

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

**In the Matter of:  
PHELPS DODGE TYRONE,  
Appeal of Supplemental Discharge  
Permit for Closure (DP-1341),**

**PHELPS DODGE TYRONE, INC.  
and  
CITIZENS FOR ECONOMIC GROWTH AND  
ENVIRONMENTAL PROTECTION, INC.,**

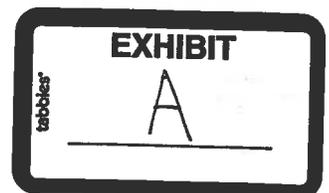
**Petitioners.**

**Nos. WQCC 03-12(A) and  
WQCC 03-13(A)**



**PARTIAL FINAL DECISION AND ORDER AFFIRMING SUPPLEMENTAL  
DISCHARGE PERMIT AND REQUESTING A MODIFICATION TO CONDITION  
NUMBER 22**

THIS MATTER came before the New Mexico Water Quality Control Commission (“Commission”) upon an appeal filed by Phelps Dodge Tyrone (“Tyrone”) and Citizens for Economic Growth and Environmental Protection, Inc. (“CEGEP”) (jointly, “Petitioners”) to Supplemental Discharge Permit for Closure # 1341 issued pursuant to a New Mexico Environment Department (“NMED”) Hearing Officer’s order pursuant to NMSA 1978, Sections 74-6-1 to 74-6-17 and 20.6.2 NMAC. A public hearing on the appeal was held over ten days between October 27 and November 13, 2003. A public hearing on preliminary motions was held on January 13, and April 13, 2004. A public meeting with deliberations in this matter was held on April 13-14, 2004. The Commission heard all evidence, deliberated, and voted to affirm the contested conditions and to a request a modification to condition number 22, for the reasons set forth below.



## Findings of Fact

### Procedural Findings

1. Tyrone operates the mine that is subject of the appealed Supplemental Discharge Permit for Closure and Tyrone is the permittee under the Permit. Tyrone Finding of Fact ("T FOF") # 2.
2. On or about May 20, 2002, through June 1, 2002, there was a public hearing on the proposed closure permit in Silver City, New Mexico. New Mexico Environment Department Finding of Fact ("NMED FOF") #121.
3. On or about March 7, 2003, the NMED Hearing Officer who presided over this public hearing issued a 106 page Hearing Officer's Report and 307 page Findings of Fact and Conclusions of Law. (NMED FOF #124).
4. On or about April 4, 2003, Tyrone filed an informal appeal with the Commission. (T FOF #3).
5. On or about April 7, 2003, Gila Resources Information Project ("GRIP") filed a formal appeal petition with the Commission. (NMED FOF #126). NMED responded on June 10, 2003. (NMED FOF #129).
6. On or about April 8, 2003, pursuant to the Hearing Officer's Report and Final Decision, NMED issued the final Permit. (NMED FOF #125).
7. On or about July 3, 2003, Tyrone converted the informal appeal into a formal appeal petition with the Commission. (T FOF #3). NMED responded on August 6, 2003. (NMED FOF #129).
8. On or about July 7, 2003, CEGEP filed a formal appeal petition with the Commission. (NMED FOF #128). NMED responded on August 8, 2003. (NMED FOF #129).

9. On or about September and October 2003, the parties negotiated a settlement on appeal issues relating to the closure of the Mangas Valley Tailing Impoundments. The NMED Secretary signed the Settlement Agreement and Stipulated Order on October 15, 2003. (NMED FOF #130).
10. On or about September 27, 2003, the Commission published notice that it would be holding consecutive hearings on the Tyrone, GRIP, and CEGEP appeals beginning on October 27, 2003. (NMED FOF #132).
11. On or about October 20, 2003, GRIP withdrew its appeal in its entirety. (NMED FOF #131). GRIP remained an interested participant pursuant to 20.1.3.200(F) NMAC by filing a notice of intent to present technical evidence.
12. On or about October 20, 2003, CEGEP withdrew its appeal on the issue involved in the Settlement Agreement. Tyrone did the same on January 27, 2004. (NMED FOF #131).
13. On or about October 27 through November 13, 2003, a public hearing on the appeal of Supplemental Discharge Permit for Closure (DP-1341) was held over ten days.
14. All documents in the administrative record were made available to the Commissioners for their review as evidence in the hearing of this case. (T FOF #4).
15. On or about January 13, 2004 and April 13, 2004, a public hearing was held on preliminary motions in this matter. On January 13, 2004, the Commission orally denied: (a) Tyrone's Renewed Motion to Disqualify Commissioner Goad; (b) NMED's Motion to Exclude CEGEP Witness McDonald; and (c) NMED's Motion for Partial Dismissal. The Commission partially granted and partially denied Tyrone's Motion for Closing Arguments. Tyrone was the only party that requested a written order and only requested it for the disqualification motion. On April 13, 2004, the Commission orally denied: (a)

Tyrone's Motion to continue the hearing until Commission Watchman-Moore was present; and (b) Tyrone's Motion to Disqualify Commissioner Lewis. No party requested a written order.

16. On or about April 13 and 14, 2004, the Commission held deliberations in this matter.

### Substantive Findings

1. This Order will only address the conditions appealed in the permit. A discussion of all other conditions and their supporting Findings of Fact/Conclusions of Law can be found in NMED's Hearing Officer documents.
2. Authority. There are no Findings of Fact on whether NMED had the statutory authority to approve a permit with conditions beyond those conditions listed in NMSA 1978, Section 74-6-5(I). This issue will be addressed in the Conclusions of Law.
3. Use. The Tyrone Mine Facility encompasses approximately 9,400 acres. (NMED FOF #1). The Tyrone Mine Facility (a/k/a Tyrone Mine Site) includes within it the Tyrone Mining Area.
4. Use. The Tyrone Mining Area is made up of the waste rock piles, leach ore stockpiles and open pits. (T FOF #24). The Tyrone Mining Area includes within it the Open Pit Capture Zone.
5. Use. An Open Pit Capture Zone is an area in which all ground water allegedly flows to, is captured by, and is collected rather than flowing away from the open pit into the regional aquifer. (T FOF #9).

6. Use. Tyrone alleges that there is no point where water may exist in or below the waste rock piles, leach ore stockpiles and pits (a/k/a Tyrone Mining Area) that is a place of withdrawal for present or reasonably foreseeable future use. (T COL #7).
7. Use. If the Commission concluded that the Water Quality Act should be interpreted to mean that all groundwater containing less than 10,000 Total Dissolved Solids ("TDS") is protectable, then the Commission had to look at the entire Tyrone Mine Facility in its use analysis. Glass, Del. Tr. vol. 1, p. 252, lines 15-22. Olson, Del. Tr. vol. 1, p. 275, lines 2-14.<sup>1</sup>
8. Use. NMED did conduct extensive site-specific analysis of the Tyrone Mine Facility. NMED Exs. 7-14, 22, 23. Cited by Norton, Del. Tr. vol. 2, p. 306, lines 1-4.
9. Present Use. The Fortuna Wells are located on the Tyrone Mine Facility. Shelley, Tr. vol. 1, p. 173, lines 14-20. (NMED FOF #137). Cited by Norton, Del. Tr. vol. 1, p. 261, lines 8-12.
10. Present Use. Tyrone has installed wells, the Fortuna wells, to provide a potable water supply to the Tyrone Mine Facility. Shelley, Tr. vol. 1, p. 141, lines 13-15. (NMED FOF #136).
11. Future Use. In 1972, there were approximately 16 domestic wells within a two-mile radius of the Tyrone Mine Facility. Marshall, Tr. vol. 5, p. 1286, lines 9-11; NMED Ex. 38, 40. (NMED FOF #143). Cited by Norton, Del. Tr. vol. 1, p. 228, lines 1-4.

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<sup>1</sup> Method of citation.

- (a) Administrative Record sample. AR-1341, E-155 at p.4-2.
- (b) Pleadings sample. NMED's Response Brief, p. 29.
- (c) Commission's 2003 hearing transcript sample. (Witness) Marshall, Transcript ("Tr."), volume ("vol.") 5, page number ("p.") 1286, lines 9-11.
- (d) Commission's 2003 hearing exhibit sample. NMED, Exhibit ("Ex.") 1.
- (e) Commission's 2004 deliberations transcript sample. (Commissioner) Norton, Deliberations Transcript ("Del. Tr."), volume ("vol.") 1, page ("p.") 228, lines 1-4.

12. Future Use. In 2002, there were now approximately 50 domestic wells within a two-mile radius of the Tyrone Mine Facility. Marshall, Tr. vol. 5, p. 1292, lines 9-12, NMED Ex. 39. (NMED FOF # 146). Cited by Norton, Del. Tr. vol. 1, p. 228, lines 1-4.
13. Future Use. The approved post-mining land use for the Tyrone Mine under the New Mexico Mining Act is wildlife habitat and industrial use. Shelley, Tr. vol. 1, p. 79, lines 9-11. (NMED FOF #139). Cited by Olson, Del. Tr. vol. 1, p. 270, line 24 to p. 271 line 6.
14. Future Use. There are no institutional restrictions, such as filing a deed at the county courthouse that will provide with certainty that parties will not be allowed to drill wells in the future. Cited by Goad, Del. Tr. vol. 1, p. 234, lines 13-17.
15. Future Use. CEGEP Witness Ward did not state that there had been actual measures taken by any party to make sure that no future party will put wells in the Mining Area or Mining Facility in the future. Olson, Del. Tr. vol. 1, p. 271, line 21 to p. 272, line 11.
16. Future Use. "That's possible—yes, that's possible" that there could be installation of wells on the sides of the piles in the future. Blandford, Tr. vol. 2, p. 321, lines 17-20. Cited by Goad, Del. Tr. vol. 1, p. 276, lines 6-24. Olson, Del. Tr. vol. 1, p. 277, lines 3-11.
17. Containment. Tyrone has asserted that impacted waters within the Open Pit Capture Zone will not combine with other waters outside the Tyrone Mine Facility. (T FOF #25).
18. Containment. Tyrone's proposal to rely on the purported open pit capture zone is a man-made containment remedy dependent on pumping out the contaminated ground water and treating it. Menetrey, Tr. vol. 3, p. 746, line 24 to p. 747, line 1. (NMED FOF #167). Cited by Glass, Del. Tr. vol. 2, p. 326, line 22 to p. 327, line 10.

19. Containment. Pumping to remove the contaminated water from the open pits will be necessary virtually in perpetuity. Shelley, Tr. vol. 1, p. 81, lines 17-20. (NMED FOF #169).
20. Containment. NMED Witness Marshall presented a map that delineated areas where ground water exceedances had been found on the Tyrone Mine Property. Marshall, Tr. vol. 5, p. 1236, lines 2-12. NMED Ex. #33. (NMED FOF #73). Cited by Brandvold, Del. Tr. vol. 2, p. 344, lines 5-21.
21. Containment. The natural geology beneath the Tyrone Mine is characterized by extensive faults and fractures. Marshall, Tr. vol. 5, p. 1193, line 24 to p. 1196, line 15. NMED Ex. 37. (NMED FOF #174).
22. Containment. Faults and fissures can behave in various and hard to predict ways depending on the hydrogeology under the site. Glass, Del. Tr. vol. 2, p. 335, lines 15-18.
23. Containment. The alluvial aquifer is hydrologically connected to the regional aquifer. Shelley, Tr. vol. 1, p. 112, lines 15-16; Marshall, Tr. vol. 5, p. 1279, lines 10-14, p. 1280, lines 4-9. (NMED FOF #181). Cited by Norton, Del. Tr. vol. 2, p. 343, lines 17-20.
24. Containment. Faults and fractures may provide conduits for contamination to move down from the alluvial aquifer to the regional aquifer. Marshall, Tr. vol. 5, p. 1266, line 6, to p. 1267, line 14. (NMED FOF #175). Cited by Sloane, Del. Tr. vol. 1, p. 242, line 24 to p. 243, line 3. Bada, Del. Tr. vol. 1, p. 275, line 20 to p. 276, line 1. Olson, Del. Tr. vol. 1, p. 280, line 20 to p. 281, line 2. Glass, Olson, Del. Tr. vol. 2, p. 330, lines 8-18. Glass, Del. Tr. vol. 2, p. 336, lines 6-8.
25. Containment. The existence of these faults may not permanently and perpetually prevent translocation of the contamination away from the Open Pit Capture Zone and into one of

the faults and eventually off the Tyrone Mining Facility. Glass, Del. Tr. vol. 2, p. 336, lines 9-14.

26. Condition 4. Tyrone appealed Condition 4 on two grounds. The first ground was that the Permit requires Tyrone to re-grade and cover the slopes of those portions of the waste rock piles and leach ore stockpiles located within the Open Pit Capture Zone. (T FOF #8).
27. Condition 4. The second ground was that Tyrone proposed that slope angles beyond the Open Pit Capture Zone be no steeper than 2:5:1 unless re-grading of an individual slope would result in the intersection of a designated surface water of the State or a highway, in which case the slope may be steeper than 2.5:1, but not steeper than 2:1. (T FOF #26).
28. Condition 4. NMED Witness Philip testified that re-grading the slopes of the existing leach ore stockpiles and waste rock piles in accordance with Condition 4 will protect ground and surface water by: 1) stabilizing the piles and reducing the propensity for mass failure; 2) facilitating the safe operation of heavy equipment on the slopes of the piles; 3) reducing the potential for erosion; 4) allowing terrace benches to be constructed on the slopes; 5) allowing a cover to be placed that will not be eroded before vegetation is established; and 6) facilitating successful long-term establishment of vegetation. Philip, Tr. vol. 6, p. 1738, line 5 to p. 1741, line 17. (NMED FOF #190). Cited by Norton, Del. Tr. vol. 2, p. 394, line 21 to p. 395, line 11. Goad, Del. Tr. vol. 2, p. 412, lines 2-4.
29. Condition 4. A 3 to 1 slope will reduce the possibility of mass failures and erosion problems. Norton, Hutchinson, Del. Tr. vol. 2, p. 423, lines 1-4.
30. Condition 4. While the 3 to 1 ratio is not an industry standard, it is a common criterion. Lewis, Del. Tr. vol. 2, p. 404, lines 13-15.

31. Condition 4. The closed Tererro Mine Site north of the Village of Pecos, New Mexico has re-graded slopes to 3 to 1. Philip, Tr. vol. 7, p. 1780, line 25 to p. 1781, line 203. AR-1341 E-155 at p.4-2. (NMED FOF #225). Cited by Norton, Del. Tr. vol. 2, p. 404, lines 5-6.
32. Condition 4. The Molycorp Mine in Questa, New Mexico has put in place financial assurance that includes re-grading of waste rock dumps to slopes of 3 to 1, unless the underlying slope exceeds 3 to 1, in which case the slope may be re-graded to no steeper than 2 to 1. Philip, Tr. vol. 7, p. 1781, lines 3-5, AF-1341 E-129 at p. 15. (NMED FOF #227). Cited by Norton, Del. Tr. vol. 2, p. 404, lines 5-6.
33. Condition 4. The Phelps Dodge Little Rock Mine in Grant County, New Mexico has put in place a bond for re-grading of slopes to 3 to 1. Philip, Tr. vol. 7, p. 1781, lines 6-8; AR-1341 E-132. (NMED FOF #228). Cited by Norton, Del. Tr. vol. 2, p. 404, lines 5-6.
34. Condition 4. The Permit's Condition #1 allows Tyrone to propose amendments to the closure plan for leach ore stockpiles and waste rock piles, including the slope angle requirements, based on information obtained from various closure studies. NMED Ex. 1. (NMED FOF #188).
35. Condition 4. There will be an opportunity for greater collection of productive data if re-grading is permitted throughout the Tyrone Mine Facility. Glass, Del. Tr. vol. 2, p. 423, line 20 to p. 427, line 13.
36. Condition 4. The facts were unclear whether the re-grading would actually decrease the mine life and thus decrease economic benefits. Shelley, Tr. vol. 1, p. 188, line 20 to p. 189, line 15. Hutchinson, Sloane, Del. Tr. vol. 2, p. 390, line 19 to p. 391, line 6. Olson, Del. Tr. vol. 2, p. 430, line 23 to p. 431, line 7.

37. Condition 6. Tyrone appealed Condition 6 on two grounds. The first ground was NMED did not have statutory authority to impose this condition. There are no Findings of Fact on whether NMED had the statutory authority to approve a permit with conditions beyond those conditions listed in NMSA 1978, Section 74-6-5(I). This issue will be addressed in the Conclusions of Law.
38. Condition 6. The second ground was that Tyrone proposed to have terrace benching at slope lengths no greater than 500 feet.
39. Condition 6. The rationale behind structuring appropriate re-graded slope angles and appropriate terrace benching are related. Lujan, Del. Tr. vol. 2, p. 398, lines 1-2. Norton, Del. Tr. vol. 2, p. 398, lines 23-24.
40. Condition 6. The facts were unclear whether Tyrone presented evidence that terrace benching no greater than 500 feet was appropriate.
41. Condition 6. However, Tyrone's expert witness on closure costs assumed 300 feet of spacing between terrace benches in preparing Tyrone's closure cost estimate. He based this assumption on a maximum range for hydro seeding equipment of 150 feet in either direction. (NMED FOF #250). Cited by Olson, Del. Tr. vol. 2, p. 435, lines 7-10.
42. Condition 17. Tyrone appealed this condition on two grounds. The first ground was that Tyrone proposed that covers be installed to establish vegetation on the flat top surfaces of the waste rock and leach ore stockpiles, and on slopes outside the Open Pit Capture Zone. (T FOF #32).
43. Condition 17. The second ground was that Tyrone proposed the covers consist of a minimum of 24 inches of alluvium material. (T FOF #32).

44. Condition 17. Comparing the Permit requirement of a 36 inch cover on the tops and slopes of rock piles re-graded to a 3 to 1 slope in an average year (with 17.8 inches of precipitation) with Tyrone's proposed plan for a 24 inch cover on the tops of the waste piles, with no cover on slopes at angle of repose in a wet year, the Permit requirement results in virtually no infiltration overall, 0.000005% or 74.3 gallons of infiltration per year, while Tyrone's proposal results in 6.4% infiltration overall or 83,881,254 gallons per year of infiltration. NMED Ex. 70. (NMED FOF #303).
45. Condition 17. Comparing the Permit requirement of a 36 inch cover on the tops and slopes of rock piles re-graded to a 3 to 1 slope in a wet year (with 25.9 inches of precipitation) with Tyrone's proposed plan for a 24 inch cover on the tops of the waste piles, with no cover on slopes at angle of repose in a wet year, the Permit requirement results in 0.04% infiltration overall or 963,035 gallons per year of infiltration while Tyrone's proposal results in 12.4% infiltration overall or 238,048,503 gallons per year of infiltration. NMED Ex. 70. (NMED FOF #302). Cited by Norton, Del. Tr. vol. 2, p. 433, lines 18-24.
46. Condition 17. Tyrone Witness Monk's slide titled "Cover Performance" demonstrated that the 36-inch cover was closer to 0 percent infiltration. Tyrone Ex. 400, Series 437. Cited by Bada, Del. Tr. vol. 2, p. 432, line 20 to p. 433, line 6.
47. Condition 17. Real performance of a cover system can only be measured through field trials because the amount of infiltration reduction that is achievable is site-specific, and is dependent on many variables including climate, cover material properties and vegetation. NMED Ex. 44. (NMED FOF #284).

48. Condition 17. Test plots can be useful to answer questions concerning constructability, construction tolerances, plant performance, revegetation success, and amount of runoff. Munk, Tr. vol. 10, p. 2699, lines 5-11, p. 2718, lines 7-11. (NMED FOF #285).
49. Condition 17. There will be an opportunity for greater collection of productive data if a 36-inch cover is permitted throughout the Tyrone Mine Facility. Glass, Del. Tr. vol. 2, p. 423, line 20 to p. 427, line 13.
50. Conditions 4, 6 and 17. Uncontested Conditions # 75 through 89 will provide Tyrone and NMED with an opportunity to conduct site-specific tests in order to have more information whether the contested conditions should be reconsidered in the future.
51. Modeling. According to Tyrone Witness Voss, it would be helpful if the models that his system model relied upon were verified through field studies. Voss, Tr. vol. 3, p. 491, line 24 to p. 492, line 2. (NMED FOF #376).
52. Modeling. Tyrone's modeling results, especially the systems model, lacked validity because they lacked appropriate mixing zone assumptions and were not calibrated and verified with data on-site. Olson, Del. Tr. vol. 1, p. 229, line 21 to p. 230, line 3. Olson, Del. Tr. vol. 2, p. 400, line 12 to p. 403, line 19. Hutchinson, Norton, Del. Tr. vol. 2, p. 403, lines 20-24. Lewis, Del. Tr. vol. 2, p. 404, line 21 to p. 405, line 8.
53. Surface Waters. Tyrone appealed Conditions # 15, 22, 25, 26, 30, 32, and 34 on two grounds. The first ground was that NMED did not have the statutory authority to regulate surface waters in this permit. There are no Findings of Fact on whether NMED had this statutory authority. This issue will be addressed in the Conclusions of Law.
54. Surface Waters. The second ground, in the alternative, was that the water in Tyrone's open pit should not be considered surface water.

55. **Surface Waters.** The water in the regional aquifer is hydrologically connected to a surface water of the state.
56. **Surface Waters.** The water in the open pit is hydrologically connected to the regional aquifer. Marshall, Tr. vol. 5, p. 1279, lines 10-14, p. 1280, lines 4-9. (NMED FOF #181). Cited by Norton, Del. Tr. vol. 2, p. 473, lines 8-12.
57. **Surface Waters.** The water in the open pit is a surface water of the state. (NMED FOF #328). Cited by Norton, Del. Tr. vol. 2, p. 473, lines 12-17.
58. **Surface Waters.** However, NMED acknowledges that the requirement in Condition 22 is intended to apply only to surface water in a pit lake, not to water in a necessary sump or impoundment. NMED's Response Brief, p. 29. Cited by Hutchinson, Del. Tr. vol. 2, p. 461, lines 19-25.
59. **Financial Assurance.** The difference between Tyrone's re-grading and covering proposal for the stockpiles and the Environment Department's re-grading and covering proposal is about \$75 million. Philip, Tr. vol. 7, p. 1784, lines 6-10. Gila Resources Information Project Finding of Fact ("GRIP FOF") #72.
60. **Financial Assurance.** In accordance with the Financial Assurance agreement reached between the Environment Department and Phelps Dodge, only ten percent of the net present value of the financial assurance for the Tyrone mine must be put forward as cash. Philip, Tr. vol. 7, p. 1795, lines 2-8. (GRIP FOF #73). Cited by Olson, Del. Tr. vol. 2, p. 429, line 25 to p. 430, line 1.
61. **Financial Assurance.** The total cash difference between what Tyrone's proposed conditions and what is currently required under DP-1341 is only \$6.7 million. Philip, Tr.

vol. 7, p. 1795, lines 9-14. (GRIP FOF #74). Cited by Glass, Del. Tr. vol. 2, p. 414, lines 1-9. Olson, Bada, Sloane, Goad, Del. Tr. vol. 2, p. 430, lines 5-13.

62. Financial Assurance. Having adequate financial assurance in place for the worse case scenario is needed so the costs do not fall back on the taxpayers for cleanup of the site. Olson, Del. Tr. vol. 2, p. 405, lines 19-21.

63. Financial Assurance. Tyrone will only have this \$6.7 million, not a much larger figure, unavailable to invest in further expansion of the mine, pay salaries, or make charitable donations. Glass, Del. Tr. vol. 2, p. 414, lines 1-6.

#### Conclusions of Law

1. The Commission has jurisdiction to hear and decide this matter pursuant to NMSA 1978, Section 74-6-5(O) and 20.1.3 NMAC.
2. The Commission has jurisdiction over Petitioners pursuant to the Water Quality Act ("Act"), NMSA 1978, Section 74-6-1 to 74-16-17, 20.1.3 NMAC, and 20.6.2 NMAC.
3. The Commission may take action to accept, modify, or deny NMED's Supplemental Discharge Permit for Closure # 1341.
4. The Petitioners have "the burden of going forward with the evidence and of proving by a preponderance of the evidence the facts relied upon to justify the relief sought in the Petition." 20.1.3.200(H) NMAC.
5. The purpose of the Act is to abate and prevent water pollution. Bokum Res. Corp. v. N.M. Water Quality Control Comm'n, 93 N.M. 546, 555, 603 P.2d 285, 294 (1979).
6. Authority. The Act grants constituent agencies the authority to grant permits with site-specific conditions.

7. Authority. NMSA 1978, Sections 74-6-5(D), (M) specifically gives constituent agencies the authority to grant a permit, grant a permit subject to conditions, or deny a permit. Sloane, Del. Tr. vol. 1, p. 183, lines 11-14.
8. Authority. NMSA 1978, Section 74-6-5(O) specifically gives the Commission the authority to sustain, modify, or reverse the action of a constituent agency. Sloane, Del. Tr. vol. 1, p. 183, lines 14-16.
9. Authority. There has to be a place in the permitting process for a site-specific approach for those kinds of conditions that will ensure the overall intent of the Act is met. Norton, Del. Tr. vol. 1, p. 189, lines 1-9.
10. Authority. If a constituent agency, such as NMED, does not have the authority to impose site-specific conditions in a permit, it would not have any reasonable ability to meet the intention of the Act to protect groundwater. Norton, Del. Tr. vol. 1, p. 188, lines 20-25.
11. Authority. The Legislature could not have envisioned that a constituent agency, such as NMED, would be limited to either approving or disapproving the permit. Such an approach would give them no negotiating stance and no power to protect and abate water pollution. Olson, Del. Tr. vol. 1, p. 194, line 23 to p. 195, line 6.
12. Authority. A constituent agency's ability to grant permits with site-specific conditions is not bounded by certain other provisions of the Act.
13. Authority. NMSA 1978, Section 74-6-5(I) lists five specific conditions that have to do with those types of things that apply to any type of entity. They are not site-specific. Bada, Del. Tr. vol. 1, p. 184, lines 18-24.

14. Authority. NMSA 1978, Section 74-6-5(I) lists five conditions that the Legislature asserted were reasonable to apply to all facilities by regulation. Sloane, Del. Tr. vol. 1, p. 188, lines 3-5.
15. Authority. NMSA 1978, Section 74-6-5(I) lists measures that do not directly protect the water. These measures are dealing with record keeping and monitoring. Norton, Del. Tr. vol. 1, p. 189, lines 1-9.
16. Authority. NMSA 1978, Section 74-6-4(D) should be read to mean that the Commission cannot put into the regulations that an entity has to have a certain slope or pump at a certain rate. However, NMED can require certain specific things in a permit, which is different from a regulation. Goad, Del. Tr. vol. 1, p. 190, line 23 to p. 191, line 10.
17. Authority. The Legislature wanted the regulations to be intentionally broader because the Commission does not know what the circumstances are going to be for every site. Instead, the permit must be tailored to each site. Olson, Del. Tr. vol. 1, p. 191, line 24 to p. 192, line 4.
18. Authority. The Commission has interpreted the Act to mean that constituent agencies have authority to grant permits subject to site-specific conditions pursuant to NMSA 1978, Sections 74-6-5(D), (M) and this is not limited by NMSA 1978, Section 74-6-5(I). This motion passed with nine yes, one no and one abstention. Del. Tr. vol. 1, p. 224, lines 2-3.
19. Authority. If a permittee believes a constituent agency has listed an unreasonable condition in a permit, it has the remedy of appealing the condition to the Commission. Olson, Del. Tr. vol. 1, p. 204, lines 18-22.

20. Use. NMSA 1978, Section 74-6-5(E)(3) provides that the determination of the dischargers' effect on groundwater should be measured at any place of withdrawal of water for present or reasonably foreseeable future use.
21. Use. Based on the Act's overall intent, the Commission has interpreted this language to mean that if there is groundwater with less than 10,000 milligrams per liter of TDS, there is a rebuttable presumption that the water is protectable for present or reasonably foreseeable future use. Olson, Del. Tr. vol. 1, p. 275, lines 7-11. Olson, Brandvold, Norton, Del. Tr. vol. 2, p. 309, line 24 to p. 310, line 11. Sloane, Del. Tr. vol. 2, p. 313, lines 4-7. This motion passed unanimously. Del. Tr. vol. 2, p. 326, line 12.
22. Use. The permittee has the burden of proof to overcome this presumption. Goad, Del. Tr. vol. 1, p. 235, lines 7-12. Olson, Del. Tr. vol. 1, p. 275, lines 7-12.
23. Use. The presumption of present use can be overcome if there is a showing that there is no present use of the water.
24. Use. The presumption of reasonably foreseeable future use can be overcome if there is a showing, such as through a restrictive covenant on the property, that the water cannot be used in the future. Oral testimony that use is unlikely to happen does not overcome the presumption. Goad, Del. Tr. vol. 1, p. 234, lines 21-23, p. 235, lines 13-16. Olson, Del. Tr. vol. 1, p. 255, lines 18-22. Olson, Del. Tr. vol. 1, p. 274, line 23.
25. Use. If a party can overcome this presumption through the use of experts in positions, such as demographics and economics, that NMED does not have on its staff, NMED should hire outside contractors for these positions in order to conduct its analysis. Vigil, Del. Tr. vol. 2, p. 315, lines 6-10.

26. Present Use. Tyrone Witness Shelley was not persuasive because he admitted that the Fortuna Wells are located on the Tyrone Mine Facility and provide a potable water supply to the Tyrone Mine Facility. Shelley, Tr. vol. 1, p. 173, lines 14-20. (NMED FOF #137). Shelley, Tr. vol. 1, p. 141, lines 13-15. (NMED FOF #136). Cited by Norton, Del. Tr. Vol. 1, p. 261, lines 8-12.
27. Future Use. CEGEP Witness Ward was not persuasive because she did not state that there had been actual measures taken to make sure that no party will install wells in the future. Olson, Del. Tr. vol. 1, p. 271, line 21 to p. 272, line 11.
28. Future Use. Tyrone Witness Blandford was not persuasive because he admitted it was possible that there could be installation of wells adjacent to the piles in the future. Blandford, Tr. vol. 2, p. 321, lines 17-20. Cited by Goad, Del. Tr. vol. 1, p. 276, lines 6-24. Olson, Del. Tr. vol. 1, p. 277, lines 3-11.
29. Use. Based on the preponderance of the evidence, the Commission concluded there was a present and reasonably foreseeable future use of water at the Tyrone Mine Facility. This motion passed with ten yes and one no vote. Del. Tr. vol. 1, p. 295, lines 9-12.
30. Use. If Tyrone is unsatisfied with this conclusion, it has the remedy of pursuing an alternative abatement standard petition. Norton, Del. Tr. vol. 1, p. 257, lines 1-3.
31. Containment. NMSA 1978, Section 74-6-12(C) provides water quality regulations do not govern water pollution if its effects are confined entirely within the boundaries of property within which the water pollution occurs when the water does not combine with other waters.
32. Containment. Based on the preponderance of the evidence in Findings #17-25, the Commission concluded that NMSA 1978, Section 74-6-12(C) does not apply to the

Tyrone Mine Facility. Hutchinson, Del. Tr. vol. 2, p. 410, lines 9-14. The motion passed unanimously. Del. Tr. vol. 2, p. 362, line 11.

33. Conditions 4, 6 and 17. Based on the preponderance of the evidence in Findings #26-52, the Commission concluded that Conditions 4, 6, and 17 should remain as written subject to future change pending the outcome of the studies defined in Conditions # 75 through 89. The motion passed unanimously. Del. Tr. vol. 2, p. 435, line 5.
34. Surface Waters. NMSA 1978, Section 74-6-5(E)(3) provides that a discharge cannot contribute to water contamination levels in excess of any state or federal standard. Bada, Del. Tr. vol. 2, p. 444, line 22 to p. 445, line 1.
35. Surface Waters. 20.6.2.3109(C) NMAC provides that NMED's Secretary shall approve a discharge plan "provided that the other requirements of this Part are met." Glass, Brandvold, Goad, Del. Tr. vol. 2, p. 439, line 23 to p. 440, line 23.
36. Surface Waters. The Commission's long-standing interpretation of "Part" is that it means the entire section. Glass, Del. Tr. vol. 2, p. 440, lines 15-19. Section 2 is titled: "Ground and Surface Water Protection."
37. Surface Waters. 20.6.2.3109(H)(2) NMAC provides that NMED's Secretary shall not approve a proposed discharge plan if "any discharge that will cause any stream standard to be violated." Cited by Goad, Del. Tr. vol. 2, p. 441, lines 2-15.
38. Surface Waters. The Commission has interpreted all of this language to mean that groundwater discharge permits and abatement plans under the Act, Section 74-6-5(E) and regulations 20.6.2.3109(C) and (H)(2) NMAC must not cause or contribute to any violation of surface water standards. The motion passed unanimously. Del. Tr. vol. 2, p. 459, line 15.

39. **Surface Waters.** 20.6.4.7.RR NMAC provides a definition for “Surface waters of the State.” Olson, Del. Tr. vol. 2, p. 469, lines 11-14.
40. **Surface Waters.** Any pit lake that might form in the open pits at the Tyrone Mine would be a surface water of the State within the meaning of section 20.6.4.7(RR). (NMED COL #70). Cited by Olson, Del. Tr. vol. 2, p. 469, line 15.
41. **Surface Waters.** However, as long as the water in the open pit is an active part of the treatment pumping system, it is a sump. Brandvold, Lewis, Sloane, Hutchinson, Olson, Del. Tr. vol. 2, p. 463, lines 9-22.
42. **Surface Waters.** If the water in the open pit is a sump, it is not a surface water of the state within the meaning of section 20.6.4.7(RR). Hutchinson, Del. Tr. vol. 2, p. 463, lines 4-7.
43. **Surface Waters.** Based on the preponderance of the evidence in Findings #53-58, the Commission concluded that Conditions 15, 25, 26, 30, 32 and 34 should remain as written. The motion passed unanimously. Del. Tr. vol. 2, p. 465, line 2.
44. **Surface Waters.** Based on the preponderance of the evidence in Findings #53-58, the Commission concluded that Condition 22 is accepted if the fourth sentence is modified to read: “Tyrone shall ensure that water remaining in any open pit, that is not part of active waste collection and treatment system, meets applicable surface water quality standards pursuant to the State of New Mexico standards for interstate and intrastate streams.” The motion passed unanimously. Del. Tr. vol. 2, p. 479, line 9.
45. **Financial Assurance.** The Permit’s contested amount of Financial Assurance is reasonable because: (a) it is only an approximate 20 percent increase in the financial assurance costs, compared to Tyrone’s proposal; (b) the Permit conditions represent the

most cautious and water-protective positions based on the current information; and (c) it will serve as a motivator for Tyrone to get additional studies done and prove to NMED that less expensive alternatives are workable and protective. Glass, Del. Tr. vol. 2, p. 414, lines 10-25.

46. Financial Assurance. If Tyrone is unsatisfied with this conclusion, it has the remedy of conducting additional studies to prove to NMED that less expensive alternatives are acceptable and financial assurance could possibly be lowered.

Order

Based upon these Findings of Fact and Conclusions of Law, a quorum of the Commission renders the following decision and order:

IT IS THEREFORE ORDERED that:

1. The appealed conditions in the Supplemental Discharge Permit for Closure #1341 are Affirmed.
2. Except that NMED has thirty (30) days from receipt of this Order to modify Permit Condition #22 and submit a revised and signed copy to the Commission's Secretary. Upon receipt, the Commission counsel shall prepare a brief Final Order that will conclude this matter. This Final Order will include and be cumulative of this Partial Final Order, and any other orders, and the Final Order will presumably be the document actionable for any party's possible appeal to the Court of Appeals.

  
Jim Norton, Acting Chairperson  
On behalf of the Commission

6/10/04  
\_\_\_\_\_  
Date