

**PERMIT MODIFICATION 20-1 TO PERMIT NO. SI006RE
ST. CLOUD MINING COMPANY
WINSTON ZEOLITE MINE AND PLANT FACILITY
EXISTING MINING OPERATION**

**MINING AND MINERALS DIVISION
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT**

Permit Modification 20-1 to Permit No. SI006RE is issued by the Director of the Mining and Minerals Division (“MMD”) of the New Mexico Energy, Minerals and Natural Resources Department to:

St. Cloud Mining Company (“SCM”)
P.O. Box 196
761 St. Cloud Mine Road
Winston, New Mexico 89743

(“Permittee”) for the Winston Zeolite Mine and Mill Facility (may be referred to hereinafter as the “Mine” or the “Winston Facility”), located approximately 4.5 miles south of Winston, within the Chloride Mining District, in Sierra County, New Mexico.

This Permit Modification 20-1 approves, and incorporates into Permit No. SI006RE, a new pit called South Side 1, access road, and three sediment ponds which are located within the approved design limits and permit area.

The cost estimate included with the application for Permit Modification 20-1 increases the Financial Assurance (“FA”) for Permit No. SI006RE from \$171,149.00 to \$360,251.00 to account for the increase in surface disturbance associated with the planned new South Side 1 Pit, access road, and sediment ponds.

The following sections of Permit No. SI006RE have been added or are revised to read as follows:

Section 1 (20-1). PERMIT MODIFICATION PACKAGE

- A. The Permit Modification Package (“PMP”) is comprised of the following submittals and supporting documents:
- 1) *St. Cloud Company, Zeolite Operations, Permit No. SI006RE. Permit Modification Application 20-1 submittal, dated April 28, 2020, to permit a new pit South Side 1 Project.*
 - 2) *Responses to Agency Review Comments and Request for Additional Information, Zeolite Mine, Modification 20-1 Application, Permit No. SI006RE – Sierra County, dated August 4, 2020.*



- 3) *Responses to Agency Review Comments and Request for Additional Information, Zeolite Mine, Modification 20-1 Application, Permit No. SI006RE – Sierra County, dated September 2, 2020.*
- 4) *Responses to Agency Review Comments and Request for Additional Information, Zeolite Mine, Modification 20-1 Application, Permit No. SI006RE – Sierra County, dated October 13, 2020.*
- 5) *Land Appraisal Report Narrative Summary Report, 48.25 Acres M/L of Undeveloped Land and Two Adjacent Residential Lots, Winston, Sierra County, NM. Prepared by Barrett Appraisal Services, LLC, dated March 2020.*
- 6) *Land Appraisal Report Narrative Summary, 316.28 Acres M/L of Undeveloped Land, Winston, Sierra County, NM. Prepared by Barrett Appraisal Services, LLC, dated March 2020.*

Section 2a (20-1).

PERMIT AREA AND DESIGN LIMITS

- A. The new South Side 1 Pit and sediment ponds are designed and located within the existing approved design limits, as indicated on Figure 1 (PMP Item No. 1), Figure 3 through 5 (PMP Item No. 3), and in other drawings and figures included within the PMP.
- B. Project Base Map for South Side 1 dated April 28, 2020 (PMP Item No. 1) provides the design limit boundaries of the South Side 1 pit covering approximately 35.8 acres and incorporates the new pit and sediment ponds into the existing Permit SI006RE.

Section 3 (20-1).

FINDINGS OF FACT

- A. The Permittee has filed an application requesting the modification of the Permit, including the excavation of a new pit and sediment ponds, as required by §19.10.5.505 NMAC.
- B. The Director has determined that the proposed permit modification meets the requirements of §19.10.5 NMAC.
- C. The Permittee submitted, on May 5, 2020, the \$1,000 permit modification fee as required by §19.10.2.201.H NMAC.
- D. The Permit Modification Package is complete and contains all the information required, with the conditions outlined in this modification document, as required by §19.10.5.505 NMAC.
- E. No public notice is required for the permit modification pursuant to §19.10.9.9 and §19.10.506.J.1 NMAC.

- F. Pursuant to §19.10.5.505 NMAC, the Director has determined that the proposed modification will not have a significant environmental impact.
- G. The proposed permit modification does not expand the design limits beyond those authorized by the Permit, will not create a significant increase in the amount of financial assurance, or significantly depart from the nature or scale of the Permit.

Agency and Tribal Consultation

- H. The Director has consulted with the New Mexico Environment Department, New Mexico Department of Game and Fish, Office of the State Engineer, Historic Preservation Division, State Forestry Division, and State Land Office as required by §19.10.5.505.B(3) NMAC.
- I. MMD provided the PMP to the following tribal entities and requested review and comment: Hopi Tribe, Mescalero Apache Tribe, Pueblo of Isleta, Navajo Nation, White Mountain Apache Tribe, Comanche Nation of Oklahoma, Ysleta del Sur Pueblo, and Fort Sill Apache Tribe on May 15, 2020. Comments were received from the Hopi Tribe and the Navajo Nation Heritage and Historic Preservation Department's Traditional Culture Program.

Financial Assurance Amount and Instrument(s)

- J. The total amount of financial assurance required for the closeout plan at the Winston Facility was \$171,149.00 prior to approval of this permit modification. The total amount of financial assurance for the closeout plan at the Winston Facility following approval of this permit modification is \$360,251.00.
- K. The Permittee has provided financial assurance in the total appraised amount of \$527,000.00 as required by §19.10.5.506.J.2 NMAC. The financial assurance instruments consist of real property collateral bonds. See cover letter attached to this Modification 20-1. The elements of the collateral update, addressed in the cover letter, shall be submitted to MMD within 180 days after issuance of this modification.

Section 8 (20-1).

COMPLIANCE WITH THE PERMIT

- A. The Permittee shall conduct mining and reclamation operations only as described in the approved PMP, the Permit, and any revisions or modifications approved by the Director.
- B. This permit modification 20-1 is issued pursuant to NMSA 1978, Section 69-36-1 et. Seq. and Title 19, Chapter 10 NMAC. Permittee may be required to comply with other federal, state, county or local laws or ordinances before or while undertaking the activities that are subject of this permit modification. MMD does not, by issuing this permit modification or otherwise, make any comment on Permittee's compliance with such other laws. It is Permittee's sole responsibility to investigate and comply with the requirements of such other laws.

- C. Permittee shall maintain all environmental permits required for the permit area. The approval of this permit modification does not relieve Permittee from the responsibility of complying with other state and federal requirements and standards.

Section 9 (20-1). **GENERAL OBLIGATIONS AND CONDITIONS**

The conditions outlined in this section are required for the Permittee to meet the requirements of the New Mexico Mining Act Rules:

- A. The area of disturbance that is approved in this permit modification is subject to the reclamation standard of 19.10.5.507.A NMAC.
- B. The Permittee shall notify MMD a minimum of 30 days prior to performing any permanent closeout/reclamation activities at the mine site.

C. **ACCESS ROADS**

1. The South Side 1 Pit will be accessed via a road (1,575 feet X 100 feet, 3.61 acres) that spurs off the existing Hermosa Road, County Road Co03 as shown in Figure 1 (PMP Item No.1) and shall be reclaimed.
2. County road Co04 shall not be impacted during the South Side 1 Pit mining operations. All other access roads to the Facility are existing county roads and are to be maintained either by the County or by SCM to support the PMLU following cessation of mining.

D. **SOUTH SIDE 1 PIT AND SEDIMENT PONDS**

The following conditions apply to mining disturbances within the permit area and the units designated as the “South Side 1 Pit” and sediment ponds. These are identified in Figure 1 (PMP Item No. 1) and Figure 3 through Figure 5 (PMP Item No. 3), showing the revised design limits into the existing permit boundaries of SI006RE. The conditions are required to mitigate the disturbances and to provide for stabilization of these units in such a way that will minimize future impact to the environment and protect air and water resources in accordance with §19.10.1.7.R.(1) NMAC.

1. **Surface Shaping and Stormwater Management**

- a) The Permittee shall backfill and regrade all slopes and high walls created by excavation of the South Side 1 Pit and sediment ponds to a slope no steeper than 3 horizontal to 1 vertical (“3H:1V”) and in a manner that ensures positive drainage from areas to be covered and revegetated.
- b) To the extent practicable, the Permittee shall eliminate ponding on final cover



surfaces. The Permittee shall construct top surfaces and final cover surfaces to a final grade of no less than 1% to direct stormwater away from covered surfaces.

- c) The Permittee shall provide to MMD, for its approval, detailed plans for stormwater management and best management practices (“BMP’s”) for erosion control of reclaimed and revegetated areas at least 180 days before implementation. The Permittee shall design, construct, and maintain BMP’s for erosion control of reclaimed and revegetated areas as identified within Attachment 8 Stormwater Pollution Prevention Plan SWPPP of the PMP (PMP Item No. 1).
- d) The Permittee shall provide both run-on and run-off controls and create positive drainage from any reclaimed areas. If necessary, surface water diversion ditches shall be provided on out slopes to adequately convey stormwater to retention ponds or outlet channels located at the out slope toe or to any other retention structure. Any diversion ditches needed shall be constructed at a grade of no steeper than 5%.

2. Cover Placement Plan

- a) Regraded surfaces of reclaimed and revegetated areas shall be covered with a total of at least 18 inches of suitable cover material. The textural characteristics of the cover material shall be supportive of a self-sustaining ecosystem. The cover material shall be stockpiled for storage adjacent to the pit to be applied evenly over the backfilled and regraded pit surfaces, then seeded and mulched as described in the approved reclamation plan.
- b) MMD shall approve the proposed specifications for the cover material prior to placement. A construction quality and assurance plan shall be provided to MMD, prior to the final reclamation/engineering of the South Side 1 Pit and sediment ponds. The construction quality and assurance plan shall be submitted to MMD no more than 180 days following the date of final mining and pit decommissioning operations within the South Side 1 Pit and sediment ponds, unless earlier reclamation is required by other agencies, or is initiated under other requirements, as required by this Permit.
- c) Any remaining accessible roads located within the South Side 1 Pit and sediment ponds, including all sources used as borrow for cover material, unless part of the industrial post-mining land use scenario, shall be graded for stormwater control, and shall be ripped to a minimum depth of 24 inches or covered with a minimum of 18 inches of suitable cover material and revegetated according to the requirements of the approved closeout and reclamation plan.
- d) Any slopes and high walls that may be created by excavation of borrow pits

shall be regraded to a slope no steeper than 3H:1V and revegetated according to the requirements of the approved closeout and reclamation plan.

3. **Seeding methods for South Side 1 Pit and Sediment Ponds**

After placement of cover material on tops and outcrops of the reclaimed South Side 1 Pit and sediment ponds, in accordance with the approved closeout and reclamation plan, the Permittee shall leave the seedbed in a roughened condition, to reduce overland flow and promote the infiltration of water. If this soil surface configuration and the potentially high rock fragment content of the cover material preclude the use of a drill seeder, the seed will be broadcast at double the rate provided in Appendix A and covered using a chain- or tire-drag. Straw or native grass mulch will be applied at a rate of at least two tons/acre, and stabilized in place using a tackifier emulsion, or by crimping. Long-stem mulch is preferred over shorter materials and will be weed-free and contain a minimum of viable seeds associated with the mulch source (e.g., barley or wheat seeds).

E. **Post-Mining Land Use**

The South Side 1 Pit, access road, and sediment ponds shall be revegetated to an acceptable standard to achieve a PMLU of “grazing/wildlife habitat.” Revegetation in the reclaimed areas shall meet approved MMD revegetation standards prior to release.

F. **Financial Assurance**

1. The Permittee shall maintain adequate financial assurance in the amount of \$360,251.00 for the approved activities in this Permit Modification 20-1, Permit No. SI006RE and any other modifications or revisions.
2. The Permittee shall update financial assurance and submit the required documents stated in the attached cover letter to meet the conditions in §19.10.12.1208.C.3 NMAC within 180 days of permit approval unless otherwise authorized by MMD.

Section 10 (20-1).

CONCLUSIONS OF LAW

- A. The Director has jurisdiction over the Permittee and the subject matter of this proceeding.
- B. The PMP is complete, accurate, and complies with the requirements of the Act and §19.10.5.502 and §19.10.5.503 of Rules with conditions described in this Permit Revision document.
- C. The PMP is complete, accurate, and complies with the requirements for Closeout Plans in the Act and §19.10.5.505, §19.10.5.506, and §19.10.5.507.A NMAC. The Permittee, SCM, is permitted, pursuant to the New Mexico Mining Act, to conduct milling, concentrating and reclamation operations at the Winston Zeolite Mine and Plant Site, Sierra County, New Mexico, upon the condition that the Permittee complies with the

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New Pit – South Side 1
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requirements of the Order, the Act, the Rules, the Permit Conditions, and requirements imposed by this permit.

All other provisions, modification, and revisions for mining and reclamation contained in the Winston Zeolite Mine and Plant Site Permit No. SI006RE remain unchanged.



CERTIFICATION

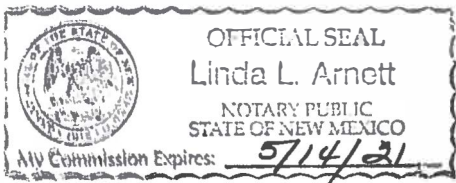
I certify that I have read, understand and will comply with the requirements of Permit No. SI006RE and any and all subsequent modifications and revisions.



Authorized Representative of the Permittee - JOSEPH P. McENANEY

PRESIDENT
Title

ST. CLOUD MINING COMPANY
Company

Subscribed and sworn to before me this 8th day of December, 2020




Notary Public


My Commission Expires

May 14, 2021

ORDER

NOW THEREFORE, IT IS HEREBY ORDERED that Permit Modification 20-1 to Permit SI006RE, approving the construction and reclamation of the South Side 1 Pit, access road and sediment ponds, is approved.

By Order of the Director, Mining and Minerals Division of the New Mexico Energy, Minerals and Natural Resources Department, of the State of New Mexico.

By: 

Jerry Schoepner, Director
Mining and Minerals Division
Energy, Minerals and Natural Resources Department

DATE: 12/15/2020

APPENDIX A.

Seed Mix, Vegetation Success Standards and Success Monitoring for Existing Units

Species	lbs. PLS/Acre	Seeds/lbs.	Seeds/ft ² .	Seasonality
Blue Grama <i>Bouteloua gracilis</i>	0.5	825000	9.47	Warm
SideOats Grama <i>Bouteloua curtipendula</i>	0.5	191000	2.19	Warm
Alkali sacaton <i>Sporobolus airoides</i>	0.5	1750000	20.09	Warm
Big sacaton <i>Sporobolus wrightii</i>	0.5	200000	2.3	Warm
Western Wheatgrass <i>Pascopyrum smithii</i>	0.5	110000	1.26	Cool
Bottlebrush Squirreltail <i>Elymus elymoides</i>	3	192000	13.22	Cool
Desert Globemallow <i>Sphaeralcea ambigua</i>	1	500000	11.48	Forb
Red Mexican hat <i>Ratibida columnaris forma pulcherrima</i>	0.6	737000	10.15	Forb
Wand-bloom penstemon <i>Penstemon virgatus</i>	1	500000	11.48	Forb
Fourwing Saltbrush <i>Atriplex canescens</i>	2	52000	2.39	Shrub
Apache Plume <i>Fallugia paradoxa</i>	0.4	420000	3.86	Shrub
Total	10.5		87.89	

***Drilled Seed Rates (double if broadcasted)**

Canopy Cover A proportional canopy cover standard will be determined based on quantitative vegetation data and on the interpretation of the community structure and ecological conditions in the reference area. The numerical standard derived from the proportional standard may vary over time to account for temporal differences in canopy cover associated with climatic variations. Thus, the numerical standard may increase or decrease based on reference area measurements, but the proportional standard will remain fixed. The numerical standard for canopy cover shall be 70% of the reference area.

Permittee shall identify a reference area representative of the vegetation community of the undisturbed area contiguous to the Permit Area.

Shrub Density The standard for shrub density will be 60% of the shrub density in the reference area.

Plant Diversity The plant diversity standard (shown below) shall be utilized for the Facility.

Class	Seasonally	Number	Minimum occurrence (% cover)
Perennial grass	Warm	3	1
Perennial grass	Cool	2	0.5
Perennial shrub	NA	2	1
Perennial forbs	NA	2	0.1

NA= Not applicable.

The above standards for canopy cover, shrub density, and plant diversity shall be applicable to the naturally revegetated areas as well.

Revegetation Success Monitoring

The reclaimed and reference areas will be monitored periodically after the final grading and the initial establishment of vegetation on the reclaimed lands. Regular inspections will be made to determine the initial success of the seeding. Thereafter, vegetation monitoring will be conducted periodically starting three years after initial establishment of vegetation on the reclaimed lands.

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