

## BEFORE THE NEW MEXICO MINING COMMISSION

**IN THE MATTER OF:  
PROPOSED AMENDMENTS  
TO 19.10.3.303 AND 19.10.3.304 NMAC  
(MINIMAL IMPACT RULES)**

**No. 13-01 (R)**

### FINAL ORDER

**THIS MATTER** came before the New Mexico Mining Commission (the “Commission”) on the petition filed on March 25, 2013 by Mineris Vitae, LLC, to amend 19.10.3.303A and 19.10.3.304A NMAC of the Commission’s Regulations. Notice of the subject, time and place of hearing, the manner in which any interested persons could present their views, and the method by which the public could obtain copies of the proposed revisions was published and mailed as required by NMSA 1978, § 69-36-8(C). All interested persons and the general public were provided with a reasonable opportunity to present their views and to examine witnesses testifying at the hearing. The hearing was transcribed and copies of the hearing transcript are in the custody of the Energy, Minerals and Natural Resources Department, Mining and Minerals Division.

#### **Statement of Proceedings**

In accordance with the Commission’s Guidelines for Rulemaking, Mineris Vitae, LLC, Horizon Ag-Products, LP, and Miocene, LLC filed a Joint Notice of Intent to Present Testimony (“Joint NOI”) in support of their petition on August 16, 2013. The Joint NOI contained direct written testimony and exhibits. On the same date, Amigos Bravos filed a Notice of Intent (“NOI”) to Present Technical Testimony in opposition to Mineris Vitae’s petition. Amigos Bravos’ NOI contained certified copies of certain

administrative records created and/or maintained by the Mining and Minerals Division (“MMD”), as well as the curriculum vitae of its witnesses and certain documents related to their anticipated testimony.

The Commission heard Mineris Vitae’s Petition to Amend 19.10.3 NMAC (Minimal Impact Rule) on August 26, 27 and September 17, 2013. The hearing included direct examination of witnesses called by Mineris Vitae and Amigos Bravos, cross-examination, rebuttal testimony and closing statements. In addition, several members of the public provided public comment. At the conclusion of the hearing and upon deliberation, the Commission voted to amend and adopt the Proposed Rule, as amended. The Commission left the hearing record open until October 15, 2013 to allow Mineris Vitae, LP, and Amigos Bravos the opportunity to file proposed statements of reasons in support or against the Commission’s decision. On October 15, 2013, Mineris Vitae filed its Proposed Statement of Reasons and Amigos Bravos filed Proposed Findings of Fact, Conclusions of Law, and Decision.

### **Proposed Amendments**

The proposed revision to the Commission’s Minimal Impact Existing Mining Operations regulation, 19.10.3.303A NMAC (“Rule 303”), would increase the permissible acreage of disturbed land from ten (10) acres to sixty (60) acres for a minimal impact existing mining operation extracting humate if it also conducted expeditious reclamation. And, like the proposed revision for Rule 303, the proposed revision to the Commission’s Minimal Impact New Mining Operations, 19.10.3.304A NMAC (“Rule 304”), would increase the permissible acreage of disturbed land from ten (10) acres to

sixty (60) acres for a minimal impact new mining operation extracting humate if it also conducted expeditious reclamation. The proposed revisions introduced at the hearing read as follows:

### **19.10.3.303 MINIMAL IMPACT EXISTING MINING OPERATIONS**

A. An existing mining operation that continues mining operations will not be considered a minimal impact existing mining operation if it exceeds 10 acres of disturbed land, except that an existing mining operation extracting humate may exceed 10 acres but not 60 acres if its approved closeout plan or reclamation plan provides for expeditious reclamation of mined-out areas. Permanent roads and areas within the permit area that are reclaimed will not be counted as part of the acreage limitation for a minimal impact existing mining operation. Reclaimed, for this purpose, means all financial assurance has been released, except the amount held to re-establish vegetation pursuant to Subsection A of 19.10.12.1204 NMAC. Construction of roads and access ways, the types of disturbances, and the applicant's previous history of compliance with the Act and 19.10 NMAC will be major factors in the Director's determination of minimal impact status.

\* \* \* \* \*

### **19.10.3.304 MINIMAL IMPACT NEW MINING OPERATIONS**

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(the "Proposed Rule").

After considering the evidence presented at the hearing, for the reasons outlined below, the Commission elected by a vote of 7 to 1 to amend the Proposed Rule and adopt it as amended (the “Amended Rule”). The language of the Amended Rule is as follows:

**19.10.3.303 MINIMAL IMPACT EXISTING MINING OPERATIONS**

A. An existing mining operation that continues mining operations will not be considered a minimal impact existing mining operation if it exceeds 10 acres of disturbed land, except that an existing mining operation extracting humate may exceed 10 acres but not 20 acres if its approved closeout plan or reclamation plan provides for concurrent reclamation of mined-out areas. Permanent roads and areas within the permit area that are reclaimed will not be counted as part of the acreage limitation for a minimal impact existing mining operation. Reclaimed, for this purpose, means all financial assurance has been released, except the amount held to re-establish vegetation pursuant to Subsection A of 19.10.12.1204 NMAC. Construction of roads and access ways, the types of disturbances, and the applicant's previous history of compliance with the Act and 19.10 NMAC will be major factors in the Director's determination of minimal impact status.

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**19.10.3.304 MINIMAL IMPACT NEW MINING OPERATIONS**

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### Statement of Reasons

Upon review of the hearing transcripts and the evidence admitted at the hearing, as well the proposed statement of reasons submitted by the parties, the Commission finds that:

1. Humate is an organic material formed as a result of the slow decay of prehistoric plant and animal organisms. Tr. Vol. 1 at 188; Petitioner's Exhibit 30.
2. Humate is a non-toxic, non-carcinogenic, non-mutagenic material that is ubiquitous to the natural environment and not dangerous to human health. Tr. Vol. 3 at 615-616; Petitioner's Exhibit 39.
3. Approximately 80,000 tons of humate are mined in New Mexico each year. Tr. Vol. 2 at 318.
4. Humate accounts for 0.0016 percent of all of the materials mined in New Mexico. Petitioner's Exhibit 23.
5. Humate currently is being utilized as a soil amendment and partial substitute for chemical-based fertilizers. It also potentially may be used in agriculture, gardening, golf course maintenance, concrete coloration, and nutraceuticals. Tr. Vol. 1 at 115.
6. The benefits of humate use can include improved water utilization, improved nitrogen and potassium intake in plants, increased soil fertility and plant growth, and increased crop yields. Tr. Vol. 2 at 288-289; Tr. Vol. 3 at 659-661.

7. The nature of humate and its differences from other mined commodities are relevant factors in determining whether to allow mine operators extracting humate to disturb more than ten (10) acres of land under a minimal impact mining permit. Tr. Vol. 3 at 631.
8. The exploration, development and production of humate are similar to the exploration, development and production processes of industrial products such as silica sand, gravel, perlite, vermiculite, and pumice, all of which are commonly found in near-surface deposits. Tr. Vol. 1 at 185-186.
9. Humate is excavated through shallow pit excavation techniques, using front-end loaders, bulldozers, and backhoes. Tr. Vol. 1 at 185; 215; Tr. Vol. 2 at 502.
10. Humate deposits can vary significantly over any given geographic area. Tr. Vol. 1 at 1929; 205-206.
11. Because the quality of humate tends to decrease with depth, deep pits typical of other types of mining operations are not employed with humate mining. Tr. Vol. 1 at 131.
12. The humate mining process does not require drilling or blasting, or the use of large mining equipment, leach solutions or other caustic materials introduced from off-site. Tr. Vol. 3 at 593-594; Tr. Vol. 1 at 185.
13. Humate mines of any size pose a potential risk to wildlife. Tr. Vol. 2 at 467.
14. A site-specific assessment is necessary before it is possible to conclude that a proposed mining operation will have environmental impacts. Id.

15. Neither the Mining Act nor the Mining Act Rules require site-specific surveys of wildlife occurring on or adjacent to a proposed mine site. Tr. Vol. 2 at 461.
16. The Department of Game & Fish may provide comments or raise concerns about the potential impacts to wildlife at a proposed minimal impact mine site during the permit application process. Tr. Vol. 2 at 469-470, 476-477.
17. When run properly, humate mines may be operated as “minimal impact” mines, as contemplated by NMSA 1978, § 69-36-7(L), and defined in 19.10.3 NMAC. Tr. Vol. 1 at 136-139, 142-144.
18. Amigos Bravos introduced documents it obtained from MMD pertaining to the Clodbuster Mine, a humate mine located in Sandoval County, New Mexico and operated by Agronics, Inc. Amigos Bravos Exhibit 3, CB0007-CB0039.
19. The documents indicate that in March 1999, MMD issued a notice of violation to Agronics, Inc. for operating the Clodbuster Mine without an approved permit and closeout plan, as required by Section 501.C of the Mining Act Rules (now codified at 19.10.5.501.C NMAC) for existing mining operations. Amigos Bravos Exhibit 3, CB0009-CB0012.
20. The documents indicate that in January 2000 MMD issued a Cessation Order for the failure of Agronics to abate the notice of violation, and as of March 16, 2012 a court order prohibiting the operation of the Clodbuster Mine was still in effect. Amigos Bravos Exhibit 3, CB0023.
21. The area disturbed by the Clodbuster Mine was approximately 13 acres. Tr. Vol. 2, at 505.

22. The Clodbuster Mine is an example of a mining operation that caused environmental impacts. Tr. Vol. 2 at 363, 419, 503.
23. The Clodbuster Mine involved an existing mining operation and a mine operator who repeatedly refused to respond to MMD, obtain a permit, or otherwise come into compliance with the requirements of the Mining Act or the Mining Act Rules. Amigos Bravos Exhibit 3, CB0009-CB0012.
24. Amigos Bravos introduced documents it obtained from MMD pertaining to the Mineris Vitae mine. Amigos Bravos Exhibit 3, MV0001-MV0042.
25. In June 2012, MMD issued a notice of violation to Petitioner Mineris Vitae, LLC for conducting mining without a permit. Amigos Bravos Exhibit 3, MV0037-MV0042.
26. The notice of violation identified approximately 13.6 acres of disturbance. Id.
27. Under the heading “Remedial Action Required/Abatement”, the notice of violations directed Mineris Vitae to (1) submit a minimal impact new mining permit application; (2) pay the penalty associated with the notice of violation; (3) submit interim financial assurance in the amount of \$46,980, minus \$25,000 credit for bond posted with the State Land Office, for a deficit amount of \$21,980 payable to MMD; (4) provide for MMD approval a plan and schedule to reclaim portions of the area to reduce the mining disturbance to below 10 acres within the proposed mining area; and (5) complete reclamation pursuant to the approved plan. Id.

28. By letter dated October 2, 2012, MMD notified Mineris Vitae that it “had conducted an inspection of the reclamation on September 14, 2012 and found the reclamation to be satisfactory and compliant with the requirements of the New Mexico Mining Act and Rules. After reviewing the available information, MMD considers the Notice of Violation identification number N12-18-05 adequately abated at this time. As such, the permitting process related to Part 3 Minimal Impact Mining Operation application for the site can proceed.” Amigos Bravos Exhibit 3, MV0025; Tr. Vol. 1 at 58.
29. Petitioner Mineris Vitae LLC has conducted exploration and development of humate resources in McKinley County, New Mexico since July 2012, utilizing what it believes to be best management practices. In accordance with these best management practices, Petitioner sets aside certain areas within its permitted 10-acre mine site for plant and grubbing material, top soils, overburden, as well as for administrative offices and roads. Tr. Vol. 1 at 34-35; 76; 126-129; Petitioner’s Exhibits 24 and 25.
30. Based on its experience with humate surface extraction, Petitioner believes the current 10-acre limit on disturbed land under Rule 303 and 304 is insufficient to conduct surface extraction operations in an efficient manner. Tr. Vol. 1 at 35; 85-87.
31. The current 10-acre limit on disturbed lands under Rule 303 and 304 does not allow operators like Petitioner to develop the capacity to provide clients with a

reliable source of material over periods of time. Tr. Vol. 1 at 45-46; 75-76; see also, Tr. Vol. 1 at 116.

32. Currently, humate mining operators are able to deplete the resources within their designated mine sites and reclaim the same sites within a period of less than one year. Tr. Vol. 2 at 295.
33. Petitioner's annual average demand for humate production, not including any projections for industry growth, is approximately 20,000 tons of humate material, the equivalent of a total of 60 acres of mineable area. Tr. Vol. 1 at 221.
34. Petitioner's average annual demand for humate production may be met through six ten-acre minimal impact permits, three twenty-acre minimal impact permits, two thirty-acre minimal impact permits or one sixty-acre permit per year. See Petitioner's Exhibit 38.
35. As areas of permitted disturbance for minimal impact mining operations become larger, the potential for additional environmental impacts and the need to regulate these more stringently also increase. Tr. Vol. 2 at 494-495.
36. The relevant issue is the amount of acreage that is disturbed: the greater the amount of disturbance, the more potential there is for environmental liability. *Id.*
37. During sworn public comment, Fernando Martínez, the Director of MMD, stated that increasing the maximum allowable areas of permitted disturbances for minimal impact humate mining operations will require greater administrative scrutiny when a permit application is made, but also may result in a decreased

administrative burden in the long term due to the smaller number of permits issued. Tr. Vol. 3 at 681-682.

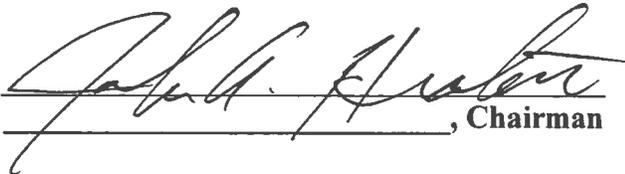
38. Mr. Martínez stated that he expects the amount of financial assurance required will increase as the maximum allowable areas of permitted disturbances for minimal impact humate mining operations increases. Tr. Vol. 3 at 683.
39. Mr. Martínez also stated that increasing the acreage of permitted disturbance areas for minimal impact humate mining operations will result in fewer permit mining applications and in more efficient and effective administrative oversight. Tr. Vol. 3 at 681-682.
40. In view of the fact that since the adoption of the Mining Act and the Commission's regulations MMD has not issued any regular mining permits under 19.10.6 NMAC ("Part 6"), operators like Petitioner are discouraged from applying for a Part 6 permit due to the cost and indefinite amount of time it would take to obtain such a permit. Tr. Vol. 1 at 63-64; 88-89.
41. Concurrent or contemporaneous reclamation means trying to perform reclamation at the earliest possible time during mining operations to avoid creating a larger disturbance area. Tr. Vol. 2 at 499-500.
42. Concurrent reclamation optimizes the amount of material that can be extracted while minimizing the disturbed area. Tr. Vol. 2 at 502.
43. According to the evidence presented, the word "concurrent" is a term of art that is preferable to and more widely understood than "expeditious" within the mining industry. Tr. Vol. 3 at 651-652.

### Conclusion

1. After hearing the testimony and considering the evidence and arguments presented by all parties, the Commission finds that amending the Proposed Rule is more appropriate than denying it. Tr. Vol. 3 at 745-746.
2. The Commission finds that the language of the Amended Rule strikes an appropriate balance between the economic, environmental, natural resource optimization, and permitting efficiency concerns of the humate mining industry and the public. Id.
3. Balancing the economic and environmental risks of additional impacts that may be caused by allowing up to 60 acres of permitted disturbance for minimal impact mining operations, the Commission finds that the Proposed Rule is not an appropriate solution to meet industry demand. Tr. Vol. 3 at 740-741, 743.
4. Increasing the acreage of permitted disturbance areas for minimal impact humate mining operations from 10 acres to 20 acres would allow humate mine operators like Petitioner to employ better management, extraction and reclamation practices while meeting production demand. Tr. Vol.3 at 782-783, 785-786
5. Increasing the maximum allowable minimal impact mining acreage for humate mining operations from 10 acres to 20 acres strikes a satisfactory balance between the potential increased environmental impacts associated with larger minimum impact mines and the overall benefits afforded by more efficient and productive humate operations.

6. Increasing the maximum allowable minimal impact mining acreage for humate mining operations from 10 acres to 20 acres will not alter current Rule 303 or Rule 304 requirements regarding closeout plans; reclamation; financial assurance; notice to and solicitation of comments from the Environment Department, the Department of Game & Fish, the State Forestry Division, the State Historic Preservation Office, the State Engineer, and the appropriate state or federal land administrator, if the operation is located on state or federal land; and a written determination from Secretary of Environment Department that the permit applicant has demonstrated that the activities to be permitted or authorized will be expected to achieve compliance with all applicable air, water quality and other environmental standards if permitted activities are carried out as described in the closeout plan. Tr. Vol. 3 at 739.
7. The Commission notes that, in reaching its decision, it is bound by the factors delineated in Section 69-36-7(A)(1). Therefore, the Commission specifically finds that: (1) humate mining has minimal impacts on the environment; (2) the environmental effects of mining humate will improve with increased acreage; (3) the economics of humate mining necessitate increased acreage in order to have a viable humate industry in New Mexico; and (4) the Amended Rule is consistent with the permitting requirements for minimal impact mines in accordance with Section 69-36-7(L).
8. The amendments approved by the Commission on September 17, 2013 are attached hereto as Exhibit A and incorporated by reference.

**NEW MEXICO MINING COMMISSION**

By: , Chairman

Dated: February 12, 2014

**EXHIBIT A**

**19.10.3.303 MINIMAL IMPACT EXISTING MINING OPERATIONS**

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