State of New Mexico
Energy, Minerals and Natural Resources Department

Michelle Lujan Grisham
Governor

Dylan Fuge
Acting Cabinet Secretary

Albert C.S. Chang, Director
Mining and Minerals Division

Electronic Transmission

January 12, 2024

Todd Whitacre
Imerys Perlite USA, Inc.
150 East Main, Suite 320
Femley, NV 89408

RE: Technical Comments on Revision 23-1 No Agua Mine Updated Closeout Plan, Revision 23-1, Permit No. TA005RE

Dear Mr. Whitacre,

The New Mexico Mining and Minerals Division ("MMD") received an application to Revise Permit No. **TA005RE** No Agua Mine on July 25, 2023, from Imerys Perlite USA Inc. ("Imerys") titled, "No Agua Mine Closeout Plan Update" ("Application"). The Application, assigned Revision 23-1 by MMD, proposes to update the 5-year Closeout Plan.

MMD has conducted a technical review of the Revision 23-1 Application and, in accordance with 19.10.5.506.E NMAC, provided the Application to, and requested comments from, the New Mexico Environment Department ("NMED"), New Mexico Office of the State Engineer ("NMOSE"), New Mexico Department of Game and Fish ("NMDG&F"), New Mexico Historic Preservation Division ("NMDCA") and New Mexico Forestry Division ("NMSFD"). Copies of the comments received from these state agencies are attached (Attachment C).

Review and respond to all agency comments in addition to the responses to MMD Technical Comments (Attachment A).

General Comments:

MMD finds that, in general, the submitted Application lacks sufficient technical details on the overall plan for reclamation at closeout. For instance, no permanent storm water erosion controls are proposed, the Closeout Plan is not reflective of all approved Permit No. TA005RE conditions, and no test plot work plan is included, as previously required by MMD. The Application appears to look nearly identical to the previous 5-year Closeout Plan (March 22, 2017) with no major changes, despite numerous technical comments having been made previously by MMD and the cooperating state agencies on the (July 24, 2017) document. Additionally, during agency review it was discovered that no NMOSE well permit could be located for the on-site well. Please refer to Attachment A for MMD's complete technical comments on this updated closeout plan.

MMD is requiring that Imerys submit a revised Closeout Plan addressing the attached comments; to include a Test Plot Work Program.

The following attachments are included:

Attachment A: MMD Technical Comments
Attachment B: Annotated Confidential Map
Attachment C: Agency Comment letters

Please review and respond to all MMD technical comments (Attachment A) and attached comments from other state agencies (Attachment C) within 60 days of receipt of this letter. If you have any questions, concerns, or would like to meet again regarding these comments, please contact me at (505) 216- 8945 or at samantha.rynas@emnrd.nm.gov.

Sincerely,

Samantha Rynas, Permit Lead
Mining Act Reclamation Program ("MARP")
Mining and Minerals Division

Attachments:
A: MMD Technical Comments
B: Annotated Confidential Map
C: Agency Comment letters

CC: David (DJ) Ennis, Program Manager, MARP, MMD
Carmen Rose, Reclamation Specialist Supervisor, MARP, MMD

DRAFT

Attachment A: MMD Technical Comments

No Agua Mine Revision 23-1
Permit No. TA005RE
Date: January 12, 2024

OVERVIEW

Name of Operator: Imerys Perlite USA Inc. **Permit Update:** 5-year Closeout Plan Revision 23-1

Agency Responses: A*ttached for Imerys review and comment as Attachment C*

New Mexico Department of Cultural Affairs Submitted October 13, 2023
New Mexico Department of Game and Fish Submitted December 8, 2023
New Mexico Environment Department Submitted December 7, 2023
New Mexico Office of the State Engineer Submitted December 1, 2023
EMNRD - Forestry Division Submitted October 12, 2023

MMD Comments

1. Section 2.4 Improvements states *"A third dump area may be added in the future, if required."* Is a new waste dump anticipated as part of the five-year mine plan? If so, please identify the planned location.
   Operator response: and/or see attachment:

2. Section 2.7 Highwalls states "*Since 2005 all highwalls constructed have used a design specification of 15 foot wide benches and 35 foot bench height. All highwalls constructed going forward will use this specification.*" During the recent site inspection on November 9, 2023, mine staff stated benching construction has been 25 feet by 25 feet, and previously provided cross sections of the highwalls at closeout showed varied benching heights as well. Please update this section to clarify the current mine operations benching specifications.
   Operator response: and/or see attachment:

3. Section 2.9 Cultural Resources. MMD supports NMDCA's recommendation that Imerys do an archeological survey of the proposed design limits.
   Operator response: and/or see attachment:

4. Section 2.10 Hydrology. Please include a map with the locations of perennial, intermittent, and ephemeral streams within the permit area, and identify and label the four catch basins described in this section. *See also, NMED Surface Water Quality Bureau comment #3.*
   Operator response: and/or see attachment:

5. Section 5.3 Waste Dumps. MMD will require that a minimum of one-foot of reclamation cover material be placed over the fines dump at reclamation.
   Operator response: and/or see attachment:

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6. Section 5.4 Quarries and Pits. MMD will continue to require the installation of a fence and warning signs along the perimeters of the open pit where highwalls exist to prevent potential harm to humans at closure.
   Operator response: and/or see attachment:

7. Sections 5.4 Quarries and Pits and 7.1 Slope Stability Analysis. MMD will require that the stability of the high walls (specifically of West Pit) be investigated for long term stability through the submission of a Slope Stability Analysis Work Plan. MMD will require that Imerys submit a Slope Stability Analysis Work Plan for MMD approval within 60 days of Revision 23-1 approval. Per meeting with Todd Whitacre on December 18, 2023, Imerys has already initiated doing a slope stability review at No Agua. Due to the proximity of one of the West Pit high walls being at the property boundary line, future slope failures in this area may cause the permit boundaries to be breeched.
   Operator response: and/or see attachment:

8. Figure 3. Post Reclamation Topographic Map shows the post-closeout topography of the mine. What will be the approximate overall slope gradient of the North Hill, South Hill and West Hill pit high walls at closeout? Please provide cross-sectional drawings of the proposed high walls of the pits at closeout.
   Operator response: and/or see attachment:

9. Figure 3. Post Reclamation Topographic Map. Please provide cross-sectional drawings of the pits and dumps at mine closeout to supplement the updated closeout plan. In reviewing the provided cross-sections, questions remain on benching configurations. MMD is requesting additional cross-sections not previously included. As these maps were submitted as confidential, the specific cross-sections being requested will be sent separately under Attachment B.
   Operator response: and/or see attachment:

10. Section 5.4 Quarries and Pits. North Hill appears to have less topographic variation than the other pits. What is the reclamation plan for North Hill? Will any highwalls remain at reclamation?
    Operator response: and/or see attachment:

11. Section 5.4 Quarries and Pits. Pursuant to Condition 8.F.2.a of the Permit, MMD will continue to require that a minimum of one-foot of approved reclamation cover material be placed in the quarries, where feasible, at reclamation.
    Operator response: and/or see attachment:

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12. Section 5.5 Watershed and Catch Bains. Pursuant to Condition 9.0.1.c of the Permit, erosion control features shall be designed for a minimum 100-year, 24-hour storm event. Please confirm, (1) the catch basins are designed to this specification, (2) what basins are planned to be left in place at reclamation.
    Operator response: and/or see attachment:

13. Section 5.6 Erosion Control. MMD will require that Imerys design, construct, and maintain permanent stormwater controls for reclamation at No Agua in order to ensure that the site achieves a self-sustaining ecosystem at closure. Installation of hay bales and straw wattles are considered temporary BMPs. Please describe what stormwater controls for reclaimed waste piles, quarries, and roads will be designed and constructed at No Agua, including a description of any stormwater conveyance channels and sediment ponds. All permanent stormwater conveyance channels shall be designed, constructed, and maintained to safely pass the peak run-off from a 100-year, 24-hour storm event, pursuant to Condition 9.O.1.c of the Permit. *See also NMED -SWQB comment #5.*
    Operator response: and/or see attachment:

14. Section 5.6 Erosion Control. As required by Condition 8.G.1.b in the Permit, Imerys must implement interim best management practices to control offsite sediment transport for the fines dump. As a future permit condition, MMD will require that Imerys submit a Dust Mitigation plan due to observed on-going wind erosion of the Fines Dump that was observed during the October 2023 site visit. MMD will continue to require that Imerys reclaim all Affected Areas as required by Condition 8.M.2 of the Permit.
    Operator response: and/or see attachment:

15. Section 5.7 Topsoil. As required by Condition 8.F.2.a of the Permit, MMD will continue to require a one-foot thick layer of approved reclamation cover material over the quarry bottoms for cover.
    Operator response: and/or see attachment:

16. Section 5.8 Revegetation. MMD will require that certified weed-free mulch will be applied and crimped in after seeding at reclamation.
    Operator response: and/or see attachment:

17. Section 5.8 Revegetation. MMD recommends planting bareroot shrubs and broadleaf woody species as opposed to Rocky Mountain juniper. Mountain mahogany, antelope bitterbrush, Apache plume, and New Mexico Locust are a few recommendations.
    Operator response: and/or see attachment:

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18. Section 6.2: Cover states that "The 508 governed areas are indicated in Figure 4", but those areas are not delineated in Figure 4. Please include a delineation of the existing units (19.10.5.507 NMAC) versus the new units (19.10.5.508 NMAC) in an updated map (*See also comment 25 on Figure 1 below*).
    Operator response: and/or see attachment:

19. Section 7.1 Slope Stability Analysis. In the submitted Closeout Plan, only the stability of the waste material dumps is addressed; however, all disturbed areas of the mine, including highwalls and pits, shall also be included in the Slope Stability Monitoring Program (SSMP). *See also MMD comment 8, above.*
    Operator response: and/or see attachment:

20. Section 7.3 Revegetation Monitoring Program. Pursuant to 19.10.12.1204 NMAC, Imerys shall maintain financial assurance for a minimum period of 12 years after reclamation is completed.
    Operator response: and/or see attachment:

21. Section 8.0 Closeout Plan Permitting Requirements. As required by 19.10.5.509.C NMAC and Condition "S" of the Permit; on-site wells should be properly permitted. This section will need to be updated to reflect any additional well permits. *See OSE comment letter.*
    Operator response: and/or see attachment:

22. Section 10.0 Cost Estimate for Closeout. MMD will require that a reclamation cost estimate be submitted after the technical comments within this summary have been addressed. The updated reclamation cost estimate will then reflect the updated scope of the revised Closeout Plan. To note, one of the components of the cost estimate that will need to be included is the cost of well abandonment in accordance with NMOSE requirements.
    Operator response: and/or see attachment:

23. Section 11.0 Closeout and Reclamation Schedule. According to MMD's records, activity at North Hill was last recorded in 2000 when Harborlite performed a blast to test some of the material for a potential customer. During the agency site inspection on October 25, 2023, MMD was unable to inspect this area because the road had been bermed off and the condition of the road was unknown. Since North hill is not proposed by Imerys to be actively mined in the next 5-year plan, MMD encourages Imerys to place the new test plots in this area.
    Operator response: and/or see attachment:

24. Under Condition 8.G.2.b of the Permit, MMD will require the salvage and storage of topsoil from any future disturbed areas for use as cover material at reclamation. For MMD

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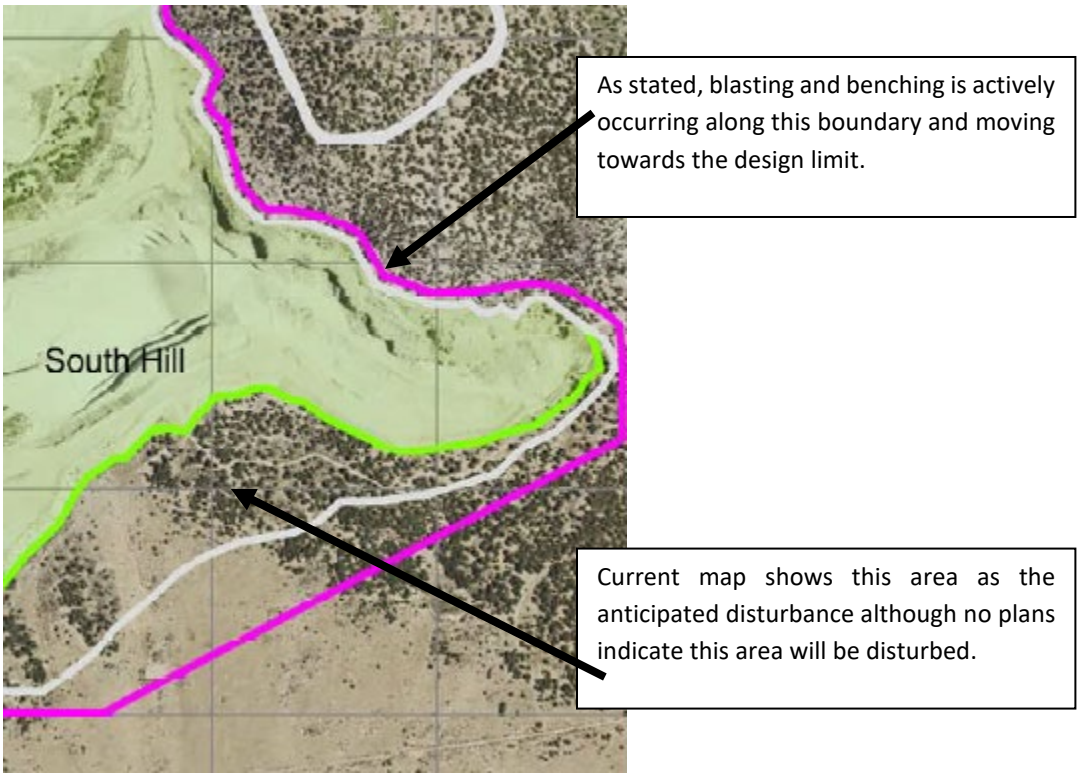
recommendations on salvaging topsoils, please visit our website:
https://www.emnrd.nm.gov/mmd/mining-act-reclamation-program/guidelines/
Operator response: and/or see attachment:

25. Figure 1: MMD is requesting updated maps for on-going and future reference. MMD is requesting the below characteristics be included.
    Site-Specific Characteristics:
    a. Confirm 5-year disturbance/design limit for South Pit (see annotated map below),
    b. Fines dump locations (including prospective third dump location, if needed),
    c. Overburden dump,
    d. Cover material storage,
    e. Label the new "508" and existing units "507",
    f. Well location,
    g. New proposed test plot locations,
    h. Historic test plot locations (3) and,
    i. Catch Basins (4)



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26. Please see the following from the NMDGF comment letter recommending an updated wildlife survey to bring Imerys into current baseline wildlife study guidelines. MMD recommends performing a new baseline study in accordance with current protocols.

    "The 2001 "Wildlife and Wildlife Activity at the No Agua Harborlite Perlite Mine Report" (Report), included in Appendix C of the CCP, was lacking in detail and substantive information. The Report does not adequately document the presence, diversity, relative abundance, and distribution of wildlife and their habitats within the mine permit area. The Department recommends that an updated wildlife survey of the No Agua Mine be performed that includes a half-mile buffer zone. The Department also suggests that Imerys reference the Department's Baseline Wildlife Study Guidelines for further guidance on survey protocols and methods for documenting wildlife and their habitats."

    Operator response: and/or see attachment:

27. In 2022, the original Test Plot Program was concluded and did not show adequate success for use as a reclamation cover material at mine closure. MMD and Imerys have been working together on a new Test Plot Program. A preliminary draft plan was submitted on June 12, 2022, and has yet to be finalized. On May 4, 2023, MMD met with Imerys to discuss the Test Plot Program work plan. Please include a finalized Test Plot Program work plan, in your response to these comments, to be included in this revision. MMD recommends that the new test plots be fenced to reduce browse damage/mortality. The work plan should include a description of how the test plots will be constructed, what stormwater controls will be installed, and the location of the test plots.

    Include the following treatments in the work plan at a minimum:

    - Incorporation of borrow materials and/or organic amendments
    - Type of Seeding (e.g. drill versus broadcast)

Permit Lead: *Samantha Rynas* **DATE:** 1/12/2024

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MEMORANDUM
OFFICE OF THE STATE ENGINEER
HYDROLOGY BUREAU

DATE: December 1, 2023
TO: Samantha Rynas, Permit Lead, Mining Act Reclamation Program (MARP), Mining and Minerals Division (MMD), Energy, Minerals and Natural Resources Department (EMNRD)
THROUGH: Katie Zemlick, Chief, Hydrology Bureau, Santa Fe, NM KZ
Laura Petronis, Water Resources Manager 1, Hydrology Bureau, Santa Fe, NM LJP
FROM: Brad Wolaver, Senior Hydrologist, Hydrology Bureau, Santa Fe, NM BDW
SUBJECT: Review of 5-year Closeout Plan Revision for Permit Application, No Agua Mine, Permit No. TA005RE, Taos County

Summary

On October 3, 2023, the New Mexico Mining and Minerals Division ("MMD") of the State of New Mexico Energy, Minerals and Natural Resources Department ("EMNRD") requested that the New Mexico Office of the State Engineer ("OSE") Hydrology Bureau ("Hydrology Bureau") review and comment on the application from Imerys Perlite USA Inc. ("Applicant") to revise permit No. TA005RE No Agua Mine ("Mine" / "Permit") titled, "No Agua Mine Closeout Plan Update" ("Application" / "Closeout Plan"). The Applicant has also provided information regarding a water supply well ("Well") at the Mine. A review of the New Mexico Environment Department (NMED) public water supply system database indicates two wells ("Wells") at the Mine; one active and one inactive. However, District VI Water Resources Division in Santa Fe ("WRD") has not been able to locate the Wells under the Mine's current or former owners or in vicinity of the described property. Additionally, the Applicant has not provided proof of water right for Wells. Thus, it is the responsibility of the Applicant to contact WRD to verify and properly permit the Wells. Also, while the Closeout Plan proposes to "restore the mine site to a self-sustaining ecosystem as similar to pre-mining conditions as possible", plugging and abandonment of the Well and any other wells at the Mine is not included in the Closeout Plan, which should be amended to include well plugging and abandonment per State regulations.

Groundwater

The Mine is in Taos County, New Mexico approximately thirty miles northwest of Taos, New Mexico and eight miles north of Tres Piedras, New Mexico. The Mine produces perlite (Figure 1) (Ennis, 2011). Using the New Mexico Water Right Reporting System (NMWRRS) (OSE, 2023), twenty-three wells were identified within approximately five miles of the Mine (Table 1). Out of those twenty-three wells, fourteen wells have well depth information, and eleven wells have both well depth and depth to water (DTW) information. The well depths range 12–1,200 ft (median: 625 ft). The reported initial depth to water for the wells is 6–1,005 ft (median: 570 ft).

An examination of the logs for nearby wells RG-63581, RG-80377, RG-90842, and RG-94389 (OSE, 2023) suggests that basalt and gravel comprised of volcanic rocks are important aquifers in the vicinity of the Mine. Details of nearby wells are provided in the Table 1.

As mentioned above, the Wells were not found in the NMWRRS database; however, the Applicant has provided some information for the Well (Whitacre, 2023):

- Well registered at the Drinking Water Bureau of the New Mexico Environment Department (NMED) as water supply system number NM3580329 (NMED, 2023),
- Total depth: Approximately 1,600 ft,
- Current pump set at 1,037 feet,
- The Well has a 25,000-gal storage tank with booster pumps,
- The Well is on a compliance schedule of sampling because they are considered a non-transient, non-community public water system (NTNCWS) serving over twenty-five people.

The NMED's online Public Water Supply Systems Search (NMED, 2023) system indicates two Wells at the Mine; one active (WELL #1) and one inactive (WELL #2) (Figure 2). The Applicant has not provided groundwater production records for either well; however, NMED (2023) reports an average daily production of 70,000 gal (likely from WELL #1; Figure 3), which—assuming running 100 percent of the time—is equivalent to approximately 50 gallons per minute (NMED, 2023). Additionally, the Closeout Plan states that the Mine uses dry milling, and that water is only used for "minor maintenance activities".

Well Plugging and Abandonment

The Well and any other well(s) at the Mine should be plugged and abandoned in accordance with State regulations (Appendix A; Rappuhn, 2017). As such, wells at the Mine should be plugged in accordance with 19.27.4 NMAC and a Well Plugging Plan, which the Applicant will submit to NMOSE for approval before well plugging begins. Plugging should also conform to MMD conditions in the Mine's permit.

Surface Water

The National Hydrologic Dataset (NHD) (USGS, 2023) was used to locate surface water in the vicinity of the Mine. The Mine is located approximately one mile to the east of Arroyo Aguaje de Petaco and two and a half miles east of Warden Creek, the only named surface water features (both intermittent streams) within approximately five miles of the Mine. To this end, the Closeout Plan states that "[f]our catch basins function to prevent …["fine materials of perlite"] from exiting the mine area … [via] approximately eight natural drainages leaving the site" [and] [f]ollowing precipitation events, some runoff may leave the property from the north and west … ultimately discharging into the Arroyo Aguaje de Petaco."

Recommendations

The Hydrology Bureau suggests the following recommendations:

- The Applicant should contact WRD to verify and properly permit the Wells, and
- Plugging and abandonment of the Wells and any other wells at the Mine should be added to the Closure Plan, and
- The Wells and any other wells at the Mine should be plugged in accordance with State regulations as part of Closure Plan activities.

References

Ennis, D. J. (2011). Perlite mining and reclamation in the No Agua Peaks, Taos County, New. In D. J. Koning, K. E. Karlstrom, S. A. Kelley, V. W. Lueth, & S. B. Aby, Geology of the Tusas Mountains and Ojo Caliente, New Mexico Geological Society 62nd Annual Fall Field Conference Guidebook.

EMNRD. (2023). New Mexico Energy, Minerals and Natural Resources Department (EMNRD), TA005RE No Agua Mine Revision 23-1, www.emnrd.nm.gov/mmd/ta005re-no-agua-mine-revision-23-1/

NMBGMR. (2003). New Mexico Bureau of Geology and Mineral Resources (NMBGMR), Geologic Map of New Mexico, Scale 1:500,000, available at: geoinfo.nmt.edu/publications/maps/geologic/state/home.cfm

NMED. (2023). New Mexico Environment Department (NMED), Drinking Water Branch, Drinking Water Watch, Public Water Supply Systems Search Parameters, Water System No. NM3580329, available at: https://dww.water.net.env.nm.gov/NMDWW/.

OSE. (2023). New Mexico Water Rights Reporting System (NMWRRS), http://nmwrrs.ose.state.nm.us/nmwrrs/index.html.

Rappuhn, D. (2017). General concerns related to NMOSE regulations of exploratory borehole drilling encountering groundwater and associated plugging of those borings, November 20, 2017.

USGS. (2023). U.S. Geological Survey (USGS), NHDPlus High Resolution, available at: www.usgs.gov/national-hydrography/nhdplus-high-resolution.

Whitacre, T. (2023). Personal Communication with Imerys Performance Minerals America Lands and Reclamation Manager Todd Whitacre, Nov.1, 2023.

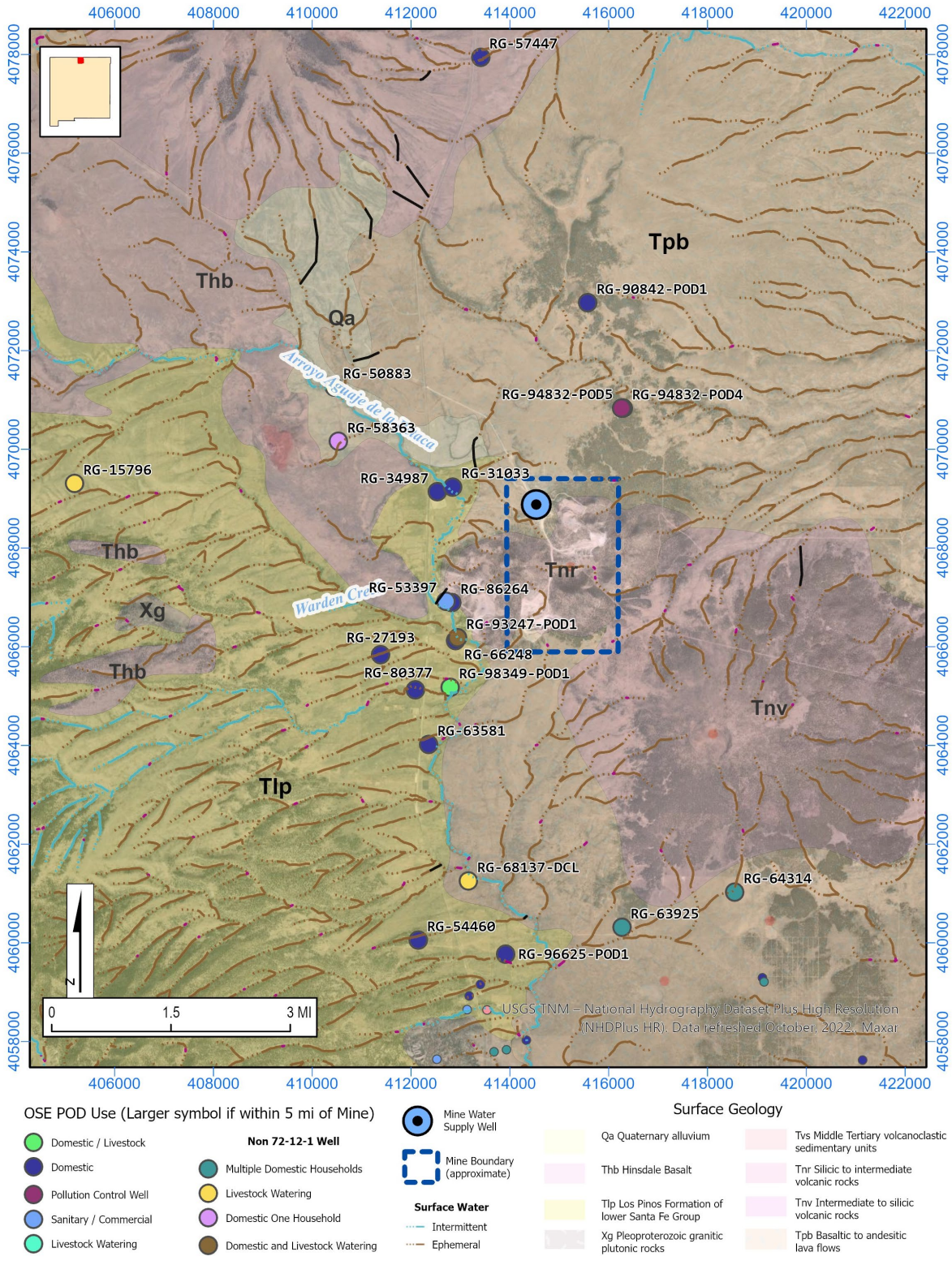

Figure 1. No Agua Mine project location

All documents for this Permit are available at EMNRD (2023). Wells from New Mexico Water Rights Reporting System (NMWRRS; OSE 2023) Surface water from USGS (2023). Surface geology from NMBGMR (2003).

Water System Detail Information

Water System No.:	NM3580329	Federal Type:	NTNC
Water System Name:	IMERYS PERLITE	Federal Source:	GW
Principal County Served:	TAOS	System Status:	A
Principal City Served:	TRES PIEDRAS	Activity Date:	06-19-1991

Water System Contacts

Type	Contact	Communication	
AC - Administrative Contact	BOLLING, RYAN 4200 US Highway 285 South ANTONITO, CO 81120	Electronic Type	Value
		EMAIL - Email	ryan.bolling@imerys.com
		Phone Type	Value
		BUS - Business	719-376-5484

Annual Operating Period(s)

Eff. Begin Date	Eff. End Date	Start Month/Day	End Month/Day	Type	Population
08-10-2006	No End Date	1/1	12/31	NT	30

Service Connection(s)

Type	Count	Meter Type	Meter Size
CB	2	UM	0

Service Area(s)

Code	Name
NT	INDUSTRIAL/AGRICULTURAL

System Certification Requirements

Certification Name	Code	Begin Date

Water System Facilities

Fac. ID	Facility Name	Type Status Avail.	Unit Process Name Treatment Objective Name Treatment Process Name
80329000	DIST	DS - A - P	
80329001	WELL #1	WL - A - P	
80329003	STORAGE TANK #1	ST - A - P	
80329004	BOOSTER PUMP FACILITY #1	PF - A - P	
80329002	WELL #2	WL - I - P	

Water System Facility Flows

Supplying Facility ID No.	Supplying Facility Name	Receiving Facility ID No.	Receiving Facility Name
WL - 80329001	WELL #1	ST - 80329003	STORAGE TANK #1
ST - 80329003	STORAGE TANK #1	PF - 80329004	BOOSTER PUMP FACILITY #1
PF - 80329004	BOOSTER PUMP FACILITY #1	DS - 80329000	DIST

Water Purchases

Water System \ Treatment Status
No Water Purchases

Buyers of Water

Water System / Population / Availability (blank, (S)easonal, (E)mergency, (I)nterim, (P)ermanent, (O)ther
No Buyers

Routine TCR Sample Schedules

Begin Date	End Date	Requirements
04-01-2016	Continuous	1 RT/MN

Repeat TCR Sample Schedules

Figure 2. Water System Detail Information for Wells at the Mine

Source: NMED (2023). Well #1 is listed as active (WL - A - P) and Well #2 is inactive (WL - I - P). Neither well is included in the New Mexico Water Rights Reporting System (NMWRRS; OSE 2023).

New Mexico Environment Department	UOCP Operator Lookup	Drinking Water Program
County Map of NM	Water System Search	Help

Water System Facilities	Violations Enforcement Actions	TCR Sample Results GWR Sample Results	TTHM HAA5 Summaries
Sample Points	Assistance Actions	Recent Positive TCR Results	PBCU Summaries
Sample Schedules / FANLs / Plans	Compliance Schedules	Other Chemical Results	Chlorine Summaries
Site Visits Milestones	TOC/Alkalinity Results	Chemical Results by: Name Code	Turbidity Summaries
Operators All POC	LRAA (TTHM/HAA5)	Recent Non-TCR Sample Results	TCR Sample Summaries

Water System Detail Information

Water System No.:	NM3580329	Federal Type:	NTNC
Water System Name:	IMERYS PERLITE	Federal Source:	GW
Principal County Served:	TAOS	System Status:	A
Principal City Served:	TRES PIEDRAS	Activity Date:	06-19-1991
Federal Population:	30	NDPDES Permit No.	

Water System Contacts

Type	Contact	Communication	
AC - Administrative Contact	BOLLING, RYAN 4200 US Highway 285 South ANTONITO, CO 81120	Electronic Type	Value
		EMAIL - Email	ryan.bolling@imerys.com
		Phone Type	Value
		BUS - Business	719-376-5484

Sources of Water

Name	Type	Activity	Availability
WELL #1	WL	A	P
WELL #2	WL	I	P

Source Water Percentages

Surface Water	0	Surface Water Purchased	0
Ground Water	100	Ground Water Purchased	0
Ground Water UDI	0	Ground Water UDI Purchased	0

Water Purchases

Water System \ Treatment Status
No Water Purchases

Buyers of Water

Water System / Population / Availability (blank, (S)easonal, (E)mergency, (I)nterim, (P)ermanent, (O)ther
No Buyers

Total Population Served = 30
Total Population Served included ALL active connections, including emergency.

Annual Operating Period(s)					
Effective Begin Date	Effective End Date	Start Month/Day	End Month/Day	Type	Population
08-10-2006	No End Date	1/1	12/31	NT	30

Service Connections			
Type	Count	Meter Type	Meter Size
CB	2	UM	0

Service Area	
Code	Name
NT	INDUSTRIAL/AGRICULTURAL

Regulating Agencies	
Name	Alias/Inspector
NEW MEXICO ENVIRONMENT DEPARTMENT	
SANTA FE AREA OFFICE	
CO WAYNE JEFFS	WAYNE JEFFS
SAMPLER VERNON TRUJILLO	

Water System Historical Names
Historical Name(s)
HARBORLITE CORPORATION

System Certification Requirements		
Certification Name	Code	Begin Date

WS Flow Rates		
Type	Quantity	UOM
AVPD - Average Daily Production	70000	GPD
TLDS - Total Design Capacity	149760	GPD

WS Measures		
Type	Quantity	UOM

WS Indicators

Figure 3. Water System Information for the Mine

The Mine's water source is 100 percent groundwater with an average daily production of 70,000 gallons per day listed Source: NMED (2023). The Mine's Wells are not included in the New Mexico Water Rights Reporting System (NMWRRS; OSE 2023).

Table 1. Wells within five-mile radius of the Mine

Wells from New Mexico Water Rights Reporting System (NMWRRS; OSE 2023).

POD	UTM E	UTM N	Use	Well Depth (ft)	Initial Depth to Water (ft)	Status	Year Drilled	Perforations (ft)	Owner
RG-15796	405190	4069307	PDL						APOLONIA G TRUJILLO
RG-27193	411385	4065837	DOM	730	700		1976		REBECCA J MAYO
RG-31033	412841	4069236	DOM			PEN			RICK SCHOFIELD
RG-34987	412532	4069138	DOM	650	570	ACT	1980	600-615, 625-645	RICK SCHOFIELD
RG-37145	423659	4069463	PLS	463	12		1967		QUINLAN RANCHES INC
RG-50883	410448	4071259	PDL	12	6	ACT	1912		DENNIS R. GARCIA
RG-53397	412704	4066923	SAN			PEN			DICAPERL CORP.
RG-54460	412147	4060056	DOM			PEN			RUIEL DUNLAP
RG-57447	413409	4077945	DOM						BILL CALDWELL
RG-58363	410531	4070160	PDM						DENNIS R GARCIA
RG-63581	412356	4064020	DOM	780	460	ACT	1995	740-760	A. J. DE HERRERA
RG-63925	416269	4060315	MUL	600					SHERRI ANDERSON
RG-64314	418553	4061028	MUL	600					SHERRI ANDERSON
RG-66248	412898	4066121	DOM	700	619	ACT	1997	630-690	GEORGIA A. KUYKENDALL
RG-68137-DCL	413162	4061252	PDL			ACT	1919		BUREAU OF LAND MANAGEMENT
RG-80377	412088	4065123	DOM	800	661	ACT	2004	760-800	P-LAG, LLC
RG-86264	412824	4066893	DOM			PEN			KEITH RANDALL
RG-90842-POD1	415577	4072971	DOM	1220	1005	ACT	2008	1160-1220	PENELOPE GREGORY
RG-93247-POD1	412940	4066181	PLS	50			1920		GEORGIA ANN KUYKENDALL
RG-94832-POD4	416296	4070833	POL	45	33	ACT	2017	25-45	WILLIAM D. PARKER
RG-94832-POD5	416261	4070838	POL	50	39	ACT	2017	30-50	WILLIAM D. PARKER
RG-96625-POD1	413919	4059771	DOM			PEN			JOSEPH SIEVERS
RG-98349-POD1	412792	4065180	DOL	750	687	ACT	2020	650-750	KATHERINE A. HASTON

Appendix A. Summary of NMOSE Regulation of Drilling and Plugging of Wells (modified from Rappuhn, 2017)

General Concerns

Well drilling activities and well plugging, are regulated in part under 19.27.4 NMAC (New Mexico Administrative Code). Most recently promulgated in 6/30/2017, these regulations require any person engaged in the business of well drilling within New Mexico to obtain a Well Driller License issued by the NMOSE (New Mexico Office of the State Engineer). Therefore, a New Mexico licensed Well Driller shall perform the drilling and plugging of exploratory boreholes that encounter groundwater.

Drilling where any form of groundwater is encountered will be subject to pertinent sections of 19.27.4 NMAC, including but not limited to Sections 19.27.4.30.C NMAC for plugging and abandonment of non-artesian wells / borings; and 19.27.4.31 NMAC for artesian wells / borings, including but not limited to Section 19.27.4.31.J and Section 27.4.31.K for repair and plugging of artesian wells. A complete version of the NMOSE 19.27.4 NMAC regulations can be found on the New Mexico OneSource website at: https://nmonesource.com/nmos/nmac/en/nav_date.do . The Mining and Mineral Division (MMD) will likely place additional conditions on the plugging of all wells via the MMD project permit.

All onsite plugging activities where groundwater is encountered shall be conducted under the supervision of the New Mexico-licensed Well Driller or a NMOSE-registered Drill Rig Supervisor under the direction of the licensed Well Driller. Special plugging conditions may be necessary to stop the migration of contaminants in the wellbore. These conditions may include perforating the casing, specialty cements and other conditions depending on the water quality, style, and conditions of the wellbore.

Additional NMOSE filings will be required where it is requested that a well be converted to a monitoring well. The well design and construction shall be subject to the provisions of 19.27.4 NMAC Regulations. Appropriation of water from such a conversion may require a water right. The MMD may disallow the conversions of existing wells to monitoring wells if not permitted specifically in the MMD permit.

Well Plugging

Terms of well plugging will be established jointly by the evaluation of the NMOSE *Well Plugging Plan of Operations* and the review of the relevant MMD application for wells. Approved high-solids bentonite abandonment-grade sealants and/or approved cement slurries will be required for plugging as deemed hydrogeologically appropriate by the agencies. NMOSE-authorized cement slurries will be required for the decommissioning of wells.

NMOSE well plugging regulations require tremie placement of the column of well sealant, which shall extend from the bottom of the borehole to ground surface. By regulation, pumping decommissioning sealants into the top of the borehole is not allowed. The NMOSE defers to the discretion of the MMD for the choice of sealant versus natural fill in the uppermost portion of a borehole plug to facilitate site restoration.

Required plugging of wells shall occur within the timeframe specified by either the NMOSE or MMD.

Drill Rig Fuels, Oils and Fluids

Drill rigs contain and consume fuels, oil, and hydraulic fluids, and are subject to leaks. Drill rigs often remain in-place longer than other pieces of equipment onsite, are frequently running, and are positioned immediately above and adjacent to the open borehole. As a standard practice to prevent contamination and reduce site cleanup activities, it may be beneficial to use bermed, impermeable ground sheeting under the drill rig. Consideration of bermed containment volume sufficient to accommodate a high-intensity precipitation event and use of oil- and water-absorbent mats under the drill rig is also a good practice.

Electronic Transmission

MEMORANDUM

Date: December 7, 2023

To: David Ennis, Program Manager, Mining Act Reclamation Program

Through: Anne Maurer, Mining Act Team Leader, Mining Environmental Compliance Section (MECS)

From: Amber Rheubottom, MECS
Alan Klatt, Surface Water Quality Bureau (SWQB)
Sufi Mustafa, Air Quality Bureau (AQB)

Subject: **New Mexico Environment Department (NMED) Comments, No Agua Mine, Updated Closeout Plan, Revision 23-1, Imerys Perlite UCS, Inc., Taos County, New Mexico, Mining Act Permit No. TA005RE**

The New Mexico Environment Department (NMED) received correspondence from the Mining and Minerals Division (MMD) on October 2, 2023, requesting that NMED review and provide comments on the above-referenced MMD permitting action. Pursuant to the Mining Act, the No Agua Mine is is a regular existing mine. MMD requested comments on the application within 60 days of receipt of the request for comments. NMED requested an extension to submit comments by December 8, 2023. NMED has the following comments.

Background

Imerys Perlite UCS, Inc. (applicant) submitted an updated Closeout Plan to MMD in July of 2023. The No Agua Mine is a perlite surface mining and processing operation. The Closeout Plan updates the permit boundary, current disturbance, design limit, and anticipated five-year disturbance. This site is located on private property located approximately seven miles north of Tres Piedras, NM.

Air Quality Bureau

The Air Quality Bureau comments are attached.

Surface Water Quality Bureau

The Surface Water Quality Bureau comments are attached.

Mining Environmental Compliance Section (MECS)

The MECS has the following comments:

1. MECS submitted comments to MMD in 2017 that addressed one on-site well that was used as a drinking water source. Please discuss the current condition of and use of the well, and additionally what the use will be at closure and post-closure. If the well is to be plugged and abandoned, please adhere to the New Mexico Office of the State Engineer guidelines and regulations and account for those costs in the forthcoming cost estimate. The applicant has indicated that groundwater is approximately 1,300 feet below ground surface. The No Agua Mine is a surface mine and should not have any adverse impacts to groundwater associated with surface mining activities.

NMED Summary Comment

NMED has determined that the activities proposed in the Closeout Plan including responses to comments contained herein should have no adverse impacts to groundwater and surface water and will be protective of the environment.

If you have any questions, please contact Anne Maurer at (505) 660-8878.

cc: Joseph Fox, Program Manager, NMED-MECS
Shelly Lemon, Bureau Chief, NMED-SWQB
Elizabeth Bisbey-Kuehn, Bureau Chief, NMED-AQB
Samantha Rynas, EMNRD-MARP

MEMORANDUM

DATE: December 1, 2023

TO: Anne Maurer, Mining Environmental Compliance Section, Ground Water Quality Bureau, New Mexico Environment Department

FROM: Alan Klatt, Watershed Protection Section, Surface Water Quality Bureau, New Mexico Environment Department

SUBJECT: **Request for Review and Comment, No Agua Mine, Revision 23-1, Updated Closeout Plan, Imerys Perlite UCS Inc., Taos County, New Mexico Mining Act Permit No. TA005RE**

The New Mexico Environment Department (NMED)-Surface Water Quality Bureau (SWQB) received the subject request for comments on October 6, 2023. The application for permit revision 23-1 is to revise the 5-year closeout plan. SWQB has prepared the following comments pursuant to 19.10.5.506.E New Mexico Administrative Code (NMAC):

SWQB Comment Number	Reference to July 25, 2023 Mine Closeout Plan	SWQB Comment
1	General SWQB Comment	Tributaries to Arroyo Aguaje de la Petaca and other unnamed arroyos are subject to State water quality standards at 20.6.4 NMAC including 20.6.4.98 NMAC and 20.6.4.13 NMAC. Designated uses for water quality include livestock watering, wildlife habitat, marginal warmwater aquatic life and primary contact. All mining related activities should be designed to prevent potential impacts to water quality.
2	Section 2.10 Hydrology: The only potential impact to runoff is fine particles of perlite, a naturally occurring substance. Four catch basins function to prevent this material from exiting the mine area. No water quality problems have been identified at the operation throughout its history.	Please describe the methods that have been used to support the finding that no water quality problems have been identified.
3	Section 2.10 Hydrology: There are approximately eight natural drainages leaving the site.	Please provide a map that identifies the approximately eight drainages leaving the site. SWQB has identified up to 13 zero order streams leaving the site using the National Hydrography Dataset that is available on SWQB's online mapper: https://gis.web.env.nm.gov/oem/?map=swqb.
4	Section 7.2 Water Quality Monitoring:	Please provide SWQB with a copy of the Water Quality Monitoring Program. To ensure that fine sediment

	A Water Quality Monitoring Program (WQMP) will be conducted during the five year period following closure prior to bond release. This program will demonstrate the maintenance of state water quality standards at the site's permanent impoundments (pit bottoms and catch basins).	particles associated with the mining activity are not impacting water quality standards at 20.6.4.13 A. NMAC, SWQB recommends that Imerys Perlite UCS Inc. uses SWQB's Standard Operating Procedure 5.0 for Physical Habitat and conduct physical habitat measurements, including pebble counts.
5	Section 5.5 Watershed and Catch Basins: At closeout, there will be no changes in the locations or directions of the drainage at the property boundaries. The site's final internal watershed configuration may change prior to and during closeout, however it will remain in a productive and stable condition.	Please describe how the internal watershed configuration may change (e.g. changes to arroyo slopes, widths, depths, lengths, sinuosity, etc.), and please describe what criteria and restoration methods will be used to ensure that the headwater arroyos will remain productive and stable.
6	General SWQB Comment	The proposed reclamation activities may require permit coverage under the Clean Water Act (CWA) National Pollutant Discharge Elimination System (NPDES) Construction General Permit (CGP) and/or the Multi-Sector General Permit (MSGP). The 2022 CGP information is available at https://www.epa.gov/npdes/2022-construction-general-permit-cgp; the 2021 MSGP information is available at https://www.epa.gov/npdes/stormwater-discharges-industrial-activities-epas-2021-msgp. Contact Region 6 of the U.S. Environmental Protection Agency for any questions about the NPDES permitting program: https://www.epa.gov/npdes-permits/npdes-stormwater-program-region-6#contacts.

For questions related to these comments, please contact Alan Klatt, SWQB, at 505-819-9623.

MEMORANDUM

DATE: November 7, 2023

TO: Anne Maurer, Mining Act Team Leader, Mining Environmental Compliance Section, NMED

FROM: Sufi Mustafa, Staff Manager, Air Dispersion Modeling and Emission Inventory Section, Air Quality Bureau.

Request for Review and Comment, No Agua Mine, Revision 23-1, Updated Closeout Plan, Imerys Perlite UCS Inc., Taos County, New Mexico Mining Act Permit No. TA005RE

The New Mexico Air Quality Bureau (AQB) has completed its review of the above-mentioned mining project. Pursuant to the New Mexico Mining Act Rules, the AQB provides the following comments.

Recommendation

The Air Quality Bureau has no objection to this close out plan request.

This written evaluation does not supersede the applicability of any forthcoming state or federal regulations.

If you have any questions, please contact me at 505 629 6186

GOVERNOR
Michelle Lujan Grisham

DIRECTOR AND SECRETARY
TO THE COMMISSION
Michael B. Sloane

STATE OF NEW MEXICO
DEPARTMENT OF GAME & FISH

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Santa Fe

8 December 2023

Samantha Rynas, Permit Lead
Mining Act Reclamation Program
Mining and Minerals Division (MMD)
1220 South St. Francis Drive
Santa Fe, NM 87505

RE: 5-Year Closure/Closeout Plan Revision Permit Application, No Agua Mine, Taos County, New Mexico, Permit No. TA005ME; NMDGF Project No. NMERT-2936.

Dear Ms. Rynas,

The New Mexico Department of Game and Fish (Department) has reviewed the above referenced Closure/Closeout Plan Revision (CCP) submitted by Imerys Perlite USA, Inc. (Imerys). Imerys has submitted a revised CCP pursuant to New Mexico Mining Act Rules, Subpart 5, Section 506.

The CCP proposes to incorporate vertical mine highwalls into the reclamation. The high walls will be designed with benches that are15 feet wide and 35 feet tall to lend stability. The Department supports the incorporation of highwalls into the post-mining reclamation plan. However, in order for the highwalls to provide functional habitat for nesting raptors, ravens, and other avian species, the Department recommends including the creation of ledges and cavities in the highwall design. The Department also recommends further enhancing the habitat value of the highwalls by creating an undulating or irregular profile and by placing talus material along the toe of each highwall to provide habitat for small mammals and reptiles. In the more gently sloping and flat areas of reclaimed habitat, the Department further suggests incorporating brush and rock/boulder piles to enhance habitat diversity and provide shelter and protection from predators for local, smaller-bodied, terrestrial wildlife species.

The 2001 “Wildlife and Wildlife Activity at the No Agua Harborlite Perlite Mine Report” (Report), included in Appendix C of the CCP, was lacking in detail and substantive information. The Report does not adequately document the presence, diversity, relative abundance, and distribution of wildlife and their habitats within the mine permit area. The Department recommends that an updated wildlife survey of the No Agua Mine be performed that includes a half-mile buffer zone. The Department also suggests that Imerys reference the Department’s Baseline Wildlife Study Guidelines for further guidance on survey protocols and methods for documenting wildlife and their habitats.

The Department concurs with the reclamation seed mix presented in Table 6 of the CCP. The Department also recommends that only certified weed-free seed be used to avoid inadvertently introducing non-native species to the reclamation site. Any alternate plant species, used to

substitute for primary plant species that are unavailable at the time of reclamation, should also be native. When possible, the Department recommends using seeds that are sourced from the same region and habitat type as the reclamation site and suggests including seeds from a region that represents potential future climatic conditions at the site.

Thank you for the opportunity to review and comment on the updated CCP. If you have any questions, please contact Ron Kellermueller, Mining and Energy Habitat Specialist, at (505) 270-6612 or ronald.kellermueller@dgf.nm.gov.

Sincerely,

Virginia Seamster on behalf of Matt Wunder, Ph.D.
Chief, Ecological and Environmental Planning Division

cc: USFWS NMES Field Office

State of New Mexico
Energy, Minerals and Natural Resources Department

Michelle Lujan Grisham
Governor

Sarah Cottrell Propst
Cabinet Secretary

Todd E. Leahy, JD, PhD
Deputy Cabinet Secretary

Laura McCarthy, State Forester
Forestry Division

October 12, 2023

Samantha Rynas
Reclamation Specialist
Mining and Minerals Division
Mining Act Reclamation Program
1220 S. St. Francis Drive
Santa Fe, NM 87505

RE: Request for Agency Comment on No Agua Mine (TA005RE) Revision 23-1

Thank you for the opportunity to comment on the above referenced project. If new disturbance occurs outside of areas approved in 2017, there is the potential for impacts to *Cymopterus spellenbergii* (Taos spring parsley), a State Endangered plant species listed in Section 75-6-1 NMSA 1978. Although no occurrences of *C. spellenbergii* are currently known from within project boundaries, the site has suitable habitat –volcanic soils and rocks of the Taos Plateau in open piñon-juniper woodland or Douglas fir-ponderosa pine forest at elevations of 1,890-2,680 m, and populations of this species are known to occur within 10 miles of the No Aqua Mine.

Sincerely,

Erika Rowe
State Botanist/Endangered Plant Program Coordinator
EMNRD-Forestry Division
1220 S. St. Francis Dr.
Santa Fe, NM 87505
erika.rowe@emnrd.nm.gov / http://www.emnrd.state.nm.us/SFD/
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Michelle Lujan
Grisham
Governor

STATE OF NEW MEXICO
DEPARTMENT OF CULTURAL AFFAIRS
HISTORIC PRESERVATION DIVISION

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October 13, 2023

Samantha Rynas
Reclamation Specialist
Mining and Minerals Division
Mining Act Reclamation Program
1220 S. St. Francis Drive
Santa Fe, NM 87505
samantha.rynas@emnrd.nm.gov

Re: HPD Log# 120783, No Agua Mine (TA005RE) Revision 23-1

Dear Ms. Rynas:

This letter is in response to the above-mentioned permit revision 23-1.

I reviewed our records to determine if any cemeteries, burial grounds, or cultural resources listed on the State Register of Cultural Properties (SRCP) or the National Register of Historic Places (NRHP) exist within or near the project area.

Our records show that the permit area has never been surveyed for archaeology and it contains no known cultural resources. There are also no known burial grounds or NRHP/SRCP properties with it. However, lands immediately adjacent to the project area (which have been surveyed for cultural resources) contain multiple historic properties. Because of this we recommend that the mine operator conduct a cultural resource survey of any areas of proposed ground disturbance related to this permit modification.

This survey should be performed by a qualified professional to determine if any historic or archaeological properties are present, and if so, to provide documentation of those resources to our office. This information can then be used to evaluate the NRHP eligibility of any resources identified during the survey and determine project effects on those resources. A list of state permitted archaeologists and archaeological firms are available from this office upon request or can be downloaded from our web site at:

http://www.nmhistoricpreservation.org/documents/consultants.html

If you have any questions concerning these comments, please do not hesitate to contact me by phone at (505)-827-6162 or e-mail me at richard.reycraft@dca.nm.gov

Sincerely,

Richard Reycraft

Richard. Reycraft
HPD Staff Archaeologist