

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

**IN THE MATTER OF PROPOSED  
AMENDMENTS TO 20.6.2 NMAC,  
THE COPPER MINE RULE**

**No. WQCC 12-01(R)**

**New Mexico Environment Department,  
Petitioner**

**WILLIAM C. OLSON CLOSING ARGUMENT**

Pursuant to the New Mexico Water Quality Act (Water Quality Act), 74-6-1 to 74-6-17 NMSA 1978, Section 405 of the *Guidelines for Water Quality Control Commission Regulation Hearings*, and the Hearing Officer's Scheduling and Procedural Order issued on November 21, 2012, William C. Olson hereby submits the following Closing Argument. Concurrently with the filing of this Closing Argument, I have filed a final August 22, 2013 proposed rule titled "*Joint Proposal from the New Mexico Attorney, Gila Resources Information Project/Turner Ranch Properties Inc., Amigos Bravos, and William C. Olson to Water Quality Control Commission Amended Petition*" (Joint Proposal). The Joint Proposal indicates all changes proposed jointly by myself, the New Mexico Attorney General Office (AGO), Gila Resources Information Project (GRIP)/Turner Ranch Properties, L.P. (TRP) Inc., and Amigos Bravos (AB) to the New Mexico Environment Department's (Department) February 18, 2013 Amended Petition for the Proposed Copper Mine Rule as a result of the testimony presented at the Commissions 2013 Copper Mine Rule hearings. I have also submitted a Proposed Statement of Reasons concurrently with my Closing Argument and the Joint Proposal. The Proposed Statement of Reasons outlines the legal authority for the proceeding and provides factual findings, with citations to the evidentiary record, and conclusions of law to support the Joint Proposal's proposed amendments to the Copper Mine Rule.

## I. STANDARD FOR RULEMAKING

The Water Quality Control Commission (“Commission”) adopts regulations pursuant to its authority in Section 74-6-4 NMSA 1978. In adopting regulations, the Commission shall give weight it deems appropriate to all relevant facts and circumstances, including:

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

Section 74-6-4(E) NMSA 1978.

In adopting regulations pursuant to Section 74-6-4(K) NMSA 1978, the Commission must also consider the best available scientific information. The Commission’s decision to adopt a regulation must be based on substantial evidence. “Substantial evidence supporting administrative agency action is relevant evidence that a reasonable mind might accept as adequate to support a conclusion.” *Oil Transportation Co. v. New Mexico State Corporation Commission*, 110 N.M. 568, 571, 798 P.2d 169, 172 (1990). The agency must consider all evidence in the record. *Perkins v. Department of Human Services*, 106 N.M. 651, 654, 748 P.2d 24, 27 (Ct. App. 1987).

In addition, decisions of the Commission with regard to adoption of Title 20, Chapter 6, Part 7 may be overturned upon appeal if the decision is (1) arbitrary, capricious or an abuse of

discretion, (2) unsupported by the substantial evidence in the record, or (3) otherwise not in accordance with the law. Section 74-6-7(B) NMSA 1978.

## **II. INTRODUCTION**

This hearing is fundamentally about protection of ground water resources in New Mexico through the adoption of industry specific rules for copper mines. New Mexico is an arid state, with limited water resources. It is growing and developing rapidly, placing an increasing demand on those limited resources. New Mexico citizens obtain approximately 90 percent of their drinking water from ground water sources. It is therefore extremely important that we protect those resources. Olson Testimony WCO Ex. 1, pg. 3.

On October 30, 2012, the Department submitted a petition for regulatory change to the Commission. The petition proposed to amend the Ground and Surface Water Protection Regulations, 20.6.2 NMAC, to include new rules for the copper mine industry. The petition was in response to a 2009 amendment to the Water Quality Act requiring the Commission to adopt new industry specific discharge permit rules for the copper mine industry and “*to specify in regulations the measures to be taken to prevent water pollution and to monitor water quality.*” Section 74-6-4(K) NMSA 1978. Skibitski Direct Testimony pgs. 9-11.

Eleven days of public hearings were held between April 9, 2013 and May 3, 2013 in Santa Fe and Silver City, New Mexico on the Department’s petition to adopt a copper mine rule. Participants were the Department, Freeport-McMoRan Tyrone Inc., Freeport-McMoRan Chino Mines Company, and Freeport-McMoRan Cobre Mining Company (collectively “Freeport”), New Mexico Attorney General Office (AGO), Gila Resources Information Project (GRIP)/Turner Ranch Properties, L.P. (TRP) Inc., Amigos Bravos (AB) and William C. Olson, a private citizen. Tr. vol. 1-11.

The Department's proposed amendment would add a new section, 20.6.2.3200 NMAC, Ground Water Protection - Supplemental Permitting Requirements for Copper Mine Facilities. The goal of the Department's proposal is to prevent water pollution and monitor ground water quality in a consistent and comprehensive manner, and to assist the Commission in promulgating a rule that is consistent with both the 2006 Court of Appeals opinion on Phelps Dodge Tyrone, Inc. v. N.M. Water Quality Control Commission, Docket No. 25,027 (Tyrone Opinion) and the Water Quality as amended in 2009. The Department's secondary goals are to improve the permitting process for both the applicant and the Department, to decrease permit conditions by incorporating provisions by rule and to reduce the number of variances sought. The Department also seeks to create a straightforward permitting process with improved regulatory certainty that results in discharge permits that are consistent between facilities and more readily enforceable. Skibitski Written Testimony, pg. 11.

### **III. THE NECESSITY OF RULES FOR PREVENTION OF WATER POLLUTION AT COPPER MINES**

There are currently 3 existing copper mines near Silver City, New Mexico with millions of tons of ore reserves, the Chino, Tyrone and Cobre Mines. Brack Written Testimony, pg.3. The Chino and Tyrone mines are large open pit operations. The Chino Mine is about 11,600 feet long, 8,500 feet wide and 2000 feet deep and basically consists of a single pit. The main Tyrone Mine is about 4,600 feet long, 4,300 feet wide and 1,300 deep and has 8 satellite pits with the largest 3,700 feet long and the smallest 2,600 feet long. Lande Written Testimony pg. 9. There is also one proposed copper mine, the Copper Flat Mine, near Hillsboro, New Mexico that is seeking permits to operate a copper mine. Deichmann Testimony Tr. vol. 8, pg. 2065.

Open and underground mine workings , waste rock, leach piles and tailings at copper mines by virtue of their geological and geochemical nature, have a high probability of containing

metals and metalloids which are toxic and if not otherwise contained can pollute ground water above standards. Kuipers Direct Testimony pg. 3, paragraph 6. Both the Chino and Tyrone Mines in New Mexico, the state's two largest copper mines, have significant acid generation potential and accompanying metals leaching potential that have been demonstrated to impact and contaminate ground water above standards. Kuipers Direct Testimony pg. 3, paragraph 6. Voluminous information on water pollution from copper mine discharge activities has been presented to the Commission at numerous hearings over the past ten years on the Tyrone Mine site near Silver City, New Mexico. Olson Testimony WCO Ex. 1, pg. 4.

The major sources of water pollution at copper mines are leach stockpiles, waste rock stockpiles and tailing impoundments. Leach stockpiles generate highly acidic metal-laden leachates shown to cause contamination of ground water in excess of Commission water quality standards. Waste rock stockpiles can generate highly acidic leachate containing water contaminants that have the potential to cause ground water pollution in excess of Commission water quality standards. Tailing impoundments are large-scale mine disposal facilities and can contain water contaminants that have the potential to cause ground water pollution in excess of Commission water quality standards. The Commission has acknowledged this in prior hearings on the Tyrone Mine in 2007 and adopted findings of facts on this contamination in the Commission's February 4, 2009 Tyrone Mine Decision and Order on Remand. During the Copper Rule Advisory Committee meetings in 2012, all parties to this rulemaking also acknowledged the high potential for ground contamination from leach stockpiles. Olson Testimony WCO Ex. 3, pg. 22, pg. 28 and pg. 32; WCO Ex.15, pgs. 9-11; WCO Ex. 16, pgs. 2939-2946; and WCO Ex. 10, pgs. 8-11.

Data on file with the Department has shown that ground water contamination at existing copper mine facilities can migrate to great distances. FMI monitoring reports for tailings pond 7

at the Chino Mine show that sulfate contamination of the shallow aquifer underlying tailings pond 7 extends at least 3,000 feet downgradient of the tailings impoundment. Olson Testimony WCO Ex. 3, pg. 12; and WCO Ex.13. The Department also presented extensive expert witness testimony on the extent of ground water contamination resulting from mining operations at the Tyrone Mine during the 24 days of Commission's Tyrone Mine Remand Hearing held in 2007. A Department map depicting contaminated aquifer monitoring wells at the Tyrone Mine shows ground water contamination extending approximately 2 miles downgradient of the east side of the mine site. Olson Testimony WCO Ex. 3, pg. 12; and WCO Ex.14. Department expert witness Clint Marshall also testified during the 2007 Commission Tyrone Mine Remand Hearing that extensive ground water contamination from mining activities has occurred at the Tyrone Mine with a plume of contamination extending for three-and-a-half miles offsite. The leading edge of the plume of contaminated ground water was about a half mile from Tyrone's own production wells located down in Oak Grove Draw. Olson Testimony WCO Ex. 3, pg. 12; WCO Ex. 15, page 11; WCO Ex. 16, pgs. 2945-2946; and WCO Ex. 16, pg. 2946. The Commission has also recognized this extensive contamination in its findings of fact in its Tyrone Mine February 4, 2009 "Decision and Order on Remand". Olson Testimony WCO Ex. 3, pg. 12; and WCO Ex. 10, pgs. 8-11, FOF 27-42.

#### **IV. STATUTORY REQUIREMENTS FOR PREVENTING WATER POLLUTION**

The Water Quality Act governs protection of ground water quality in the State of New Mexico. One of the main functions of the Commission's duties and powers under the Water Quality Act is to adopt rules to "*prevent or abate water pollution*" as set out in 74-6-4(E) NMSA 1978. It is clear that the Commission when adopting specific rules for discharge permits for copper mine facilities must prevent water pollution. Olson Testimony WCO Ex. 1, pg. 5.

To allow for flexibility in applying adopted rules, the Water Quality Act in 74-6-4(H) NMSA 1978 gives the Commission the authority to grant exceptions to its rules subject to limitations after a public hearing. In particular, 74-6-4(H) NMSA 1978 specifies, “*The commission may only grant a variance conditioned upon a person effecting a particular abatement of water pollution within a reasonable period of time. Any variance shall be granted for the period of time specified by the commission. The commission shall adopt regulations specifying the procedure under which variances may be sought, which regulations shall provide for the holding of a public hearing before any variance is granted*”. This provision contemplates that there are circumstances under which a permit applicant may be allowed, through the granting of a variance, to cause temporary pollution of water as long as it is abated within a reasonable period of time. Under this provision, a person is limited from being granted approval of a variance that allows permanent or long-term water pollution. Olson Testimony WCO Ex. 1, pgs. 5-6.

There is a significant provision of the Water Quality Act that is especially important for the Commission to apply in the adoption of rules for preventing water pollution. Section 74-6-5(E)(3) NMSA 1978 requires that the constituent agency deny a discharge permit if “*the discharge would cause or contribute to water contaminant levels in excess of any state or federal standard. Determination of the discharge’s effect on ground water shall be measured at any place of withdrawal of water for present and reasonably foreseeable future use*”. The Water Quality Act explicitly prohibits approval of a discharge permit that allows ground water to be contaminated above water quality standards at “*any place of withdrawal of water for present or reasonably foreseeable future use*” (“*place of withdrawal*”) (Emphasis added). Olson Testimony WCO Ex. 1, pg. 6.

The Commission’s powers to allow water pollution are also limited by the Water Quality

Act. Section 74-6-12(F) NMSA 1978 states, “*reasonable degradation of water quality resulting from beneficial use shall be allowed. Such degradation shall not result in impairment of water quality to the extent that water quality standards are exceeded*”. This statutory provision allows some degradation of ground water quality but prohibits the Commission from allowing degradation in excess of the water quality standards. Existing Commission rules reflect this in sections on approval of discharge permits such as 20.6.2.3109.C NMAC and numerous other sections of Commission rules that reference compliance with standards as part of an action to be taken. Olson Testimony WCO Ex. 1, pgs. 6-7.

As discussed earlier, the Water Quality Act was amended in 2009 to allow the Commission the power to adopt industry specific rules that were not previously allowed under the statute. Most significantly, the 2009 amendments inserted new statutory language in Section 74-6-4(K) NMSA 1978 that allows the Commission to adopt regulations specific to particular industries, and directed the Commission to promulgate industry specific rules for the copper industry. Section 74-6-4(K) NMSA 1978 requires that the Commission “*shall specify in regulations the measures to be taken to prevent water pollution and to monitor water quality*”. It is clear from the 2009 amended statutory language in 74-6-4(K) NMSA 1978 that the main purpose of the Commission in this proceeding is to adopt specific rules for copper mines to prevent water pollution and to monitor water quality. The 2009 amendments do not make allowances for point of compliance concepts that intentionally allow pollution to occur at copper mines. Olson Testimony WCO Ex. 1, pgs. 7-8.

Based upon the above statutory requirements, the Commission is required to adopt a rule that prevents water pollution in excess of standards and must require that the constituent agency deny any permit application that causes ground water pollution in excess of water quality standards at a “*place of withdrawal*”. Olson Testimony WCO Ex. 1, pg. 8.

## V. EXISTING COMMISSION RULE REQUIREMENTS FOR PREVENTING WATER POLLUTION

Pursuant to its grants of authority under the Water Quality Act, the Commission has previously promulgated rules consistent with the statutory requirements for preventing and abating pollution of ground water. Olson Testimony WCO Ex. 1, pg. 8.

In existing rule 20.6.2.3101.A NMAC, the Commission has required that the purpose of the discharge permitting rules is for “*controlling discharges onto or below the surface of the ground [is] to protect all ground water of the state of New Mexico which has an existing concentration of 10,000 mg/l or less TDS, for present and potential future use as domestic and agricultural water supply . .*” Emphasis is placed on the words “all ground water”. This language clearly shows that the Commission has required that all ground water be protected under a discharge permit consistent with the provisions of the Water Quality Act. Olson Testimony WCO Ex. 1, pg. 8.

In existing rule 20.6.2.4101.A NMAC, the Commission has required that the purpose of the rules for prevention and abatement of water pollution is to “*abate pollution of subsurface water so that all ground water of the state of New Mexico which has an existing concentration of 10,000 mg/l or less TDS, is either remediated or protected for use as domestic and agricultural water supply .....*”. Again, emphasis is placed on the words “all ground water”. This language clearly shows that the Commission has required that all ground water be remediated and protected in the abatement of water pollution consistent with the provisions of the Water Quality Act. Olson Testimony WCO Ex. 1, pgs. 8-9.

There are numerous areas of the existing Commission rules that link to the Water Quality Act “*place of withdrawal*” requirement in 74-6-5(E)(3) NMSA 1978. The Commission has

required that both discharge permits and abatement plans (which could also be required for a permitted facility that causes ground water pollution) must consider whether ground water is protected at a “*place of withdrawal*” or an application must be denied. The portions of existing Commission rules that require this are:

- Existing Commission rule 20.6.2.7.AA NMAC where the definition of “*hazard to public*” links a “*place of withdrawal*” to a determination of whether a hazard to public health exists. This definition is also linked to agency decisions on whether a permit can be approved;
- Existing Commission 20.6.2.3103 NMAC numeric water quality standards, which require that discharges “*will not result in concentrations at any place of withdrawal for present or reasonably foreseeable future use in excess of the standards of this section*”;
- Existing Commission rules 20.6.2.3109.E NMAC and 20.6.2.3109. E(1) NMAC which allow the agency the power to modify a permit to abate water pollution based upon an exceedance of the 20.6.2.3103 NMAC standards at a “*place of withdrawal*”;
- Existing Commission rule 20.6.2.3109.H NMAC where the agency is required to deny a permit for “*the discharge of any water contaminant which may result in a hazard to public health .*” This phrase is tied to the definition of “*hazard to public health*” that is itself linked to a “*place of withdrawal*” determination;
- Existing Commission rule 20.6.2.4103.B NMAC where ground water abatement standards link back to the Commission’ s 20.6.2.3103 NMAC numeric water quality standards, which are linked to a “*place of withdrawal*”;
- Existing Commission rule 20.6.2.4106.E NMAC where the design of a Stage 2 abatement plan is linked to attainment of the Commission’s 20.6.2.3103 NMAC numeric water quality standards, which are linked to a “*place of withdrawal*”;

- Existing Commission rule 20.6.2.4109.F NMAC where agency approval of a Stage 2 abatement plan is dependent on attaining the Commission's 20.6.2.3103 NMAC numeric water quality standards, which are linked to a "*place of withdrawal*"; and
- Existing Commission rule 20.6.2.4112 NMAC where agency approval of completion of abatement is linked to attaining the Commission's 20.6.2.3103 NMAC numeric water quality standards, which are linked to a "*place of withdrawal*".

Olson Testimony WCO Ex. 1, pgs. 9-10.

Pursuant to its authority under the Water Quality Act, the Commission has also promulgated different types of variance rules. In existing Commission rule 20.6.2.4103 NMAC, the Commission has allowed a method for seeking alternative abatement standards that can exceed the Commission's numeric standards under 20.6.2.3103 NMAC under certain circumstances. In order to obtain alternative abatement standards, the discharger must be in the process of abatement, then petition the Commission, and the petition may be granted only after a public hearing. In a second existing Commission rule in 20.6.2.1210 NMAC, there is a mechanism for considering site-specific variances to Commission rules. This Commission variance rule contains provisions for individual variances in accordance with Section 74-6-4(H) NMSA 1978 of the Water Quality Act. In these cases, the Commission may only grant variances after a public hearing and the variance terms are limited to a five-year period. In addition, in a third existing rule, the recent Dairy Rule, in 20.6.6.18 NMAC the Commission adopted a new variance rule for dairy facilities that allows for alternate discharge designs consistent with the requirements of the Water Quality Act. This variance provisions in the Dairy Rule offers some expanded criteria for consideration, allows variances to be granted for the useful life of the feature and provides for 5-year review of the effectiveness of the variance. Olson Testimony WCO Ex. 1, pgs. 10-11.

In summary, numerous existing Commission rules provide for protection of all ground water throughout a permitted site consistent with the Water Quality Act unless a variance is obtained by the permittee. Olson Testimony WCO Ex. 1, pg. 11.

## **VI. THE HISTORICAL PRACTICE OF PREVENTING WATER POLLUTION IN NEW MEXICO**

There is a 46-year history of protecting all ground water in the State of New Mexico with the rebuttable presumption that all ground water is to be protected from contamination unless it can be demonstrated that it does not have a present or reasonably foreseeable future use. Olson Testimony WCO Ex. 1, pg. 11.

In 1967 the State Engineer declared that *“All underground water in the State of New Mexico containing 10,000 parts per million or less of dissolved solids is hereby designated by the State Engineer pursuant to 65-3-11.(15) N.M.S.A., 1953 Compilation; except that this designation shall not include any water for which there is no present or reasonably foreseeable beneficial use that would be impaired by contamination”*. This State Engineer designation was used during an April 19, 1967 New Mexico Oil Conservation Commission (OCC) hearing in support of OCC Order 3221, one of the early ground water pollution prevention measures taken in New Mexico. Olson Testimony WCO Ex. 1, pg. 11; and WCO Ex. 4.

In response to 1973 amendments to the Water Quality Act, the Commission in 1977 adopted new rules that included discharge permitting and ground water standards. The purpose of the permitting rules as set out in 20.6.2.3101.A NMAC was for *“controlling discharges onto or below the surface of the ground [is] to protect all ground water of the state of New Mexico which has an existing concentration of 10,000 mg/l or less TDS, for present and potential future use as domestic and agricultural water supply . . .”* Olson Testimony WCO Ex. 1, pgs. 11-12.

In 1985, the State Engineer reaffirmed his 1967 determination that “all underground waters” were to be protected from contamination. Olson Testimony WCO Ex. 1, pgs. 12; WCO Ex. 5; and WCO Ex. 6.

On February 26, 1987, the Director of the Environmental Improvement Division (predecessor to the Department) provided comments to the Environmental Protection Agency (EPA) on the 1986 final draft of Guidelines for Ground-Water Classification under the EPA Ground-Water Protection Strategy. In his comments, the Director stated that *“Protected under the regulations for present and potential future use as domestic and agricultural water supply is all ground water having a concentration of 10,000 mg/l or less total dissolved solids (TDS)”*. He also stated that, *“The WQCC system gives the same protection to present and potential future uses of ground water”*. In addition, he stated that, *“The WQCC system has been in use in New Mexico for ten years since 1977. Experience has shown that this relatively clear and easily understood system is very effective in protecting ground water quality in the state”*. Olson Testimony WCO Ex. 1, pg. 12; WCO Ex. 7, page 2; WCO Ex. 7, page 4.

It is also important to note that I have extensive personal regulatory experience on the historical practice of the pollution prevention in New Mexico. I worked for 25 years on implementing and enforcing the Water Quality Act and Commission rules for prevention and abatement of water pollution for both of the constituent agencies that enforce Commission rules. From the start of my employment with the New Mexico Oil Conservation Division in 1986, I was trained that in New Mexico ground water is a public resource of the state and that all ground water is protected from contamination from discharges of water contaminants unless the applicant or permittee can demonstrate that the water does not have a present or reasonably foreseeable future use. That permitting and abatement interpretation was followed throughout my career with both the New Mexico Oil Conservation Division and the Department up until my

retirement as Bureau Chief of the Ground Water Quality Bureau of the Department in 2011. I have worked on most types of discharge sites in the state and this was a consistent interpretation on behalf of the state agencies for those 25 years. Olson Testimony WCO Ex. 1, pgs. 12-13.

## **VII. DETERMINATION OF A PLACE OF WITHDRAWAL**

The Water Quality Act and the Commission rules as they exist today do not define the term “*place of withdrawal of water for present or reasonable foreseeable future use*” nor do they give direction as to how to determine where this area exists. However, there has been extensive litigation over “*place of withdrawal*” related to the closure permit for the Tyrone Mine that resulted in Commission determinations of “*place of withdrawal*” that must be consistent with the proposed Copper Mine Rule.

### **A. Tyrone Mine Closure Permit Litigation**

The Water Quality Act language regarding “*place of withdrawal of water for present and reasonably foreseeable use*” was the subject of technically complex litigation in adjudicatory permit hearings before the Department and the Commission for over a decade. In the early 2000’s, the Tyrone Mine (at that time operated by Phelps Dodge Tyrone, Inc. and currently operated by Freeport McMoRan Tyrone) objected to the Department conditions of approval contained in the draft closure permit for the Tyrone Mine. A major point of contention was that the Department conditions of approval applied to ground water at all places within the mine. This objection led to a 10-day evidentiary hearing before the Department in 2002. In 2003, the Department issued a 106 page Hearing Officer’s Report and 307 pages of Findings of Fact and Conclusions of Law, as well as, a closure permit for Tyrone based on the Hearing Officer’s report, findings and conclusions. Olson Testimony WCO Ex. 1, pgs. 13-14.

Tyrone appealed the Department issued closure permit to the Commission on July 3, 2003. The Commission held another 10-day evidentiary hearing in October and November of

2003. The Commission subsequently issued a decision in 2004 upholding the Department approved permit and concluding that the Tyrone Mine was a “place of withdrawal,” and that all ground water underneath the Tyrone Mine was required to be protected under the Water Quality Act. Olson Testimony WCO Ex. 1, pg. 14.

Tyrone appealed the Commission’s decision to the New Mexico Court of Appeals. In 2006, the Court of Appeals issued a decision that upheld all portions of the Department approved closure permit for the Tyrone Mine with the exception of conditions 4 and 17 of the permit. The Court of Appeals remanded conditions 4 and 17 of the discharge permit to the Commission concluding that the Commission decision that the entire mine site is a place of withdrawal was overly broad. The remand directed the Commission to conduct further proceedings to “*create some general factors or policies to guide its determination*” as to what constitutes a “*place of withdrawal*” under the Water Quality Act. The court also decided to “*decline to adopt as a standard a “point of compliance”*” concept for the purposes of protecting ground water quality standards, as Tyrone had urged. Olson Testimony WCO Ex. 1, pg. 14; and NMED Ex. 3, pg. 10 #35; NMED Ex. 3, page 11, #37.

In response to the Court of Appeals remand, in 2007 the Commission held 24 days of hearings on the issue of “*place of withdrawal*”. In these hearings, the Department presented extensive testimony on the proposed criteria that are relevant and useful to the determination of whether there is a present or reasonably foreseeable future use of ground water at and around the Tyrone Mine. The criteria were selected to be relatively general and neutral criteria that would not be controversial, cover a broad range of issues that the Commission needs to consider in making these types of decisions, and could be applicable to any site or type of facility. The Department proposed criteria were:

- (1) Site hydrology and geology;

- (2) The quality of ground water prior to any discharge from that facility;
- (3) Past and current land use in the vicinity;
- (4) Potential future land use in the vicinity;
- (5) Past and current water use in the vicinity;
- (6) Potential future water use in the vicinity; and
- (7) Population trends in the vicinity.

Olson Testimony WCO Ex. 1, pg. 15, WCO Ex. 9, pgs. 4-11.

The Department also presented extensive technical testimony on the application of these criteria to the Tyrone Mine and maintained that under these criteria ground water underneath the Tyrone mine site was a “place of withdrawal”, and required protection from contamination in excess of Commission standards. Tyrone proposed alternate criteria and took the position that lands inside the 12,500-acre Mining and Minerals Division permit boundary for the Tyrone Mine were not places of withdrawal, and that Commission water quality standards did not apply.

Olson Testimony WCO Ex. 1, pg. 15-16, WCO Ex. 9, pgs. 22-24.

The Commission issued its “Decision and Order on Remand” on February 4, 2009. The Commission decided as a matter of law that the Water Quality Act protected ground water at “*any place of withdrawal for present and reasonably foreseeable future use.*” and that the Water Quality Act “*does not establish any specific ‘point(s) of compliance’ for compliance with water quality standards*”. Olson Testimony WCO Ex. 10, pg. 80. The Commission also adopted the criteria for determining “*place of withdrawal*” as proposed by the Department. Olson Testimony WCO Ex. 10, pgs. 78-80. In addition, the Commission applied these criteria and made a number of determinations, as a matter law, in support of the Department’s testimony. Olson Testimony WCO Ex. 10, pgs. 80-84. The Commission determined in its conclusions of law that “*the regional and alluvial aquifers underlying portions of the Tyrone mine site are*

*places of withdrawal of water for present and reasonable foreseeable future use pursuant to Section 74-6-5(E)(3).*” Olson Testimony WCO Ex. 10, pg. 81, COL 33. The Commission did not consider the entire mine site a “*place of withdrawal*” and excepted those areas at the mine where the hydraulic conductivity of the underlying aquifer was less than 0.05 ft./day and could not support beneficial uses. Olson Testimony WCO Ex. 10, pg. 84, COL 51. Finally, the Commission held that if “*it is not technically feasible for water quality standards to be met underneath the Tyrone Mine, the appropriate remedy for Tyrone is to seek alternative abatement standards under the Commission Regulations at section 20.6.2.4103.F NMAC.*” Olson Testimony WCO Ex. 10, pg. 84, COL 52. This order of the Commission is still in effect and defines “*place of withdrawal*” at the Tyrone Mine. Olson Testimony WCO Ex. 1, pg. 16.

## **B. Tyrone Settlement**

Tyrone was unsatisfied with the Commission decision and again appealed the decision to the Court of Appeals in March of 2009. The March 2009 appeal has currently been stayed pending implementation of a Settlement Agreement and Stipulated Final Order (Tyrone Agreement) finalized between the Department and Freeport-McMoRan Tyrone on December 20, 2010. Olson Testimony WCO. Ex. 1, pg. 16; and WCO Ex. 11.

The Tyrone Agreement requires Tyrone to meet water quality standards at its mine site or alternate abatement standards. Olson Testimony WCO Exhibit #11, pgs. 8-9, paragraphs 26-28; pg. 11, paragraph 35; and pg. 13, paragraph 43(a). Most importantly, the Tyrone Agreement allows a mechanism for Tyrone to request variances from water quality standards during operations for existing and new facilities and to petition the Commission for alternative abatement standards upon closure, consistent with the requirements of the Commission’s 2009 Decision and Order on Remand. Finally, the Tyrone Agreement establishes an “*Open Pit Surface Drainage Area*”, similar to that proposed in 20.6.7.7.B(42) NMAC of the Copper Mine

Rule. In this area, some latitude may be given to construction of facilities that do not employ full technological controls for the protection of ground water through the variance process as long as water pollution is abated to applicable standards upon closure. Olson Testimony WCO Ex. 1, pg. 17; WCO Ex. 11, page 6, paragraph 19; and WCO Ex. 11, pgs. 12-14.

The Tyrone Agreement is consistent with the requirements of the Water Quality Act, existing Commission's rules, historical precedent of the Commission and its constituent agencies, and the Commission's February 4, 2009 Decision and Order on Remand in the Tyrone Mine litigation. Olson Testimony WCO Ex. 1, pg. 17

**VIII. PROPOSED RULE DOES NOT PREVENT WATER POLLUTION OR CONFORM WITH THE STATUTE AND PLACE OF WITHDRAWAL REQUIREMENTS AND THE DEPARTMENT'S HEARING GOALS.**

The below major sections of the Copper Mine Rule, as proposed by the Department, would allow intentional discharges of water contaminants to pollute ground water in excess of Commission standards, or would institute a point of compliance concept that would expressly allow large-scale contamination to occur by measuring the contamination at some distance away from a source of discharge.

- 20.6.7.20.A(1)(f) NMAC allows construction of new unlined leach stockpiles within an open pit surface drainage area without a variance.
- 20.6.7.20.B(2)NMAC, 20.6.7.21.C(2) NMAC and 20.6.7.22.B(2) NMAC creates blanket exemptions for existing leach stockpiles, waste rock stockpiles piles and tailing impoundments that have failed and resulted in water pollution in excess of Commission standards. By rule, they are allowed to continue to pollute ground water without a variance.

- 20.6.7.21.B NMAC and 20.6.7.22.A(4) NMAC allow construction of new unlined waste rock stockpiles and new unlined tailing impoundments that intentionally cause water pollution as long as contaminated ground water downgradient of the facility is pumped and captured by ground water interceptor well systems.
- 20.6.7.28.B(2) NMAC creates a point of compliance concept by allowing monitoring wells for waste rock stockpiles and tailing impoundments to be located some distance downgradient of ground water interceptor well systems designed to capture polluted ground water, and which is itself downgradient of the discharging facility.
- 20.6.7.21.B(1)(d) NMAC creates a point of compliance concept by limiting applicability of standards at waste rock stockpiles to a monitoring well located pursuant to 20.7.28.B(2) that as discussed above is some distance downgradient of the ground water interceptor well systems designed to capture polluted ground water, which is itself downgradient of the discharging facility.
- 20.6.7.33.D(2) NMAC creates a point of compliance concept for a flow-through pit upon closure by allowing determination of compliance with applicable standards only at a designated monitoring well location. The designated monitoring well is located pursuant to 20.7.28.B(4) NMAC that is some undefined distance outside of the perimeter of the open pit. In addition, for a flow through pit, 20.6.7.D(2) NMAC does not require compliance with water quality standards in the open pit upon closure if ground water is managed and mitigated within the area of hydrologic containment.
- 20.6.7.33.F NMAC creates a point of compliance concept by allowing a determination of compliance with applicable standards for a cover system on any facility waste system to be only at a designated monitoring well location. For a waste rock stockpile or tailing impoundment the designated monitoring well is located pursuant to 20.7.28.B(2) that as

discussed above is some distance downgradient of the ground water interceptor well system designed to capture polluted ground water, which is itself downgradient of the discharging facility.

Olson Testimony WCO Ex. 1, pgs. 17-19.

**A. The proposed rule does not meet Department’s stated goal to prevent water pollution pursuant to the Act and is contrary to law, existing Commission rules, historical ground water pollution prevention, and “place of withdrawal litigation.**

The Department proposed Copper Mine Rules listed above are inconsistent and in direct conflict with the Water Quality Act, existing Commission rules, the historical application of the Water Quality Act and ground water protection rules in New Mexico, and the Commission’s place of withdrawal litigation. These rules would allow construction and operation of unlined facilities for the intentional pollution of ground water in excess of Commission standards underneath a permitted facility and downgradient of the facility to a point of compliance away from the discharge site. Such pollution could occur without the need for a variance as set out by statute and existing Commission rules. This includes the construction of future mines with underlying clean ground water, construction of new facilities at existing mines in areas that may contain clean water or continued operation of failed existing facilities that have contaminated ground water in excess of applicable standards. New facilities and failed existing facilities would be authorized by rule to pollute water. The Water Quality Act explicitly and clearly requires prevention of pollution and not allowance of pollution. The intent of the Water Quality Act is reflected in the 35-year history of the ground water protection in New Mexico by the Commission and both of its constituent agencies. Olson Testimony WCO Ex. 1, pgs. 19-20.

As proposed, it appears that the Department, through a rule-making process, is attempting to eliminate a statutory requirement under 74-6-5(E)(3) NMSA 1978 for a site-specific

determination of what constitutes a “*place of withdrawal*”. This is contrary to the Water Quality Act, historical precedent in pollution prevention, the Commission’s decisions in both the original Tyrone appeal and in the remand hearing on Tyrone, the Tyrone Agreement and the Court of Appeals 2006 direction to the Commission in the Tyrone Opinion. In fact, the proposed rule is effectively making an advance determination that all future mine sites and all new mine facilities at existing mines are not places of withdrawal without consideration of any site specific ground water information, including information on the use of ground water. This determination cannot be made since the facilities, locations, and site-specific conditions are unknown at this time.

Olson Testimony WCO Ex. 1, pgs. 20-21

As demonstrated in the Tyrone hearings, application of objective criteria for defining “*place of withdrawal*”, as adopted by the Commission in their February 4, 2009 Decision and Order on Remand, is likely to lead to a determination that ground water has a present or reasonably foreseeable future use. Only in rare instances will ground water be found not to have a reasonably foreseeable future use. This is consistent with the intent and purpose of the Water Quality Act to protect state water resources by preventing and abating water pollution, and is necessary to meet the needs of New Mexico to protect its limited state water supplies now and into the future. Additionally, in its June 10, 2004 Order affirming the closure permit, the Commission adopted a rebuttable presumption that all ground water with less than 10,000 milligrams per liter TDS “*is protectable for present or reasonably foreseeable future use.*” The Court of Appeals did not disturb or overturn that conclusion. This rule as proposed eliminates that rebuttable presumption and the need for a discharger to demonstrate that the ground water is not protectable thereby providing a copper mine a blanket exemption to pollute ground water without any type of “*place of withdrawal*” analysis. Olson Testimony WCO Ex. 1, pg. 21.

According to the proposed rule, ground water pollution from a waste rock stockpile or a

tailing impoundment would only need to be measured at monitoring wells located downgradient of the associated ground water interceptor well system that is itself downgradient of the discharging facility. For a flow through open pit compliance with water quality standards would be at a monitoring well network installed around the perimeter of the open pit a considerable distance from the open pit. This establishes a point of compliance concept in the rule allowing all ground water underneath and downgradient of the interceptor wells system or flow through pit to be polluted in excess of water quality standards contrary to the Water Quality Act, historical precedent and the Commission's prior decisions in "*place of withdrawal*" litigation. Olson Testimony WCO Ex. 1, pg. 22.

Under the Department's point of compliance concept, if the ground water from the downgradient point of compliance well or wells meet standards, then all ground water interior to these monitoring wells does not need to meet standards. Such ground water would effectively be written off or sacrificed. It would not be prevented from being polluted nor protected. It would not need to meet standards. Ground water is not static; it moves. Contamination can spread. A future production well installed in a clean part of the aquifer, outside at a point of compliance could draw in contamination from a distance away. A point of compliance concept in the rule is contrary to the purpose of the Water Quality Act, the Commission's Rules, historical precedent and Commission decisions in the Tyrone litigation. There is no basis in the statute or Commission rules for adopting the point of compliance concept. Olson Testimony WCO Ex. 1, pg. 22.

**B. The proposed rule does not meet Department's stated goal to promulgate a rule consistent with the 2006 Court of Appeals Tyrone Opinion.**

The 2006 Court of Appeals Tyrone Opinion directed the Commission to conduct further proceedings to "*create some general factors or policies to guide its determination*" as to what

constitutes a “*place of withdrawal*” under the Water Quality Act. Olson Testimony WCO Ex. 1, pg. 14; and NMED Ex. 3, pg. 10, Opinion 35.

In response to the Court of Appeals remand, in 2007, the Commission held 24 days of hearings on the criteria for determining a “*place of withdrawal*” and heard technical evidence on their application to the Tyrone Mine. Olson Testimony WCO Ex. 1, pg. 15, WCO Ex. 9, pgs. 4-11; and Olson Testimony WCO Ex. 1, pg. 15-16, WCO Ex. 9, pgs. 22-24. The Commission issued a “Decision and Order on Remand” on February 4, 2009 adopting criteria for determining “*place of withdrawal*” and applied these criteria and made a number of determinations, as a matter of law. Olson Testimony WCO Ex. 10, pgs. 78-84. This order of the Commission is still in effect and defines “*place of withdrawal*” at the Tyrone Mine. Olson Testimony WCO Ex. 1, pg. 16.

The proposed rule seeks to overturn or negate the Commission’s 2009 Decision and Order on Remand and adopt a point of compliance concept without addressing “*place of withdrawal*” contrary to the direction given by the Court of Appeals in its opinion on the Tyrone appeal. The proposed rule does not contain any factors or criteria for evaluating “*place of withdrawal*” as directed by the Court of Appeals. In fact, the Department admitted that the rule does not say anything about reasonably foreseeable future use. Skibitski Testimony Tr. vol. 2, page 391, lines 21-24. This is surprising since it was a central issue of litigation related to issuance of the Tyrone mine closure permit for over ten years and the Court of Appeals directed the Commission to clarify this issue. In fact, the proposed rule is effectively making an advance determination that all future mine sites and all new mine facilities at existing mines are not places of withdrawal without consideration of any factors or criteria for making this determination including site specific information on ground water and its use. This determination cannot be made since there is no evaluation of facility locations and site-specific

conditions and no factors or criteria have been applied to make this determination. Olson Testimony WCO Ex. 1, pgs. 20-21; Olson Testimony Tr. vol. 8, pg. 2014, lines 2-5.

**C. The proposed rule does not meet Department’s stated goal to create a straightforward permitting process that is readily enforceable and has regulatory certainty.**

The proposed rule, establishes a point of compliance concept allowing all ground water underneath and downgradient of the interceptor well system or flow through pit to be polluted in excess of water quality standards contrary to the Water Quality Act, historical precedent and the Commission’s prior decisions in “*place of withdrawal*” litigation. Under the point of compliance concept, all ground water interior to the point of compliance monitoring wells does not need to meet standards. It would not be prevented from being polluted. This creates a direct conflict between the proposed rule and the Water Quality Act including the potential for extensive public hearings. When the Department attempts to approve a discharge permit pursuant to the Copper Mine Rule that allows pollution by rule from unlined discharge facilities, it is likely the public will challenge the permit. Since the Water Quality Act under 74-6-5(E)(3) NMSA 1978 requires that a permit be denied if the discharge would cause an exceedance of standards at any place of withdrawal of water for present or reasonably foreseeable future use, the public would have a good case to seek denial of a permit. Olson Testimony WCO Ex. 1, pgs. 21-22.

**D. The proposed rule does not meet the statutory adoption criteria for promulgation of a rule.**

Section 74-6-4(E) NMSA 1978 states that in adopting regulations to prevent or abate water pollution, the Commission shall give weight it deems appropriate to all relevant facts and circumstances, including the 7 criteria addressed below. The proposed rule does not meet these criteria for the following reasons:

**(1) character and degree of injury to or interference with health, welfare, environment and property.** As proposed, the rule will interfere with health, welfare, environment and property. In New Mexico, ground water is public property and belongs to the state. Copper mines pose a high potential risk of ground water contamination if ore and wastes are not stored and handled properly, and due to the volume of concentrated materials and wastes generated over large areas. Copper mine facilities have contaminated extensive areas of ground water in excess of Commission standards. William C. Olson Statement of Reasons, Findings of Fact 77-86.

The Copper Mine Rule as proposed by the Department is based on a point of compliance concept that allows intentional pollution of ground water underneath copper mine waste units. This water pollution would be allowed to travel downgradient of the waste unit and be contained by a ground water interceptor system some distance away. Compliance with water quality standards would be measured further downgradient of the ground water pumping interceptor system. William C. Olson Statement of Reasons, Findings of Fact 87-100.

Under the proposed rule, approximately 2.5 square miles of water resources would be lost at a minimum from a single tailing impoundment at the Chino mine not including other mine contaminant source areas. At the Tyrone mine, approximately 9 square miles of public ground water resources would be lost. Contamination of public ground water resources in excess of the water quality standards promulgated by the Commission presents a risk to health, welfare, the environment and property. William C. Olson Statement of Reasons, Findings of Fact 114-116.

**(2) the public interest, including the social and economic value of the sources of water contaminants.** The Supreme Court has characterized water as “*our greatest natural resource.*” *State ex.rel. Ericson v. McLean*, 62 N.M. 264, 272, 308 P.2d 983 (1957). Ground

water is a public resource and approximately 90 percent of the population of New Mexico depends on ground water as a source of drinking water. Olson Testimony WCO Ex. 1, pg. 3.

As proposed by the Department the Copper Mine Rule shifts the burden of proof from the discharger to the agency to prove that ground water standards will be exceeded. As such, known sources of water pollution are presumed to not cause water pollution unless the agency proves otherwise. Pollution of ground water must then occur before it can be prevented. Under the Department's point of compliance concept proposed in the rule, water pollution will likely become extensive before the Department can meet this requirement and extensive harm to the state will occur through the loss of water resources. William C. Olson Statement of Reasons, Findings of Fact 111-114.

**(3) technical practicability and economic reasonableness of reducing or eliminating water contaminants from the sources involved and previous experience with equipment and methods available to control the water contaminants involved.** A number of the ground water pollution prevention measures called for in the Department's proposed Copper Mine Rule are technically practicable and economically reasonable. However, the proposed rule ignores the technical practicability and economic reasonableness of implementing pollution prevention measures at waste rock stockpiles and tailing impoundments. One mine company in New Mexico plans to install a liner system for a 530-acre tailing impoundment that they consider to be technically and economically viable. William C. Olson Statement of Reasons, Findings of Fact 101-110.

**(4) successive uses, including but not limited to domestic, commercial, industrial, pastoral, agricultural, wildlife and recreational uses.** The primary concern of the Copper Mine Rule is to prevent ground water contamination and to monitor water quality to assure that it remains uncontaminated. Potential future uses make preservation of the water resource

important to the state and its citizens. William C. Olson Statement of Reasons, Findings of Fact 9-36.

As proposed, the rule does not protect successive uses. The Copper Mine Rule, as proposed by the Department, allows intentional pollution of ground water underneath copper mine waste units regardless of whether the ground water is at a present or reasonably foreseeable place of withdrawal of water. William C. Olson Statement of Reasons, Findings of Fact 87-100.

**(5) feasibility of a user or a subsequent user treating the water before a subsequent use.** The Copper Mine Rule as proposed by the Department allows intentional pollution of ground water underneath copper mine waste units regardless of whether the ground water is at a present or reasonably foreseeable place of withdrawal of water. There is no consideration of treatment by subsequent users. William C. Olson Statement of Reasons, Findings of Fact 87-100. In addition, the Commission's water quality rules in 20.6.2.4000 NMAC through 20.6.2.4115 NMAC require abatement of contaminated ground water by the responsible party to protect places of withdrawal rather than requiring treatment by subsequent users. Olson Testimony WCO Ex. 1, pg. 10.

**(6) property rights and accustomed uses.** In addressing property rights, it is important to note that a person does not have the right to contaminate ground water in excess of ground water quality standards. Ground water is a public property, and is protected as a public resource. William C. Olson Statement of Reasons, Findings of Fact 9-36.

**(7) federal water quality requirements.** The Copper Mine rule is proposed for adoption under state statutes for prevention of water pollution and is not directly linked to federal water quality requirements. However, there are other programs that rely on the historical interpretation of the Department on "place of withdrawal". Adoption of a point of compliance approach may lead federal programs that permit hazardous wastes and the cleanup of hazardous waste sites in

New Mexico under federal laws and rules, such as those under the Hazardous Waste Act and superfund site cleanups, to allow pollution of ground water at those sites. Olson Testimony WCO Ex. 1, pgs. 11-13, pgs. 25-26.

**IX. DEPARTMENT WITNESS TESTIMONY IS NOT CREDIBLE ON PLACE OF WITHDRAWAL AND PRACTICE OF THE DEPARTMENT**

**A. Department witness Tom Skibitski is unqualified to give opinions on the rule.**

Mr. Tom Skibitski was the Acting Director of the Department's Resource Protection Division. The purpose of his testimony was to provide information concerning the adoption of the rule and explain as a matter of policy why the Department supports the proposed rule. He was the only witness employed by the Department to speak on behalf of the Department and provide Department policy interpretations of the content of the proposed rule. His testimony was intended to provide information on the history that gave rise to the Copper Mine Rule, the policy goals and objectives of the proposed rule, a discussion of statutory criteria for adopting the rule, and information on the rule development process. Skibitski Direct Testimony pg. 3.

Mr. Skibitski was acting as Division Director for a period of approximately 4 months at the time of his hearing testimony. His educational background is in architecture and planning. He has no formal scientific training or educational background in hydrology, geology, engineering or any other environmental science. He has no experience in implementing, interpreting or enforcing rules of the Commission or any other constituent agency of the Commission pursuant to the Water Quality Act. He has not worked for the Department's Ground Water Quality, Hazardous Waste or Solid Waste Bureau's that have regulatory authority over ground water protection. He has never been involved in a copper mine permitting case and has never managed any staff who were engaged in regulating a copper mine. He has not been personally or directly involved in reviewing, approving or conditioning discharge permits for

copper mines. He had no direct or personal involvement, knowledge, or personal experience in making determinations as to whether discharge sites are “*places of withdrawal.*” In fact, when asked, he offered no particular personal experience for the Commission to consider when it decides whether or not to adopt the Copper Mine Rule. Lacking any educational background or experience Mr. Skibitski’s testimony should be given little to no weight in this proceeding. Skibitski Direct Testimony pg. 1-2; NMED Ex. 1; Skibitski Testimony Tr. vol. 2, pg. 261, line 5-15; Skibitski Testimony Tr. vol. 2, pg. 262, line 8 to pg. 263, line 1; Skibitski Testimony Tr. vol. 2, pg. 369, line 15 to pg. 372, line 25; and Skibitski Testimony Tr. vol. 2, pg. 405, line 2 to pg. 406 line 5; Skibitski Testimony Tr. vol. 4, pg. 986, lines 7-19.

Mr. Skibitski had no direct knowledge of the development of the Copper Mine Rule, specific provisions of the proposed rule or previous water quality protection actions of the Department or Commission. He did not write any portion of the rule proposed by the Department. He was not part of any discussions with anyone as part of the Department’s rulemaking decisions regarding what is in the rule and what’s out of the rule. He did not have any involvement in the process of petitioning the Commission for rulemaking. He was not aware of certain membership of the Copper Rule Advisory Committee or Copper Rule Technical Committee. He did not know if draft rules presented to the Copper Rule Advisory Committee were approved by technical staff of the Department. He did not know Freeport submitted September 5, 2012 comments on the draft rule to the Department that were adopted in the final proposed rule. He did not know who made the decision to allow interceptor wells to contain pollution in the rule. He did not know who removed language related to variances or why liner requirements for waste rock stockpiles and tailing impoundments were removed from draft rules. He only had limited familiarity with the Commission’s 2009 Decision and Order on Remand for the Tyrone Mine. He was not familiar with the Tyrone Agreement. He does not know if water

quality standards must be met in the open pit. He does not know if an exceedance of water quality standards in an offsite domestic well is a violation of the proposed rule. Given Mr. Skibitski's lack of knowledge about basic factual issues related to the rule and its development, his testimony should be given no weight in this proceeding. Skibitski Testimony Tr. vol. 2, pg. 294, lines 4-16; Skibitski Testimony Tr. vol. 2, pg. 340, lines 9-14; Skibitski Testimony Tr. vol. 2, pg. 352, line 25 to pg. 353, line 4; Skibitski Testimony Tr. vol. 2, pg. 354, lines 18-24; Skibitski Testimony Tr. vol. 2, pg. 361, lines 14-25; Skibitski Testimony Tr. vol. 2, pg. 369, line 15 to pg. 371, line 18; Skibitski Testimony Tr. vol. 2, pg. 376, line 21 to pg. 377, line 3; Skibitski Testimony Tr. vol. 2, pg. 380, lines 6-10; Skibitski Testimony Tr. vol. 2, pg. 384, lines 7-20; Skibitski Testimony Tr. vol. 2, pg. 419, line 19 to pg. 420, line 18.

**B. Department witness Tom Skibitski testimony is not supported by facts.**

Mr. Skibitski testifies that *"The actual practice of the Department was to issue permits without requiring all ground water at all locations within a mine site meet ground water standards"*. Further, in discussing the Department proposal to effectively create a point of compliance to allow ground water pollution to occur by rule up until the contamination reaches a designated monitoring point, Mr. Skibitski testifies that *"This approach is also consistent with the past practice of the Department..."* and *"The proposed Copper Mine Rule codifies existing practices ..."* Skibitski Direct Testimony pgs. 8-9.

These three statements are not true or supported by the facts. Mr. Skibitski's statements are directly related to the statutory requirement of the Water Quality Act in 74-6-5(E)(3) NMSA 1978 that requires that the Department deny a discharge permit if *"the discharge would cause or contribute to water contaminant levels in excess of any state or federal standard. Determination of the discharge's effect on ground water shall be measured at any place of withdrawal of water for present and reasonably foreseeable future use"*. The Water Quality Act explicitly prohibits

approval of a discharge permit that allows ground water to be contaminated above water quality standards at “*any place of withdrawal of water for present or reasonably foreseeable future use*” (Emphasis added). The historical practice of the Department regarding where within an aquifer to apply Commission ground water quality standards was the subject of extensive testimony during many years of litigation at two separate Commission hearings over the closure permit for the Freeport Tyrone Mine. As a result, the practice of the Department on the issue of “*place of withdrawal*” is well documented. The July 9, 2007 Commission hearing testimony of Department witness Mary Ann Menetrey, Program Manager of the Ground Water Quality Bureau’s Mining and Environmental Compliance Section, details the application of water quality standards during the discharge permitting and water pollution abatement history of the Tyrone Mine since the adoption of Commission rules in 1977. In preparation for the 2007 Commission hearings on the Tyrone mine, Ms. Menetrey reviewed all of the Department permitting files for Tyrone discharge permits going back to the early days of discharge permitting by the Department and its predecessor agency, the New Mexico Environmental Improvement Division. Ms. Menetrey’s 2007 Commission testimony contains details on: 1) The relationship between the Tyrone operational discharge permits and the closure discharge permit; 2) The Tyrone operational permits and their pollution prevention and abatement requirements; 3) The discharge permit closure plans for the Tyrone mine; 4) Examples of the Department’s history of protection of ground water at the Tyrone mine; and 5) Potential effects on the Tyrone operational discharge permits and ground water quality in New Mexico if ground water beneath the Tyrone mine is not protected. Olson Rebuttal Testimony pgs. 3-4; and WCO Rebuttal Ex. 2.

All of the discharge permits issued since adoption of the Commission rules in 1977 require prevention of water pollution. The purpose of each permit is to prevent pollution of ground water underneath and around permitted areas of the mine, and to require abatement of

ground water pollution if it has occurred. There are many conditions in the permits to ensure that ground water quality is protected underneath the entire Tyrone mine site. The discharge permits have also contained closure requirements specific to the facilities covered by the permits. The closure requirements are and have been intended to ensure that ground water quality underneath the entire Tyrone mine site is protected. There are a number of specific examples of where the Department, over the course of permitting the Tyrone mine, has indicated that ground water beneath the mine site is protected under the Water Quality Act and Commission rules and where Tyrone has represented that it would not pollute ground water beneath the mine site in excess of Commission water quality standards. Olson Rebuttal Testimony pgs. 4-5; and WCO Rebuttal Ex. 2.

The Commission has also recognized the past permitting history of the Department in its February 4, 2009 Decision and Order on Remand where the Commission found that *“None of the operational permits authorizes Tyrone to contaminate ground water in excess of ground water standards; none of the operational permits authorizes any form of natural attenuation as a treatment, containment or mitigation measure; and none of the operational permits defines or mentions a place of withdrawal of water for present of reasonably foreseeable future use.”* Olson Testimony WCO Ex. 10, pg. 7, FOF 18. Consistent with the Department past permitting history, the Commission also concluded in its February 4, 2009 Decision and Order on Remand that *“A place of withdrawal of water is not limited to a place on the ground, but extends into the aquifer underlying an area on the ground surface, it need not be a well.”* Olson Rebuttal Testimony pg. 5; and WCO Ex. 10, pg. 81, COL 32.

The above documented practice of the Department and the findings and conclusions of the Commission are also consistent with my experience in this matter. From 1986 to 2011, I worked on implementing and enforcing the Water Quality Act and Commission rules for

prevention and abatement of water pollution for both the New Mexico Oil Conservation Division and the Department. I also served as a Department expert witness at Commission rule-making and adjudicatory hearings on discharge permits. In addition, I served for 13 years on the Commission as the designee of the Director of the New Mexico Oil Conservation Division. In all of this time, ground water has been treated as a public resource of the state in all permitting and abatement actions for all types of industries under both constituent agencies of the Commission. All ground water underneath each discharge site was protected from contamination from discharges of water contaminants unless the applicant or permittee could demonstrate that the water does not have a present or reasonably foreseeable future use. This agency permitting and abatement interpretation was followed throughout my 25-year career until my retirement as Bureau Chief of the Ground Water Quality Bureau of the Department in 2011. It is clear that the practice of the Department since the adoption of Commission rules in 1977 has been to protect all ground water underneath a discharge permit site, including ground water at a mine site that is underneath waste rock piles and tailings impoundments. To date, this practice has been consistently used by the Department in the prevention and abatement of water pollution under discharge permits and abatement plans pursuant to the statutory requirements of the Water Quality Act and Commission rules. Olson Rebuttal Testimony pg. 5.

In Mr. Skibitski's rebuttal testimony, he states "*The proposed rule attempts to apply the lessons learned from decades of regulatory activities at mines in a manner that is both transparent and predictable.*" Skibitski Rebuttal Testimony pg.4. The proposed rule is contrary to the historical precedent of the Commission and its constituent agencies in the implementation and enforcement of Commission rules and the Water Quality Act. The proposed rule is also inconsistent with years of Commission litigation on place of withdrawal litigation at the Tyrone Mine and its final settlement. The 35-year historical precedent of the Commission and the

constituent agencies has been clear, transparent and predictable. The proposed rule is not clear, transparent and predictable on application of standards and place of withdrawal, as evidenced in the oral testimony of the Department witnesses to this hearing. The proposed rule is also inconsistent with numerous other Commission rules in 20.6.2 NMAC. Olson Testimony Tr. vol. 8, pg. 2023, line 10 to pg. 2024, line 17.

**C. Department witness Adrian Brown testimony is not binding on the Department.**

Mr. Adrian Brown's testimony on how the Department interprets the rule should be given little to no weight in this proceeding. Mr. Brown was an independent contractor testifying as an expert technical witness for the Department and is not responsible for implementing and enforcing Commission rules or the Water Quality Act. The purpose of his testimony was to give a technical evaluation of the effectiveness of the proposed rule to prevent water pollution. Mr. Brown did not participate in the rule development in either the Copper Rule Advisory Committee or the Copper Rule Technical Committee and he did not write any portion of the rule. Mr. Brown acknowledged that he had no authority to speak on behalf of the Department as to Department interpretations of the rule. He agreed that his interpretations of the rule in this proceeding are not binding on the Department. Brown Direct Testimony pg. 3; Brown Testimony Tr. vol. 3, pg. 595, lines 24-25; Brown Testimony Tr. vol. 3, pg. 596, lines 20-22; Brown Testimony Tr. vol. 3, pg. 598, line 22 to pg. 599, line 17; Smith Testimony Tr. vol. 10, pg. 2463, lines 11-15.

**D. Department witness Adrian Brown testimony is not supported by facts.**

In Section 1.2 on Page 1 of Mr. Brown's Rebuttal Testimony, he states "*The WQA is silent on the subject of how groundwater protection that would prevent pollution will be achieved, and does not require "state of the art" method to be applied*". This statement is not

true and is not supported by the facts. The Water Quality Act in 74-6-4-(E) NMSA 1978 requires that when adopting regulations “*Regulations may specify a standard of performance for new sources that reflects the greatest reduction in the concentration of water contaminants that the commission determines to be achievable through application of the best available demonstrated control technology, processes, operating methods or other alternatives, including where practicable a standard permitting no discharge of pollutants.*” In addition, the Water Quality Act in 74-6-4(K) NMSA 1978 requires that when specifying in regulations the measures taken to prevent water pollution “*The Commission shall consider, in addition to the factors listed in Subsection E of this section, the best available scientific information.*” These statutory provisions show that state of the art pollution prevention measures should be considered by the Commission in the adoption of rules. Olson Testimony Tr. vol. 8, pg. 2012, line 9 to pg. 2013, line 8.

On page 4 in paragraphs 2 and 3 of Mr. Brown’s Rebuttal Testimony, he states that ground water under waste rock stockpiles and tailing impoundments is not a place of withdrawal and is not protected from pollution because it is presently in use for mining activities. He also states that “*They can, however again become places of withdrawal after mine closure....*” and that “*Upon closure all groundwater is protected as domestic or agricultural use as the present and reasonably foreseeable future use.*” (Emphasis added). His testimony implies that ground water is exempt from pollution prevention measures during mining. His statements are not correct and not supported by the facts for a number of reasons:

- 1) There is no exemption or limitation in the Water Quality Act that allows water pollution to occur during mining;

2) There are no proposed criteria or factors in the proposed rule for determining if the site of a new mine waste rock stockpile or tailing impoundment is a place of withdrawal of water;

3) His statement acknowledges that ground water at these sites is a future place of withdrawal after mining. Therefore, pursuant to 74-6-5(E)(3) NMSA 1978 of the Water Quality Act, the constituent agency is prohibited from issuing a discharge permit because the discharge will cause an exceedance of water quality standards at a place of withdrawal of foreseeable future use; and

4) Nowhere in the rule does it state that ground water within the waste rock and tailing impoundment mine units must be cleaned up after mining to protect the ground water as a future place of withdrawal. In fact as written, the rule specifically allows ground water underneath and downgradient of waste rock stockpiles and tailing impoundments to remain polluted upon closure. This pollution is allowed if standards are not exceeded at the monitoring well network located downgradient of the disposal units interceptor system. Olson Testimony Tr. vol. 8, pg. 2013, line 9 to pg. 2014, line 24.

On page 5 and page 6 of Mr. Brown's Rebuttal Testimony, he denies that the monitoring system proposed in the rule is a point of compliance concept. There is no basis in fact for this statement. A point of compliance concept is a system that permits pollution of ground water under a source of pollution and up to a point some distance away from the source of the pollution. The rule as proposed allows a permittee to intentionally pollute ground water underneath and downgradient of a new waste rock stockpile or tailing impoundment. The pollution is allowed to travel downgradient to an interceptor system at some undefined distance away from the source of pollution. This pollution is allowed by rule as long as the ground water pollution does not reach a monitoring well some further distance downgradient of the interceptor

system where it is monitored for compliance with water quality standards. The discharge, interceptor and monitoring system contained in the rule exactly describes a point of compliance system. Olson Testimony Tr. vol. 8, pg. 2014, line 25 to pg. 2015, line 20.

Mr. Brown's denial of establishment of a point of compliance concept is also directly contradicted by his own statements on page 5 in the final sentence of the 1<sup>st</sup> Paragraph of section 4.2 of his rebuttal where he states that "*These monitor wells are not points of compliance; they are sentinels to ensure that the protections that are built in to each unit of the copper mine facility are effective, and if they are not, then to signal the need for implementation of contingency and abatement actions as needed to restore the protections required.*" Contrary to his assertions, his statement describes a point of compliance at which an exceedance of water quality standards in a monitoring well downgradient of the interceptor system triggers compliance with contingency actions. These contingencies in the rule, include required corrective actions and source control measures to stop the additional migration of pollution. The contingencies also include potential submission of an abatement plan to investigate and cleanup polluted ground water that has migrated past the monitoring well. Therefore, the sentinel wells he describes are points of compliance. Olson Testimony Tr. vol. 8, pg. 2015, line 21 to pg. 2016, line 21.

On page 6 and the 1<sup>st</sup> paragraph of page 7 of Mr. Brown's rebuttal testimony in his section titled "*Contamination by Rule Versus Contamination by Variance*", he discusses the Department's decision to allow pollution by rule rather than on a site-by-site basis under a variance. He compares pollution by rule to variances for leach stockpiles issued by the Commission. He states that the requirements of the variances are the same as in the proposed rule. In addition, he discusses the concept that pollution by rule vs. issuing variances reduces permitting uncertainty and permitting time. His testimony is not correct, misrepresents the issues

related to prior Commission variances, and is not supported by the facts for the following reasons:

1<sup>st</sup> There have only been two variances granted by the Commission. Both are for new leaching operations in existing open pits, which are highly contaminated from prior operations. These are the Lee Hill leach system inside the Chino open pit and the Savannah pit leach system inside the open pit at Tyrone. By rule, the Department now seeks to allow pollution to occur from new waste rock stockpiles and tailing impoundments outside open pit areas in areas that may not be polluted. The systems and locations are different than those in the variances and have different considerations. The Commission has not issued a variance for a new waste rock or tailings impoundment outside of an open pit of a copper mine. Therefore, there can be no conditions from existing variances for waste rock and tailing impoundments located outside an open pit to place in the rule.

Olson Testimony Tr. vol. 8, pg. 2016, line 22 to pg. 2018, line 4.

2<sup>nd</sup> In its Response to Variance Petition for the Savannah Pit as shown in NMED Ex. 22 and for the Lee Hill Leach Stockpile, as shown in NMED Ex. 24, the Department made ground water determinations and recommended that certain conditions be imposed that are significantly different than the requirements contained in the rule including:

a. On page 2 Paragraph 2 of NMED Ex. 22, the Department made a determination “*that ground water at the Tyrone Mine is a place of withdrawal of water for present or reasonably foreseeable future use.*” The Department rule is different from the variance because it maintains that ground water in the open pit and other areas of the mine would not be a place of withdrawal.

b. On Page 6, Paragraph 6 of NMED Ex. 22, the Department conditioned its recommendation for issuing a variance on Tyrone monitoring the discharges effects on

ground water within the Savannah Pit. The proposed rule is different from the Department's conditions for the variance because the rule does not require monitoring of ground water within the open pit.

c. On Page 7, Paragraph 13 of NMED Ex. 22, the Department conditioned its recommendation for issuing a variance on Tyrone abating water pollution within the Savannah Pit upon completion of mining operations. The proposed rule is different from the Department conditions for a variance because it does not require abatement of pollution within an open pit unless the pit is a flow-thru pit.

Olson Testimony Tr. vol. 8, pg. 2018, line 5 to pg. 2019, line 13.

3<sup>rd</sup> In its Response to Variance Petition for the Lee Hill Leach Stockpile in the Chino open pit, as shown in NMED Ex. 24, the Department made ground water determinations and recommended that certain conditions be imposed that are the opposite of the requirements contained in the rule including:

a. On page 2 Paragraph 4 of NMED Ex. 24, the Department made a determination "*that the ground water within the Santa Rita Pit is protected under the WQA and the WQCC Regulations, 20.6.2 NMAC, and specifically that the ground water represents a place of withdrawal of water for present and reasonably foreseeable future use under 74-6-5.E(3) of the WQA.*" The Department rule is different from the variance because it maintains that ground water in Santa Rita open pit is not a place of withdrawal.

b. On Page 5, Paragraph 3 of NMED Ex. 24, the Department conditioned its recommendation for issuing a variance on Chino monitoring ground water impacts related to the Lee Hill Leach Stockpile. The proposed rule is different from the Department's conditions for the variance because the rule does not require monitoring of ground water within the open pit.

c. On Page 5, Paragraph 5 of NMED Ex. 24, the Department conditioned its recommendation for issuing a variance on Chino abating water pollution within the Santa Rita Pit upon completion of mining operations. The proposed rule is different from the Department conditions for a variance because it does not require abatement of pollution within an open pit unless the pit is a flow-thru pit.

Olson Testimony Tr. vol. 8, pg. 2019, line 14 to pg. 2020, line 22.

4<sup>th</sup> As shown in NMED Ex. 23 and NMED Ex. 25, both the Commission's January 27, 2012 Statement of Reasons and Order on the Savannah Pit Variance and the Commission's June 12, 2007 Findings of Fact, Conclusions of Law, and Order Granting Variance with Conditions for the Lee Hill Leach Stockpile accepted the positions of the Department as discussed above, including the Department's recommended conditions of approval. The Department's proposed rule is not consistent with the Commission Orders approving the variances.

Olson Testimony Tr. vol. 8, pg. 2020, line 23 to pg. 2021, line 9.

5<sup>th</sup> On page 6 in paragraph 2 of Section 5.2 of Mr. Browns rebuttal testimony he states that at the variance hearings "*all witness testimony related to requirements of the Rule with respect to waste rock and tailings impoundments, and whether they should be lined.*" This is not true. In fact, the variance hearing testimony was related to leaching operations not waste rock or tailings impoundments. The variance hearing witness testimony reflected in Commission orders in NMED Ex. 23 and NMED Ex. 25 for approval of both variances was about determining factors for consideration in granting a variance including:

- Hydrogeology;
- Extent of Disturbance;
- Limited Leaching Capacity;

- Compliance with other Requirements; and
- Abatement of Pollution.

Olson Testimony Tr. vol. 8, pg. 2021, line 10 to pg. 2021, line 24.

6<sup>th</sup> On page 6 in paragraph 2 of Section 5.2 of Mr. Browns rebuttal testimony, he states “*It has been the finding of NMED as cited in the variance petitions that it is infeasible to line these facilities....*” In fact, as shown in NMED Ex. 22, in regards to the Savannah pit variance, neither the recommendations of the Department on the variance nor the findings in the Commission order in NMED Ex. 23 discussed the feasibility of lining the leach stockpile.

Olson Testimony Tr. vol. 8, pg. 2021, line 25 to pg. 2022, line 9.

7<sup>th</sup> And finally on page 7 in the final paragraph Section 5.2 of Mr. Browns rebuttal testimony he states that “*the variances have been temporary; after closure, the ground water at points of withdrawal beneath and outside the waste rock stockpiles and tailings impoundments is required to meet the standard, as does the Rule.*” This statement is only partially correct and is inconsistent with the facts. It is correct that the variances were temporary and required abatement of water pollution upon closure. However, these variances were for leach stockpiles inside an open pit mine not for new waste rock stockpiles or tailing impoundments located outside the open pit. In addition, nowhere in the rule does it state that ground water within waste rock and tailing impoundment mine units must be cleaned up after closure to standards similar to the variances. As written the rule specifically allows ground water underneath and downgradient of waste rock stockpiles and tailing impoundments to remain polluted upon closure. The rule allows this water pollution as long as it does not exceed standards at the monitoring well network located a distance downgradient of the waste rock and tailings ground water pollution interceptor systems.

Olson Testimony Tr. vol. 8, pg. 2022, line 10 to pg. 2023, line 9.

**X. FREEPORT WITNESS TESTIMONY NOT CREDIBLE ON PLACE OF WITHDRAWAL AND THE PRACTICE OF THE DEPARTMENT**

**A. Freeport witness Neil Blandford testimony is not supported by facts.**

On Page 35 and 36 of Mr. Blandford’s rebuttal testimony, he discounts the potential for water pollution from copper mines to impact future water supply wells. His rationale for this is that contamination will be detected in monitoring wells, contingency measures will be implemented and that there are setbacks for new mine operations. On Page 36, he concludes “*In my opinion, this approach is protective of other water supplies, as it is unlikely that production wells will be placed close enough to a mine facility that they would be adversely affected.*” This conclusion assumes that the mine site is not a place of withdrawal of water and that institutional controls by the permittee prevent access to ground water at the mine site. These assumptions are not correct and not supported by the facts for a number of reasons:

Olson Testimony Tr. vol. 8, pg. 2024, line 20 to pg. 2025, line 11.

In extensive litigation, the Commission has already determined that one of Freeport’s major copper mine facilities, the Tyrone Mine, is place of withdrawal of water for present or reasonably foreseeable future use. This is reflected in the February 4, 2009 in the Commission Decision and Order on Remand. In this Order, the Commission adopted 7 criteria for determining place of withdrawal, applied the criteria to the facts of the Tyrone Mine and determined that with some limited exceptions the mine was a place of withdrawal of water.

Olson Testimony Tr. vol. 8, pg. 2025, line 12 to pg. 2025, line 25; and WCO Ex. 10, COL 15-52.

In addition, the Department has also made determinations or statements that Freeport’s mines are a “*place of withdrawal*” in approving discharge permits for Freeport’s other copper mines, the Chino and Cobre mines. Examples of this can be seen in permits that are part of the hearing record.

- One example is Freeport Ex. Scott – E which contains the January 14, 2005 discharge permit DP-484 amendment for Chino Mines tailing pond 7. Department statements and determinations about place of withdrawal are shown on Page 1 of the permit in paragraph 2 of the Introduction and on Page 4 of the permit in Finding 4.

- Another examples is Freeport Ex. Shelley 3 containing the February 24, 2003 supplemental closure discharge permit DP-1340 for the Chino Mine. Department statements about place of withdrawal are shown on Page 1 of the permit in paragraph 2 of the Introduction.

- Another example is Freeport Ex. Shelley 4 containing the December 10, 2004 supplemental closure discharge permit DP-1403 for the Cobre Mine. Department statements and determinations about place of withdrawal are shown on Page 1 of the permit in paragraph 2 of the Introduction and on Page 8 of the permit in Findings 2 & 4.

- Another example is NMED Ex. 17 containing the June 17, 2012 DP-376 discharge permit renewal for the Chino Mine Lampbright Leach System. Department statements and determinations about place of withdrawal are shown on Page 1 of the permit in paragraph 2 of the Introduction and on Page 3 of the permit in Finding 4.

Olson Testimony Tr. vol. 8, pg. 2026, line 1 to pg. 2027, line 6.

Finally, the Commission has previously rejected attempts by Freeport to use institutional controls to restrict a place of withdrawal at the Tyrone Mine. The use of institutional controls is discussed in its February 4, 2009 Commission Decision and Order on Remand. Olson Testimony WCO Ex. 10, pgs. 68-73, FOF 299-324. In its Order on Page 78 in Conclusion of Law 24 of WCO Ex. 10, the Commission expressly determined that “*The use of institutional controls to restrict access to ground water beneath the surface and thus conclude that the ground water is not a place of withdrawal for reasonably foreseeable future use would be*

*contrary to the WQA.”*

Olson Testimony Tr. vol. 8, pg. 2027, line 7 to pg. 2027, line 21.

**B. Freeport witness Timothy E. Eastep testimony is not supported by the facts.**

On page 18 of Mr. Eastep’s rebuttal testimony, he discounts my testimony as legal interpretation of the Water Quality Act that has already been addressed in legal briefs. His assertion are not correct and not supported by the facts. The legal briefs filed to date have involved legal argument from parties other than me on whether the Commission should remand the rule to the Department because it is not consistent with the Water Quality Act. Freeport and the Department in response filed legal briefs arguing that the Commission should not remand the rule and should consider the facts of this issue during its hearings on the rule. I filed no legal briefs requesting remand of the petition to the Department. I participated in the hearings as a private citizen to provide independent facts for the Commission to consider in their rulemaking as the Department and Freeport requested of the Commission. My expert witness testimony is factual testimony from the perspective of a regulator that directly implemented and enforced the Water Quality Act and Commission rules for 25 years for both the Department and the Oil Conservation Division. As a regulator, the Water Quality Act and Commission rules are interpreted on a daily basis and daily regulatory enforcement decisions are made administratively based on these interpretations. These regulatory interpretations as discussed in my written direct and rebuttal testimony have been consistently applied since the adoption of the Commission rules in 1977 until the submission of this Department proposed rule. Olson Testimony Tr. vol. 8, pg. 2027, line 24 to pg. 2028, line 24.

In Mr. Eastep’s rebuttal testimony he makes wide ranging statements that the proposed rule imposes the same requirements that were in discharge permits that I approved when I was Bureau Chief of the Ground Water Quality Bureau of the Department. He lists issues that were

authorized in the permits; asserts that variances are not necessary based upon past practices; and provides examples of such permits. His testimony misrepresents the facts related to these permits and is not supported by the facts. Olson Testimony Tr. vol. 8, pg. 2028, line 25 to pg. 2029, line 9.

Mr. Eastep confuses renewals of existing discharge permits addressing failed pollution prevention systems with the approval of new discharge permits to prevent water pollution. The permits that Mr. Eastep refers to are renewals of existing discharge permits that have either failed to prevent pollution based on assertions of the copper mine permittee or address pre-existing pollution of ground water. These permits are attempting to remedy failed systems at the copper mine facilities that have caused water pollution. Olson Testimony Tr. vol. 8, pg. 2029, line 10 to pg. 2029, line 20.

Department issued permits have not allowed new mine unit discharges that will intentionally pollute ground water as is proposed in the rule. Throughout the 35 year history of issuance of discharge permits the constituent agencies have maintained that all ground water underneath a site is considered to be a place of withdrawal and is subject to protection from pollution according to 74-6-5(E)(3) NMSA 1978 unless the permittee can demonstrate otherwise. At the July 9, 2007 Commission hearing testimony of Department witness Mary Ann Menetrey, Program Manager of the Ground Water Quality Bureau's Mining and Environmental Compliance Section, detailed the application of water quality standards during the discharge permitting and water pollution abatement history of the Tyrone Mine since the adoption of Commission rules in 1977. WCO Rebuttal Ex. 2. In preparation for the 2007 Commission hearings on the Tyrone mine, Ms. Menetrey reviewed all of the Department permitting files for Tyrone discharge permits going back to the early days of discharge permitting by the Department and its predecessor agency, the New Mexico Environmental Improvement Division. She stated

that all of the discharge permits issued since adoption of the Commission rules in 1977 required prevention of water pollution. The Commission recognized the past permitting history of the Department in its February 4, 2009 Decision and Order on Remand. In WCO Ex. 10, pg. 7, FOF 18, the Commission found that *“None of the operational permits authorizes Tyrone to contaminate ground water in excess of ground water standards; none of the operational permits authorizes any form of natural attenuation as a treatment, containment or mitigation measure; and none of the operational permits defines or mentions a place of withdrawal of water for present of reasonably foreseeable future use.”* Olson Testimony Tr. vol. 8, pg. 2029, line 11 to pg. 2031, line 14.

Despite Mr. Eastep’s statements to the contrary, in discussions with the mine staff and in the discharge permits issued for the copper mines, the Department has maintained that the copper mines are a place of withdrawal of water for present or reasonable foreseeable future use. Examples of this are discussed previously in this closing argument in my discussions of the testimony of Freeport witness Neil Blandford. Under the permitting system, the Department has used its enforcement discretion and never shut down a copper mine that failed to protect ground water from pollution. The Department has consistently worked with the copper mines to issue permits that implement new pollution prevention measures and abate water pollution from failed discharging units while still keeping the copper mines as viable businesses. No other industry except the mining industry has been allowed to operate failed systems that act as ongoing sources of water pollution. Other industries with failed systems have been issued discharge permit renewals that require the permittee to replace failed discharge units. Olson Testimony Tr. vol. 8, pg. 2031, line 15 to pg. 2032, line 13.

The Department previously recognized that the renewal of discharge permits with ongoing sources of pollution was problematic under the Water Quality Act. That is why the

Department developed a process in the Tyrone Agreement where Freeport could continue to operate failed pollution prevention systems in a clear and transparent public manner under a variance consistent with the requirements of the Water Quality Act. The Department sought requirements in the Tyrone Agreement whereby Freeport must seek variances for existing facilities that are causing ground water to be polluted in excess of the Commission standards. The Tyrone Agreement in provisions 41 – 43 of WCO Ex. 11 on Pages 13 and 14 contains these requirements and the mechanism by which the Department could support a variance. The Department set up a similar variance process for potential new discharge sites as seen in provisions 36 – 40 of WCO Ex. 11 on Pages 12 and 13. Freeport willingly agreed to the settlement and these provisions on December 20, 2010 and more recently continued to agree with these settlement provisions in the December 20, 2012 First Amendment to Settlement Agreement and Stipulated Final Order. WCO Ex. 17. This variance process has been shown to work efficiently for new facilities. Freeport has successfully been granted variances for two new major leach facilities using this model. Both variances were supported by the Department, there was a short, clear and transparent public hearing process and the variances were approved by Commission without controversy. Olson Testimony Tr. vol. 8, pg. 2032, line 14 to pg. 2033, line 22.

On page 22 of Mr. Eastep's rebuttal testimony, he rebuts my testimony regarding New Mexico Copper Corporation's proposal for a liner system for a tailings impoundment at the Copper Flats Mine with the rationale that this design is not part of a permit application. This is not true or supported by the facts. Freeport witness Thomas L. Shelley makes similar statements regarding the New Mexico Copper's Copper Flat Mine so this issue is addressed in the following discussion of the testimony of Freeport witness Mr. Shelley. Olson Testimony Tr. vol. 8, pg. 2033, line 23 to pg. 2034, line 6.

On Page 22 of Mr. Eastep's rebuttal testimony, he states that my testimony ignores other pollution prevention strategies for waste rock stockpiles such as material characterization and handling plans. This misrepresents my testimony. In my written testimony regarding proposed changes to the rule on pages 25 - 26 of WCO Ex. 3, I acknowledge the necessity of material characterization and handling plans for preventing ground water pollution and propose some modified rule language. Mr. Eastep may be confused because I opined that the current department rule to allow water pollution by rule from waste rock stockpiles seems to negate the need for material characterization and handling plans to prevent pollution. Olson Testimony Tr. vol. 8, pg. 2034, line 7 to pg. 2034, line 23.

**C. Freeport witness James Scott testimony is not supported by the facts.**

On page 7 and 8 of Mr. Scott's rebuttal testimony, he makes statements about the feasibility of liner systems for tailing impoundments. There is a new mine permit application case in NM where lining of a tailing impoundment is feasible, the Copper Flat Mine. This issue is addressed in the following discussion of the testimony of Freeport witness Mr. Shelley. Olson Testimony Tr. vol. 8, pg. 2034, line 24 to pg. 2035, line 9.

**D. Freeport witness Thomas L. Shelley testimony not supported by the facts.**

On page 11, paragraph 3 and page 12 of Mr. Shelley's rebuttal testimony, he makes statements in response to my direct testimony expressing doubts about the feasibility of the lining of tailing impoundments. He implies that the Commission should disregard the case I cited for a new lined tailing system at the proposed Copper Flat Mine. He states that the tailings system in the Copper Flat mine case is "*based on a conceptual design that has not been presented in a permit*" and further states that "*the information presented did not indicate to me that the conceptual design would meet the requirements of the New Mexico State Engineer.*"

These statements are not true and not supported by the facts. Olson Testimony Tr. vol. 8, pg. 2035, line 12 to pg. 2036, line 2.

The fact is New Mexico Copper Corporation has filed a Copper Flat Mine Plan of Operation with the United States Bureau of Land Management as shown in WCO Ex. 12 that contains a conceptual design report with engineering plans for a liner system for a tailing impoundment. New Mexico Copper also proposed this system to the Department and discussed it as a means of preventing pollution under a discharge permit during copper mining. On May 3, 2012, New Mexico Copper made a technical presentation to the Copper Rule Technical Committee regarding their proposed engineering design for a 530-acre tailing impoundment, which included a liner system. In addition, New Mexico Copper on July 18, 2012 filed a mine permit application for the Copper Flat Mine with the Mining and Minerals Division of the New Mexico Energy, Minerals and Natural Resources Department. Their July 18, 2012 mine permit application proposes to construct a new lined tailing facility as shown in WCO Sur-rebuttal Ex. 1 on pg. 33. The mine permit application also contains a detailed engineering design plan for the liner system as shown in WCO Sur-rebuttal Ex. 1 in Preliminary Tailings Facility Design Drawing #6. Finally, the Department considers information submitted in mine permit applications for the Mining and Minerals Division as design information for discharge permits to avoid duplication. Olson Testimony Tr. vol. 8, pg. 2036, line 2 to pg. 2037, line 8; WCO Ex. 1, pg. 23; and Diechmann Testimony Tr. vol. 8, pg. 2084, line 16-18

Mr. Shelley's statements regarding the Office of the State Engineer are also not correct or supported by the facts. New Mexico Copper clearly states in the July 18, 2012 mine permit application on Page 65 of WCO Sur-rebuttal Ex. 1 in the last sentence of Section 4.3.6.1 that *"The TSF was designed in accordance with the design and dam-safety guidelines and*

*regulations of the NMOSE Dam Safety Bureau (NMOSE, 2010)*”. Olson Testimony Tr. vol. 8, pg. 2037, line 9 to pg. 2037, line 17.

New Mexico Copper testified at this hearing that they are continuing to plan for use of an engineered composite liner system for disposal of tailings at their tailings storage facility. This design was proposed before the proposed Copper Mine Rule was developed. The facts clearly show that New Mexico Copper believes a liner system for a tailing impoundment is a feasible and economic means to prevent water pollution while conducting copper mining activities. Olson Testimony Tr. vol. 8, pg. 2037, line 18 to pg. 2037, line 21; and Diechmann Testimony Tr. vol. 8, pg. 2073, line 23-25 and pg. 2074, line 1-4.

Additionally, on page 12, paragraph 3 of Mr. Shelley’s rebuttal testimony he states that lining of impoundments is unfounded and justifies this by saying that “*Mr. Blandford gave a presentation to the technical committee showing that deposition of tailing into the series of impoundments at Tyrone did not result in ground water quality exceedances at any monitoring wells.*” This is not true and is not supported by the facts. It has been well documented that the tailings impoundments at the Tyrone Mine have caused pollution of ground water in excess of Commission standards. During the Tyrone litigation, Department technical witness Clint Marshall testified about the water pollution caused by the Tyrone tailings as shown in WCO Ex. 15 on Page 10. The Commission also issued findings of fact determining that leachate from these tailings had polluted ground water in excess of state standards. WCO Ex. 10, pg. 9, FOF 31-32. Olson Testimony Tr. vol. 8, pg. 2037, line 22 to pg. 2038, line 16.

## **XI. APPLICABILITY OF WATER QUALITY STANDARDS**

During their testimony related to questions on place of withdrawal, Department witness Adrian Brown and Freeport witness Neil Blandford stated a number of times that ground water throughout the mine is a future place of withdrawal upon closure and that water quality standards

apply throughout the copper mine facility upon closure. Brown Rebuttal Testimony, pg. 4, paragraphs 2-3; Brown Testimony Tr. vol. 4, pg. 803, lines 19-24; Brown Testimony Tr. vol. 3, pg. 623, lines 4-9; Brown Testimony Tr. vol. 4, pg. 803, lines 19-24; Brown Testimony Tr. vol. 4, pg. 917, lines 18-23; Brown Testimony Tr. vol. 4, pg. 927, lines 21-22; Blandford Testimony Tr. vol. 6, pg. 1422, lines 4-15; Blandford Testimony Tr. vol. 6, pg. 1453, lines 20-24;

The rule does not state that water quality standards must be met everywhere upon closure as stated by Mr. Brown and Mr. Blandford. Therefore consistent with the Department's and Freeport's testimony and their intent, the proposed rule should be amended, as shown in the William C. Olson Statement of Reasons Findings of Fact 211-214. This amendment accomplishes 2 things. It clearly states that the closure plan must meet applicable standards in ground water upon closure. There are 2 exceptions to this. First, the ground water standards would not need to be met in the pit lake at the bottom of the open pit if the pit acts as an evaporative sink. Secondly, the standards would not have to be met if the permittee can demonstrate that the polluted ground water is not a "*place of withdrawal*". The criteria that need to be considered to determine a "*place of withdrawal*" are the seven criteria that were adopted by the Commission for the Tyrone Mine including: 1) site hydrology and geology; 2) the quality of ground water prior to any discharge from the facility; 3) past and current land use; 4) potential future land use; 5) past and current water use; 6) potential future water use; and 7) population trends in the vicinity. This would be an administrative process under the permit application where the Department can make an administrative determination on "*place of withdrawal*". The type of information necessary for the Department's determination would be clearly spelled out in the rule. This amendment would be consistent with the Department's testimony, the Water Quality Act, Commission rules and the WQCC Order on Remand and is necessary as a solution to the confusion over the application of standards and statutory permitting limitations related to

the issue of “*place of withdrawal*”. Olson Testimony Tr. vol. 8, pg. 2042, line 14 to pg. 2044, line 5.

## **XII. POTENTIAL STATE ENVIRONMENTAL LIABILITY FOR CLEANUP**

Mr. Tom Skibitski on Page 1 of his rebuttal testimony in Paragraph 2 states that it is an objective of the Department to “*minimize the prospects of litigation.*” The Commission needs to seriously consider the potential for harm to the citizens of New Mexico from future liability in the rule as proposed. Large scale mining sites have become federal superfund sites for cleanup of extensive pollution caused by the mines. If the Commission allows pollution by rule and a copper mine site is listed in the future as a superfund site, the permittee may have a claim against the state under federal superfund laws to pay its fair share of the cleanup for allowing pollution to occur. This has happened recently at the Questa Mine in northern New Mexico, a major molybdenum mine with unlined tailing impoundments similar in scale to the copper mines. The Questa Mine is a federal superfund site on the EPA’s National Priorities list. Chevron, the operator of the mine, has argued in litigation that the federal Department of Interior and Department of Agriculture are partially responsible for pollution at the site for allowing mining and waste disposal operations and the consequent releases of hazardous substances that caused pollution. Chevron is seeking that the United States taxpayers pay an equitable share of the estimated \$1 billion dollar cost of cleanup for the site, including attorney’s fees and other costs. Allowing pollution by rule at copper mines could have the same litigation repercussions for the citizens of the state of New Mexico. Olson Testimony Tr. vol. 8, pg. 2042, line 14 to pg. 2044, line 5; and WCO Sur-rebuttal Ex. 4

## **XIII. JOINT PROPOSAL RULE AMENDMENTS**

It is necessary that modifications be made to sections of the proposed rule to prevent water pollution and correct identified deficiencies in the rule. At the end of the hearings, the

Commission requested that the parties consolidate their proposals to make it simpler for the Commission to not have to reconcile 7 separate proposals. I received no contact from the Department regarding reconciliation of the parties rule amendments. However, at the request of the AGO, I have worked with the AGO, GRIP/TRP and AB to develop a joint August 22, 2013 proposed rule titled “*Joint Proposal from the New Mexico Attorney, Gila Resources Information Project/Turner Ranch Properties Inc., Amigos Bravos, and William C. Olson to Water Quality Control Commission Amended Petition*” (Joint Proposal). The Joint Proposal supersedes my prior proposed rule amendments. The Joint Proposal is attached to this Closing Argument and contains all changes proposed jointly by myself, the AGO, GRIP/TRP, and AB to the Department’s February 18, 2013 Amended Petition for the Proposed Copper Mine Rule as a result of the testimony presented at the Commissions 2013 Copper Mine Rule hearings. The amendments in the Joint Proposal are necessary to make the proposed rule consistent with the Water Quality Act, other Commission rules, historical precedent, and prior Commission decisions on “*place of withdrawal*”, the Court of Appeals 2006 Tyrone Opinion and the Tyrone Agreement as discussed in this closing argument and the August 22, 2013 William C. Olson Statement of Reasons.

A detailed analysis of each amendment is contained in the August 22, 2013 William C. Olson Statement of Reasons in Findings of Fact 120-218. In general, the amendments in the Joint Proposal: 1) remove rule language related to the point of compliance concept and keep the monitoring language consistent with current monitoring practice approved under existing discharge permits; 2) include requirements for lining of waste rock stockpiles and tailing impoundments unless the applicant seeks a variance; 3) add a section on variances to provide for a clear and transparent public process for consideration of site specific factors and designs such that approvals can be granted for the operational life of the facility; 4) add a section specifying

water quality standards upon closure; and 5) contain additional lesser modifications for clarity and consistency with the Water Quality Act and Commission rules.

#### **XIV. CONCLUSIONS**

In summary, I support the need for a Copper Mine Rule to prevent water pollution and monitor water quality. However, substantial evidence in the hearing record shows that the rule as proposed does not meet the statutory criteria for adoption of a rule pursuant to 74-6-4(E), is not supported by the facts and is contrary to law. The rule as proposed also fails to meet the Department's goals as specified in their testimony. Portions of the Department's proposed rule are inconsistent and in direct conflict with the Water Quality Act, existing Commission rules, the historical application of the Water Quality Act and ground water protection rules in New Mexico, the Commission's place of withdrawal litigation and the direction given to the Commission by the Court of Appeals. As proposed, these rules would allow construction and operation of unlined facilities for the intentional pollution of ground water in excess of Commission standards underneath a permitted facility and downgradient of the facility to a point of compliance away from the discharge site. Such pollution could occur without the need for a variance as set out by statute and existing Commission rules. This includes the construction of future mines with underlying clean ground water, construction of new facilities at existing mines in areas that may contain clean water or continued operation of failed existing facilities that have contaminated ground water in excess of applicable standards. New facilities and failed existing facilities would be authorized by rule to pollute water. The Water Quality Act explicitly and clearly requires prevention of pollution and not allowance of pollution. The intent of the Water Quality Act is reflected in the 35-year history of the ground water protection in New Mexico by the Commission and both of its constituent agencies. On this basis, the Department's rule should not be adopted as proposed.

The proposed rule amendments contained in the Joint Proposal, and as discussed in the August 22, 2013 William C. Olson Statement of Reasons Findings of Fact 120-218, correct the deficiencies identified in the proposed rule. The Joint Proposal amendments are necessary to prevent water pollution and monitor water quality consistent with the Water Quality Act; existing Commission rules; historical agency interpretations and application of the Water Quality Act and Commission rules; the direction given by the Court of Appeals in its Tyrone Opinion; Commission decisions in the Tyrone place of withdrawal litigation; and the Tyrone Agreement. The preponderance of the evidence demonstrates that the Joint Proposal amendments to the proposed Copper Mine Rule will prevent water pollution, are consistent with the law and meet the statutory criteria for approval, and therefore should be approved.

Respectfully submitted,

*William C. Olson*

By \_\_\_\_\_

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August 22, 2013  
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Certificate of Service

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