductivity of less than 1×10^{-6} centimeters per second. AR-12433. As explained in our Opening Brief, this estimate of the hydraulic conductivity of the andesite is based on only three data points from two borings. The first data point is from well GWQ-5R, which was the subject of a pressure test. The second and third data points are from monitoring well GWQ96-22A and B (two screened intervals at different depths in the same well), which was the subject of a slug test. Ranches-GRIP Opening Brief at 25; *see* AR-02206; NMED Ex. 4, p. 5. These two borings are the basis for characterizing more than 170 acres of bedrock. Further, the tests used to estimate the conductivity of the andesite were conducted deep in the bedrock formation, and are likely not representative of conditions at the surface where fractures are more likely to occur. Ranches-GRIP Opening Brief at 25. In addition, several water supply wells have been completed in the andesite. *Id.* at 26; *see* Ranches Ex. 40. Production wells could not be sustained in bedrock with a conductivity as low as 1×10^{-6} centimeters per second. Ranches-GRIP Opening Brief at 26.

In response, N.M. Copper Corp. and the Department proclaim “overwhelming evidence” of the low permeability of the andesite and “many pages of test results.” NMCC Answer Brief at 9; NMED Response Brief at 10. N.M. Copper Corp. goes on to make three principal arguments based on this “overwhelming evidence.” But the evidence the company marshals to support these arguments is neither overwhelming nor adequate to satisfy the basic requirements of the regulations.

For its first argument, N.M. Copper Corp. cites the rebuttal testimony of Steven Finch, the company’s hydrogeologist. NMCC Answer Brief at 7-8. In his testimony, Mr. Finch described a series of seven consultant reports – three of which are not in the administrative record – ostensibly affirming the low conductivity of the andesite. *See* N.M. Copper Corp. Ex. 108 (listing the technical reports). However, a careful review of these reports reveals that they are all based on the same

limited data points. Mr. Finch first references a 1993 report from John Shomaker. According to Mr. Finch, Dr. Shomaker concluded that the andesite is low-permeability based on “local geology, mining workings and results of dewatering efforts,” as well as “hand-dug wells and things and mine shafts.” Finch Test. Tr. vol. 5, p. 1606, lines 12-19. These bases are so vague as to be almost meaningless, and Mr. Finch provides no actual data from the report. Further, although it is referenced in other reports, the 1993 Shomaker report is not in the administrative record. Finch Test. Tr. vol. 5, p. 1621, lines 5-7. Moreover, in a later report¹ Dr. Shomaker qualified this conclusion, stating that the slug test analysis conducted on one well completed in the andesite estimates an extremely low range of hydraulic conductivity for the “*unfractured* andesite . . . rocks.” Abatement Plan Amend. 2011 at 9 (AR-02206) (emphasis added). The Ranches and GRIP do not contest that the unfractured andesite has a low conductivity; but it is the fractures in the andesite that would transport contaminants.

Mr. Finch next references a 1996 report by Adrian Brown, who conducted the slug test. Finch Test. Tr. vol. 5, p. 1606, lines 20-25; N.M. Copper Corp. Ex. 108. But this slug test, which was conducted in the andesite (another slug test was conducted in quartz monzonite), represents two of the three data points. Moreover, this report also is not part of the administrative record. Finch Test. Tr. vol. 5, p. 1621, lines 5-7.

Next, Mr. Finch states that in 1997 SRK did an “independent analysis” of the andesite conductivity, with the same results. Finch Test. Tr. vol. 5 p. 1607, lines 1-2. But the SRK analysis merely reviewed the same data, as Mr. Finch acknowledged. Finch Test. Tr. vol. 5, p. 1622, line 24 to p. 1623, line 5. The SRK report also is not part of the administrative record. Finch Test. Tr. vol.

¹ John Shomaker & Associates, Inc., Amendment to the Stage 1 Abatement Plan Proposal for the Copper Flat Mine (Oct. 14, 2011) (“JSAI Abatement Plan Amend. 2011”) (AR-02192 to AR-02257).

5, p. 1621, lines 5-7; N.M. Copper Corp. Ex. 108. Mr. Finch also references the 2011 JSAI Abatement Plan Amendment, which, as he correctly states, recognizes the low permeability of the andesite from “the previous work.” Finch Test. Tr. vol. 5, p. 1607, lines 3-9; *see* JSAI Abatement Plan Amend. at 8-10 (AR-02205 to AR-02207). Mr. Finch next references the INTERA baseline data report,² which he says reviewed the data “independently.” Finch Test. Tr. vol. 5, p. 1607, lines 10-11. But, again, INTERA reviewed the same limited slug test and pump test data. INTERA Baseline Data Rep’t at 8-35 (AR-02797). Next, Mr. Finch references the 2014 JSAI Stage 1 Abatement Report.³ Finch Test. Tr. vol. 5, p. 1607, lines 3-9. Again, this report relies on the same data from the same two wells. JSAI Abatement Rep’t 2014 at 18-20 (AR-09606 to AR-09608).⁴ Finally, Mr. Finch references the JSAI model report.⁵ Finch Test. Tr. vol. 5, p. 1607, lines 17-21. The report relies mostly on the same data, particularly the pressure test conducted on one andesite well (GWQ-5R), although it also briefly references the pumping rate for dewatering the Quintana open pit in 1982. JSAI Model Rep’t 2014 at 22-23, 43 (AR-10000-10001, AR-10021). Thus, the seven technical reports that Mr. Finch references repeat, over and over again, the same data from the same two borings.

Additionally, Mr. Finch testified that during the abatement monitoring the sampling crew “rarely got any more than a single well volume” of purge water when sampling wells completed in

2 INTERA, Baseline Data Characterization Report for Copper Flat Mine, Sierra County, New Mexico (June 2012) (“INTERA Baseline Data Rep’t 2012”) (AR-02500 to AR-02795).

3 John Shomaker & Associates, Inc., Results from the First Year of Stage 1 Abatement Investigation at the Copper Flat Mine Site Near Hillsboro, New Mexico (May 2014) (“JSAI Abatement Rep’t 2014”) (AR-09579 to AR-09915).

4 Table 12 of the report inaccurately lists well GWQ96-23 as drilled in andesite. JSAI Abatement Rept. 2014 at 20 (AR-09608). While the surface formation at the well location is andesite, both well screens are completed in monzonite. Ranches Ex. 39; JSAI Abatement Rep’t 2014, Fig. A2 (AR-09655).

5 John Shomaker & Associates, Inc., Model of Groundwater Flow in the Animas Uplift and Palomas Basin, Copper Flat Project, Sierra County, New Mexico (2014) (“JSAI Model Rep’t 2014”) (AR-09969 to AR-10385).

the andesite. Finch Test. Tr. vol. 5, p. 1611, lines 12-16; N.M. Copper Corp. Ex. 112. N.M. Copper Corp. cites this testimony in support of its argument. NMCC Answer Brief at 9. However, the only well completed in andesite that is listed in the N.M. Copper Corp. exhibit (Ex. 112) is the same well that provided the slug test data (Well GWQ96-22), which is also the same well that Dr. Shomaker described as in “unfractured” andesite. JSAI Abatement Plan Amend. 2011 at 9 (AR-02206). The well purge data is thus derived from one of the same two borings that produced the earlier data. Derived from the same well as the slug test, which was completed deep in unfractured andesite, this well purge data is neither remarkable nor particularly helpful; it adds little to our understanding of the conductivity of the andesite bedrock.

For its second argument, N.M. Copper Corp. dismisses the Ranches’ evidence that several supply wells have been successfully completed in the andesite (Ranches Ex. 40), again citing the rebuttal testimony of Mr. Finch. NMCC Answer Brief at 9. According to Mr. Finch, the “supply wells completed in the andesite are mostly hand-dug in drainages, with a water chemistry that resembles surface water.” Finch Test. Tr. vol. 5, p. 1608, lines 21-25. Yet on cross-examination, Mr. Finch acknowledged that of the seven wells listed as supply wells completed in andesite, four of them were hand-dug (GWQ-6(S), Pague, Delores, and Paxton), two of those being mine shafts (Delores and Paxton), but three of the wells were drilled into the andesite (GWQ-6(N), LRG-4156, and LRG-4159). Finch Test. Tr. vol. 5, p. 1625, line 13 to p. 2627, line 1. Thus, three apparently successful supply wells have indeed been completed in the supposedly impermeable andesite.

And for its third argument, N.M. Copper Corp. apparently acknowledges that the andesite is fractured in some areas, but postulates that the fractures have been filled in by impermeable minerals. NMCC Brief at 8. Mr. Finch, in his direct testimony, stated that fractures in the andesite had been filled in by soluble silicate and calcite minerals. Finch Test. Tr. vol. 1, p. 99, lines 4-14. But Mr.

Finch cites no support for this statement. Without a much more thorough characterization of the andesite the correctness of this premise cannot be verified.

For these reasons, we respectfully request that the Commission vacate the discharge permit because the permit application did not include an adequate evaluation of the aquifer that underlies the proposed unlined waste rock piles. *See* 20.6.7.21.B(1)(d)(vi) NMAC; 20.6.7.10.J(1) NMAC. The Commission should remand the matter to the Department with instructions to add a permit condition requiring full evaluation of the andesite, including an evaluation of fractures, before mining operations begin. *See* Ranches Ex. 30 (proposed permit condition).

III. THE DISCHARGE WOULD POSE AN UNDUE RISK TO PROPERTY

The third issue in this proceeding is whether the discharge permit poses an undue risk to property. This issue is important because under the Copper Mine Regulations the Department Secretary must deny an application for a discharge permit if it would pose “undue risk to property.” 20.6.7.10.J NMAC. The Ranch owners have no doubt that the mine poses an undue risk to their property. The Department Hearing Officer found the concerns of undue risk to property “compelling,” noting that “the sensitivity of the Ranches’ ecosystems . . . amplify[ies] even a small risk of occurrence.” Hearing Off’r Rep’t at 28. In an unusual tack, however, she declined to make a recommendation on the issue, leaving it for the Secretary. The Secretary, with little analysis, found that the permit would not pose an undue risk to property. Final Order at 3, ¶¶ 4, 5, 6. N.M. Copper Corp. and the Department now defend the Secretary’s decision.

As described in our Opening Brief, the Copper Flat Mine is adjacent to private property, most notably the Ladder Ranch to the north and east of the mine, and the Hillsboro Pitchfork Ranch to the west of the mine. These properties encompass unique and sensitive ecosystems, including Las Animas Creek, its tributary Cave Creek, the Avant Pasture, and Grayback Canyon. These

ecosystems support a diversity of plants, fish, and wildlife. These ecosystems also support various successful business enterprises, including bison ranching, cattle ranching, hunting expeditions, and eco-tourism. The businesses depend on a plentiful supply of clean water, both from surface streams and from groundwater. Ranches-GRIP Opening Brief at 27-32.

As also described in our Opening Brief, the discharge permit for the Copper Flat Mine threatens the ranch properties and businesses by water contamination and water depletion. There is a substantial likelihood that leaks and spills of acid rock drainage, mine tailings, and mine impacted water will occur at the mine, resulting in groundwater contamination. There is also a substantial likelihood that such contaminants could move off the mine site, especially through fractures and faults in the underlying bedrock, to the adjacent ranch properties. And there is a substantial likelihood that the hydraulic drawdown of the open pit will significantly reduce groundwater levels beneath the ranch properties, and it could also reduce surface water flow on the ranch properties. *Id.* at 32-35.

In response, the Department makes the remarkable argument that “[t]he phrase ‘undue risk to property’ as used in both the Copper [Mine] Rule and the Water Quality Act means undue risk to property from the contamination of ground or surface water above the numerical standards found at 20.6.2.3103 NMAC.” NMED Response Brief at 6. This restrictive interpretation of the Copper Mine Regulation is incorrect for three obvious reasons.

First, the interpretation is contrary to the plain meaning of the phrase “undue risk to property.” When construing a statute or regulations, courts “begin with the plain language,” and “assume that the ordinary meaning of the words” expresses the purpose of the drafters. *N.M. Mining Ass’n v. N.M. Water Quality Control Comm’n*, 2007-NMCA-010, ¶ 12, 141 N.M. 41, 46, 150 P.3d

991, 996. The phrase “undue risk to property” is not by its words limited to an exceedance of the groundwater quality standards; its plain meaning is a broader one. *See* 20.6.7.10.J NMAC.

Second, the interpretation would render the “undue risk to property” provision in the Copper Mine Regulations redundant and unnecessary. Courts interpret statutes as a whole so that no part is rendered superfluous. *Regents of the Univ. of N.M. v. N.M. Fed'n of Teachers*, 1998-NMSC-020, ¶ 28, 125 N.M. 401, 411, 962 P.2d 1236, 1246. The regulations require the Secretary to deny a permit application if the discharge would pose an “undue risk to property.” 20.6.7.10.J(1) NMAC. But the same provision of the regulations also requires the Secretary to deny a permit application if denial is required under the WQA, subsection 74-6-5(E). 20.6.7.10.J(3) NMAC. That subsection of the WQA requires the Secretary to deny a discharge permit application if “the discharge would cause or contribute to water contaminant levels in excess of any state or federal standard.” NMSA 1978, § 74-6-5(E)(3). Since the statute and the same provision of the regulations already prohibit the Secretary from issuing a discharge permit if the discharge would result in an exceedance of standards, the prohibition on creating an “undue risk to property” – as the Department narrowly interprets it – would be superfluous.

Finally, the interpretation would inappropriately constrain the discretion of the Department Secretary and, by extension, that of the Commission. The Secretary has discretion in deciding whether the proposed permit would pose an undue risk to property. *See Pickett Ranch, LLC v. Curry*, ¶ 36. 2006-NMCA-082, 140 N.M. 49, 61, 139 P.3d 209, 220 (noting the Secretary’s discretion in applying a similar provision in the Solid Waste Act). The Department’s interpretation would limit the Secretary’s discretion to deny a permit to the circumstance where water quality standards are exceeded. But many sorts of discharge, that would not necessarily cause an exceedance of standards, might nevertheless pose an undue risk to property. The Secretary’s hands should not be

tied in such circumstances. Suppose, as a hypothetical example, that a proposed discharge would flood a neighboring property with effluent containing dangerous levels of a highly toxic chemical for which the Commission had not promulgated standards. Because no numerical standards would be exceeded, under the Department's interpretation, the Secretary would be unable to deny the permit application even if the Secretary concluded that the discharge would pose an undue risk to property.

The Department and N.M. Copper Corp. also argue that the Department has no authority to consider the depletion of groundwater in issuing a discharge permit, even if it might cause an undue risk to property. NMED Response Brief at 7; NMCC Answer Brief at 14. They assert that only the Office of the State Engineer has authority to regulate groundwater depletions. NMCC Answer Brief at 14.

As explained in our Opening Brief, the issue is not simply the impairment of water rights – which the Office of the State Engineer regulates – but the ecological and environmental consequences of withdrawing huge quantities of groundwater. Ranches-GRIP Opening Brief at 34-37. The Office of the State Engineer does not consider these consequences. *Id.* at 35. The depletion of groundwater is inseparably linked to the discharge of contaminants into groundwater. The fresh water that is drawn into the open pit from surrounding lands during mine operations will become contaminated and will become part of the discharge that the Department has permitted. Moreover, the depletion of ground and surface water will exacerbate the adverse effects of water contamination, both by stressing sensitive ecosystems, and by removing fresh water from the system that otherwise would have contributed to the dilution of contaminants. It is thus not sufficient to say, simply, that the Department regulates water quality, while the Office of the State Engineer regulates water quantity. *See* NMCC Answer Brief at 14. Issues of water quality and of water quantity are too intertwined to separate them into neat regulatory compartments. It bears repeating that “the

Department cannot ignore concerns that relate to environmental protection simply because they are not mentioned in a technical regulation.” *Colonias Dev. Council v. Rhino Envtl. Servs.*, 2005-NMSC-024, ¶ 34, 138 N.M. 133, 142, 117 P.3d 939, 948.

Thus, we respectfully request that the Commission vacate the discharge permit because the permitted discharge would pose an undue risk to property. *See* 20.6.7.10.J NMAC. We also recommend that the Commission expressly reject the proposition that the phrase “undue risk to property” in the regulations means only a risk posed by exceedance of the groundwater quality standards.

IV. THE GROUNDWATER MONITORING WELL NETWORK IS INADEQUATE

The fourth issue in this proceeding is whether the discharge permit requires an adequate groundwater monitoring well network for the Copper Flat Mine. An adequate groundwater monitoring well network is important to ensure that mine contaminants that make their way into groundwater are detected and addressed, especially before they can migrate to the adjacent properties. The Secretary found that the groundwater monitoring well network in the permit is appropriate. Final Order at 3, ¶ 9. N.M. Copper Corp. and the Department defend the Secretary’s finding. But the groundwater monitoring well network has serious gaps.

Under the Copper Mine Regulations, monitoring wells must be spaced “as close as practicable around the perimeter and downgradient of” each specified mine facility. 20.6.7.28.B NMAC. Monitoring wells must also be located “to detect an exceedance or a trend towards exceedance of the applicable standards at the earliest possible occurrence, so that investigation of the extent of contamination and actions to address the source of contamination may be implemented as soon as possible.” *Id.* Further, the Secretary can approve a discharge permit for a copper mine only if the requirements of the Copper Mine Regulations are met. 20.6.7.10.J(1) NMAC.

We explained in our opening brief that the monitoring well network required under the discharge permit is not adequate to meet the requirements of the regulations. According to the interpretive modeling prepared by the Ranches' hydrologist, groundwater contaminants could migrate through groundwater between the monitoring wells without being detected. The wells therefore need to be spaced more closely. Ranches-GRIP Opening Brief at 37-39.

In response, N.M. Copper Corp. and the Department tout the 43 monitoring wells that will comprise the monitoring system under the discharge permit. NMED Response Brief at 11-12. They assert that their experts have concluded that the monitoring well network is adequate, and that it meets or exceeds the requirements of the regulations. NMCC Answer Brief at 11-13; NMED Response Brief at 12-13.

The absolute number of monitoring wells, however, is not particularly relevant to the question whether the wells are located so as to detect an exceedance of groundwater quality standards at the earliest possible occurrence, as required by the regulations. And the company and the Department offer only vague assurances that their experts have concluded the monitoring well system is adequate. But they do not address the specific issue that the monitoring wells are not spaced closely enough to necessarily detect a plume of migrating groundwater contaminants.

We therefore respectfully request that the Commission vacate the discharge permit because the permit does not meet the requirements of the Copper Mine Regulations. *See* 20.6.7.10.J(1) NMAC; 20.6.7.28.B NMAC. The Commission should remand the matter to the Department with instructions to add a permit condition requiring additional monitoring wells in the monitoring well network. *See* Ranches Ex. 34 (proposed permit condition).

V. THE FINANCIAL ASSURANCE PROPOSAL IS INADEQUATE AND INCOMPLETE

The fifth and final issue in this permit review proceeding is whether the financial assurance proposal that N.M. Copper Corp. has submitted is sufficient to meet the requirements of the Copper Mine Regulations. Financial assurance is critical to ensure that adequate funds will be available for proper closure and reclamation of the mine once mining operations cease. The Secretary found that he did not need to make a decision on the adequacy of the financial assurance as part of his decision on the discharge permit. Final Order at 3-4, ¶ 10. N.M. Copper Corp. and the Department support this view, although it is at odds with the regulations.

The WQA authorizes the Commission to adopt regulations for “financial responsibility.” NMSA 1978, § 74-6-5(H). The Copper Mine Regulations provide that an application for a permit “shall include a proposal for financial assurance for those portions of a copper mine facility to be reclaimed in accordance with a closure plan.” 20.6.7.11.U NMAC. A financial assurance proposal that is facially inadequate does not meet the requirements of the regulations.

The financial assurance proposal that N.M. Copper Corp. submitted to the Energy, Mineral and Natural Resources Department in August 2018 is preliminary, inadequate, and incomplete in several respects. It does not include a proposed form that the financial assurance will take. It does not include either the discount rate or the escalation rate that will be applied to the cost estimate. It is based on the unrealistic assumption that monitoring and maintenance at the mine will be necessary for only 25 years. It omits a number of important elements of the closure of the mine, and their associated costs. It applies a direct cost rate of only 26 percent, which is substantially lower than the 42 percent rate that agency draft guidance would require. Ranches-GRIP Opening Brief at 41-42.

Moreover, the public did not have an opportunity to review the final financial assurance proposal prior to the hearing on the discharge permit. Neither the Secretary nor this Commission has

had an opportunity to review the final proposal. Indeed, even the preliminary proposal is not part of the Administrative Record for this proceeding. *Id.* at 43-44.

N.M. Copper Corp. responds that the financial assurance proposal it submitted is preliminary, and that negotiations towards a final proposal are “ongoing.” NMCC Answer Brief at 17. N.M. Copper Corp. asserts that the Ranches have “cited to no authority whatsoever which suggests” that a final financial assurance proposal must be settled before issuance of a permit, and that “no such authority exists.” *Id.*

To the contrary, the authority for requiring a final financial assurance proposal before issuing a discharge permit, which the Ranches and GRIP have repeatedly cited, is the Copper Mine Regulations. The regulations explicitly provide that an application for a permit “shall include a proposal for financial assurance for those portions of a copper mine facility to be reclaimed.” 20.6.7.11.U NMAC. The regulations do not say a “preliminary” proposal for financial assurance is sufficient. Nor do they say a partial or incomplete proposal for financial assurance is sufficient. N.M. Copper Corp. reads into the regulations an imprecision that is not there.

The Department similarly responds that the final financial assurance proposal can be addressed in a hearing before the New Mexico Mining Commission on the Mining Act permit for the Copper Flat Mine. NMED Response Brief at 13-14. The Mining Act permit can be appealed on the grounds that the financial assurance requirements are inadequate. *Id.* at 14.

But the Environment Department’s attempt to rely on a separate proceeding before another agency under different legal authority is an abdication of the Department Secretary’s statutory responsibility to require and administer financial assurance under the WQA and the regulations. *See* NMSA 1978, § 74-6-8 (1987) (“Each constituent agency shall administer regulations adopted pursuant to the Water Quality Act”). The WQA contains a financial assurance requirement,

referenced above, that is separate and independent from the requirement in the Mining Act. Under the WQA, the Department must consider financial assurance for items that protect water quality, such as maintenance of water management structures and operation of water treatment systems. The Department Secretary and Department staff have unique expertise in these matters. The Energy, Minerals and Natural Resources Department staff do not. These matters must be considered as part of the Environment Department's discharge permit procedures.

Thus, we respectfully request that the Commission vacate the discharge permit because the application did not satisfy the financial assurance requirements of the regulations. *See* 20.6.7.11.U NMAC; 20.6.7.10.J(1) NMAC. The Commission should remand the matter to the Department with instructions not to issue a discharge permit until after it has reviewed and approved a final financial assurance proposal.

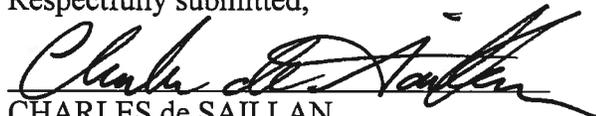
VI. CONCLUSION

For the foregoing reasons, the Ranches and GRIP respectfully request that the Commission reverse the Secretary's Final Order approving the groundwater discharge permit, vacate the permit, and remand the matter to the Secretary. The Commission should instruct the Secretary to deny the permit because the permit application is not technically complete; the permit will result in the exceedance of State water quality standards; the permit will result in undue risk to property; and the permit does not meet the requirements of the Copper Mine Regulations. The Commission should further instruct the Secretary, in the event he issues a new discharge permit for the Copper Flat Mine, to issue the permit only after the applicant has submitted to the Environment Department, and the Department has approved, a final financial assurance proposal; to revise the permit to require the permittee to treat the water in the future pit lake or take other measures to ensure that surface water standards will be met; to require the permittee to fully evaluate the andesite bedrock, particularly its

conductivity and the extent to which it is fractured; and to require the permittee to expand the monitoring well network at the Copper Flat Mine.

July 30, 2019

Respectfully submitted,



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CERTIFICATE OF SERVICE

I hereby certify that on this 30th day of July 2019, a copy of the foregoing Joint Reply Brief of Petitioners Turner Ranch Properties, L.P., Hillsboro Pitchfork Ranch, LLC, and Gila Resources Information Project was sent by first class mail, postage prepaid, or electronic mail to:

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