State of New Mexico Energy, Minerals and Natural Resources Department

Susana Martinez

Governor

David Martin Cabinet Secretary

Fernando Martinez, Director Mining and Minerals Division WISTON OF THE PARTY OF THE PART

Tony Delfin

Deputy Cabinet Secretary

7012 0470 0000 0880 6580

CERTIFIED MAIL - RETURN RECEIPT REQUEST

June 7, 2016

Mr. Allen Norris, Mine Manager Dicaperl Minerals Corp., El Grande Mine PO Box 1436 Socorro, NM 87801

RE: Site Wide Closeout Plan Update Application Response, Permit Modification 16-1, Permit No. TA002RE, El Grande Mine

Dear Mr. Norris,

The New Mexico Mining and Minerals Division ("MMD") received a Permit Modification Application Response dated February 5, 2016 ("Site Wide Application Response") addressing two MMD Comment letters, dated May 4, 2015 and October 23, 2015, regarding El Grande's application to modify Permit No. TA002RE dated December 23, 2014 ("Application"). Representatives from MMD and Dicaperl met on November 12, 2015 at MMD's Santa Fe offices and on November 13, 2015 at the El Grande mine site. During these meetings an agreement was reached to process the proposed changes to Dump 1Ea under Modification 14-1 and to process the site wide updated closeout plan as a separate modification or revision. The Site Wide Application Response submitted by Dicaperl on February 5, 2016 provided information for MMD approval regarding: 1) updates to the reclamation plan for the Mine Site, and 2) updates to the reclamation cost estimate for Financial Assurance for the mine site.

General Comments

The purpose of this letter is to acknowledge Dicaperl's responses to MMD's May 4 and October 23, 2015 comment letters and request additional information regarding the Site Wide Closeout Plan Update Application Response dated February 5, 2016. Comments that related specifically to Dump 1Ea, Modification 14-1, were addressed in correspondence specific to Dump 1Ea in a letter dated March 9, 2016. Comments related to the Site Wide Modification 16-1 are addressed below.

MMD has reviewed the February 5, 2016 Site Wide Application Response received from Dicaperl Minerals for the El Grande Mine, and provides the following comments. For continuity and clarity, the numbering below corresponds to the numbering presented in MMD's original comment letter dated May 4, 2015 for comments 1-20, and comment letter dated October 23, 2015 for comments 21-25.

RE:Site Wide Closeout Plan Update Application Response, Permit Modification16-1, Permit No. TA002RE, El Grande Mine
June 7, 2016
Page 2

MMD Specific Comments (to Dicaperl's Application)

- 1. Dicaperl's response is acceptable to MMD (addressed in July 4, 2015 Response).
- 2. Dicaperl's response is acceptable to MMD (addressed in July 4, 2015 Response).
- 3. Dicaperl's response is acceptable to MMD (addressed in February 5, 2016 Response).
- 4. Dicaperl's response is acceptable to MMD (addressed in February 5, 2016 Application Response).
- 5. Dicaperl's response is acceptable to MMD (addressed in February 5, 2016 Application Response).
- 6. Dicaperl's response is acceptable to MMD (addressed in February 5, 2016 Application Response). Please see comment 11 regarding Dicaperl's proposed test plot study.
- 7.
 a. Dicaperl's response is acceptable to MMD (addressed in February 5, 2016 Application Response).
 - b. Dicaperl's response is acceptable to MMD (addressed in February 5, 2016 Application Response).

As a permit condition of Modification 16-1 to Permit TA002RE, MMD will require that a Quality Assurance/Quality Control (QA/QC) plan be submitted to MMD for approval a minimum of 6 months prior to reclamation of the waste dumps to assure a minimum of 12 inches of Obsidian-Rich Perlite covered with a minimum of 12 inches of Raton rock outcrop-Orejas material is placed over all waste dumps containing Super Sacks.

As a condition of Modification 16-1 to Permit TA002RE, MMD will require that the chemical and textural analysis of the soil materials be submitted no later than 60 days after approval of Modification 16-1 to Permit TA002RE.

- c. Dicaperl's response is acceptable to MMD (addressed in February 5, 2016 Application Response).
- d. Dicaperl's response is acceptable to MMD (addressed in July 4, 2015 Application Response).
- 8. Dicaperl's response is acceptable to MMD (addressed in July 4, 2015 Application Response).
- 9. Dicaperl's response is acceptable to MMD (addressed in February 5, 2016 Application Response).

- 10. Dicaperl's response is acceptable to MMD (addressed in February 5, 2016 Application Response). Please see comment 7b.
- 11. Dicaperl's response is acceptable to MMD (addressed in February 5, 2016 Application Response).

As a condition of Modification 16-1 to Permit TA002RE, MMD will require Dicaperl to submit a detailed work plan for the 3A Exploration Area Test Plot Study to assess vegetation success using combinations of obsidian-rich perlite, Raton-rock outcrop-Orejas cover, and amendments. Dicaperl shall submit the work plan to MMD for approval no later than 60 days after approval of Modification 16-1 to Permit TA002RE and shall construct the test plots within 1 year of approval of Modification 16-1 to permit TA002RE.

- 12. Dicaperl's response is acceptable to MMD (addressed in February 5, 2016 Application Response).
- 13. Dicaperl's response is acceptable to MMD (addressed in February 5, 2016 Application Response). Please see comment 7b.
- 14. Dicaperl's response is acceptable to MMD (addressed in February 5, 2016 Application Response). Please see comment 7b, and comment 11.
- 15. Dicaperl's response is acceptable to MMD (addressed in February 5, 2016 Application Response).
- 16. Please update the Buildings and Facilities demolition plan and reclamation schedule and cost estimate based on the plan provided to MMD via e-mail on May 18, 2016.
- 17. Dicaperl's response is acceptable to MMD (addressed in February 5, 2016 Application Response). MMD will inspect the proposed reference areas prior to approval of Modification 16-1.
- 18. Dicaperl's response is acceptable to MMD (addressed in February 5, 2016 Application Response).

Please include the reclamation costs for earth work and revegetation for Dump areas 1A, 1B, 1C, and 1D and Exploration areas 3B, 3C, 3D, 3E, and 3F. Dicaperl states that "Request for bond release for certain areas will be included under separate cover."

NMAC 19.10.12.1204 states:

"The permittee shall maintain the financial assurance in effect, except as reduced pursuant to 19.10.12 NMAC, until such time as the director releases the financial

RE: Site Wide Closeout Plan Update Application Response, Permit Modification16-1, Permit No. TA002RE, El Grande Mine

June 7, 2016 Page 4

assurance pursuant to 19.10.12.1210 NMAC. For areas to be revegetated, the director shall retain the amount of financial assurance necessary for a third party to re-establish vegetation for a period of 12 years after the last year of augmented seeding, fertilizing, or irrigation, unless a post-mining land use is approved by the director that does not require revegetation. Interseeding to establish diversity shall not be considered augmented seeding. Interseeding may not be performed within the last three years of the liability period."

MMD requires FA to be maintained on all reclaimed areas until financial assurance has been released as required by NMAC 19.10.12.1210. Even though the financial assurance for the update site-wide closeout plan must include areas that have previously been reclaimed at the El Grande Mine, the release of financial assurance has been processed for other mines in a timely fashion (i.e., within 90 days). In addition, recent changes to the Mining Act Rules allows mine operators to apply for financial assurance release more than once per calendar year.

Cost Estimate Comments

19.

- a. Dicaperl's response is acceptable to MMD (addressed in February 5, 2016 Application Response).
- b. Please provide unit cost and references for labor.

Labor Rates and Equipment Costs were provided in the July 4, 2015 Dicaperl Minerals Corp El Grande Mine Permit No. TA002RE Permit modification Application Response. However, the Closure Cost Estimate submitted in the February 5, 2016 Application Response do not appear to use the same rates. Please provide the Labor Rates and Equipment Cost references for the revised Cost Estimate and ensure that standard labor rates and equipment costs for a 3rd party contractor are used in all calculations.

There are large discrepancies between the hours reported in the "Time to Complete Reclamation" tables submitted on July 4, 2015 and February 5, 2016. Additionally, the total costs reported for completing the work appears to be inversely related to the required number of hours reported when comparing the July 4, 2015 and February 5, 2016 Cost Estimates. Please provide the basis for the estimated hours required to complete reclamation work.

In the February 5, 2016 Application Response, the estimated Times to Complete Reclamation reported in the table "El Grande reclamation Haul Distance & Time to Complete" in response to MMD comment #19 (pg. 15) differ substantially from the Reclamation Schedule provided in Appendix D. Please

revise the Closeout Plan and Cost Estimate to ensure that the time and cost estimates are congruent.

El Grande Reclamation Haul Distance & Time to Complete			Standard Reclamation Cost Estimator		El Grande Reclamation Schedule
	Time to Complete Reclamation July 4, 2015	Time to Complete Reclamation Feb 5, 2016	SRCE July 4, 2015	SRCE Feb 5, 2016	Appendix D Feb, 5 2016
Exploration	~ 41 hours	~ 3 months (360 hours)	41 Total dozer hours	372 Total dozer hours	8 months
Roads	~ 10 hours	~ 3 weeks (90 hours)	10 hours	9 hours	
Waste Dumps	~ 372 hours	~ 1 year (1440 hours)	394 Total dozer, fleet, ripping hours	204 Total dozer, fleet, ripping hours	
Quarry	~ 130 hours	~ 1 year (1440 hours)	130 dozer, fleet hours	78 dozer, fleet hours	
Demolition of Foundation & Buildings	~ 45 hours	~ 8 months (960 hours)	?	?	4 months

- c. Dicaperl's response is acceptable to MMD (addressed in February 5, 2016 Application Response).
- d. Please revise the Closure Cost Estimate to include materials costs for seeding and mulching, if applicable, for the entire reclamation area. Seed Mix "User Mix 1" does not have a cost associated with it. Also please ensure that labor and equipment costs associated with revegetation are included.

Please revise the reclamation monitoring costs to include all areas and provide the spreadsheet(s) supporting these calculations.

- e. Dicaperl's response is acceptable to MMD (addressed in February 5, 2016 Application Response).
- f. Dicaperl's response is acceptable to MMD (addressed in February 5, 2016 Application Response).
- 20. Dicaperl's response is acceptable to MMD (addressed in July 4, 2015 Response).

Additional MMD Comments (to Dicaperl's Response)

RE:Site Wide Closeout Plan Update Application Response, Permit Modification16-1, Permit No. TA002RE, El Grande Mine
June 7, 2016
Page 6

- 21. In the February 5, 2016 Application Response, the estimated Times to Complete Reclamation reported in the table " El Grande reclamation Haul Distance & Time to Complete" in response to MMD comment #19 (pg. 15) differ substantially from the Reclamation Schedule provided in Appendix D (refer table in comment 19c). Please explain these discrepancies.
- 22. MMD received notification on May 18, 2016 that Dicaperl would begin demolition of the Mill facility on May 23, 2016. The scope of work includes removal of items that will be reused at other facilities, removal of infrastructure for salvage and recycle value, removal of siding and roofing, and removal of support structure down to the top of the silos. Please re-calculate the facilities demolition, removal, and revegetation costs to reflect this work if necessary.

In the July 4, 2015 Application Response the Closeout Costs related to facility demolition and revegetation was \$129,777.00, and facilities removal was \$191,761.00 for a total cost related to facilities of \$321,493.00. In the February 5, 2016 of \$49,198.00 for facilities demo and removal (\$44,135.00) and earthwork and revegetation (\$5,063.00). This is a difference of \$272,295.00. Please recalculate the cost of demolition, removal, earthwork, and revegetation of the El Grande mill and attendant facilities. Please include labor rates, equipment costs, SRCE Closure Cost Spreadsheets and other supporting documentation for the updated calculation.

Please adjust the Construction Management & Support calculations to reflect the estimated 12 months for reclamation or explain the duration of 6 months used in the calculation. Please ensure that all calculations for reclamation costs, estimates for time to complete reclamation activities, and the reclamation schedule are in concurrence.

In addition please address the following agency comments:

- 23. Office of the State Engineer. Please address agency comments provided for Modification 16-1. Please see attached OSE review of Dicaperl's response dated April 29, 2016, and original OSE comments dated March 9, 2015.
- 24. New Mexico Environment Department Air Quality Bureau. Dicaperl's response is acceptable to the agency (addressed in February 5, 2016 Application Response).
- 25. Department of Cultural Affairs Historic Preservation Division. *Dicaperl's response is acceptable to the agency (addressed in February 5, 2016 Application Response).*

RE: Site Wide Closeout Plan Update Application Response, Permit Modification 16-1, Permit No.

TA002RE, El Grande Mine

June 7, 2016

Page 7

Please contact me at (505) 476-3425 or at davena.crosley@state.nm.us if you have any questions.

Sincerely,

Davera Crosley Davena Crosley - Permit Lead

Reclamation Biologist

Mining Act Reclamation Program ("MARP")

Enclosures: The Navajo Nation comment letter

The Hopi Tribe comment letter

Department of Cultural Affairs Historic Preservation Division comment letter

New Mexico Environment Department comment letter New Mexico Department of Game & Fish comment letter

New Mexico Office of the State Engineer comment letter 3/9/2015 New Mexico Office of the State Engineer comment letter 4/29/2016

New Mexico Environment Department Air Quality Bureau comment letter

Rocky Torgrimson, Operations Manager, Dicalite Minerals Corporation cc:

Holland Shepherd, Manager, MARP

David Ohori, Senior Reclamation Specialist, MARP Hillary Falgiano, Project Manager, CDM Smith

Mine File (TA002RE)



Russell Begaye Jonathan Nez

May 2, 2016



Fernando Martinez, Director Mining and Minerals Division State of New Mexico Energy, Minerals and Natural Resources Department 1220 South St. Francis Drive Santa Fe, New Mexico 87505

RE: APPLICATION FOR MODIFICATION 16-1, EL GRANDE MINE, DICAPERL MINERALS CORP., PERMIT NO. TA002RE

Dear Mr. Martinez,

The Navajo Nation Historic Preservation Department, hereafter (HPD) is in receipt of consultation pursuant to 36 CFR 800.16(y) for the proposed mine closeout plan and to permit the disposal of perlite waste originating from the Dicaperl Socorro Mine located in Socorro County, New Mexico at the El Grande Mine in Tre Piedras, in Taos County, New Mexico.

Traditional Culture Program Staff reviewed the informational documents, and have provided the comments herein, HPD has concluded that the proposed undertaking for the identification of traditional cultural or religious properties to take into consideration for the updated closeout plan, is within the vicinity of Traditional Cultural Properties and places of cultural significance to the Navajo people. The national forest lands have ceremonial and oral history tied to the landscape and is considered a traditional cultural property. Please be advised with conducting the final determinations of this project initiative.

If the proposed project inadvertently discovers Traditional Cultural Properties such as habitation sites, plant gathering areas, human remains or objects of cultural patrimony, HPD request that we be notified in accordance with 36 CFR 800 as a Consulting Party, and per the Native American Graves Protection and Repatriation Act (NAGPRA). (The Navajo Nation claims cultural affiliation to all Anaasazi people (from the Archaic to Pueblo IV periods) of the southwest. The Navajo Nation makes this claim through Navajo oral history and ceremonial history, which has been documented as early as 1880 and has been taught from generation to generation).

The Navajo Nation HPD appreciates State of New Mexico's consultation efforts regarding this undertaking. Should you have any additional concerns and/or questions do not hesitate to contact our department at 928-871-7198 or (928)871-7153.

Historic Preservation & Heritage Management Department P.O.B. 4950 Window Rock Arizona 86515 PH:(928)871-7198 Fax:(928)871-7881



The Navajo Nation

RUSSELL BEGAYE PRISIDENT
JONATHAN NEZ MICH PRISIDENT

Fernando Martinez, Director RE: TA002RE May 2, 2016 Page 2 of 2

Sincerely,

Melinda Arviso-Ciocco

TCP File: 16-032

Melinda Arviso-Ciocco Navajo Cultural Specialist Traditional Culture Program Historic Preservation Department Concurred,

Ora Marek-Mertines, PhD Tribal Historic Preservation Officer Historic Preservation Department Division of Natural Resources



APR 2 6 2016

MINING & MINERALS DIVISION

Herman G. Honanie CHAIRMAN

Alfred Lomahquahu Jr. VICE-CHAIRMAN

April 18, 2016

Fernando Martinez, Director, Mining and Minerals Division

Attention: Davena Crosley

New Mexico Energy, Minerals, and Natural Resources Department

1220 South St. Francis Drive Santa Fe, New Mexico 87505

Dear Mr. Martinez,

This letter is in response to your two correspondences dated April 4, 2016, regarding (1) an Application for Modification 16-1 for Rocky Mountain Mine near Espanola from CR Minerals Company LLC, Permit No. RA004RE, to change the close-out plan, and (2) an Application for Modification 16-1 for El Grande Mine near Tres Piedras from Discaperl Minerals Corporation, Permit No. TA002RE, to change the close-out plan and permit the disposal of perlite waste originating from the Dicaperl Socorro Mine at the El Grande Mine.

The Hopi Tribe claims cultural affiliation to prehistoric cultural groups in New Mexico. The Hopi Cultural Preservation Office supports identification and avoidance of prehistoric archaeological sites and Traditional Cultural Properties, and we consider the archaeological sites that are habitations of our ancestors to be "footprints" and Hopi Traditional Cultural Properties. Therefore, we appreciate the New Mexico Energy, Minerals, and Natural Resources Department, Mining and Minerals Division (MMD)'s continuing solicitation of our input and your efforts to address our concerns.

The Hopi Cultural Preservation Office is interested in consulting on any proposal in New Mexico with the potential to adversely affect prehistoric sites. In the enclosed letter dated February 24, 2015, regarding Application for Modification 14-1 for the El Grande Mine, Dicaperl Minerals Corps. Permit No. TA002RE, we stated we have previously conveyed our recommendation that the New Mexico Energy, Minerals, and Natural Resources Department require cultural resource surveys of the project areas it permits, so that it can determine if the undertakings it permits may adversely affect cultural resources significant to the State of New Mexico, the United States, and the Hopi Tribe.

Your correspondences state that you are offering to consult with us

to identify traditional cultural or religious properties that you would like MMD to take into consideration before making a final determination on the close out plan...We would like to obtain more specific information on the location of these traditional properties. This information is important to us to evaluate potential impacts and work toward developing avoidance, or protection, options.

Hopi Traditional Cultural Properties include mountains such as the San Francisco Peaks and Mount Taylor, our ancestral archaeological sites, artifacts and human remains, and rockpiles that may be shrines, offering places, and trail markers. Therefore, when requested to identify traditional cultural or religious properties that we would like to taken into consideration during government-to government consultations, we routinely request a copy of the cultural resources survey of the area of potential effect. This more specific information on the location of historic properties is important to us to identify sites and potential impacts. Without cultural resources surveys or a traditional cultural properties survey we are unable to determine if proposals may affect cultural resources significant to the Hopi Tribe.

Therefore, in response to your request on how we would like to proceed with consultations, in cases where MMD is permitting mining operations on private land where MMD asserts cultural resources surveys are not required of proponents, we hereby will request field trips to the project areas, sponsored by MMD and the project proponents, to identify traditional cultural or religious properties that we would like MMD to take into consideration before making determinations.

7. Kuwanwisiwma, Director Cultural Preservation Office

Should you have any questions or need additional information, please contact Terry Morgart at tmorgart@hopi.nsn.us. Thank again you for your consideration.

Enclosures: February 24, 2015 letter

xc: New Mexico State Historic Preservation Office



Herman G. Honanie CHAIRMAN

Alfred Lomahquahu Jr. VICE-CHAIRMAN

February 24, 2015

Fernando Martinez, Director, Mining and Minerals Division Attention: David Ohori New Mexico Energy, Minerals, and Natural Resources Department 1220 South St. Francis Drive Santa Fe, New Mexico 87505

Re: Application for Modification 14-1, El Grande Mine, Taos County Dicaperl Minerals Corps. Permit No. TA002RE

Dear Mr. Martinez,

This letter is in response to your correspondence dated February 10, 2015, regarding a submittal from Dicaperl Minerals Corps. to update the El Grande Mine closeout plan. The Hopi Tribe claims cultural affiliation to earlier identifiable cultural groups in New Mexico. The Hopi Cultural Preservation Office supports identification and avoidance of prehistoric archaeological sites and Traditional Cultural Properties, and we consider the archaeological sites that are habitations of our ancestors to be "footprints" and Hopi Traditional Cultural Properties. Therefore, we appreciate your continuing solicitation of our input and your efforts to address our concerns.

The Hopi Cultural Preservation Office has stated that we are interested in consulting on any proposal in New Mexico with the potential to adversely affect prehistoric sites. We are not aware of any Hopi Traditional Cultural Properties in this project area. However, we have previously conveyed our recommendation that the New Mexico Energy, Minerals, and Natural Resources Department require cultural resource surveys of the project areas it permits, so that it can determine if the undertakings it permits may adversely affect cultural resources significant to the State of New Mexico, the United States, and the Hopi Tribe.

In addition, we recommend that if any cultural features or deposits are encountered during project activities, these activities must be discontinued in the immediate area of the remains, and the State Historic Preservation Office must be consulted to evaluate their nature and significance. If any Native American human remains or funerary objects are discovered during construction they shall be immediately reported as required by law.

Should you have any questions or need additional information, please contact Terry Morgart at tmorgart@hopi.nsn.us. Thank again you for your consideration.

Respectfully,

151

Leigh J. Kuwanwisiwma, Director Hopi Cultural Preservation Office

xc: New Mexico State Historic Preservation Office



STATE OF NEW MEXICO

DEPARTMENT OF CULTURAL AFFAIRS HISTORIC PRESERVATION DIVISION

BATAAN MEMORIAL BUILDING 407 GALISTEO STREET, SUITE 236 SANTA FE, NEW MEXICO 87501 PHONE (505) 827-6320 FAX (505) 827-6338



May 3, 2016

Davena E. Crosley Mining Act Reclamation Program Mining and Minerals Division 1220 South St. Francis Drive Santa Fe, NM 87505

Re: Request for Comments on Updated Closeout Plan, Modification 16-1, Permit No. TA002RE, El Grande Mine

Dear Ms. Crosley: Land to All Control of the Contro

This letter is in response to the above referenced permit modification and updated closeout plan, received at the Historic Preservation Division (HPD) on April 7, 2015. It is my understanding that the permit modification will cover an addition of the disposal area.

In accordance with rule 19.10.5.506 NMAC, I reviewed our records to determine if cemeteries, burial grounds or cultural resources listed on the State Register of Cultural Properties or the National Register of Historic Places exist within or near the permit area. Our records show that there are no cultural resources listed on the National Register or State Register within or near the proposed permit area and no known cemeteries or burial grounds.

Although there are no known archaeological sites within the project area, an archaeological survey in advance of a fiber optic line within one mile of the mine identified several archaeological sites. Because archaeological sites have been identified nearby, there is a potential for unidentified archaeological sites to exist in areas that will see expansion for dumps and also in areas that will be disturbed by future reclamation activities such as grading, re-seeding, etc. For this reason, this office this office recommends that an archaeological survey be conducted of any areas that may have the potential for unknown archaeological sites and determine whether ground disturbing activities associated with the expansion of the dump areas and the close out plan will have an effect on archaeological sites.

Dicaperl Minerals Corp in their application response has acknowledged that the recommendation for an archaeological survey is an advisory statement and proposes to survey areas of future planned disturbance (page 17). HPD supports this proposal.



JOHN A. SANCHEZ Lieutenant Governor

NEW MEXICO ENVIRONMENT DEPARTMENT

Harold Runnels Building 1190 South St. Francis Drive (87505) P.O. Box 5469, Santa Fe, New Mexico 87502-5469 Phone (505) 827-2900 Fax (505) 827-2965 www.env.nm.gov



Deputy Secretary

MEMORANDUM

DATE:

May 6, 2016

TO:

Holland Shepherd, Program Manager, Mining Act Reclamation

Program

FROM:

Larry Shore, Mining Environmental Compliance Section (MECS)

Neal Schaeffer, Surface Water Quality Bureau

Neal Butt, Air Quality Bureau

THROUGH: Jeff Lewellin, Mining Act Team Leader, MECS

RE:

NMED Comments, Dicaperl Minerals Corporation, El Grande

Mine, Updated Closeout Plan, MMD Permit No. TA002RE,

Modification 16-1

The New Mexico Environment Department (NMED) received correspondence from the Mining and Minerals Division (MMD) on April 4, 2016 requesting NMED review and provide comments on the above referenced MMD permitting action. The modification is a request to change the closeout plan. MMD requested comments within 30 days of receipt in accordance with Section 19.10.5.506.E NMAC. NMED has the following comments.

Background

The El Grande Mine is a perlite mine located west of the Rio Grande River in Taos County, New Mexico. Perlite is a mineral derived from the heating of obsidian in a furnace. Obsidian is a vitreous form of basalt that contains water. When heated, the obsidian expands forming a light porous mineral (perlite). Dicaperl Minerals Corporation (DMC) mines obsidian at the El Grande mine in Taos County and at a mine located north of Socorro, NM. The mined rock is shipped to a processing plant located near Alamosa, Colorado.

At the processing plant, following heat expansion, the perlite is sorted to separate fine grained waste perlite from the material suitable for sale. The fine grained waste perlite material is placed in fiberglass super sacks. Perlite waste derived from the mines located in New Mexico is Holland Shepherd May 6, 2016 Page 2 of 2

returned to the El Grande Mine and stockpiled temporarily in disposal cells. At closure, the supersacks are to be compacted, covered with stockpiled overburden, graded, covered and seeded as part of the closure plan. Based on review of the initial permit modification application, MMD has required DMC to submit the current amended modification 16-1.

Air Quality Bureau

The Air Quality Bureau comments are attached under separate letterhead.

Surface Water Quality Bureau

The Surface Water Quality Bureau has no comments at this time.

Ground Water Quality Bureau

Modification 16-1 incorporates responses from an October 23, 2015 MMD request for additional information. NMED has reviewed the closure plan and financial assurance associated with modification 16-1. The burial of the waste perlite is not expected to present a threat to ground water quality. Its presence in a disposal cell covered with graded and compacted growth medium and reseeded, as proposed, should have no discernable effect on ground water quality. The design of the slopes and cover thickness appear to be adequate to support a long-term sustainable ecosystem as defined by the specified density and diversity standards in the modified closure plan. The cost estimates provided by DMC appear to be adequate for closure.

NMED Summary Comment

The activities described in the proposed closeout plan should have no adverse impacts to the environment once completed.

If you have any questions, please contact Jeff Lewellin at (505) 827-1049.

cc: Trais Kliphuis, Division Director, NMED-WPD
James Hogan, Bureau Chief, SWQB
Richard Goodyear, Bureau Chief, AQB
Fernando Martinez, Division Director, EMNRD-MMD
Davena Crosley, Permit Lead Staff, EMNRD-MMD
Kurt Vollbrecht, Program Manager, MECS
Larry Shore, Lead Staff, MECS

GOVERNOR
Susana Martinez



DIRECTOR AND SECRETARY TO THE COMMISSION Alexandra Sandoval

DEPUTY DIRECTOR

Donald L. Jaramillo

STATE OF NEW MEXICO DEPARTMENT OF GAME & FISH

One Wildlife Way, Santa Fe, NM 87507

Post Office Box 25112, Santa Fe, NM 87504

Tel: (505) 476-8000 | Fax: (505) 476-8123

For information call: (888) 248-6866

www.wildlife.state.nm.us

STATE GAME COMMISSION

PAUL M. KIENZLE III
Chairman
Albuquerque
BILL MONTOYA
Vice-Chairman
Alto
ROBERT ESPINOZA, SR.
Farmington
RALPH RAMOS
Las Cruces
BOB RICKLEFS
Cimarron
ELIZABETH A. RYAN
Roswell
THOMAS "DICK" SALOPEK

Las Cruces

April 15, 2016

Davena Crosley Mining and Minerals Division (MMD) 1220 South St. Francis Drive Santa Fe, NM 87505

RE: Request for Comments on Updated Closeout Plan, Modification 16-1, Permit No. TA002RE, El Grande Mine, Taos County, New Mexico. NMDGF No. 17031

Dear Ms. Crosley:

In response to your letter dated 4 April 2016 regarding the above referenced project, the Department of Game and Fish (Department) has reviewed the above referenced project and does not anticipate any significant impacts to wildlife or sensitive habitats. For your information, we have enclosed a list of sensitive, threatened and endangered species that occur in Taos County, New Mexico.

Included below are sources of additional information:

- For Biota Information System of New Mexico (BISON-M) species accounts, searches, and county lists go to <u>bison-m.org</u>.
- For the Department's Habitat Handbook Project guidelines go to http://www.wildlife.state.nm.us/conservation/habitat-information/habitat-handbook/.
- 3. For custom, site-specific database searches on plants and wildlife go to nhm.unm.edu, then go to Data, Free On-Line Data, and follow the directions.
- For state-listed plants contact the New Mexico State Forestry Division at (505) 476-3334 or nmrareplants.unm.edu/index.html.
- 5. For the most current listing of federally listed species **always** check the U.S. Fish and Wildlife Service's Information, Planning, and Conservation website at http://ecos.fws.gov/ipac/.

Thank you for the opportunity to review and comment on your project. If you have any questions, please contact; Ron Kellermueller, Mining and Energy Habitat Specialist at (505) 476-8159 or ronald.kellermueller@state.nm.us.

Sincerely,

Chuck L. Hayes, Assistant Chief Ecological and Environmental Planning Division

cc: USFWS NMES Field Office

Crosley, Davena, EMNRD

From: Myers, Kevin, OSE

Sent: Monday, March 09, 2015 8:20 AM

To: Ohori, David, EMNRD

Cc: Crosley, Davena, EMNRD; Johnson, Mike S., OSE

Subject: OSE comments for Mod 14-1, No. TA002RE - El Grande Mine - Updated Closeout Plan

David,

On February 9, 2015, the Hydrology Bureau of the New Mexico Office of the State Engineer (NMOSE) received from MMD a request for review and comment on an updated closeout plan for the Modification 14-1 of Permit No. TA002RE, El Grande Mine (Modification). Operated by the Dicaperl Minerals Corporation (Dicaperl), the El Grande Mine is located in Taos County near No Agua Peaks, east of the highway 285 between Tres Piedras and San Antonio Peak. NMOSE has reviewed the Modification and has the following comments.

- 1. The updated closeout plan does not mention the quantity of water, if any, necessary for reclamation. For example, some reclamation activities may require dust control or other uses of water for construction. Dicaperl should provided an estimate of water use and source of water.
- 2. The updated closeout plan does not address the disposition of the well RG-53397. In the NMOSE file for RG-53397, it's unclear if this well was ever drilled because there is no well record, yet there were some meter readings submitted to NMOSE. Some wells are plugged, ownership transferred or some other final disposition. Some of these actions require approval of NMOSE Water Resources Division District 6 in Santa Fe. If the well was drilled, Dicaperl should provide a well record and clarify final disposition of well.
- 3. In the updated closure plan, the open pit (approximately 76 acres) will be used to capture storm water for evaporation or infiltration. Dicaperl should contact NMOSE Distrct 6 for discussion on the potential permitting of impoundment, which may be required for non jurisdictional impoundments pursuant subsection 19.16.2.15 NMAC (excerpt of Regulations provided below).
 - 19.26.2.15 PONDS AND OTHER IMPOUNDMENTS: A permit is required to capture or store surface water in an impoundment. An application to capture and store surface water shall be filed pursuant to 19.26.2.10 NMAC or 19.26.2.11 NMAC unless the impoundment of water is authorized as a livestock watering impoundment under 19.26.2.14 NMAC. A permit to appropriate water is required for an impoundment created by constructed works, sand and gravel operations, or mining operations, including excavations that fill with water. Dams exceeding 10 feet in height or that can store in excess of 10 acre-feet shall meet the requirements of 19.25.12 NMAC.
 - A. Form content: An application for an impoundment shall be filed pursuant to the requirements of 19.26.2.10 NMAC or 19.26.2.11 NMAC. In addition to the information required for an application filed under 19.26.2.10 NMAC or 19.26.2.11 NMAC, an application for a pond or other impoundment shall also include: the name of the proposed impoundment, the location of the impoundment using public land survey system, latitude and longitude, or the New Mexico state plane coordinate system, the maximum depth of the impoundment, the perimeter of the impoundment, the maximum surface area, the estimation of annual evaporative losses, the slope(s) of the interior basin, the outlet conduit size and slope, a table showing the stage, surface area and storage capacity of the impoundment, and the time to empty the impoundment.
 - B. Flood control: No permit to appropriate water is required for an impoundment when the primary purpose of the impoundment is flood control, provided the outlet drains the impoundment (from the spillway crest) in 96 hours. The water shall not be detained in the impoundment in excess of 96 hours unless the state engineer has issued a waiver to the owner of the impoundment.

 [19.26.2.15 NMAC N, 1/31/2005]

The NMOSE District 6 contact information is as follows: http://www.ose.state.nm.us/DO/district-6.php

NMOSE Water Rights Division District 6 P.O. Box 25102 407 Galisteo Street - Room 102 Santa Fe, NM 87504-5102 (505) 827-6120

If you have any questions about the above, please contact me.

Kevin Myers, Hydrologist Hydrology Bureau - NM OSE P.O. Box 25102 Santa Fe, NM 87504-5102 Ph: (505) 476-7402

Fax: (505) 476-7402

http://www.ose.state.nm.us/

Crosley, Davena, EMNRD

From:

Pine, Robert, OSE

Sent:

Friday, April 29, 2016 8:53 AM

To:

Crosley, Davena, EMNRD

Cc:

Johnson, Mike S., OSE; Musharrafieh, Ghassan R., OSE

Subject:

OSE Comments on El Grande Mine Updated Closeout Plan

Dear Ms. Crosley,

On April 4, 2016 the Hydrology Bureau of the New Mexico Office of the State Engineer (OSE) received a request from MMD to review and comment on the updated closeout plan, Modification 16-1, for the El Grande Mine, Permit No. TA002RE, located in Taos County. OSE has the following comments.

- 1) On March 9, 2015, Kevin Myers of NMOSE/Hydrology Bureau submitted three comments to MMD regarding the El Grande Mine updated closeout plan. MMD submitted these comments as well its own comments and those of other reviewing agencies to Dicaperl, owner and operator of the mine. Dicaperl submitted a response to these comments in a document titled *Permit Modification Response*, dated February 5, 2016. In this document, Dicaperl responds only to Kevin Myers' comment #3 regarding the open pit. Dicaperl must respond to questions #1 and #2 as well.
- 2) In Dicaperl's response to Kevin Myers' question #3, they state that they do not need to obtain a permit from OSE for the open pit under regulations 19.26.2.15 NMAC because the open pit will not impound water for more than 96 hours. 19.26.2.15.B NMAC states that "No permit to appropriate water is required for an impoundment when the primary purpose of the impoundment is flood control, provided the outlet drains the impoundment (from the spillway crest) in 96 hours." The primary purpose of the open pit at the El Grande Mine is not flood control and so this provision is not applicable. Therefore, as stated in Kevin Myers' comment #3, Dicaperl should contact NMOSE District 6 for discussion on the potential permitting of the impoundment (i.e. the open pit).

If you have any questions regarding these comments, please contact me.

Robert Pine OSE/Hydrology Bureau P.O. Box 25102 Santa Fe, NM 87504-5102 Ph: (505) 476-7402



New Mexico ENVIRONMENT DEPARTMENT

525 Camino de los Marquez, Suite 1 Santa Fe, NM 87505 Phone (505) 476-4300 Fax (505) 476-4375 www.env.nm.gov



Ryan Flynn Cabinet Secretary

Butch Tongate Deputy Secretary

MEMORANDUM

DATE:

May 3, 2016

TO:

Jeff Lewellin, Mining Act Team Leader

Mining Environmental Compliance Section, Ground Water Quality Bureau

FROM:

Neal Butt, Environmental Scientist & Specialist

Air Quality Bureau

RE:

Request for Comments, Dicaperl Minerals Corporation, El Grande Mine

Taos County, Updated Closeout Plan, Modification 16-1,

MMD Permit No. TA002RE

The New Mexico Air Quality Bureau (AQB) has completed its review of the, **Dica**perl Minerals Corp El Grande Mine Permit No. TA002RE Permit Modification Application Response. February 5, 2016. Pursuant to the New Mexico Mining Act Rules, the AQB has the following comments:

Air Quality Permitting History

The most recent permitting activity for **Dicaperl** Minerals Corp. (a/k/a St. Cloud Mining Co.) is for an NSR Air Quality Permit No. 2018 - 250TPH Crusher - No. 2018 Portable Permit. Last location was 9 miles southwest of Deming in Luna County. No record was found for any air quality permits issued by the AQB for the **Dicaperl** El Grande operation in Taos County, NM.

Details

The applicant, **Dicaperl** Minerals Corporation ("**Dicaperl**") is requesting a modification (M16-1) to the El Grande Mine permit, TA002RE. The application for permit modification requests to update the closeout plan for the El Grande Mine and to permit the disposal of perlite waste originating from the **Dicaperl** Socorro Mine located in Socorro County, NM, at the El Grande Mine.

Page 2

The AQB has no objection to the current request for permit modification.

Air Quality Requirements

The New Mexico Mining Act of 1993 states that "Nothing in the New Mexico Mining Act shall supersede current or future requirements and standards of any other applicable federal or state law." Thus, the applicant is expected to comply with all requirements of federal and state laws pertaining to air quality. Current requirements which may be applicable in this mining project include, but are not limited to the following:

20.2.15 NMAC, *Pumice, Mica and Perlite Processing*. Including 20.2.15.110 NMAC, *Other Particulate Control*: "The owner or operator of pumice, mica or perlite process equipment shall not permit, cause, suffer or allow any material to be handled, transported, stored or disposed of or a building or road to be used, constructed, altered or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne."

Subsection A of 20.2.72.200 NMAC, Application For Construction, Modification, NSPS, And NESHAP - Permits And Revisions, states that: "Permits must be obtained from the Department by:

- (1) "any person constructing a stationary source which has a potential emission rate greater than 10 pounds per hour or 25 tons per year of any regulated air contaminant for which there is a National or New Mexico Ambient Air Quality Standard. If the specified threshold in this subsection is exceeded for any one regulated air contaminant, all regulated air contaminants with National or New Mexico Ambient Air Quality Standards emitted are subject to permit review. . "; and
- (3) "Any person constructing or modifying any source or installing any equipment which is subject to 20.2.77 NMAC, New Source Performance Standards, 20.2.78 NMAC, Emission Standards for Hazardous Air Pollutants, or any other New Mexico Air Quality Control Regulation which contains emission limitations for any regulated air contaminant;"

Also, Paragraph (1) of Subsection A of 20.2.73.200 NMAC, Notice of Intent, states that:

(1) "Any owner or operator intending to construct a new stationary source which has a potential emission rate greater than 10 tons per year of any regulated air contaminant or 1 ton per year of lead shall file a notice of intent with the department."

The above is not intended to be an exhaustive list of all requirements that could apply. The applicant should be aware that this evaluation does not supersede the requirements of any current federal or state air quality requirement.

Fugitive Dust

Fugitive dust is a common problem at mining sites. The AQB does not regulate fugitive dust; however, we do recommend controls to minimize emissions of particulate matter from fugitive

Request for Comments, Dicaperl Minerals Corporation, El Grande Mine, Taos County, Updated Closeout Plan, Modification 16-1, MMD Permit No. TA002RE

Page 3

dust sources. The following control strategies can be included in a comprehensive facility dust control plan (from EPA's Compilation of Air Pollutant Emission Factors, AP-42):

Unpaved haul roads and traffic areas: paving of permanent and semi-permanent roads, application of surfactant, watering, and traffic controls, such as speed limits and traffic volume restrictions.

Paved roads: covering of loads in trucks to eliminate truck spillage, paving of access areas to sites, vacuum sweeping, water flushing, and broom sweeping and flushing.

Material handling: wind speed reduction and wet suppression, including watering and application of surfactants (wet suppression should not confound track out problems).

Bulldozing: wet suppression of materials to "optimum moisture" for compaction.

Scraping: wet suppression of scraper travel routes.

Storage piles: enclosure or covering of piles, application of surfactants.

Miscellaneous fugitive dust sources: watering, application of surfactants or reduction of surface wind speed with windbreaks or source enclosures.

The AQB or the US Environmental Protection Agency may implement requirements, regulations and standards for the control of fugitive dust sources in the future. This written evaluation does not supersede the applicability of any forthcoming state or federal regulations.

If you have any questions, please contact me at (505) 476-4317.