

STATE OF NEW MEXICO
BEFORE THE SECRETARY OF ENVIRONMENT

IN THE MATTER OF THE APPLICATION OF THE
NEW MEXICO COPPER CORPORATION FOR A
GROUND WATER DISCHARGE PERMIT FOR
THE COPPER FLAT MINE, DP-1840

No. GWB 18-06(P)



**NEW MEXICO COPPER CORPORATION'S
COMMENTS ON HEARING OFFICER'S REPORT**

New Mexico Copper Corporation (NMCC), pursuant to 20.1.4.500(C)(2) NMAC and the Order on Deadline for Comments on the Hearing Officer's Report (filed December 3, 2018), hereby submits the following comments on the Hearing Officer's Report (Report) and Proposed Findings of Fact and Conclusions of Law (Findings and Conclusions). NMCC herein supports the adoption of the Hearing Officer's Findings and Conclusions and, for the reasons discussed, urges the Secretary to (1) determine that draft DP-1840 does not present an undue risk to property, and (2) issue DP-1840 as proposed by the New Mexico Environment Department (NMED).

COMMENTS

I. NMCC Supports the Report and Findings of Fact and Conclusions of Law

The Hearing Officer's Report and Findings and Conclusions accurately support and state the central conclusion, Conclusion 43, that: "The permit complies with all the requirements of the New Mexico Water Quality Act, NMSA 1978, Sections 74-5-1 through 74-5-17, the New Mexico Ground and Surface Water Protection Regulations (Part 20.6.2 NMAC), and the supplemental permitting requirements for copper mine facilities, or Copper Rule (Part 20.6.7 NMAC)." *See also* Report at 4, 31. NMCC has met or exceeded all requirements in its proposed mine plan. Conclusions 34-56. For these reasons, DP-1840 as drafted by NMED should be issued forthwith.

a. Draft DP-1840 Adequately Addresses Andesite Permeability

NMCC encourages following the Hearing Officer's recommendation not to include a permit condition requiring further evaluation of the andesite. The Hearing Officer correctly found that the hydraulic conductivity of the andesite is low, based on evidence in the record including expert testimony from NMED and NMCC witnesses. *See* Report at 7-9; Findings 188-89.

b. The Pit Qualifies as a Hydraulic Sink that Meets the Private Water Exception

The Hearing Officer appropriately found that the future pit lake meets the private water exception, and therefore is not a surface water of the state subject to the water quality standards in 20.6.4 NMAC. Report at 22; Findings 480-490, Conclusion 56. The Hearing Officer also correctly understood and found support in the Copper Rule and the judicial interpretations thereof. *Id.*

c. The Proposed Monitoring System is Adequate and Appropriate

The Hearing Officer correctly determined that the proposed monitoring well network is appropriate, Report at 14, and that it meets or exceeds the requirements of the Copper Rule. Conclusions 52-55. There is no need to require wells beyond the robust monitoring network in draft DP-1840. *See id.*; Report at 14. As pointed out in NMED's comments, requiring additional wells at this time would be premature, and NMED will have the ability to evaluate sufficiency on an ongoing basis with the benefit of better information going forward. NMED Comments, p. 2.

d. Liner Leakage was Assumed and Appropriately Evaluated in Draft DP-1840

The Hearing Officer correctly concluded that the tailings storage facility (TSF) liner exceeds the requirements of the Copper Rule, a point she noted was not contested by the expert for Turner Ranch Properties, LP, and Hillsboro Pitchfork Ranch, LLC (Ranches). Report at 12. NMCC supports the Hearing Officer's determination that NMCC's evaluation of the seepage rate from a lined facility is consistent with industry standards and accepted guidance. *Id.*

e. Fulfillment of the State Engineer's Dam Safety Requirements Is Assured

The Hearing Officer correctly found that draft DP-1840 complies with the Copper Rule's requirement to fulfill Office of the State Engineer's (OSE) dam safety requirements. Report at 22-24; Finding 287. As recognized by the Hearing Officer, no law or rule requires NMED delay the issuance of draft DP-1840 pending the OSE's Dam Safety Bureau permit. Report at 23. NMCC concurs with the Hearing Officer's conclusion that NMCC has complied with the environmental controls required for tailings storage facilities in the Copper Rule. Conclusions 34, 43, 47, 48, 51. NMCC concurs in the recommendation that no additional conditions are needed. Report at 24.

f. NMCC Supports the Findings and Conclusions on Financial Assurance

The Hearing Officer correctly found that NMCC has met the financial assurance requirements in the Copper Rule. Report, 17-18; Findings 468-479. The Copper Rule and draft DP-1840 require that financial assurance be held among three agencies, and does not require the Secretary issue a decision on the amount of financial assurance as part of his final order. *Id.*

As demonstrated by the Findings and Conclusions, DP-1840 meets or exceeds all pertinent requirements, additional conditions are unnecessary, and the Secretary should issue DP-1840.

II. Issuance of DP-1840 Will Not Pose an Undue Risk to Property

The Copper Rule directs that the Secretary "shall" issue a permit if it fulfills the technical requirements of the Copper Rule, meets the requirements of 20.6.2.3109 NMAC, and "poses neither a hazard to public health nor undue risk to property." 20.6.7.10.J NMAC. The Hearing Officer defers to the Secretary's construction of what constitutes "undue risk to property" in connection with the issuance of a groundwater discharge permit. *See* Report at 30-31. Attempting to assist the Secretary in construing that language in the Copper Rule, the Hearing Officer offers seven questions she believed might assist in analyzing "undue risk" to property. Report at 31.

In the following comments, NMCC addresses the Hearing Officer's questions and points out that the extensive administrative record and expert testimony unquestionably demonstrate that DP-1840 does not present an undue risk to property and should be issued. The Hearing Officer's Report provides a recommendation to grant NMCC's permit application since it is fully compliant with the Copper Rule, Report at 4, and a full consideration of the Findings and Conclusions, together with the Copper Rule-based testimony of NMCC's and NMED's expert witnesses, lead inexorably to the conclusion that issuing DP-1840 will not pose a hazard to public health or an undue risk to property, as those terms are properly construed in the context of the Copper Rule.

- a. Is "undue risk" limited to potential injuries caused by groundwater contaminants, or can broader ecological concerns and far-reaching legal implications be considered?

The New Mexico Supreme Court has considered and analyzed the intent and the scope of the Copper Rule, the authority for which stems from 2009 amendments to the Water Quality Act. In its discussion of the Copper Rule, the New Mexico Supreme Court recognized that:

The Copper Rule is comprised of thirty-nine different sections and a myriad of subsections which address all manner of discharge control for the copper mining industry. It is a "supplement [to] the general permitting requirements ... to control discharges of water contaminants specific to copper mine facilities..." 20.6.7.6 NMAC. The "purpose" of the Copper Rule, as stated by the Commission, "is to control and contain discharges of water contaminants specific to copper mine facilities and their operations to prevent water pollution so that ground water meets the quality standards of 20.6.2.3103 NMAC at locations of present and potential future use."

Gila Res. Info. Project v. New Mexico Water Quality Control Comm'n, 2018-NMSC-025, ¶ 16, 417 P.3d 369, 373. The Copper Rule provisions must be construed pursuant to the purpose of protecting groundwater. While ecological concerns and legal implications directly related to groundwater *discharges* potentially containing contaminants may appropriately be considered when evaluating whether an "undue risk to property" it would be entirely inappropriate to enlarge the analysis to consider far-reaching legal implications and broader ecological concerns such as

impacts or potential impairments of *withdrawals* or *evaporation losses*; those considerations are entirely outside of the agency's purview in regulating the known and potential effects of the issuing the discharge permit.

Many of the ecological and legal concerns raised by the Ranches and the Elephant Butte Irrigation District (EBID) are not within the scope of this proceeding. The concerns raised by the Ranches and EBID that do relate to ground water quality and potential contamination, even when viewed through the broadest lens, do not substantiate their hypothetical and speculative claims of undue risk to property. As evidenced by the extensive administrative record and the testimony of NMCC's five expert witnesses, and NMED's three expert witnesses, there is no basis for the Ranches and EBID's concerns about contaminant transport risks. These concerns were identified by witness reports and testimony that were highly speculative in nature and that were without any credible scientific support.

The Ranches and EBID make unfounded allegations about how the draft permit *could* or *might* create undue risk to property. Each allegation is speculative, unsupported by any substantial evidence in the record, and successfully refuted by NMCC's and NMED's experts. The Ranches and EBID focus their concerns primarily on their fears of contaminant migration and water depletion. Report at 25.

Dr. Tom Meyers' report, Ranches Exhibit 23, includes unsubstantiated general concerns that contaminants from the Copper Flat Mine site *could* travel to Ladder Ranch, Caballo Reservoir and the Rio Grande. As indicated in his expert report and through his testimony, all of the assertions that there *could* be impacts to Ladder Ranch, Caballo Reservoir or the Rio Grande are hypothetical and are not based on credible evidence. For instance, in his report, Dr. Meyers notes that "[m]ine-impacted surface water/stormwater flow that *could* jump the banks or cause changes

in the arroyo plan *could* negatively impact the Ranch through contamination of the springs...Contaminants discharged from the Mine's waste rock stock piles and TSF pursuant to the Draft Permit *could* reach springs on the Ranch. Wells and springs on the Ranch *could* become contaminated..." AR 17943 (emphases added). His report further notes that "monitoring wells are spaced too widely and contaminant plumes *could* slip through undetected." AR17944-17945 (emphasis added). These concerns essentially assume their truth but are completely unfounded. Dr. Meyers' hypothetical risks of contamination are not based on any credible scientific evidence; rather, as he admitted during his testimony, the calculations he used to determine potential contamination to the Ladder Ranch and to surface waters were based on his widely variable so-called "interpretive calculations" of andesite permeability. Dr. Meyers' testimony regarding undue risk to property is inherently flawed, is not reflective of findings at the site and, as he admitted at the hearing, is based on hydraulic conductivity assumptions that he manipulated to support his arguments and fit his desired findings. See Transcript 1284:12-1286:3. Dr. Meyers acknowledged that his findings were further invalid since he did not consider geochemistry at the site, and since they were not based on modelling any specific constituent. Tr. 1290:17-1291:15, 1298:12-1299:1.

Similarly, two additional witnesses for the Ranches, Messrs. Dobrott and Cunningham, offered highly speculative concerns about how their ranching operations and wildlife being nurtured on or utilizing their ranches *might* be damaged *if* groundwater or surface water resources become contaminated from the mine or depleted from the mine's water use. This testimony was based purely on conjecture; neither witness offered hydrological or geochemical analyses or evidence to support their stated fears. As explained by NMCC's witnesses, and acknowledged by Mr. Dobrott, Las Animas Creek, which feeds the Ladder Ranch's water supply, is part of an entirely different watershed from the watershed to the south in which the Copper Flat Mine is

proposed, and much of the water resources associated with Ladder Ranch are higher in elevation than the mine would be and therefore would be recharged by water originating in the Blank Range. Tr. 826:12-22. Mr. Cunningham further acknowledged that the upper reaches of the Grayback watershed, where a portion of his ranch is located, is at a higher elevation and that intermittent springs and flows that sometimes develop on his ranch above the mine simply are the short-term results of storm events. Tr. 887:15-22. While it was understandable for the Hearing Officer to observe that the concerns of these gentlemen are “understandable,” such does not science make.

Finally, the Ranches’ other limited expert, Mr. Kuipers, offered testimony regarding leaks and spills at other mine sites, falsely equating the catastrophic historic events at those completely unrelated mine sites to the proposed operations at the Copper Flat Mine. Mr. Kuipers was not qualified as a hydrologist and geochemist and failed to offer any evidence to support his speculative forecast of what *could* happen at the Copper Flat Mine based on things that have happened at sites he failed to equate to the conditions at Copper Flat. Mr. Kuipers’ concerns of potential contamination through leaks and catastrophic events were mere conjecture and were unsupported by evidence or even an appearance of similarity between the case studies he presented and the Copper Flat Mine designs. Additionally, his concerns are expressly addressed by provisions in the Copper Rule, the bulk of which he entirely ignored, and all of which NMCC has met. Report at 10-12. Finally, Mr. Kuipers speculative concerns are undermined through his own testimony wherein he acknowledged, for example, that the liner proposed by NMCC for the TSF meets the requirements of the Copper Rule. Tr. 1148:9-16; Report at 11-12.

EBID’s witnesses primarily focused on the issues of water supply and the possibility of water depletions, which were objected to as not being properly raised in this venue. As previously stated, the Secretary’s determination for “undue risk to property” under the Copper Rule

necessarily arises in the context of issuing a *discharge* permit to a copper mine; it does not, and should not, contemplate impacts from water withdrawals, supply or use, which are squarely within the OSE's purview. EBID's only witness to address water contamination concerns, Dr. Carroll, offered speculative and ungrounded testimony concerning water contamination. His testimony failed to consider the site-specific geology and hydrogeology at the Copper Flat Mine and the provisions of the Copper Rule itself.

As evidenced by the Report and Findings and Conclusions, NMCC conducted robust scientific studies and analyses of the potential contamination risks. The studies were based on credible scientific methods producing valid results, including but not limited to the permeability of andesite at the mine site and the lack of a potential for groundwater quality exceedances, much less movement of contaminants offsite in the direction of Copper Flat's neighbors. *See, e.g.*, Report 6-10, Findings 188-215. NMCC and NMED's mutually compatible conclusions regarding contaminant risks are based on numerous scientific reports and expert opinions, including robust scientific studies and analyses specifically concerning potential contamination risks associated with water discharges at the mine site. Report 6-12, Findings and Conclusion, Findings 192-215. NMCC's expert reports and testimony expressly consider and provide valid scientific evidence about the potential for groundwater contamination and migration of any contaminants in groundwater. Report 10-12; Findings 192-215. These expert reports reveal that the springs on Ladder Ranch will not be impacted by any contamination from the mine site and that the groundwater monitoring system is robust and will detect any potential contaminant plumes. Finding 185; Conclusions 35-36, 52-540. NMCC's experts also considered and presented credible, scientific evidence that there will be no contamination to Caballo Reservoir or the Rio Grande from mining operations. Findings 183, 184, 186, 187. Based on these valid studies and findings,

NMED crafted the draft discharge permit to address any risks and to ensure protection of groundwater, in conformance with the mandate of the Water Quality Act, the implementing regulations and the Copper Rule.

The Ranches and EBID offered additional unsubstantiated allegations that potential depletions to wells at the Ladder Ranch and to Caballo Reservoir constitute “undue risk” to property. But the discharge permit would not serve to authorize the appropriation or use of water at the mine site; it *only* regulates discharges of water at the mine site. The New Mexico Office of the State Engineer, which conducts its own analyses in determining whether water use will adversely affect other water users, regulates water appropriation and use. These property concerns are not validly raised in this proceeding and are therefore outside the scope of the Secretary’s consideration. To the extent the Secretary consider these to be concerns relating to an “undue risk” to property analysis, NMCC has demonstrated with specific credible evidence through modeling and analysis that NMCC’s proposed mining operations do not present such a risk, since any drawdowns in any event will be minimal in the distant areas of concern raised by the mine opponents. *See* AR 08042-08444, 15855-17076, NMCC Ex. 11. The speculative concern regarding drawdowns related to the open pit are unsupported by credible evidence; the cone of depression created by the open pit may be large, but there is no depletion to water resources affected by the cone of depression. *Id.*

The record, including but not limited to expert testimony offered at the hearing, demonstrates that NMCC and NMED considered “undue risk” to property when making application for, and issuing, respectively, draft DP-1840. This is most clearly evidenced by NMED’s decision to issue additional permit requirements to ensure there is not undue risk to property, including requiring a site-wide water management plan, additional monitoring wells, and

submission of a construction quality assurance/construction quality control plan (CQA) 90 days prior to construction of any impoundment that requires a liner. *See* AR 18734-18776.

- b. Is the focus of “undue risk” on the permitted discharge, or on the attendant risks posed by the presence of the facility itself?

The focus of an undue risk to property analysis should be only on the permitted discharge, as the term and the requirement for such a consideration originates in Copper Rule- governing discharge requirements for copper mines. Draft DP-1840 is facility specific; it contemplates protection of property from the potential discharge of contaminants, both at the site and surrounding the site, by providing facility-specific requirements and controls for discharges. Any other risks posed by the mine are properly considered, and are being considered, under separate permitting regimes by agencies with expertise in evaluating those risks, including the New Mexico Mining and Minerals Division, the Office of the State Engineer and the United States Bureau of Land Management. NMED need not consider risks outside of the permitted discharge in considering whether draft DP-1840 poses an undue risk to property in accordance with 20.6.7.10.J NMAC. Regardless, however, no credible evidence identifies undue risks to property of any kind.

- c. Does the interconnectedness of groundwater and surface water come into the calculation?

The Copper Rule and draft DP-1840 contemplate groundwater and surface water interconnectedness, so there is no need to duplicate this consideration in an undue risk to property analysis. NMCC has considered surface waters, including stormwater, in its discharge permit application and NMED considered and created conditions related to surface water in the draft discharge permit. Findings 362-364; AR18754. In any event, NMCC has submitted extensive evidenced-based reports and testimony assessing the potential contaminant migration, including to surface waters of the state.

- d. Is a dam breach analysis necessary for NMED to make its determination of “undue risk” independent of the OSE determination?

A NMED dam breach analysis is not necessary for the agency to make a determination of whether an undue risk to property would result from issuance of draft DP-1840. The Copper Rule clearly requires the applicant submit documentation of compliance with the requirements of the OSE’s Dam Safety Bureau, pursuant to NMSA §72-5-32. 20.6.7.17.C(1)(d) NMAC. Given this very specific cross-reference in the Copper Rule, it is clear the Water Quality Control Commission (WQCC) considered potential risks associated with dam safety when drafting the Copper Rule. Had the WQCC intended NMED to conduct its own separate investigation into dam safety, it would have built that into the regulation. Additionally, because the regulation clearly provides that NMED is to consider whether the applicant has complied with the expert agency’s requirements before issuing a discharge permit, NMED is taking into account dam safety in determining whether an undue risk to property exists. Finally, NMED has imposed additional permit requirements that are not required by the Copper Rule in order to ensure there is not undue risk to property by issuing this permit. One of these conditions is permit condition C105.C.2, which requires NMCC to submit documentation to the Dam Safety Bureau prior to initiation of construction of any portion of the TSF and associated dam. Finding 386; AR 18752.

- e. Is additional coordination necessary among the state agencies that regulate a multifaceted facility in order to determine “undue risk”?

The agencies that are evaluating applications for the proposed Copper Flat Mine, including NMED, share and seek input from cooperating agencies. As NMED expert Kurt Vollbrecht testified, NMED worked closely with other agencies in evaluating the proposed Copper Flat Mine project and in drafting draft DP-1840. NMED Ex. 2, p. 3. Given the intricate nature of state and federal permitting regimes, there is no reason to require or mandate additional agency coordination

or communication in order to evaluate whether an undue risk to property would be posed by issuing the draft discharge permit. NMED is the lead agency charged with evaluating risk under its own permitting regime, in this case for a groundwater discharge permit. There is no evidence to suggest that NMED failed to elicit or consider input from other agencies in approaching NMCC's discharge permit application and in ultimately issuing draft DP-1840.

f. Is it enough for NMED to minimize risk to the extent practicable through technical and operational elements in the discharge permit?

As previously indicated, the Copper Rule provisions, including the technical and operational requirements, must be construed as being protective of water quality and guarding against undue risk to property. The technical and operational requirements set forth in the draft discharge permit are robust and are designed to eliminate the possibility of undue risk to property. Site-specific provisions of the discharge permit ensure that risks are properly evaluated and addressed in the proposed permit. *See Gila Res. Info. Project v. New Mexico Water Quality Control Comm'n*, 2018-NMSC-025, ¶ 49, 417 P.3d 369, 380 (“[T]he Copper Rule functions on a unit-by-unit basis and ensures groundwater protection at each unit through discharge control and monitoring at the monitoring well network. NMED must approve the monitoring well locations for each copper mine unit and may require additional wells to ensure that the monitoring system is sufficiently comprehensive. 20.6.7.28 NMAC. According to the Commission, these requirements pertaining to NMED's oversight of the monitoring well system are the most intensive required by any state.”). NMED has imposed additional permit conditions to further minimize risk, which again include a site wide water management plan, additional monitoring wells, and the requirement to have NMCC submit a CQA plan 90 days prior to construction of any impoundment that requires a liner. Had the WQCC intended risk be minimized in additional ways, other than by technical and operational

elements in the discharge permit, it would have crafted such mechanisms and included them in the regulation.

- g. How does NMED decide what remaining risks are acceptable in permitting a copper mine?

The Copper Rule and the risks it contemplates and seeks to prevent are extensive. *See Gila Res. Info. Project v. New Mexico Water Quality Control Comm'n*, 2018-NMSC-025, ¶ 16, 417 P.3d 369, 373–74. As evidenced by the robust administrative record, NMCC and NMED have worked tirelessly over the past eight years considering a discharge permit for the proposed Copper Flat Mine. Findings 138-158. Through this process, NMED has identified and evaluated the risks associated with the discharge of water at the proposed mine site in evaluating and drafting DP-1840. NMED has approached this permit as it does all permits to protect groundwater, in the broadest possible way, including soliciting public comments, evaluating all submissions and delivering a draft permit that is protective of groundwater. NMED has addressed perceived risks that are not expressly covered by the Copper Rule by adding permit conditions. As discussed above, any potential risks articulated by EBID and Ranches are indefinite and, to the extent they are even relevant, are adequately addressed by the discharge permit.

LIMITED EXCEPTIONS

NMCC offers these limited exceptions to the Hearing Officer’s Findings and Conclusions:

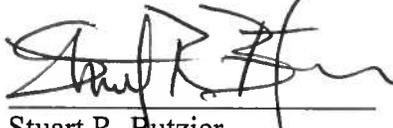
- Finding 28 indicates that the Ladder Ranch has “excellent” water resources, but the Ranches presented no technical or scientific evidence about the water resources.
- Finding 415 indicates “impoundments that store water or leach solutions for long-term storage require additional engineering controls compared to impoundments intended to store solutions for less than 30 days.” The Copper Flat Mine will not use leach solutions.

- Conclusion 58 misstates 20.6.7.10.J NMAC; it states the “Secretary shall approve a discharge permit provided that it poses neither a hazard to public health nor undue risk to property.”

CONCLUSION

As set forth herein, draft DP-1840 fully complies with the provisions of the Copper Rule, and the issuance of draft DP-1840 will not result in undue risk to property. Therefore, NMCC requests that the Secretary adopt the Findings and Conclusions and issue DP-1840 as proposed.

Respectfully submitted,



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CERTIFICATE OF SERVICE

I hereby certify that on December 13, 2018, a copy of the foregoing Comments on Hearing Officer Report was e-mailed to the following:

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