

STATE OF NEW MEXICO
WATER QUALITY CONTROL COMMISSION



IN THE MATTER OF PROPOSED AMENDMENTS
TO 20.6.2 NMAC, THE COPPER RULES

WQCC 12-01(R)

New Mexico Environment Department,
Petitioner.

**FREEPORT-MCMORAN'S OPPOSITION TO
REQUEST FOR STAY OF THE COPPER MINE RULE, 20.6.7 NMAC**

I. INTRODUCTION

Freeport-McMoRan Chino Mines Company, Freeport-McMoRan Tyrone Inc., and Freeport-McMoRan Cobre Mining Company (collectively "Freeport") object to a stay of the Copper Mine Rule, 20.6.7 NMAC, and submit this written response to the Joint Request for Stay of 20.6.7 NMAC filed by the Gila Resources Information Project ("GRIP"), Turner Ranch Properties, L.P. ("TRP"), and Amigos Bravos on October 23, 2013 ("Joint Request"), the Notice of Proposed Testimony and Other Evidence Offered in Support of Motion to Stay the Copper Mine Rule Pending Appeal filed by GRIP, TRP and Amigos Bravos on November 15, 2013 ("Notice of Testimony"), and the Attorney General's Support of Joint Request for Stay of 20.6.7 NMAC also filed on November 13, 2013 ("AG's Support"). William Olson has filed a notice that he concurs in the Joint Request but has not filed separate pleadings, although he has proffered written testimony as Exhibit K to the Notice of Testimony. GRIP, TRP, Amigos Bravos, the Attorney General and William Olson have filed Notices of Appeal of the 20.6.7 NMAC and are referenced collectively herein as "Movants" on the Joint Request or "Appellants" in the Court of Appeals. This response is filed in accordance with the Hearing

Officer's Procedural Order Relating to the Joint Motion for Stay of 20.6.7 NMAC dated November 7, 2013.

The three Freeport companies operate three New Mexico copper mines, Chino, Tyrone and Cobre, which hold 20 separate ground water discharge permits issued under the Water Quality Control Commission's ("Commission") ground water discharge permit regulations, 20.6.2.3101-3115 NMAC. Affidavit of Timothy Eastep, ¶ 8 (attached hereto as Exhibit A)("Eastep Affidavit"). Seventeen of these discharge permits currently have applications for renewal and/or modification pending before the Environment Department ("Department"). *Id.*

The Commission adopted the Copper Mine Rule after considering (1) pre-hearing legal briefs submitted by the parties, (2) the extensive written direct and rebuttal testimony and exhibits filed by all of the parties, (3) the live testimony presented during the ten-day public hearing, including public comments, and (4) the post-hearing closing arguments and proposed statements of reasons filed by the parties. *See* Order and Statement of Reasons dated September 25, 2013 (hereinafter "SOR"), page 2 and ¶¶ 25-73. Commendably, nearly all of the Commissioners were present during the April 2013 public hearing, and many traveled to Silver City to hear the public comment session conducted there. Ten of the Commissioners participated in the September 2013 deliberations, voting 9-1 to adopt the Copper Mine Rule as proposed by the Department, along with the Statement of Reasons offered by the Department, with a few changes. The result of that process, the Copper Mine Rule, 20.6.7 NMAC, was published in the New Mexico Register on October 31, 2013 and will go into effect on December 1, 2013. 24 N.M. Reg. 776 (Oct. 31, 2013). In the absence of a stay, the Copper Mine Rule will remain in effect and will govern actions on the pending discharge permit renewal applications, except for

any applications for which the Department has published a draft permit for public review and comment before the effective date of the 20.6.7 NMAC. See 20.6.7.35.B and .C NMAC.

II. MOVANTS MUST SATISFY EACH PRONG OF A FOUR PART LEGAL STANDARD TO ESTABLISH GOOD CAUSE SUFFICIENT TO POSTPONE THE EFFECTIVE DATE OF THE COPPER MINE RULE

Freeport agrees with the AG that if the Commission were to grant the Joint Request it would postpone the effective date of the Copper Mine Rule (“Rule”) from December 1, 2013 until December 2016, or such time as the appeal of the Rule is fully and finally adjudicated.¹ There is no dispute that Appellants, the parties seeking the stay, must legally and factually establish four factors to demonstrate good cause for granting the stay. The burden of making this showing falls upon the Movants, here. § 74-6-7(C) NMSA 1978. Consistent with the statute, the Commission’s *Guidelines for Water Quality Control Commission Regulation Hearings (Guidelines)* provide that the Commission may only grant a stay if a motion is filed, a hearing is held and good cause is shown. *Guidelines* § 502.A. In determining whether good cause exists, the Commission shall consider:

- (1) the likelihood that the movant will prevail on the merits of the appeal;
- (2) whether the moving party will suffer irreparable harm if a stay is not granted;
- (3) whether substantial harm will result to other interested persons; and
- (4) whether harm will ensue to the public interest.

Guidelines § 502.B.

These four factors are based upon a court decision, *Tenneco Oil Co. v. N.M. Water Quality Control Comm’n*, 1986-NMCA-033, ¶ 10, 105 N.M. 708, 710, 736 P.2d 986, 988. Moreover, “[a]n administrative order or regulation will not be stayed pending appeal where the

¹ AG’s Support, p. 2.

applicant has not made the showing of *each* of the factors required to grant the stay.” *Id.* at ¶11 (emphasis added).

These same factors are cited on pages 1-2 of the Joint Request and at page 1 of the AG’s Support, although the AG suggests, in passing, that the Legislature did not intend to adopt the four-prong test of *Tenneco*, because the statute provides that an appellant must show “good cause” to obtain a stay. *See* AG Support, at 1 n.2. The AG is incorrect, however, because in *Tenneco* itself the Court of Appeals equated the four-prong showing with good cause, holding that “[a]pplying the above standards,” *i.e.* the four-prong test, “we find that applicants have not established *good cause* for the granting of a stay under the factors recognized above.” *Tenneco*, 1986-NMCA-033, ¶13 (emphasis added). It was in 1993, seven years after *Tenneco* established the four-prong test, that the Water Quality Act was amended to authorize the WQCC to stay a rulemaking pending the outcome of an appeal “[a]fter a hearing and showing of *good cause* by the appellant....” NMSA 1978, § 74-6-7(C) (1993) (emphasis added). The legislature is presumed to be aware of the law that exists when it enacts or amends a statute. *See, e.g., Incorporated County of Los Alamos v. Johnson*, 1989-NMSC-045, ¶ 4, 108 N.M. 633 (“We presume that the legislature is well informed as to existing statutory and common law....”). Therefore, the 1993 legislature, which was well aware of the *Tenneco* four-prong test, and the *Tenneco* court’s use of “good cause” as a shorthand way of describing that test, likely intended the words “good cause” in Section 74-6-7(C) in the same way.

In any event, it is important to recognize that the Joint Request asks this Commission enjoin its own action in adopting the Copper Mine Rule. The four-prong test of the *Tenneco* case and this Commission’s own *Guidelines* mimic to a large degree the requirements for obtaining injunctive relief. *See, e.g., Anderson Living Trust v. ConocoPhillips Co., LLC*, No. CIV 12-0039

JB/KBM, 2013 WL 3456913_at *65 (D.N.M., June 28, 2013) (a party requesting an injunction “bears the burden of showing: (1) actual success on the merits; (2) irreparable harm unless the injunction is issued; (3) the threatened injury outweighs the harm that the injunction may cause the opposing party; and (4) the injunction, if issued, will not adversely affect the public interest.”) (quoting *Fisher v. Oklahoma Health Care Auth.*, 335 F. 3d 1175, 1180 (10th Cir. 2003)). Significantly, New Mexico courts deem injunctive relief to be a “harsh and drastic” remedy. See, e.g., *Orion Technical Resources, LLC v. Los Alamos Nat’l Security, LLC*, 2012-NMCA-097, ¶ 31, 287 P.3d 967 (“Injunctions are harsh and drastic remedies that should issue only in *extreme cases of pressing necessity* and only where there is no adequate remedy at law.”)

The remainder of Freeport’s Opposition explains why Movants have failed to meet their burden to establish any of the four factors necessary for the Commission to stay the Copper Mine Rule. Importantly, under the *Tenneco* standard as incorporated into this Commission’s four-prong test under its *Guidelines*, a finding by the Commission that Movants have failed to meet their burden on any one of the four factors will support denial of the Joint Request.

III. APPELLANTS ARE NOT LIKELY TO PREVAIL ON THE MERITS OF THE APPEAL FOR THE SAME REASONS THEY DID NOT PREVAIL IN THE RULE MAKING PROCEEDING.

To obtain the stay request, Movants must convince the Commission that they are likely to persuade the Court of Appeals (COA) that the Copper Mine Rule should be thrown out, while leaving the current groundwater rules of general applicability in effect in all respects for copper mines. But the appellate courts cannot set aside the Commission’s Copper Mine Rule just because the Court might like the rules of general applicability better, or believes some aspects of Appellants’ arguments seem reasonable. This is so, because the Water Quality Act establishes the standard for review to be applied to the COA’s consideration of the Commission’s adoption

of the Copper Mine Rule . More specifically, “Upon appeal, the court of appeals shall set aside the commission’s action [Copper Mine Rule] only if it is found to be: (1) arbitrary, capricious or an abuse of discretion; (2) not supported by substantial evidence in the record; or (3) otherwise not in accordance with law.” § 74-6-7(B) NMSA 1978.

Of the four factors applicable to consideration of the Joint Request, supra pp. 2-4, the first factor, likelihood of success on the merits, raises nothing new or novel for Commission. The Joint Request and the AG’s Support presents the same legal arguments previously raised by GRIP, TRP, Amigos Bravos and the Attorney General in their pre-hearing motions, which were briefed by all of the parties and denied by the Commission at the outset of the Copper Mine Rule hearing. These same legal arguments also were presented in the written and oral closing arguments and the motions at the conclusion of the hearing. *See* AG’s Support at p. 2. In other words, the Movants in the Joint Request are asking the Commission to reconsider and arrive at a different result on the very Copper Mine Rule it adopted three months ago. If the Commission continues to view the Rule as an appropriate exercise of its statutory rulemaking authority, the Movants cannot prevail on the likelihood of success factor, and therefore, because they must prevail on all four factors, the Joint Request should be denied based on this factor alone.

In response to the Joint Request’s likelihood of success on the merits argument, Freeport incorporates by reference its pre-hearing and post-hearing briefs and arguments with respect to the Copper Mine Rule, and the Statement of Reasons adopted by the Commission, key points of which are cited and summarized below.

A. The Copper Mine Rule Follows the Legislature’s Direction to Adopt Rules for the Copper Industry Utilizing a New Approach to Regulation.

The Commission was directed by the Legislature to adopt the Copper Mine Rule utilizing a new regulatory approach by which the methods for pollution prevention and monitoring are to

be specified by the Commission in a rule, rather than by the Department in the first instance. *See* § 74-6-4.K NMSA 1978; SOR ¶¶ 4-7, 1320, 1323 and testimony cited therein. The Commission's general discharge permit rules, 20.6.2.3101-.3113, do not specify the methods for pollution prevention, because it did not have the authority to do so under the Water Quality Act as it existed before the 2009 amendments. *See* SOR ¶¶ 1320 and 1323. Because of this change in approach, or new regulatory paradigm, earlier precedents, policies and decisions are either obsolete or readily distinguishable. *See* SOR ¶¶ 1317-1324.

In the 2009 amendments, the Legislature directed the Commission to consider available discharge control technologies, and to adopt those it deems appropriate for the copper industry. § 74-6-4.K NMSA 1978. Permits issued under the Copper Mine Rule are expected to incorporate by reference the pollution prevention methods specified in the Copper Mine Rule, although the Department retains authority to impose additional or different pollution prevention methods through permit conditions when the Department can show that the additional pollution prevention methods are necessary. *See* § 74-6-5.E NMSA 1978; 20.6.7.10.I NMAC. This approach will provide a much more predictable and consistent regulatory regime for the copper industry, while providing the necessary flexibility to adjust the pollution prevention methods to reflect site-specific conditions. *See* SOR ¶¶ 79 and 97-99 and testimony cited therein; Written Direct Testimony of John Brack at pp. 21-31.

B. The Copper Mine Rule Establishes a Reasonable and Logical Set of Pollution Prevention Methods for New Facilities Consistent with the Amended Water Quality Act and the Rulemaking Facts Specified by the Legislature.

Movants complain generally that the Copper Mine Rule does not comport with the objectives of the Water Quality Act. Joint Request at pp. 2-5. The arguments made in the Joint Request do not accurately represent the provisions of 20.6.7, as described below, or the approach

and intent of the Copper Mine Rule. As the Department's witnesses described, the Copper Mine Rule is designed to control and contain discharges of water contaminants specific to copper mine facilities and their operations to prevent water pollution so as to protect all ground water of the State of New Mexico for present and future used as domestic and agricultural water supply and surface water recharge. SOP ¶ 83 and testimony of Adrian Brown cited therein. The Copper Mine Rule thoughtfully requires the use of appropriate technologies to limit discharges and to contain water contaminants within mine units, and improves upon discharge permits issued for copper mines under 20.6.2.3101-3113 NMAC.

As directed by statute, the Copper Mine Rule establishes specific pollution prevention methods for new process water and storm water impoundments, leach stockpiles, waste rock stockpiles, tailings impoundments and various other facilities that may discharge water contaminants. *See* 20.6.7.20-.26 NMAC; SOR ¶¶ 86-88 and testimony cited therein. The Copper Mine Rule also establishes specific monitoring requirements as directed by the statute. *See* 20.6.7.28-.29 NMAC; SOR ¶ 90 and testimony cited therein. The technical basis for the specified pollution prevention methods and monitoring requirements is clearly presented in the testimony of the Department's expert witness, and supplemented and further explained through Freeport's expert witnesses, *See, e.g.*, SOR ¶¶ 83-92 and the testimony of Adrian Brown and the written direct and rebuttal testimony of all of Freeport's witnesses.

The Joint Request complains that the Copper Mine Rule waives the standards of 20.6.2.3103 NMAC within the "area of hydraulic containment" [sic] and gives the impression that there will be no pollution prevention required in this area. Joint Request at pp. 4-5. Importantly, nothing in the Copper Mine Rule relieves copper miners from meeting the pollution control requirements specified by the Commission for mine units located inside "areas of open

pit hydrologic containment” even though ground water quality standards do not apply there. *See, e.g., 20.6.7.17.D NMAC.* This is a major departure from the general discharge permit regulations, as the Department will no longer need to show that a pollution control measure is necessary to avoid an exceedance of standards in order to impose a pollution control measure through a permit condition, as required under 20.6.2.3101-3113 NMAC. *See SOR ¶ 325* (“the specification of measures to prevent water pollution in the Copper Mine Rule take the place of the demonstration required by 20.6.2.3109.C NMAC”). Moreover, contrary to the misleading impression given in the Movants’ pleadings that the extent of the “area of open pit hydrologic containment” is unlimited; it is, indeed, limited by both the location of the perimeter monitoring wells, which among other things will verify that ground water is flowing into the open pit, and by the extent of land disturbance authorized by a discharge permit, *i.e.*, the physical boundary of the mine units. 20.6.7.7.B(5) NMAC.

Some flexibility on the use of liner systems for units within “open pit surface water drainage areas” (“OPSDA”) is granted, but by no means the *carte blanche* lack of controls alleged by Movants. For example, liner system requirements for process water impoundments are reduced from a double synthetic liner system, required outside the OPSDA, to a single liner system inside the OPSDA. *See 20.6.7.17.C(3) and (4) NMAC.* The Copper Mine Rule allows a permit applicant to propose and the Department to consider an alternate design for leach stockpiles located inside the OPSDA, but requires that the alternative design “maximize leach solution capture considering the site-specific conditions of the open pit, underlying geology and hydrology, and leach solutions will not migrate outside of the [OPSDA].” 20.6.7.20.A(1)(f) NMAC. These technologies were extensively addressed during the hearings and the rule

provisions are well supported in the record. *See, e.g., SOR ¶¶ 491-508 and 626-632 and testimony cited therein.*

C. The Copper Mine Rule Preserves Pollution Prevention Methods Specified in Existing Discharge Permits for Existing Facilities, While Requiring Upgrades to Existing Facilities and Corrective Action or Abatement to Address Contamination.

Movants complain that the Copper Mine Rule will relieve mine operations from duties to prevent and abate water pollution. Joint Request at 4. This is not correct. With respect to existing leach stockpiles, waste rock stockpiles, and tailings impoundments, they already are covered by discharge permits that the Department has issued under the general discharge permit regulations, and the Department can incorporate existing permit conditions into permits issued under the 20.6.7 NMAC, thus preserving the permit requirements established for the existing facilities based on discharge permits issued under 20.6.3101-3113 NMAC. *See* 20.6.7.20.B(2), 20.6.7.21.C(2), and 20.6.7.22.B(2) NMAC. Both existing and new facilities are subject to specific contingency requirements, including requirements for corrective action and, if the Department determines an abatement plan is required, abatement of contamination under the abatement rules, 20.6.2.4101-4114 NMAC. *See* 20.6.7.30 NMAC. Freeport expects that the existing permit requirements regarding monitoring, discharge controls, abatement and closure will continue in place after the effective date of the Copper Mine Rule. *See* Eastep Affidavit ¶¶ 6-10; Affidavit of Lynn Lande, attached hereto as Exhibit B (“Lande Affidavit”; Affidavit of Thomas L. Shelley, attached hereto as Exhibit C (“Shelley Affidavit”).²

In many respects, the Copper Mine Rule not only retains but improves upon the pollution prevention requirements in existing discharge permits. For example, existing discharge permits authorize unlined leach stockpiles and a range of lined and unlined process water impoundments.

² The document attached as Exhibit C, signed by Mr. Shelley, will be replaced with a notarized version once it is available.

See SOR ¶ 100; Written Rebuttal Testimony of Timothy Eastep at 19-21. They also authorized the construction of at least one new, unlined tailings impoundment and its continued operation through the present, consistent with the Copper Mine Rule. SOR ¶¶ 762 and 767 and testimony cited therein. Rather than requiring liners for waste rock stockpiles, existing discharge permits require methods such as material handling plans to prevent ground water pollution. SOR ¶¶ 705 and testimony cited therein. Until very recently, new and expanded unlined mine units were routinely authorized without variances. See SOR ¶ 1139 and testimony cited therein. Consequently, there is nothing in the Joint Request to indicate that any of the requirements of existing discharge permits imposed under the existing regulations of general applicability will be undone by the Copper Mine Rule. To the contrary, the Copper Mine Rule builds upon and will substantially improve upon pollution prevention methods and monitoring requirements compared to permits issued under 20.6.2.3101-3113 NMAC. See SOR ¶ 100 and testimony cited therein.

D. The Statement of Reasons Explains the Commission’s Rationale for Adopting the Copper Mine Rule and that is all the Law Requires.

Contrary to the allegations in the Joint Request on page 5, the Statement of Reasons adopted by the Commission thoroughly explains the Commission’s reasoning for adopting 20.6.7 NMAC. It also discusses and addresses the testimony and arguments of the Movants with respect to each of the changes to the proposed rule that they advocated. See, e.g., SOR ¶¶ 608-610, 619, 622, 626-627, and 629 (leach stockpiles); 672-675, 679-681, and 691-693 (waste rock stockpiles), and 737-740, 756-759, and 778 (tailings impoundments). The Statement of Reasons and the testimony addressed each of the factors that the Commission must consider in adopting regulations as provided by the Water Quality Act, § 74-6-4(E) NMSA 1978. SOR ¶¶ 1365-1387. According to the statute, the Commission shall give the weight it deems appropriate to all

relevant factors and circumstances, including those listed in the statute. § 74-6-4(E) NMSA 1978

E. The Copper Mine Rule is Consistent with Court Precedent and Guidance Regarding Interpretation of the Water Quality Act.

In their arguments that the Copper Mine Rule likely will be set aside on appeal, Movants rely upon the same discredited interpretation of the Water Quality Act and the “place of withdrawal” concept they have been arguing for the last decade, *i.e.*, that the Water Quality Act requires that water quality standards be met everywhere at a copper mine. But the case law, binding on the Commission, says otherwise:

Although the mine is a place where water is withdrawn for present use, **it would be incorrect to conclude that, as a consequence, the entire mine site is a measuring point and must meet water quality standards everywhere.** Not only is such a conclusion overbroad, it is also unrealistic to require all water at the Tyrone mine site to meet drinkable standards.... Thus, even though it is a conclusion that is arguably within the plain language of the statute, **we reject such a broad and impractical interpretation of the Act;** so interpreted, it would not reflect a balance between the competing policies of protecting water and yet imposing reasonable requirements on industry.”

Phelps Dodge Tyrone, Inc. v. N.M. Water Quality Control WQCC, 2006-NMCA-115, ¶33, 140 N.M. 464, 143 P.3d 502 (hereinafter, “*Phelps Dodge*”) (emphasis added).

In reviewing the testimony that the Commission errantly relied upon, eight years ago, to conclude that the entire Tyrone Mine was a “place of withdrawal,” the Court of Appeals rejected reliance upon speculation that someone might someday drill a well into a mine unit, such as a waste rock stockpile:

As an indication of the overbreadth of the standard that may have been applied by the WQCC, at the evidentiary hearing there was evidence that it was “possible” that someday someone might drill a well into the side of, or adjacent to, waste rock piles. **The WQCC relied, in part, on this possibility to support its conclusion that the entire facility was a place of withdrawal of water. This speculative scenario appears to stretch the statutory language too far, does**

not appear to represent reasonable future use, and cannot support the conclusion that the entire facility is a place of withdrawal of water.

Phelps Dodge, 2006-NMCA-15, at ¶ 32. (emphasis added). The Commission's adoption of Copper Mine Rule provisions that allow for ground water quality standards to be exceeded inside some mine units is entirely consistent with the seminal appellate decision interpreting the place of withdrawal language in the Water Quality Act. *Id.*, see SOR ¶ 1326.

The Court of Appeals recognized that the Commission has a range of choices in establishing policy for protection of ground water at mines. The Court stated that the Commission could consider a "point of compliance" concept as a reasonable interpretation of place of withdrawal: "It is possible that "point of compliance" is a reasonably proxy for "any place of withdrawal . . .for present or reasonably foreseeable future use . . . and that authorities dealing with "point of compliance" can and should be used in a case like this one." *Id. at* ¶ 37. This illustrates the range of policy choices that the Commission can validly make when adopting the Copper Mine Rule consistent with the statutory factors to be considered in adopting a rule.

As the Court of Appeals noted in *Phelps Dodge* the legislature meant for impacts to be measured in a *practical and sensible fashion*, but the issue is complicated by the fact that groundwater and surface water systems are interconnected. *Id. at* ¶ 29 (emphasis added). The Commission's adoption of the Copper Mine Rule, as explained in the Statement of Reasons, utilizes a practical and sensible approach consistent with the Court of Appeals' advice to strike a wise balance between competing interests. The Copper Mine Rule clearly limits the migration of ground water contamination as much as practicable by requiring that contaminants be contained within mine units themselves and expressly prohibits any exceedance of ground water quality standards beyond monitoring wells. Monitoring wells are required to be placed as close as practicable to each mine units and around the perimeter of an open pit.

F. Based on the Criteria for Judicial Review, the Copper Mine Rule Will Not Likely Be Set Aside on Appeal.

Considering that the requirements of the Copper Mine Rule fit well within the legal parameters set by the COA, it is difficult to imagine the COA would now find the Copper Mine Rule “arbitrary, capricious or an abuse of discretion” or “contrary to law.” Furthermore, there is ample evidence, not just substantial evidence, for each and every provision of 20.6.7 NMAC, as cited in the Statement of Reasons. Importantly, in considering whether there is “substantial evidence” to support adoption of a rule, the court is not to re-weigh competing evidence. . *Regents of the Univ. of Cal. v. N.M. Water Quality Control Comm'n*, 2004-NMCA-073, ¶ 29, 136 N.M. 45, 94 P.3d 788. Indeed, the Water Quality Act itself specifies that the Commission can give evidence the weight it deems appropriate. § 74-6-4(E) NMSA 1978. The Appellants assert that the Statement of Reasons is inadequate to sustain the Copper Mine Rule on appeal. But it is the record not the Statement of Reasons that “sustains” the Rule. Rules have been rejected for lack of a sufficient explanation of the reasons why a rule was adopted, because an insufficient explanation undermines effective judicial review of agency decisions. See, e.g., *Regents of the Univ. of Cal. v. N.M. Water Quality Control Comm'n*, 2004-NMCA-073, ¶ 14, 136 N.M. 45, 94 P.3d 788 (“Our review of the entire record in this case reveals it to be thorough and comprehensive; we are able to determine from the record the basis for the Commission’s adoption of the regulations...From the record containing oral testimony, written testimony, exhibits, comments and statement of reasons, this Court has a sufficient foundation to perform its task of review. ”); *City of Roswell v. N.M. Water Quality Control Comm'n*, 1972-NMCA-160, ¶ 14, 84 N.M. 561, 505 P.2d 1327 (holding that the court had “no indication of what the Commission relied upon as a basis for adopting the regulations” because the “record reveals only the notice of the public hearing, the testimony of the various experts and others, some exhibits

and the regulations”). Here, Movants’ primary beef is that in accordance with a procedural order to which no party objected, the Commission adopted a written Statement of Reasons presented by the Department and Freeport under circumstances that invited all parties to submit proposed statements of reasons. The care with which the Commission considered the evidence is further demonstrated by the hours of deliberation undertaken on the key points in dispute. The notion that the Commission cannot adopt FMI and NMED’s statement of reasons without additional explanation is not supported by either the record or case law. *Regents of the Univ. of Cal.*, 2004-NMCA-073, ¶ 13 (“We disagree with Regents [Appellant] that the statement of reasons must state why the Commission adopted each individual provision of the standards or must respond to all concerns raised in testimony. Such a requirement would be unduly onerous for the Commission and unnecessary for the purposes of appellate review.”)

IV. GRIP, TRP, AMIGOS BRAVOS AND THE ATTORNEY GENERAL HAVE FAILED TO SHOW THAT THEY WILL SUFFER IRREPARABLE HARM UNLESS A STAY IS GRANTED.

1. GRIP, TRP, and Amigos Bravos must demonstrate harm to themselves and have failed to do so.

In order to meet their burden to show irreparable harm, it is not sufficient for GRIP, TRP, or Amigos Bravos to make an attempt at demonstrating that harm may occur to someone; rather, they must prove that *they themselves* will suffer irreparable harm. *See, e.g., Tenneco*, 1986-NMCA-033, ¶ 10 (applicant must make “a showing of irreparable harm *to applicant* unless the stay is granted”) (emphasis added); *see also City of Las Cruces v. Rio Grande Gas Co.*, 1967-NMSC-190, ¶ 15, 78 N.M. 350 (even where movant’s opponent was acting illegally, injunction would not issue where movant “failed to show injury *to itself* entitling it to injunctive relief”) (emphasis added).

In the Joint Request, Amigos Bravos does not even attempt to show that it or any of its members will suffer any harm as a result of the Copper Mine Rule. Under New Mexico law, “[i]t is not enough that the party seeking injunctive relief merely claim irreparable harm; he must come forth with evidence of the irreparability of his harm or inadequacy of any remedy.” *See State ex rel. State Highway & Transp. Dep’t of N.M. v. City of Sunland Park*, 2000-NMCA-044, ¶ 19, 129 N.M. 151, 3 P.3d 128.

GRIP too has failed to make a showing that it or its members will suffer even actual harm as a result of the Copper Mine Rule, much less irreparable harm. GRIP states that it is 300-400 members who mostly live in Silver City, which is 10-15 miles away from the Tyrone mine. Joint Request at 6. GRIP alleges without elaboration or evidence that the Copper Rule will harm “public groundwater, including groundwater that is or will be relied on by GRIP or other Grant County residents.” *Id.* These bare assertions are insufficient absent a showing that groundwater used by GRIP or its members is *likely* to be harmed during the appeal. GRIP has made no such showing. In any event, the Eastep and Lande Affidavits show that there will be no new effects on the use of ground water during the pendency of any appeal—*i.e.*, the status quo will be maintained or improved upon.

In attempting to show irreparable harm to TRP, the Joint Request proffers affidavits of James Kuipers and Steve Dobrott alleging potential impacts to waters of the Ladder Ranch owned by TRP. A careful reading of the proposed testimony shows the complete lack of any evidence, or even a contention, that ground water standards anywhere within the Ladder Ranch might be exceeded. Instead, the testimony alleges that allowing an open pit to extract ore from a porphyry copper deposit will result in exceedance of standards within the open pit which, in turn, might require long-term pumping to control. The alleged “harm” to waters on the Ladder Ranch

is not claimed to be the result of any water contaminant migrating to the Ladder Ranch, but instead the result of speculation that water levels on the Ladder Ranch might decline due to pumping. There is no evidence from a hydrologist to support the contention that water levels on the Ladder Ranch could decline, however. The written testimony proffered by Mr. Kuipers, who is not a hydrologist, asserts in paragraph 22, that long term maintenance of hydrologic containment will likely lower the water table beneath the Ladder Ranch.

In addition to being unsupported by competent expert testimony, there are at least three fatal flaws with the proffered assertions. First, there is no statement or testimony that any of the imagined effects could happen during the period for which the stay is sought, *i.e.*, during the period that the appeal from the Copper Mine Rule is pending. The Eastep Affidavit, paragraph 14, reveals that the permitting and development of the Copper Flats mine is at least two years away. Second, the Water Quality Act regulates water quality, and there is no citation to any authority of the Commission or the Department to regulate or to consider the imagined possibility of water level declines. Third, the proffered testimony, is nothing more than speculation by a witness on a subject matter beyond his expertise, and, as discussed next, speculation is not adequate to show irreparable harm.

2. Irreparable harm may not be speculative in nature.

The irreparable harm prong of the analysis is not satisfied where there's a "mere possibility" of harm: "The injury must be actual and substantial, or an affirmative prospect thereof, and not a mere possibility of harm." *State ex rel. State Highway & Transp. Dep't of New Mexico v. City of Sunland Park*, 2000-NMCA-044, ¶ 19, 129 N.M. 151. An injunction will be denied where a party relies on "speculative" allegations of harm. *Id.* at ¶ 21. Similarly, the United States Supreme Court has held that a movant must show that irreparable harm is *likely*,

not that it is merely possible. *See Winter Natural Resources Defense Council, Inc.*, 129 S.Ct. 365, 374-75 (2008) (movant must show that irreparable harm is *likely*). Under these standards, the non-expert speculations offered to support alleged harms to TRP by the affidavits accompanying the Joint Request fail. Similarly, the harm alleged by GRIP is also entirely speculative. While GRIP alleges that harm will be done to groundwater that “is or will be relied on by GRIP,” it has not provided any evidence that its members are using, or are likely to use, any water from any copper mine during the pendency of the appeal. *See Joint Motion*, at 6.

Tellingly, the AG’s arguments to support a stay also fall far short of this standard, and are replete with explicit admissions that the AG speaks only of “possible” harm. *See AG Brief*, at 3 (new open pits, leach stockpiles, waste rock piles, or tailings “constructed at a new or existing copper mine *could* cause” harm); 3 (abatement requirements “*may* now be done away with”); 4 (“it is *possible* that some seepage outside the capture zone occurs to the south”); 5 (lack of abatement requirement is “*problematic*” for a certain reservoir, “which *may* leak outside the surface drainage area”); 5 (“Ground water *may* become contaminated, such contamination *may* go undetected, and such contamination *may* leak outside the surface drainage area”); 5 (“Ground water contamination above standards *may* result”); 6 (“monitoring, abatement and contingency requirements” “*may* be deleted upon renewal or modification”); 7 (ground water “*may* be contaminated, contamination *may* go undetected, contamination *may* go unabated”); and 7 (“ground water contamination from new copper mine units is a real *possibility*”) (all emphases added).

The AG offers no testimonial or documentary evidence to support its speculative assertions of possible harms. Even if it had done so, however, that would not have mattered since speculative assertions of possible harms simply are inadequate to meet the difficult

showing of irreparable harm. *State ex rel. State Highway & Transp. Dep't*, at ¶ 21. As a result, even if the Commission were to assume the truth of the AG's assertions of possible harms, lacking as those assertions are in evidentiary support, the AG's request that the Copper Mine Rule should be stayed would still fall short of the legal standard of showing irreparable harm under New Mexico law.

Likewise, the AG's assertions that other industries and individual dischargers may ask NMED, or potentially other agencies, to modify the regulations that govern them (*see* AG Support, at 7-8) are also entirely speculative, and provide no reason to stay the Copper Mine Rule. Even if the Rule were stayed, that would not prevent other industries from proposing new regulations, and it would not prevent NMED from considering and acting on them. In any event, it is not yet known what action NMED or the Commission will take with respect to any such proposals.

3. Movants also have failed to demonstrate that any alleged irreparable harm is imminent or is likely to occur before their appeal is decided.

The AG, GRIP, TRP, and Amigos Bravos have also failed to show that any claimed irreparable harm to anyone is imminent or is likely to occur during the period it will take for the Court of Appeals to decide the appeal from this Commission's Copper Mine Rule. *See State Bar v. Guardian Abstract & Title Co.*, 1978-NMSC-016, ¶ 17, 91 N.M. 434 (“normally for a court to grant an injunction, an *imminent* threat of irreparable harm must be shown....”) (emphasis added); *Orion Technical Resources, LLC v. Los Alamos Nat'l Security, LLC*, 2012-NMCA-097, ¶ 31, 287 P.3d 967 (“Injunctions are harsh and drastic remedies that should issue only in *extreme cases of pressing necessity* and only where there is no adequate remedy at law.”) (emphasis added).

Although the AG acknowledges that the usual time for decision of an appeal is 1.5 to 3 years (*see* AG Support, at 2-3), he does not explain how or why any irreparable harm would be likely during that period. The AG gives several examples of possible harm he speculates will result from the Copper Rule, but he provides no evidence of the time frame in which the alleged harm supposedly might occur. *See* AG Support, at 3-8. Similarly, GRIP, TRP and Amigos Bravos offer several examples of allegedly irreparable harm that will occur if the Copper Mine Rule is not stayed, but they too provide no argument, much less evidence, about when this alleged harm will occur. *See* Joint Motion, at 5-7. Even the affidavit of James Kuipers, which asserts that some harm is “very likely,” does not say when that harm is expected to occur.

4. The only evidence on whether anyone’s use of ground water will be affected indicates that there will be no harm, much less irreparable harm

As discussed above, the showing required of GRIP, TRP and Amigos Bravos on this factor is that GRIP, TRP and Amigos Bravos themselves suffered irreparable harm. Even if they could meet their burden by showing irreparable harm to anyone, which is not the law, there is not one shred of evidence in the hearing record or in the materials submitted by Movants that the use of ground water by any person—whether or not appellant Movant—for drinking water, irrigation, or any other use will be impaired due to exceedance of ground water quality standards as a result of discharges from any copper mine in New Mexico if the Commission does not stay the Copper Mine Rule. To the contrary, as shown by the Eastep, Lande and Shelley Affidavits, nobody at all will be harmed in any way if the Copper Mine Rule is not stayed, much less harmed irreparably if the stay request is denied. Consequently, the Joint Request for Stay not only clearly must be denied, but its denial will have no negative consequence to anyone at all.

- 5. The AG's bare assertions that the Commission's Copper Mine Rule will irreparably harm the public interest if it is not stayed are meritless, and any harms to the public interest in any event have already received an adequate remedy at law**

The AG does not identify any particular harm to the Office of the AG, but instead attempts to identify alleged impacts on the public interest in ground water resources. Nothing in the AG's argument reaches the level of a "harm" that would be considered by a court. The AG presents no evidence whatsoever that any additional ground water at or in the vicinity of Freeport's copper mines could be contaminated as a result of the Copper Mine Rule, and the Eastep, Lande and Shelley Affidavits show otherwise. Indeed, the Copper Mine Rule would require that future discharges meet ground water quality standards outside of the mine units, monitoring has been and will continue to be conducted to verify that is the case, and the Department has invoked its authority to require continued abatement of existing contamination, which has not impacted any other water users' ability to utilize ground water.

The Attorney General and the proffered testimony of William Olson point to a particular pending permit action, Discharge Permit DP-493, in an effort to show some harm that might emanate from the Copper Mine Rule. The arguments made with regard to this permit not only expose the true intent of the Appellants to attack copper mining in New Mexico, but show that the Appellants do not understand the Copper Mine Rule or, in Mr. Olson's case, his own prior permitting actions. Mr. Olson states in his testimony that "Effective December 1, 2013, the Copper Mine Rule will require re-issuance of a draft permit consistent with the new rules." He cites no provision of the Copper Mine Rule in support of this contention. In fact, as the circumstances currently stand with respect to DP-493, Mr. Olson's statement is incorrect. When the Department has issued public notice of a draft discharge permit before the effective date of

the Copper Mine Rule, the Department is to take action on that permit under the general discharge permit rules, 20.6.3000 through 20.6.2.3113 NMAC, not 20.6.7 NMAC. *See* 20.6.7.39.C NMAC.

Surprisingly, Mr. Olson lists himself as one of the “Protestants” of the renewal of DP-493 who now assert that the Department is compelled to deny renewal of DP-493. In effect, he is asserting that the decision he made as the former Ground Water Quality Bureau Chief, when he signed the latest version of DP-493, was in violation of the Water Quality Act and the Commission’s rules. *See* Exhibit D, a copy of the most recent version of DP-493 issued by NMED. DP-493 as currently in effect was issued by the Department under the general discharge permit regulations authorized discharges from a large, unlined process water reservoir located generally within the area of the Chino open pit mine. *See* Exhibit D, p. 1-2. Despite the findings in the permit, no variance was required for issuance of this discharge permit and no specific abatement of contamination is required, as evidenced by the lack of any mention of a variance in Exhibit D. The permit document identifies evidence of exceedances of ground water quality standards in the permitted reservoir and seepage into ground water, and requires an investigation of exceedances of standards indicated at the time of the last permit renewal. *Id.* pp. 1-2 and condition 5. In essence, virtually everything that Movants now complain that could be authorized under the Copper Mine Rule was authorized when the Departments issued DP-493 under the existing discharge permit regulations, without a variance. *Compare* Exhibit D with AG Support at pages 4-6 and Exhibit K to Notice of Evidence at 4-6.

6. Appellants’ arguments based on a supposed right to variance hearings are frivolous

Movants complain that they would be irreparably harmed because the Copper Mine Rule would allegedly deprive them of a “right” to a variance hearing. AG Support at 5-6; This

argument exposes the true desires of Appellants to gain new opportunities to oppose copper mines. Their desire is not to maintain the status quo, but to advance their opportunities to block copper mining in New Mexico through the open ended variance hearing process.

There is no plausible argument that the variance provision in the Water Quality Act was intended to give opponents of New Mexico's industries the "right" to a variance hearing, unless a variance is sought by a permit applicant. Indeed, the intent of the variance provision is clear—and quite the opposite—to provide New Mexico industry the ability to obtain discretionary relief from the Commission from regulations that impose an undue burden.

Apart from variance hearings, the Water Quality Act and the Commission's regulations provide ample rights for persons with concerns regarding a permit action to receive at least two notices of pending permit applications, to present comments on draft permits and to request a public hearing before a final permit decision is made and, for those with a legitimate interest, to appeal a permit decision to the Commission and the courts. § 74-6-5(F) and (G) NMSA 1978; 20.6.2.3108 NMAC. This process is illustrated by the hearing request filed regarding DP-493. The Copper Mine Rule does nothing to change statutory hearing rights and, indeed, incorporates the existing public participation requirements of 20.6.3108 NMAC. *See* 20.6.7.F, .H and .I NMAC.

Mr. Olson and the Attorney General also assert that the Copper Rule would obviate the ongoing abatement plan process for Freeport's copper mines. They cite no specific rule provision for this contention. Moreover, their assertion that the Department will not proceed with the ongoing abatement plan process required under existing permits is mere speculation and is refuted by the Eastep and Lande Affidavits. There is no evidence that the Department has made or contemplates making any changes to its prior determinations and permit conditions

regarding abatement plans. As discussed above, the Copper Mine Rule does not change the abatement rules nor does it automatically do away with prior determinations of the Department that abatement plans are required. Moreover, as discussed in Mr. Shelley's affidavit, there is ample evidence that following closure of mine facilities, ground water quality does indeed improve.

V. GRIP, TRP, AMIGOS BRAVOS AND THE ATTORNEY GENERAL HAVE FAILED TO PRESENT EVIDENCE THAT NO SUBSTANTIAL HARM WILL RESULT TO OTHER INTERESTED PERSONS

Along with their burden to demonstrate that Appellants themselves will suffer irreparable harm if a stay is not granted, in order to show "good cause" Appellants must show that no substantial harm will result to other interested persons. Appellants' own arguments and evidence show the type of substantial harm that Freeport would suffer if a stay is granted. Moreover, Mr. Eastep's testimony in the Eastep Affidavit discusses how continuing uncertainty would harm Freeport.

Appellants' arguments with regard to DP-493 show that Appellants are intent on changing past practices under the Commission's existing rules and attacking copper mines by asserting that discharge permits routinely issued and renewed without variances in the past now must be denied, unless the permit applicant accedes to Appellants' demands that all permits must go through the variance process. As discussed in Freeport's hearing testimony, the "permit by variance" approach not only obviates the central purpose of the Copper Mine Rule to provide predictability and consistency to the issuance of permits but exposes Freeport and other copper mines to even greater uncertainty. This is because the granting of a variance is discretionary with the Commission and is subject to a vague, ill-defined and subjective standard that the

regulation is an “unreasonable burden.” *See* Written Direct Testimony of John D. Brack at pp. 4-6; Written Rebuttal Testimony of Timothy Eastep at pp 6-7. Indeed, as pointed out in Freeport’s arguments, there is an even greater legal uncertainty if one accepts the Appellants’ arguments that the Water Quality Act allows no leeway from compliance with standards because no variance from the statute itself is authorized.

The AG and Olson contend that Freeport will not be harmed by a stay of the Copper Mine Rule because Freeport has never had any difficulty with permitting its operations under the general discharge permit regulations. Yet they refute their own argument with the clear attacks on that same permitting regime and an obvious effort to force Freeport, other copper miners, the Department and the Commission into more litigation regarding permit actions. It is clear that a decision to stay the Copper Rule would not be a decision to maintain the “status quo,” but to facilitate Appellants’ efforts to drastically change the old permitting system and move to a “permit by variance” approach.

VI. THE PUBLIC INTEREST SUPPORTS DENIAL OF A STAY.

The arguments presented by Appellants with regard to the public interest address only a small segment of the relevant public interests—particular an alleged public interest in protecting ground water quality inside copper mine units. This issue is addressed in detail above. There is a broader range of public interests recognized by the Court of Appeals and also implicit in the 2009 Water Quality Act amendments, but not addressed by Appellants. These include the public interest in supporting an existing, productive resource industry in New Mexico through the adoption of regulations that consider widely used methods of control, , creating jobs for New Mexicans, minimizing red-tape and delay, utilizing public regulatory agency and permittee time and expense wisely, and maintaining and possibly expanding tax revenue for the benefit of New

Mexicans. By establishing a more predictable and consistent regulatory regime for the permitting of copper mines, the Copper Mine Rule will advance these public interests.

VII. CROSS EXAMINATION BASED ON PROFFERED TESTIMONY

At this time, Freeport does not waive cross-examination of the witnesses identified in the Notice of Testimony. Freeport will engage in further discussions with opposing counsel prior to the hearing and reserves the right to change its position.

VII. CONCLUSION

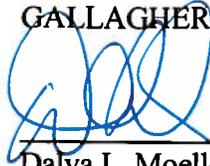
Appellants have failed to satisfy their burden to demonstrate to the Commission that any of the four factors to grant a stay have been established. The weight of the evidence heavily supports the denial of the Joint Request.

Appellants fail to acknowledge the improvements of the Copper Mine Rule and the reasoned policy choices made by the Commission in adopting the rule, consistent with the 2009 Water Quality Act amendments and specific guidance from the Court of Appeals' decision in *Phelps Dodge*. Instead, Appellants seek to prolong the use of a permitting system which, as observed by Commissioners during the public hearing, has failed in many respects as it has been applied to New Mexico's copper mines. Indeed, they not only wish to preserve a failed system, they wish to radically change it and make it worse by requiring variance hearings for each permit.

For these reasons, Freeport respectfully urges the Commission to deny the Joint Request.

Respectfully Submitted,

GALLAGHER & KENNEDY, P.A.



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CERTIFICATE OF SERVICE

I hereby certify that a true and accurate copy of the foregoing pleading was served via electronic mail to the following parties on November 26, 2013:

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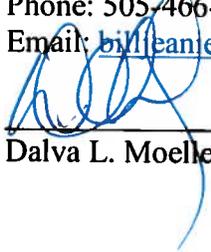
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Dalva L. Moellenberg, Esq.

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

In the Matter of:)
PROPOSED AMENDMENT TO) **No. WQCC 12-01(R)**
PART 20.6.2 NMAC (Copper Rule))

AFFIDAVIT OF TIMOTHY E. EASTEP

Being duly sworn, Affiant states:

1. My name is Timothy E. Eastep. I am over the age of 18 and affirm the truth of the matters stated herein.
2. I am the Senior Manager-Administration for Freeport-McMoRan's New Mexico Operations, which include Freeport-McMoRan Chino Mines Company, Freeport-McMoRan Tyrone Inc., and Freeport-McMoRan Cobre Mining Company (collectively, "Freeport").
3. Prior to this position, I served as the Manager of the Environment, Land & Water Departments for Freeport-McMoRan's New Mexico Operations from 2006-2012 and, in that capacity, became familiar with and oversaw the ground water discharge permit program as it applied to those operations.
4. I supplied Written Direct Testimony (WQCC Pleadings Index 50), Written Rebuttal Testimony (WQCC Pleadings Index 61), and live testimony in the Commission's hearing regarding the Copper Mine Rule, 20.6.7 NMAC. A copy of my resume showing my education and experience in the mining industry is in the record as Exhibit Eastep-1 (WQCC Pleadings Index 50).
5. The three Freeport companies comprising the New Mexico Operations that I manage, operate three New Mexico copper mines, Chino, Tyrone and Cobre, all of which will be subject to 20.6.7 NMAC.
6. In my Written Rebuttal Testimony, on page 19, I testified that the requirements of the Copper Mine Rule as proposed by NMED "would impose the same measures and the same monitoring systems that the Department has required in existing discharge permits for copper mines over the years" This testimony applies to the Copper Mine Rule as adopted by the Commission.
7. Under the Water Quality Act, discharge permits have a maximum term of five years, and under the Commission's discharge permit regulations, renewal applications for an existing discharge permit must be submitted before the term of the permit expires. If a timely renewal application is submitted, the discharge permit remains in effect until the Environment Department takes action to renew or deny the permit.



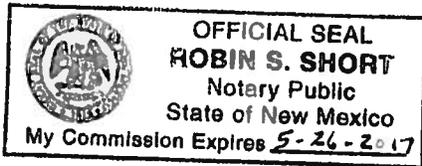
8. The three companies operating Freeport's three copper mines hold 20 separate ground water discharge permits issued under the Water Quality Control Commission's ("Commission") ground water discharge permit regulations, 20.6.2.3101-3115 NMAC. Seventeen of these discharge permits currently have applications for renewal and/or modification pending before the New Mexico Environment Department ("Department"), nearly all of which are beyond the expiration of their original five year terms. My Written Rebuttal Testimony, pages 19-21, summarizes the nature of many of those existing discharge permits. A copy of pages 19-21 of my Written Rebuttal Testimony is attached as Attachment Eastep Affidavit-1.
9. Under the existing discharge permits, the Chino, Tyrone and Cobre mines operate an extensive ground water monitoring system approved by the Environment Department to detect changes in ground water quality. This system is designed to detect any migration of water contaminants that could impact other users of ground water down-gradient from the monitoring well system in advance of any potential impact on those users.
10. This monitoring well system will continue in operation after the effective date of the Copper Mine Rule, and will remain in place, fully operational, for the five year term of each renewed permit. In other words, none of the renewals or modifications pending proposes changes to the monitoring well system.
11. I am familiar with the operating plans of the Chino, Tyrone and Cobre mines. There are no plans for expansion of these operations outside of the area currently permitted for operations under the existing discharge permits over the course of the next three years.
12. In addition to the pending permit renewals and modifications, during the next three years there likely will be a need for changes in operations that are necessary for the continuation of safe and efficient operations. The contemplated modifications are within the area currently covered by the permits and inside of the existing monitoring well network. These modifications will not adversely affect the operational effectiveness of the monitoring well system.
13. If the Copper Mine Rule is stayed, during the period of the stay, discharge permit actions will be subject to the general discharge permit rules, 20.6.3101-3113 NMAC. In that case, Freeport's New Mexico Operations that I supervise and manage will be harmed by a loss of certainty and the fact that it will be required to proceed through various permit renewal proceedings without the increased consistency and predictability offered by the Copper Mine Rule. As a result of having to proceed under the old permitting regime during a stay of the Copper Mine Rule, the permit renewal process will be lengthier and costlier than it otherwise would need to be due to the very issues with the old permitting regime that prompted the New Mexico Legislature amend the Water Quality Act to require regulatory change in the first place.

14. To the best of my knowledge, Freeport-McMoRan's New Mexico Operations are the only permitted existing copper mining operations that will be subject to 20.6.7 NMAC. I am aware, however, that New Mexico Copper Company has plans to permit, develop and eventually mine the Copper Flat porphyry copper deposit near Hillsboro, New Mexico. I understand and based on my experience in the industry have reason to believe that a number of federal and state permits and approvals are required before development of that Hillsboro mine can commence. According to information published by New Mexico Copper Company on its website, www.themacresourcesgroup.com, which I have reviewed, the permits necessary to begin developing the Copper Flat mine are not expected to be issued before the third quarter of 2015. Consequently, it will be a few years before permitting is completed and construction of mine units at the Copper Flat site can begin.

Further, Affiant Sayeth Naught.

Signed 

SUBSCRIBED AND SWORN TO BEFORE ME by the said Timothy E. Eastep, on the 26th day of November, 2013, to certify which witness my hand and official seal.



(SEAL)


Notary Public

May 26, 2017
Commission Expires

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

In the Matter of:

**PROPOSED AMENDMENT
TO 20.6.2 NMAC (Copper Rule)**

No. WQCC 12-01(R)

EXHIBIT EASTEP – 1

TIMOTHY E. EASTEP
Freeport-McMoRan Copper & Gold
P. O. Box 571
Tyrone, NM 88065
(575) 912-5237
TIM_EASTEP@FMI.COM

EXPERIENCE **Freeport-McMoRan**

Senior Manager Administration – New Mexico Operations	<i>2012 – Present</i>
Manager - Environment, Land & Water – New Mexico Operations	<i>2006 - 2012</i>
Manager – Waste Programs, Phelps Dodge Corp., Phoenix, AZ	<i>2004-2006</i>
Sr. Engineer – Water Programs, Phelps Dodge Corp., Phoenix, AZ	<i>2000-2004</i>
Various engineering and environmental compliance positions in Colorado for Climax Molybdenum Co. at the Henderson and Climax Mines	<i>1990-2000</i>

- EXPERIENCE**
- Mr. Eastep has been involved in the mining industry for over 22 years and has worked in the environmental field for 17 of those years.
 - His experience in the industry includes civil engineering design, multi-media environmental compliance and permitting, environmental management systems, and mine reclamation and closure.
 - He is a registered professional engineer (Colorado #32512) and is the co-chairman for the Resource Advisory Council (Las Cruces District).

EDUCATION **Colorado State University; Bachelor of Science, Civil Engineering, 1990**
Colorado School of Mines; Master of Science, Environmental Science & Engineering, 1997

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

In the Matter of:)
PROPOSED AMENDMENT TO)
PART 20.6.2 NMAC (Copper Rule))

No. WQCC 12-01(R)

ATTACHMENT EASTEP AFFIDAVIT - 1

with ground water quality standards at places of withdrawal of water for present or reasonably foreseeable future use.

Importantly, as discussed above and elsewhere in Freeport's testimony, the Proposed Rule requirements would impose the same measures and the same monitoring systems that the Department has required in existing discharge permits for copper mines over the years, including during the time when Mr. Olson was the Chief of the Ground Water Quality Bureau, plus it adds some new requirements. Indeed, Mr. Olson personally signed numerous discharge permits for Freeport's copper mine facilities which (1) authorized the continued use of unlined leach stockpiles, waste rock stockpiles, and tailings impoundments, (2) authorized the continued operation of these facilities when the permits themselves expressly acknowledged existing exceedances of ground water quality standards, but without requiring a variance or a public hearing on the permit, (3) specified monitoring well locations downgradient of the discharging facilities where compliance with ground water quality standards is measured, and (4) did not make or require any site-specific determination on the location of "places of withdrawal of water for present or reasonably foreseeable future use."

For example, Mr. Olson signed Discharge Permit DP-484 in January 2005, included in the record as Exhibit Scott-E. This permit authorizes the operation of Tailing Pond 7 at the Chino Mine, an unlined tailings facility (acknowledged on page 5 of the permit) that uses an interceptor well system to contain seepage. The first discharge permit was issued for this facility in 1987. The permit states that "NMED's purpose in issuing this Discharge Permit . . . is to control discharges of water contaminants from the Tailing Pond 7 into ground water and surface water, so as to protect ground and surface water for actual and potential future use as domestic and agricultural water supply and other uses, and to abate pollution of ground and surface

water.” The permit further states NMED’s determination that the requirements of 20.6.2.3109.C NMAC have been met. On page 3 of the discharge permit, it states that “Contaminated ground water from Tailings Pond 7 exceeds water quality standards under the WQCC regulations under Section 20.6.2.3103 NMAC for TDS and sulfate.” The permit document does not refer to any variance issued by Commission, and to my knowledge, the Department issued the permit without requiring a variance from the Commission. The permit conditions specify monitoring locations on paged 6 and 7. A diagram showing the locations of the monitoring wells downgradient of the tailing impoundment is presented in Mr. Blandford’s rebuttal testimony. The interceptor well system is described on page 11 of the permit document.

Similar examples of permits that the Department issued during Mr. Olson’s tenure as Ground Water Quality Bureau Chief and signed by Mr. Olson including DP-376 (2010 renewal) authorizing the continued operation of Chino’s existing unlined Lampbriht Leach Stockpile, DP-459 (2005 renewal) authorizing the continued operation of an unlined existing leach stockpile system within the Chino open pit, DP-493 (2006 renewal) authorizing the continued operation of a large unlined impoundment within the area of the Chino open pit for storage of a mixture of impacted stormwater and process water, DP-526 (2006 renewal) authorizing the continued operation of the unlined West and South leach and waste rock stockpiles at Chino, DP-181(2007 renewal) authorizing the continued operation of unlined waste rock stockpiles, an unlined tailings impoundment, and an open pit at the Cobre Mine, DP-166 (2005 renewal and 2010 modification) authorizing the continued operation of the Tyrone open pits and SX-EW plant and authorizing expansion of the Copper Mountain Pit, DP-286 (2010 renewal) authorizing continued operation of the unlined No. 3 leach system and associated interceptor well system installed for corrective action/abatement, and DP-383 (2004 renewal), DP-396 (2007 renewal),

DP-435 (2006 renewal), DP455 (2004 renewal, 2008 modification and 2010 renewal) and DP-670 (2004 renewal), all of which approved the continued operation of unlined leach and waste rock stockpiles at Tyrone. Each of these permits include similar statements as made in DP-484 regarding NMED's purpose to protect ground water and stated that NMED had determined that the requirements of 20.6.2.3109.C NMAC had been met. Each of these permits specifically identifies exceedances of ground water quality standards associated with the permitted facilities. None of these permits indicate that Tyrone was required to seek a variance from the Commission as a condition of NMED's issuance of the permit. None of these permits indicate that the permittee was required to make a demonstration that ground water impacted above standards was not located at a "place of withdrawal of water for present or reasonably foreseeable future use."

As discussed above, only two variances have been sought by Freeport copper mines in recent years, both for new or expanded leach stockpiles to be designed and constructed without liners. Both of the written petitions for those variances noted the pending Tyrone litigation over the Department's position and interpretation of the "place of withdrawal" language and reserved Chino's and Tyrone's respective rights to maintain their positions contrary to the Department's position.

This testimony rebuts Mr. Olson's testimony regarding the Department's actual permitting practices and the claimed 46 year history of absolute protection of all ground water discussed on page 11. It shows that the Department has repeatedly issued discharge permits under the Water Quality Act and the Commission's existing discharge permit regulations, including permits signed by Mr. Olson, under circumstances which, if Mr. Olson's testimony is to be believed, would violate the requirements of the Water Quality Act. It also illustrates that the Department has issued numerous discharge permits for facilities, such as unlined tailings

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

In the Matter of:)
PROPOSED AMENDMENT TO) **No. WQCC 12-01(R)**
PART 20.6.2 NMAC (Copper Rule))

AFFIDAVIT OF LYNN LANDE

Being duly sworn, Affiant states:

1. My name is Lynn Lande. I am over the age of 18 and affirm the truth of the matters stated herein.
2. I am Chief Environmental Engineer for Freeport-McMoRan Chino Mines Company. In this capacity, I also assist with certain projects at the Tyrone and Cobre mines, including closure discharge permits, which include sitewide abatement plans for all three mines.
3. I supplied Written Direct Testimony (WQCC Pleadings Index 50), Written Rebuttal Testimony (WQCC Pleadings Index 61), and live testimony in the Commission's hearing regarding the Copper Mine Rule, 20.6.7 NMAC. A copy of my resume showing my education and experience in the mining industry is in the record as Exhibit Lande-1 (WQCC Pleadings Index 50).
4. The Chino, Tyrone and Cobre Mines all are subject to abatement plan requirements to address all areas associated with the three mines where ground water monitoring has indicated that ground water may not meet the ground water quality standards of 20.6.2.3103 NMAC. The abatement plan requirements are based upon a determination by the Environment Department that there is evidence that ground water quality standards of 20.6.2.3103 NMAC have been exceeded.
5. I am familiar with the abatement plan work by the three mines. All three mines have conducted extensive investigations for their abatement plans as directed by and reported to the Environment Department, including the locations of all existing ground water production wells in and near the areas covered by the investigations. Based upon these investigations, and to my knowledge, no active or historic discharge of water contaminants from either of the active mines, Chino and Tyrone, has impacted the withdrawal of ground water by any other person for drinking water, agricultural or other uses. There have been some historical impacts to a few wells at the Cobre mine, however, this mine is inactive and investigations indicate that no additional wells are likely to be impacted.
6. Controls required under existing discharge permits, closure measures implemented for portions of the mines under existing discharge permits, and abatement actions are and will continue to contain ground water that exceeds the standards of 20.6.2.3103 largely within the active mine sites, and as a result of these actions, I do not expect any future



impacts at locations where persons other than Freeport-McMoRan could withdraw ground water over the next three or more years while an appeal of the Copper Mine Rule is pending. This is verified by ongoing ground water monitoring, and the controls and monitoring will continue over the course of the next three or more years.

Further, Affiant Sayeth Naught.

Signed Lynn A. Lande

SUBSCRIBED AND SWORN TO BEFORE ME by the said Lynn A. Lande, on the 26th day of November, 2013, to certify which witness my hand and official seal.

Contessa Archuleta

Notary Public

8/28/17

Commission Expires

(SEAL)

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

In the Matter of:)
)
)
)
PROPOSED AMENDMENT)
TO 20.6.2 NMAC (Copper Rule))
)
)

No. WQCC 12-01(R)

EXHIBIT LANDE – 1

July 2012

RESUME:

Lynn Lande

3980 Pitchfork Ranch Road

Silver City, New Mexico 88061

Work Telephone 575-912-5237; Work Cell 575-538-1724

Job History:

Chief Environmental Engineer at Freeport-McMoRan

- Participate in NM Copper Rule development by organizing and directing the Freeport technical staff. As well as participating in monthly and weekly technical meetings with the NMED, environmental groups, and academics.
- Cobre EA – Project Manager leading a diverse team of employees and consultants in the development of the Mine Plan of Operation and the Environmental Assessment.
- Mining Act and Discharge Permits – As the Closure Closeout permit regulatory lead my work includes development of financial assurance, reclamation and water treatment plans.
- Site-Wide Abatement Stage 2 DP 1340 and 1341 Project Lead for Chino and Tyrone.
- Chino Reclamation - Coordinate with Reclamation Service construction crews on projects with the NMED and MMD.
- Mentor new employees in the Chino Environmental Services department on numerous mine and reclamation projects such as pit dewatering, screening plant implementation, and mine projects.
- Manage the NPDES permit and SWPPP updates for the Chino Tailing area.
- New Mine Facility Permitting - worked with the NMED and MMD as well as Chino management, engineers, and geologist to prepare material and work plans for new stockpiles at Chino.
- As a geologist I act as a field expert and resource across the organization.

Chino Sr. Environmental Engineer

- Drafted several Operational DP renewal applications.
- Managed the drafting of several Chino Environmental reports such as Mine Hydrology, Stockpile Mass Loading, Feasibility Study, and Stockpile Slope Stability.
- Managed and participated in the drafting and reviewing of the Chino and Tyrone Closure/Closeout Plan renewal application package.
- Submit to NMED Quarterly Reports for three discharge permits and two MMD annual reports as related to the MAP.
- Interact with mine personal to educate staff concerning Chino's environmental commitments to NMED and MMD.

Chino Sr. Geologist

- Generated the monthly and quarterly geologic forecast models used in the development of monthly and quarterly mine plans.
- Supervised the Chino Ore Control Department with a staff of two Ore Control Geologists, a Mining Engineer, and four Mine Senior Sampling Technicians.
- Coordinated with Operations, Engineering and the Mill employees on a daily basis providing information on the ore and waste tons, grades, and geologic ore type characterization used to process ore.

- Spear-headed the grass root installation and training of the MineSight and acQuire upgrade, which is a comprehensive mine model and resource evaluation software package. This project restructured the ore control process and improved data quality.
- Attended numerous safety and supervisor developmental programs.
- Managed brown field exploratory drill and core sampling program. Included supervising geologists, drillers, and geology technicians.

Freeport-McMoRan Morenci Geologist

- Logged core, digitized cross-sections and plan maps.
- Helped develop the geologic, alteration/mineralization models using MineSight software.
- Acted as the Geology Environmental Coordinator. During my tenure the Geology department audit record was 100 % in compliance at drill sites, equipment lay down yards, chemical storage sites, and office areas.
- As Environmental Coordinator I trained employees and contractors on proper waste and spill handling procedures.
- Supervised up to seven Geologic Technicians in addition to core drilling crews.

Barrick Goldstrike Geologist -

- Developed and supervised multimillion dollar core and RC drill programs to expand reserves.
- Logged geology and geotechnical aspects of thousands of feet of core and drill cuttings.
- High degree of geologic and geotechnical interpretation and mapping skills.

Employment History:

YEAR

TITLE and COMPANY

2011-Present	Chief Environmental Engineer Freeport-McMoRan Copper & Gold
2006-2011	Senior Environmental Engineer Freeport-McMoRan Copper & Gold/ Phelps Dodge Chino
2005-2006	Senior Geologist Phelps Dodge Chino
2004-2005	Geologist II Phelps Dodge Morenci
2003-2004	Algebra Teacher Morenci Junior High School
2002-2003	Substitute Teacher Morenci Junior High School
2001-2002	Volunteer School Tutor Morenci Junior High School
1999-2000	Independent Geologic Consultant Aqua Terra Consultants
1997-1999	Home Maker
1995-1997	Independent Geologic Consultant Self Employed
1993-1995	Mine and Senior Geologist Barrick Goldstrike/Kilborn Engineering
1991-1993	Independent Geologic Consultant Barrick Goldstrike
1989-1991	Staff Geologist Cominco American Resources Inc.
1988-1989	Consulting Geologist Westmont Mining
1987-1988	Metallurgical Tech and Geologist Newmont Mining Company

Academic Background:

MS Program: Idaho State University, Pocatello Idaho

BA Geology Degree and Economic Minor Kean University of New Jersey: Junior Student Council Representative, Finance Board Member and Geology Club President

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

In the Matter of:)
PROPOSED AMENDMENT TO) **No. WQCC 12-01(R)**
PART 20.6.2 NMAC (Copper Rule))

AFFIDAVIT OF THOMAS L. SHELLEY

Being duly sworn, Affiant states:

1. My name is Thomas L. Shelley. I am over the age of 18 and affirm the truth of the matters stated herein.
2. I am currently employed as the Reclamation Manager for the Freeport-McMoRan Chino and Tyrone Mines. In this capacity, I oversee the design, implementation and monitoring of closure work on inactive mine areas that are identified for closure. This closure work to comply with the New Mexico Water Quality Act and discharge permits issued by the Environment Department. I also have had primary responsibility in the past to oversee discharge permits at the Tyrone Mine and have assisted with closure permit and abatement plan projects at the Chino, Tyrone and Cobre mines.
3. I supplied Written Direct Testimony (WQCC Pleadings Index 50), Written Rebuttal Testimony (WQCC Pleadings Index 61), and live testimony in the Commission's hearing regarding the Copper Mine Rule, 20.6.7 NMAC. A copy of my resume showing my education and experience in the mining industry is in the record as Exhibit Shelley-1 (WQCC Pleadings Index 50).
4. As stated in my Written Direct Testimony on pages 9, The Chino, Tyrone and Cobre Mines all hold discharge permits for closure issued by the Environment Department. These same mines also hold approved "closeout plans" approved under a separate agency under the New Mexico Mining Act. As further stated in that same testimony on pages 11-12, under the New Mexico Mining Act a closeout plan can be approved only if the Environment Department has made a determination that "the permit applicant has demonstrated that the activities to be permitted or authorized will be expected to achieve compliance with all applicable air, water quality and other environmental standards if carried out as described in the permit application." A copy of pages 9-12 of my Written Direct Testimony is attached hereto as Attachment Shelley Affidavit-1.
5. The Tyrone Mine already has completed closure and reclamation work pursuant to its discharge permit and Mining Act Permit on all of its tailings impoundments, its former concentrator site, and a portion of its inactive leach and waste rock stockpiles. Tyrone is monitoring ground water quality in the areas where this work has been conducted.



6. The Chino Mine currently is completing closure and reclamation work on all of its inactive tailings impoundments in accordance with its discharge permit for closure and its Mining Act permit requirements.
7. As stated in my Written Rebuttal Testimony on page 4, at Tyrone there is ample evidence that after completion of reclamation, the groundwater quality is showing marked improvement in real, actively monitored wells around the reclaimed surfaces. A copy of pages 3-4 of my Written Rebuttal Testimony is attached hereto as Attachment Shelley Affidavit-2.
8. As stated in my Written Direct Testimony on page 11, the closure requirements in the proposed Copper Mine Rule, which are carried over in the Copper Mine Rule adopted by the Commission as 20.6.7.33 NMAC, are consistent with the requirements established in permit conditions imposed by the Department and closure measures successfully implemented at New Mexico copper mines, while adding additional details not currently found in the permit conditions.

Further, Affiant Sayeth Naught.

Signed Thomas J. Shelley 26 Nov 2013

[Add Notary Block]

2035770

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

In the Matter of:

**PROPOSED AMENDMENT
TO 20.6.2 NMAC (Copper Rule)**

No. WQCC 12-01(R)

EXHIBIT SHELLEY – 1

THOMAS L. SHELLEY
Freeport-McMoRan Copper & Gold
P. O. Box 571
Tyrone, NM 88065
(575) 912-5773
THOMAS_SHELLEY@FMI.COM

EXPERIENCE FREEPORT-MCMORAN COPPER & GOLD

Manager Reclamation and Remediation – New Mexico Operations	<i>2007 – Present</i>
Manager - Environment, Land & Water – Tyrone Mine	<i>2006 - 2007</i>
Manager – Strategic Environmental, Land and Water Projects, Phelps Dodge , New Mexico Operations	<i>2002-2006</i>
Manager - Environment, Land & Water – Phelps Dodge Tyrone Mine	<i>1997-2002</i>
Sr. Environmental Engineer, Chino Mines Company	<i>1993-1997</i>
US Army, Engineer Officer, Woodward-Clyde Consultants, Sr. Staff/Project Engineer	<i>1986-1993</i>

- EXPERIENCE**
- Mr. Shelley has worked as a civil engineer for 26 years and has been involved in the mining industry for 22 years and has worked in the environmental field for 20 of those years.
 - His experience in the industry includes civil engineering design, multi-media environmental compliance and permitting, environmental management systems, and mine reclamation and closure.
 - He is a registered professional engineer (New Mexico #12158).

EDUCATION **Brigham Young University, B.S., Civil Engineering, 1985**
University of Texas at Austin, M.S., Civil Engineering (Geotechnical Specialty), 1991

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

In the Matter of:)
PROPOSED AMENDMENT TO)
PART 20.6.2 NMAC (Copper Rule))

No. WQCC 12-01(R)

ATTACHMENT SHELLEY AFFIDAVIT - 1

My direct testimony focuses on the closure, closure implementation and post-closure provisions of the Proposed Rule, drawing on my experience and technical qualifications in the design, permitting and implementation of closure plans at copper mines, along with the relevant definitions. I also will address some of the design and operational requirements for certain types of copper mine facilities.

The current closure permit for the Tyrone Mine is Supplemental Discharge Permit for Closure, Discharge Permit DP-1341, which is attached as Exhibit Shelley-2. The current closure permit for the Chino Mine is Supplemental Discharge Permit for Closure, Discharge Permit DP-1340, which is attached as Exhibit Shelley-3. The current closure permit for the Cobre Mine is Supplemental Discharge Permit for Closure, DP-1403 which is attached as Exhibit Shelley-4. Tyrone, Chino and Cobre all have submitted applications to renew these permits, which are pending. The Tyrone Settlement Agreement is attached as Exhibit Shelley-5. Also attached to my Testimony are two technical exhibits: Exhibit Shelley-6. Excerpts from Engineering and Design Manual – Coal Refuse Disposal Facilities (MSHA 2009) and Exhibit Shelley-7 – Excerpts from Surface Mining Water Diversion Design Manual (OSM 1982).

My written testimony incorporates the language of the Proposed Rule from Attachment 1 to the New Mexico Environment Department's (Department) Petition in this matter, dated October 30, 2012. This language is incorporated into my testimony for ease of reference, and so that if any changes to the Proposed Rule are considered by the Water quality Control Commission (Commission), the record is clear regarding the exact language to which my testimony applies.

Freeport-McMoRan Tyrone Inc., Freeport-McMoRan Chino Mines Company and Freeport-McMoRan Cobre Mining Company (collectively, Freeport) have been in litigation with The Department for many years over the methods and scope of closure for copper mining facilities. Significant concessions by Freeport were made in order to reach a settlement of this litigation (Exhibit Shelley-5) and are reflected in the Proposed Rule that I will be testifying about below. We understand the magnitude of these operations and the significant impacts that the regulations have on our operations and closure of facilities. Copper mining is a valued industry in our state and the regulations must provide for environmental protections and strike a balance with ensuring that the industry can continue to operate responsibly.

Typical copper mining operations are large scale and environmental impacts are inevitable. Responsible closure activities, like I have shown above, show the industry's commitment to mitigate those impacts. Given the massive scale of copper mines, the regulations must encourage and allow the use of locally available construction materials for closure (typically the most significant being cover material and channel armoring material). The Freeport mines are integrating closure activities with active mining to the extent practical – such as segregating suitable materials to be used for closure cover. Freeport also believes that it is in the interest of the state to encourage maximum use of the areas within hydrologic containment for mining operations, which is an environmental benefit during the operating life of the mine as well as during the closure and post-closure periods.

Closure requirements are addressed in the existing discharge permit regulations in very summary fashion, as follows:

20.62.3107 MONITORING, REPORTING AND OTHER REQUIREMENTS:

A. Each discharge plan shall provide for the following as the secretary may require:

....

(11) A closure plan to prevent the exceedance of standards of Section 20.6.2.3103 NMAC or the presence of a toxic pollutant in ground water after the cessation of operation which includes: a description of closure measures, maintenance and monitoring plans, post-closure maintenance and monitoring plans, financial assurance, and other measures necessary to prevent and/or abate such contamination. The obligation to implement the closure plan as well as the requirements of the closure plan, if any is required, survives the termination or expiration of the permit. A closure plan for any underground injection control well must incorporate the applicable requirements of Sections 20.6.2.5005 and 20.6.2.5209 NMAC.

The closure requirements in the Proposed Rule address the specific closure measures required for copper mines, consistent with the requirements established in permit conditions imposed by the Department and closure measures successfully implemented at New Mexico copper mines, while adding additional details not currently found in permit conditions. The closure requirements for copper mines in the Proposed Rule are found in Section 20.6.7.33 NMAC, which begins as follows:

20.6.7.33 CLOSURE REQUIREMENTS FOR COPPER MINE FACILITIES: An applicant or permittee shall submit a closure plan for all portions of a copper mine facility covered by a discharge permit that addresses the following requirements.

This language requires that closure plan be submitted as part of a permit application or permit for a copper mine. This approach is consistent with practice under the existing Commission regulations. Copper mines in New Mexico also are subject to the requirements of the New Mexico Mining Act and the Mining Act Rules, found at 19.10.1.1 to 19.10.13.1303 NMAC. The New Mexico Mining Act and the Mining Act Rules also require a permit for reclamation of New Mexico copper mines, and require a “closeout plan” for existing mining operations and a reclamation plan for new mining operations. The Mining Act Rules specify criteria for reclamation that include achieving an approved post-mining land use or a “self-sustaining ecosystem.” Closeout and reclamation plans submitted under the Mining Act Rules require review and a written

determination by the the Department that “the permit applicant has demonstrated that the activities to be permitted or authorized will be expected to achieve compliance with all applicable air, water quality and other environmental standards if carried out as described in the permit application. This determination shall address applicable standards for air, surface water and ground water protection enforced by the Environment Department, or for which the Environment Department is otherwise responsible.” 19.10.6.606.B(3) NMAC. Current practice is for the Department to base this determination with respect to water quality largely upon the issuance of a discharge permit for the activities to be permitted under the Mining Act. In other words, if the Department has issued or is prepared to issue a discharge permit under the Water Quality Act for the same activities to be permitted under the Mining Act, the Department will issue the determination required under the Mining Act.

From the industry standpoint, it is critical that the requirements of the Mining Act and the Water Quality Act be coordinated and consistent, and avoid conflicts. A mine operator cannot have two separate and potentially conflicting plans for closure and reclamation of a copper mine. Consequently, the copper mines with which I am familiar have prepared one plan for closure and reclamation that is designed to meet the requirements of both the Water Quality Act and the Commission’s regulations and the Mining Act and Mining Act Rules. We have called our combined plans “closure-closeout” plans. A key factor from Freeport’s perspective is that the closure requirements in the Proposed Rule be consistent with the reclamation requirements of the Mining Act. I have reviewed the Proposed Rule in this regard and believe that it is generally

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

In the Matter of:)
PROPOSED AMENDMENT TO)
PART 20.6.2 NMAC (Copper Rule))

No. WQCC 12-01(R)

ATTACHMENT SHELLEY AFFIDAVIT - 2

the Proposed Rule specifies pollution control measures where they have been implemented and shown to be feasible and effective.

Ms. Smith correctly states that an Administrative Order on Consent (AOC) study was instituted to evaluate potential impacts to the environment from historic mine operations around the Chino Mine about 18 years ago. As discussed in Freeport's direct testimony, the Chino Mine started open pit mining in 1910 in an historic mining district where there are numerous mines. I was tasked with initiating this cooperative process with the State and EPA those many years ago. As Ms. Smith mentioned, the AOC is designed to evaluate historic mining impacts that occurred before environmental permits were required, not modern mining impacts that are addressed under the discharge permit program. Although the area of study encompasses 55 square miles, in order to address the entire area where there was a potential for adverse impacts from historic mining and smelting operations, that number is misleading because only a few portions of that area have been found to be impacted to the extent that any cleanup is necessary. That number also includes the area of active mine operations which is not included in the AOC studies because active mine operations are addressed by modern environmental permits.

At the bottom of page 2 and top of page 3 of her testimony, Ms. Smith summarizes the "significant groundwater damages" that have occurred at the mine sites as reported in the New Mexico Natural Resources Trustee's Final Groundwater Restoration Plan for the three mines Chino, Cobre and Tyrone. I served as the primary technical mine representative in the cooperative assessment between FCX and the State Natural Resources Trustee for this settlement of a natural resources damage claim. This was a settlement process to address ground water injuries alleged by the Natural Resources Trustee and the Attorney General, and there were numerous technical and legal issues on which there was no agreement or resolution by the

settlement. Importantly, the settlement covers all of the impacts to ground water from all sources at all three mines originating from historical and continuing mining operations, and accounts for the entire volume of ground water impacts, including impacts that may persist into the future. As a result of the settlement, as long as there are no unforeseen new releases (which the existing discharge permits and the Proposed Rule are designed to prevent) that expand the area currently impacted, the State of New Mexico has released all claims for past and future impacts to ground water for the settlement amount of \$13 million. Indeed, while Ms. Smith indicates that the settlement assumes 100 years of ground water impacts, the mines are subject to ongoing discharge permit requirements, including future closure and water treatment requirements, as well as abatement requirements, that are expected to reduce the area of ground water impacts over time. At Tyrone, there is ample evidence that after completion of reclamation, the groundwater quality is showing marked improvement in real, actively monitored wells around the reclaimed surfaces.

III. REBUTTAL TESTIMONY IN RESPONSE TO WRITTEN DIRECT TESTIMONY OF DR. BRUCE THOMSON

I would also like to comment on Dr. Bruce Thomson's and other witnesses comments about the critical value of water in New Mexico and criticism of water use by copper mines. As discussed in Ms. Lande's testimony, copper mines use the ground water underlying their operations and recycle process water many times over, reducing the volume of water that must be imported from other wells or surface water. Of course, when a mine withdraws ground water, it must account for that withdrawal against its water rights regardless of whether the water has previously been used.

Water use is not covered by the Proposed Rule, but I would be remiss if I did not respond to Dr. Thomson's criticism of water use for copper mining. When you have the good fortune of



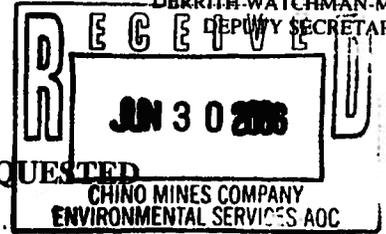
BILL RICHARDSON
GOVERNOR

State of New Mexico
ENVIRONMENT DEPARTMENT
Ground Water Quality Bureau
Harold Runnels Building
1190 St. Francis Drive, P.O. Box 26110
Santa Fe, New Mexico 87502-6110
(505) 827-2918 phone
(505) 827-2965 fax



RON CURRY
SECRETARY

DERRITH WATCHMAN-MOORE
DEPUTY SECRETARY



20060630-005

CERTIFIED MAIL – RETURN RECEIPT REQUESTED

June 28, 2006

Timothy E. Eastep, Manager
Environment, Land and Water
Chino Mines Company
210 Cortez St.
Hurley, NM 88043

RE: Discharge Permit Renewal, Reservoir 3A, DP-493

Dear Mr. Eastep:

The New Mexico Environment Department (NMED) issues the enclosed Discharge Permit, DP-493 to Chino Mines Company pursuant to the New Mexico Water Quality Act (WQA), NMSA 1978 §§74-6-1 through 74-6-17, and the New Mexico Water Quality Control Commission (WQCC) Regulations, 20.6.2 NMAC.

The Discharge Permit contains terms and conditions that shall be complied with by Chino Mines Company and are enforceable by NMED pursuant to WQCC 20.6.2.3104, WQA, NMSA 1978 §74-6-5 and §74-6-10. Issuance of this Discharge Permit does not relieve Chino Mines Company of its responsibility to comply with the WQA, WQCC Regulations, and any other applicable federal, state and/or local laws and regulations, including zoning requirements and nuisance ordinances.

Pursuant to 20.6.2.3109.H.4 NMAC, the term of the Discharge Permit shall be five years from the date of issuance and will expire on **June 28, 2011**. You must submit an application for renewal at least 120 days before the permit expiration date.

Thank you for your cooperation during the discharge permit review. If you have any questions please contact Thomas Dewers at (505)827-2906.



**DISCHARGE PERMIT RENEWAL
CHINO MINES COMPANY, DP-493
RESERVOIR 3A
June 28, 2006**

I. INTRODUCTION

The New Mexico Environment Department (NMED) renews this Discharge Permit, DP-493, to Chino Mines Company (Chino) pursuant to the New Mexico Water Quality Act (WQA), NMSA 1978 §§ 74-6-1 through 74-6-17 (1993), and the New Mexico Water Quality Control Commission (WQCC) Regulations, 20.6.2 NMAC.

NMED's purpose in issuing this Discharge Permit, and in imposing the requirements and conditions specified herein, is to control discharges of water contaminants from Reservoir 3A into ground and surface water, so as to protect ground and surface water for actual and potential future use as a domestic and agricultural water supply and other uses; and to protect public health. In issuing this Discharge Permit, NMED has determined that the requirements of 20.6.2.3109.C NMAC have been met.

DP-493, as issued in the last renewal dated December 18, 1998, for Reservoir 3A is briefly described as follows:

Reservoir 3A is a surface impoundment formed by an earthen dam. The reservoir is used for storage of mine water and has a capacity of 1.2 billion gallons. The reservoir has been in operation since 1987 and is located at the headwaters of the Whitewater Creek watershed. Reservoir 3A is located approximately 15 miles east of Silver City and adjacent to the Santa Rita open pit in Section 3, R12W, T18S in Grant County.

Associated facilities include a pipeline that conveys mine water from Reservoir 7 (covered under DP-591) to Reservoir 3A. An additional pipeline conveys mine water and storm water from the High Head Pump House associated with the Whitewater Leach System (covered under DP-526) via the South Booster Station to Reservoir 3A. A third pipeline, a 6-inch high-density polyethylene (HDPE) line, conveys storm water and acidic leachate from Reservoir 9 to Reservoir 3A.

Quantity, Quality and Flow Characteristics of the Discharge:

Reservoir 3A contains up to 1.2 billion gallons of acidic mine water, including storm water, that exceeds WQCC Ground Water Standards for several constituents. Mine waters stored in the reservoir may move directly or indirectly into ground water. This water exceeds health-based water quality standards under the WQCC Regulations in Section 20.6.2.3103.A NMAC for the constituents cadmium and chromium; the water exceeds other domestic water supply standards under Section 20.6.2.3103.B NMAC for

the constituents copper, manganese, iron, sulfate, zinc, and total dissolved solids (TDS) and is below the acceptable pH range. The mine water also exceeds water quality standards for irrigation use under Section 20.6.2.3103.C NMAC for aluminum, cobalt and nickel. In addition to the contaminated mine waters, Reservoir 3A contains sediments with leachable salts and metals that may become mobile.

Characteristics of Ground Water:

The depth to ground water ranges from approximately 100 feet to more than 300 feet below ground surface; groundwater has a total dissolved solids (TDS) concentration of approximately 220 milligrams per liter (mg/L). The area surrounding Reservoir 3A has undergone recent hydrogeological characterization to assess the ground water quality and groundwater flow paths in the area. Much of Reservoir 3A infiltration into groundwater moves to the north toward the Santa Rita pit capture zone, as evidenced by seepage in the pit walls and the areal potentiometric surface. It is possible that some seepage occurs to the south.

Activities that Produce the Discharge and Location:

Reservoir 3A is an unlined impoundment that contains waters with a pH of approximately 2.2 and a total dissolved solids concentration of over 40,000 mg/L. Reservoir 3A receives storm water and mine process water from the Whitewater Leach System via two 16-inch HDPE pipelines and from the SX/EW Reservoir 7 via a 16 inch pipeline. A fourth 6-inch pipeline conveys storm water and acidic leachate from Reservoir 9.

General:

The Discharge Plan Renewal consists of letters and documents submitted by Chino to NMED dated August 21, 2003. In addition, this Discharge Permit includes information and materials submitted as part of the original Discharge Permit issued on September 3, 1987, modified on March 30, 1988, and renewed on November 13, 1992 and on November 18, 1998.

Pursuant to 20.6.2.3109.E NMAC, NMED reserves the right to modify permit requirements in the event that NMED determines that the requirements of 20.6.2 NMAC are being, or may be, violated or the standards of 20.6.2.3103 NMAC are being, or may be, violated. This may include the determination by NMED that operational practices approved under this Discharge Permit are not protective of ground and surface water quality, and that a modification is necessary to protect the water quality and/or abate water pollution. Permit modifications may include, but are not limited to, lining or relining impoundments, changing discharge locations, changing waste management practices, expanding monitoring requirements, and/or implementing abatement of water pollution.

The discharge shall be managed in accordance with the Discharge Plan as conditioned by this permit. This Discharge Permit Renewal does not relieve Chino of its responsibility to comply with all conditions or requirements of the WQA, WQCC Regulations, and any other applicable federal, state and/or local laws and regulations such as zoning requirements or nuisance orders.

The following abbreviations may be used in this permit:

Abbreviation	Explanation	Abbreviation	Explanation
Chino	Chino Mines Company	NMED	New Mexico Environment Department
gpd	gallons per day	NMSA	New Mexico Statutes Annotated
mg/L	milligrams per liter	TDS	total dissolved solids
NMAC	New Mexico Administrative Code	WQA	Water Quality Act
		WQCC	Water Quality Control Commission

II. FINDINGS

In issuing this Discharge Permit, NMED finds:

1. Chino is discharging effluent or leachate from Reservoir 3A so that such effluent or leachate may move directly or indirectly into ground water within the meaning of 20.6.2.3104 NMAC
 2. Chino is discharging effluent or leachate from Reservoir 3A so that such effluent or leachate may move into ground water of the State of New Mexico which has an existing concentration of 10,000 mg/L or less of total dissolved solids within the meaning of 20.6.2.3101.A NMAC.
 3. The discharge from Reservoir 3A is not subject to any of the exemptions of 20.6.2.3105 NMAC.
 4. The discharges to Reservoir 3A have caused the contamination of ground water in excess of the water quality standards in the WQCC Regulations at 20.6.2.3103 NMAC.
 5. Chino is required to abate groundwater contamination pursuant to 20.6.2.3107.A(11) and 3109.E(1) NMAC.
-

III. PERMIT CONDITIONS

The following conditions shall be complied with by Chino and are enforceable by NMED.

OPERATIONS

1. Chino shall implement the following operational plan, including investigations, in accordance with the WQCC Regulations at 20.6.2.3106.C and 3107 NMAC to ensure compliance with 20 NMAC Chapter 6, Parts 1 and 2. [20.6.2.3106.C and 3107 NMAC]

Flow Description:

2. Reservoir 3A is permitted to receive discharges from the following facilities:
 - A. Storm water and acidic waters from Reservoir 9;
 - B. Storm water and mine process waters from Reservoir 7; and,
 - C. Mine process waters from the High Head Pump House via the South Booster Station. [20.6.2.3106 NMAC]
3. Chino is permitted to discharge mine process waters and storm water to Reservoir 3A from Reservoir 7 and the High Head Pumps via the South Booster Station at a maximum combined rate of 10 million gpd for a total reservoir capacity not to exceed 1.2 billion gallons. The elevation corresponding to a capacity of 1.2 billion gallons will be clearly marked at visible stations around the reservoir wall at all times and Chino will monitor the water level in accordance with Condition 13 to ensure that the approved capacity is not exceeded. [20.6.2.3107 NMAC]
4. Chino is permitted to periodically discharge storm water and acidic leachate from Reservoir 9 to Reservoir 3A. This additional inflow is discussed in the September 16, 2003 Amendment to this Discharge Permit and allows for pumping rates to Reservoir 3A not to exceed 1,440,000 gpd. [20.6.2.3107 NMAC]

Investigations:

5. Within 6 months of issuance of this Discharge Permit, Chino shall submit to NMED for approval a work plan to evaluate sources for ground water contamination in Well 3A-5. Chino must develop a work plan and study specific issues related to well 3A-5 water quality that includes better documentation of the early 1990's evaporation sprinkler operation as a potential contaminant source, and evaluation of overtopping, leaching operations, or elevated reservoir level as potential sources for the contamination. This study should quantitatively address rates of groundwater movement and solute transport in the fractured and faulted volcanic strata in the region. [20.6.2.3106.C(7) and 4106.C NMAC]

6. Within 12 months of issuance of this Discharge Permit, Chino shall submit to NMED for approval a work plan for location and installation of new monitoring wells to be placed south of Reservoir 3A. These wells will address the potential for southern and southwestern-directed reservoir seepage. The wells must meet NMED criteria for construction of monitoring wells in unconfined aquifers. [20.6.2.3106.C(7) NMAC]
7. Within 6 months of issuance of this Discharge Permit, Chino shall submit to NMED for approval a work plan to evaluate reservoir seepage via a quantitative water balance. This will include a quality control/quality assurance program to better understand accuracy of flow meters and reservoir water level measurements, instrument calibration, and meteorological data. This work plan must include a proposal and justification for meteorological instrumentation located at or near the reservoir, to obtain maximum accuracy in precipitation and evapo-transpiration in the water balance calculations. [20.6.2.3106.C(7) and 3107.A(8) NMAC]

MONITORING, REPORTING, AND OTHER REQUIREMENTS

8. Chino shall conduct the monitoring, reporting, and other requirements listed below. A summary of monitoring requirements is attached as Table 1. [20.6.2.3107 NMAC]

Sampling and Field Measurements:

9. Ground Water Monitoring Wells: Chino shall monitor ground water quality as follows:

Monitoring wells 493-99-01, 493-99-02, 3A-5, 3A-7, 493-2004-01 and 493-2004-02, and all monitoring wells installed after or in response to the issuance of this Discharge Permit shall be sampled as follows:

- A. Chino shall record the depth to the water table to the nearest hundredth of a foot (0.01 ft), quarterly.
 - B. Samples shall be collected from each well quarterly and analyzed for the water parameters listed in Conditions 15A, 15B and 15C below. Analytical results shall be reported as required in Condition 15 below. [20.6.2.3107 NMAC]
10. Reservoirs – Chino shall sample Reservoir 3A and Reservoir 7 quarterly for the parameters listed in Conditions 15A, 15B and 15C below. Chino shall also sample these locations for the parameters listed in Condition 15D on an annual basis. Analytical results shall be reported as required in Condition 17 below. [20.6.2.3107 NMAC]
 11. Seeps and Springs – Chino shall sample any observable seeps that can be safely accessed and sampled along the south side of the Santa Rita Pit, particularly near in location to the recently mined-out 459-SEEP-5, for the parameters listed in

Conditions 15A, 15B and 15C below. Analytical results shall be reported as required in Condition 17 below. [20.6.2.3107 NMAC]

12. Flow Measurements – Pursuant to the work plan in Condition 7, Chino shall measure inflows and outflows to Reservoir 3A using totalizing flow meters. The frequency of measurement shall be at least monthly, and will change to daily in the event that reservoir levels exceed 85% of reservoir capacity. Flow measurements shall be reported as required in Condition 17 below. An error analysis and calibration procedures for the flow meters shall be reported as required in Condition 17 below. [20.6.2.3107 NMAC]
13. Additional Monitoring – Pursuant to the work plan in Condition 7, Chino shall measure the water elevation of Reservoir 3A to prevent exceeding the permitted capacity of 1.2 billion gallons. The frequency of measurement shall be at least monthly, and will change to daily in the event that reservoir levels exceed 85% of reservoir capacity. Water elevations shall be reported as required in Condition 17 below. [20.6.2.3107 NMAC]
14. Water Balance - A water balance to estimate seepage from the reservoir will be calculated monthly and reported quarterly as required in Condition 17. Chino shall report reservoir volume change (based on elevations and data), rainfall amount, estimates of storm water run-off (based on amount of precipitation and the size of the watershed), estimated net evaporation, and inflows from Reservoir 7, Reservoir 9 and the South Booster Station. An evaluation of error sources and uncertainties shall be reported as required in Condition 17 below. [20.6.2.3107 NMAC]

Analysis:

15. Chino shall analyze water samples from reservoirs, surface water and ground water for the parameters listed below. Samples collected for ground water analysis shall be analyzed for dissolved concentrations unless noted below. Samples collected from reservoirs and surface water shall be analyzed for total and dissolved concentrations of the analytes listed below.
 - A. Field parameters (analysis to be performed in the field): temperature, pH, and specific conductance.
 - B. General chemistry parameters: bicarbonate, calcium, magnesium, sodium, potassium, alkalinity, sulfate, chloride, and total dissolved solids.
 - C. Metals parameters: aluminum, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, iron, lead, manganese, mercury (total concentration only), molybdenum, nickel, selenium, silver, and zinc. If any of the following analytes are non-detectable and below WQCC standards (20.6.2.3103 NMAC) within the first two years of analysis following permit approval, they may be eliminated from the above list: barium, beryllium, mercury, selenium and silver.

- D. Organics: benzene, kerosene, total poly aromatic hydrocarbons (PAHs), toluene, ethylbenzene and total petroleum hydrocarbons (TPH), full range.
- E. Other parameters: any other parameters as identified during ongoing investigations of potential source areas and as required by NMED. [20.6.2.3107 NMAC]

IV. METHODOLOGY

- 16. Unless otherwise approved in writing by NMED, Chino shall conduct sampling and analysis in accordance with the most recent edition of following documents:
 - A. American Public Health Association, *Standard Methods for the Examination of Water and Wastewater*.
 - B. U.S. Environmental Protection Agency, *Methods for Chemical Analysis of Water and Waste*.
 - C. U.S. Geological Survey, *Techniques for Water Resource Investigations of the U.S. Geological Survey*.
 - D. American Society for Testing and Materials, *Annual Book of ASTM Standards*, Part 31. Water.
 - E. U. S. Geological Survey, et al., *National Handbook of Recommended Methods for Water Data Acquisition*.

Surface water monitoring must also be conducted according to test procedures approved under Title 40 Code of Federal Regulations Part 136. [20.6.2.3107.B NMAC]

Reporting:

- 17. Chino shall submit quarterly reports by the last day of February, May, August, and November of each year. Each report shall contain:
 - A. A brief written summary of all activities related to the discharge conducted during the preceding three months, including information on operational activities, monthly flow volumes, spills, maintenance, repairs, well drilling, water management, construction or demolition of structures, water quality trends, precipitation and trends in water levels.
 - B. A single table in a paper and electronic format (EXCEL spreadsheet) of water quality data with only those constituents analyzed and water levels, in both depth

to ground water and water level elevation relative to mean sea level (referenced to an appropriate geoid), measured during a single event shown in columns. Tabulated electrical conductivity will include the measured field values and corrected values to 25 degrees Celsius. Monitor sites will be shown in rows. Values exceeding standards shall be bolded. Any constituent not analyzed for a particular site will be shown as "NA" with an associated reason, any site not sampled shall be shown as "NS" with an associated reason, and any site not measured for water levels shall be shown as "NM" with an associated reason.

- C. A table showing water level data, in both depth to ground water (for wells) and water level elevation as above, for all applicable monitoring wells and surface impoundments for the sample period.
 - D. Figures showing the sample locations and the analytical results obtained for the sample period with exceedences of applicable water quality standards presented in bold text.
 - E. Copies of the original laboratory data sheets (may be submitted electronically).
 - F. Water balance calculations, by month, based on inflow, outflow, precipitation, run-off, evaporation, seepage etc., including error analyses and data uncertainties for each measurement type. Calibration procedures for the flow meters used in inflow and outflow measurements shall be included subject to NMED-approved methods determined via the work plan in Condition 7 above.
18. Chino shall submit *annual* monitoring reports by the last day of February of each year. Each annual report shall contain the following information:
- A. An annual summary of precipitation, by month.
 - B. Tables showing the sample locations and the analytical results obtained during the entire year. Exceedences of applicable water quality standards shall be presented in bold text.
 - C. A table showing water level data for all applicable monitoring wells and surface impoundments collected over the entire year.
 - D. A potentiometric surface map of the DP-493 area shall be prepared that includes water level data from the most recent sampling event. The map shall include the southern portion of the Santa Rita Pit, Reservoir 9 to the east and upper Lucky Bill Canyon to the southwest.
 - E. Time series graphs for each well with constituents detected above WQCC ground water standards. Each graph shall plot analytical data ranging from the past 5 years until present. Only those constituents detected above ground water standards shall be included in the graphs.

- F. Hydrographs (graphical representation of water levels versus time) shall be included for all monitoring wells. The hydrographs shall include ground water elevation data and surface impoundment water elevations from the last 5 years until present. [20.6.2.3107 NMAC]

ABATEMENT

19. Ground water standards have been exceeded within the area covered under this Discharge Permit. An abatement plan to address this ground water contamination shall be submitted to NMED for approval as part of the site-wide abatement plan required pursuant to Condition 32 of the Supplemental Discharge Permit for Closure, DP-1340. The abatement plan shall be conducted in two stages. Stage One of the abatement plan shall include a schedule to investigate all known areas of ground water and surface water contamination within the area covered by this Discharge Permit to define the extent and magnitude of ground water contamination in accordance with Sections 20.6.2.3109.E.1 or 20.6.2.4000 NMAC through 4115 NMAC. The second stage of the abatement plan shall address the selection of an abatement option to abate ground water contamination in the shortest reasonable timeframe and shall include an analysis of abatement alternatives pursuant to 20.6.2.4106.E.2 NMAC. [20.6.2.3109.E and 20.6.2.4000 through 20.6.2.4115 NMAC]

CONTINGENCIES

Ground Water Exceedences:

20. In the event that monitoring indicates ground water standards are exceeded, or the extent or magnitude of existing ground water contamination is significantly increasing during the term of the Discharge Permit, Chino shall collect a confirmatory sample from the monitoring well(s) within 15 days to confirm the initial sampling results. Within 30 days of the confirmation of ground water contamination or significant increases in existing contamination, Chino shall submit a plan to the NMED to abate ground water contamination, which includes a site investigation to define the source, nature, and extent of contamination; a proposed abatement option; and a schedule for its implementation. The site investigation and abatement option shall be consistent with the requirements and provisions of 20.6.2.4101, 4103, 4106.C & E, 4107 and 4112 NMAC. The abatement plan shall be implemented within 30 days of NMED approval. [20.6.2.3107.A(10) NMAC]

Operational Failures:

21. In the event of a pipeline break, pump failure, pond overflow or other system failure at the facility, the spilled PLS, raffinate or process water shall be contained, pumped and/or transferred to areas of the facility that impose minimal impacts to ground

water quality pursuant to the April 2004 Emergency Response Plan for In-Pit Leaching Operations, DP-459, the March 2001 Emergency Response Plan for Whitewater Leaching Operations, DP-526, other Emergency Response Plans for discharge permits that could impact areas covered under this permit, or more recent versions of the above. Failed components shall be repaired, replaced or temporarily replaced with an interim remedy as soon as possible and no later than 72 hours from the time of failure. [20.6.2.3107.A(10) NMAC]

22. If NMED or Chino identifies any other failures of the discharge plan or system not specifically noted in this permit, NMED may require Chino to develop for NMED approval contingency plans and schedules to address the failures. [20.6.2.3107.A(10) NMAC]

Spill Reporting:

23. In the event of a spill or release that is not authorized under this Discharge Permit, Chino shall initiate the notifications and corrective actions as required in 20.6.2.1203 NMAC. Chino shall take immediate corrective action to contain and remove or mitigate any damage caused by the discharge. Within 24 hours after the discovery of the discharge, Chino shall verbally notify NMED and provide the information required by 20.6.2.2103.A(1) NMAC. Within 7 days of discovering the discharge, Chino shall submit a written report to NMED verifying the oral notification and providing any additional information or changes. Chino shall submit a corrective action report within 15 days after the discovery of the discharge. [20.6.2.1203 NMAC]

CLOSURE

24. Chino shall maintain a closure plan for the entire Reservoir 3A area pursuant to the Supplemental Discharge Permit for Closure, DP-1340. In the event that Chino modifies or expands the Reservoir 3A system pursuant to this Discharge Permit in a manner that exceeds the scope of the closure plan, Chino shall propose changes to the closure plan accordingly. [20.6.2.3107.A(11) NMAC]

FINANCIAL ASSURANCE

25. Pursuant to the Supplemental Discharge Permit for Closure, DP-1340, Chino shall maintain financial assurance for Reservoir 3A and associated facilities in the amount sufficient to cover the cost of all required closure activities including post-closure monitoring and site maintenance. In the event that Chino modifies or expands Reservoir 3A and associated facilities pursuant to this Discharge Permit in a manner that exceeds the scope of the closure plan, Chino shall propose changes to the financial assurance accordingly. [20.6.2.3107.A(11) NMAC]

V. GENERAL TERMS AND CONDITIONS

Record Keeping:

26. Chino shall maintain at its facility a written record of all data and information on the monitoring of ground water, surface water, seepage, and meteorological conditions pursuant to this Discharge Permit including the following:
 - A. The date, exact time, and exact location of each sample collection or field measurement;
 - B. The name and job title of the person who performed each sample collection or field measurement;
 - C. The date of the analysis of each sample;
 - D. The name and address of the laboratory and the name and job title of the person that reviewed the analysis of each sample;
 - E. The analytical technique or method used to analyze each sample or take each field measurement;
 - F. The results of each analysis or field measurement, including the raw data; and,
 - G. A description of the quality assurance /quality control results for laboratory and field measurements. [20.6.2.3107.A NMAC]
27. Such data and information shall also be maintained on all split and duplicate samples, spike and blank samples, and repeat samples. [20.6.2.3107.A NMAC]
28. Chino shall maintain a written record of any spills, seeps, or leaks of effluent, leachate or process fluids not authorized by this Discharge Permit. [20.6.2.3107.A NMAC]
29. Chino shall maintain a written record of the operation, maintenance and repair of all facilities/equipment used to treat, store, or dispose of wastewater; to measure flow rates; to monitor water quality; or to collect other data required by this Discharge Permit. This record shall include repair, replacement, or calibration of any monitoring equipment and repair or replacement of any equipment used in the conveyance of process waters throughout this permit area. [20.6.2.3107.A NMAC]
30. Notwithstanding any company record retention policy to the contrary, until such time as NMED determines that all closure measures have been completed in accordance

with the requirements of this Discharge Permit, Chino shall retain copies of all data, records, reports, and other documents generated pursuant to this Discharge Permit. Such a record retention period may be increased by NMED at any time upon written notice to Chino. [20.6.2.3107.A NMAC]

31. All such data, records, reports, and other documents generated pursuant to this Discharge Permit, shall be provided to NMED upon request. [20.6.2.3107.A NMAC]

Inspection and Entry

32. Chino shall allow the Secretary or an authorized representative of NMED, upon the presentation of credentials, to:

- A. Enter any property or premises owned or controlled by Chino during regular business hours or at other reasonable times upon Chino's premises or at another location where records are kept under the conditions of this Discharge Permit or under any Federal or WQCC regulation.
- B. Inspect and copy during regular business hours or at other reasonable times, records required to be kept under the conditions of this Discharge Permit or pursuant to State or Federal water quality regulations.
- C. Inspect any facility, equipment (including monitoring and control equipment or treatment works), practices or operations regulated or required under this Discharge Permit, or under Federal or WQCC regulation.
- D. Sample or monitor at reasonable times for the purpose of assuring compliance with this Discharge Permit or as otherwise authorized by the New Mexico Water Quality Act, any effluent, water contaminant, or receiving water at any location before or after discharge.
[20.6.2.3107D NMAC] [74-6-9.B&E WQA]

33. Nothing in this Discharge Permit shall be construed as limiting in any way the inspection and entry authority of NMED under the WQA, the WQCC Regulations, or any other applicable law or regulation. [20.6.2.3107 NMAC]

Duty to Provide Information

34. After a request from NMED and within a reasonable time, which may be specified by NMED, Chino shall provide NMED with any relevant information to determine whether cause exists for modifying, terminating, or renewing this Discharge Permit, or to determine whether Chino is in compliance with this Discharge Permit.
[20.6.2.3107D NMAC][74-6-9.B&E WQA]

35. Nothing in this Discharge Permit shall be construed as limiting in any way the information gathering authority of NMED under the WQA, the WQCC Regulations, or any other applicable law or regulation. [20.6.2.3107D NMAC][74-6-9.B&E WQA]

Spills, Leaks and Other Unauthorized Discharges

36. This Discharge Permit authorizes only those discharges specified herein. Any discharge not authorized by this Discharge Permit or any other Chino DP is a violation of 20.6.2.3104 NMAC. Chino must report any such discharge to NMED, and it must take corrective action to contain and remove or mitigate the damage caused by the discharge as required by 20.6.2.1203 NMAC [20.6.2.1203 and 20.6.2.3104 NMAC].

Modifications/Amendments

37. Chino shall notify NMED of any changes to its wastewater collection or disposal system, including any changes in the wastewater flow rate or the volume of wastewater storage, or of any other changes to its mining operations or processes that would result in any significant change in the discharge of water contaminants. Chino shall obtain NMED approval, as a modification to this Discharge Permit pursuant to 20.6.2.3109.G, NMAC prior to any increase in the quantity discharged, or any increase in the concentration of water contaminants discharged, above those levels approved in this Discharge Permit. [20.6.2.3107 NMAC]

Enforcement

38. Any violation of the requirements and conditions of this Discharge Permit, including any failure or refusal to allow NMED to enter and inspect records or facilities, or any refusal or failure to provide NMED with records or information, may subject Chino to an enforcement action. Pursuant to WQA § 74-6-10.A and B, such action may include a compliance order requiring compliance immediately or in a specified time, assessing a civil penalty, suspending or terminating the Discharge Permit, or any combination of the foregoing; or an action in district court seeking injunctive relief, civil penalties, or both. Pursuant to the WQA §§ 74-6-10.C and 74-6-10.1, civil penalties of up to \$15,000 per day of noncompliance may be assessed for each violation of the WQA § 74-6-5, the WQCC regulations, or this Discharge Permit, and civil penalties of up to \$10,000 per day of noncompliance may be assessed for each violation of any other provision of the WQA, or any regulation standard, or order adopted pursuant to such other provision. For certain violations specified in the WQA § 74-6-10.2, criminal penalties may also apply. In any action to enforce this Discharge Permit, Chino waives any objection to the admissibility as evidence of any data generated pursuant to this Discharge Permit. [74-6 WQA]

Compliance with Other Laws

39. Nothing in this Discharge Permit shall be construed in any way as relieving Chino of its obligation to comply with all applicable federal, state, and local laws, regulations, permits, or orders. Chino does not waive any rights under such applicable federal, state and local laws, regulations, permits, or orders except as expressly provided in this Discharge Permit. [74-5-5.K WQA]

Liability

40. The approval of this Discharge Permit does not relieve Chino of liability should operation result in actual pollution of surface or ground water which may be actionable under other laws and/or regulations. [20.6.2.3109 NMAC]

Right to Appeal

41. Chino may file a petition for a hearing before the WQCC on this Discharge Permit. Such petition must be made in writing to the WQCC within thirty (30) days after Chino receives this Discharge Permit. Unless a timely petition for a hearing is made, the decision of NMED shall be final. [74-6-5.N WQA]

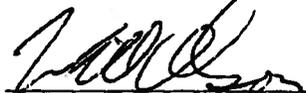
Transfer

42. Prior to any transfer of ownership, control, or possession of the Chino Mine or any portion thereof, Chino shall notify the proposed transferee in writing of the existence of this Discharge Permit and include a copy of this Permit with the notice. Chino shall deliver or send by certified mail to NMED a copy of the notification and proof that such notification has been received by the proposed transferee. [20.6.2.3111 NMAC]

Term

43. The term of this Discharge Permit is five (5) years, and the Permit will automatically expire five (5) years from the date it is issued. To renew this Discharge Permit, Chino must submit an application for renewal at least 120 days before that date. [74-6-5.H and 20.6.2.3109.H NMAC]

Issued this 28th day of June 2006



William C. Olson, Chief
Ground Water Quality Bureau
New Mexico Environment Department

Chino Mines Company, DP 493
June 28, 2006 Page 15

Under authority delegated by the Secretary of the New Mexico Environment Department

ISSUED: ____June 28, 2006____

EXPIRED: ____June 28, 2011____

**CHINO RESERVOIR 3A, DP-493
 MONITORING SUMMARY**

Monitoring Reports are due by last day of February, May, August, and November

Table 1: Monitoring and Reporting Summary

Annual Monitoring Frequency	Annual Reporting Frequency	Number of Sites	Sampling Description
12	4	1	W – Reservoir water levels monthly.
4	4	6	W – Water levels quarterly
12	4	1	Reservoir 3A monitoring of inflow and outflow.
4	4	9	A - Field parameters: Temp, pH, specific conductance
4	4	9	B - bicarbonate, calcium, magnesium, sodium, potassium, alkalinity, sulfate, chloride, and total dissolved solids.
4	4	9	C - aluminum, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, iron, lead, manganese, mercury (total concentration only), molybdenum, nickel, selenium, silver, and zinc.
4	4	2	D - benzene, kerosene, total poly aromatic hydrocarbons (PAHs), toluene, ethylbenzene and total petroleum hydrocarbons (TPH), full range.

Table 2: Monitoring Schedule

Area Sub-Area	Locations	Sampling				Notes
		type	Monthly	Quarterly	Annually	
1.	3A-5	mw		A,B,C,W		
2.	3A-7	mw		A,B,C,W		
3.	493-00-01	mw		A,B,C,W		
4.	493-99-02	mw		A,B,C,W		
5.	493-2004-01	mw		A,B,C,W		
6.	493-2004-02	mw		A,B,C,W		
7.	Reservoir 3A	si	inflow, outflow	A,B,C	D	Weekly water elevations
8.	Reservoir 7	si		A,B,C	D	
9.	459-SEEP-5 vicinity	sp		A,B,C		Seep in Santa Rita Pit

Explanation to Abbreviations and Symbols

<p>Type: mw = monitoring well ew = extraction well si = surface impoundment</p>	<p>Sampling Quarters: Q1 = Jan-Mar Q2 = Apr-Jun</p>
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spg = spring sp = seep	Q3 = Jul-Sep Q4 = Oct-Dec
<p><u>Sampling Analytical Suites:</u></p> <p>A = Field parameters: Temp, pH, and specific conductance.</p> <p>B = General chemistry parameters: bicarbonate, calcium, magnesium, sodium, potassium, alkalinity, sulfate, chloride, and total dissolved solids.</p> <p>C = Metals parameters: aluminum, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, iron, lead, manganese, mercury (total concentration only), molybdenum, nickel, selenium, silver, and zinc.¹</p> <p>D = Organics: benzene, kerosene, total poly aromatic hydrocarbons (PAHs), toluene, ethylbenzene and total petroleum hydrocarbons (TPH), full range.</p> <p>E = Other parameters: any other parameters as identified during ongoing investigations of potential source areas and as required by NMED.</p> <p>W = Depth to water measurement to the nearest 0.01 foot.</p>	

¹If any of the following analytes are non-detectable and below WQCC standards (20.6.2.3103 NMAC) within the first two years of analysis following permit approval, they may be eliminated from the above list: barium, beryllium, mercury, selenium and silver