

**FRUITLAND MINE  
PERMIT NUMBER MK052MN  
MINIMAL IMPACT NEW MINING OPERATION**

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

Permit No. MK052MN ("Permit") is issued by the Director of the Mining and Minerals Division ("MMD") of the New Mexico Energy, Minerals and Natural Resources Department to:

Miocene, LLC  
Whose correct address is: 100 Fillmore Street, Suite 500  
Denver, CO 80206

("Permittee") in order to conduct mining and reclamation at the Fruitland Mine, located in Sections 13, 14, 23 and 24, Township 20 North, Range 7 West, McKinley County, New Mexico.

**Section 1. STATUTES AND REGULATIONS**

- A. This Permit is issued pursuant to the New Mexico Mining Act, NMSA 1978, §69- 36-1, et seq. (1993, as amended through 2016).
- B. This Permit is subject to all applicable regulations of the New Mexico Mining Act ("Act"), New Mexico Mining Act Rules, Title 19, Chapter 10 of the New Mexico Administrative Code ("NMAC" or "Rules"), and any other regulations which are now or hereafter in force under the Act; and all such regulations are made a part of this Permit by this reference.

**Section 2. PERMIT APPLICATION PACKAGE**

- A. The Permit Application Package ("PAP") consists of the following:
  - 1. A Subpart 3 Minimal Impact New Mining Operations Permit Application, submitted on January 5, 2016;
  - 2. Right-to-enter information provided by the Permittee through a signed and executed document entitled *Memorandum of Surface Humate Mining Lease* ("Mining Lease") effective as of April 29, 2013.

Any correspondence subsequently submitted to MMD, by the Permittee or its representatives, can be found at MMD offices within the Division's files, and is entitled *Fruitland Mine* or similar.

**Section 3. PERMIT AREA**

- A. The Permittee is authorized to conduct mining, exploration and reclamation operations only on those lands that are specifically designated and authorized within the permitted area

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("Permit Area") and within the proposed design limit. For this Permit, the Permit Area is defined as portions of Sections 13, 14, 23, and 24 of Township 20 North, Range 7 West in McKinley County, New Mexico. Figure 1 attached to this Permit represents the Permit Area for the Fruitland Mine as depicted in the PAP.

- B. For this Permit, the design limit is no more than a total of two (2) acres of disturbed land.
- C. The Permit Area is on land managed by a private surface owner and a private mineral estate owner ("Landholder").

**Section 4. FINDINGS OF FACT**

*The Permit Application Package*

- A. The PAP is complete and demonstrates that the proposed operation will meet the performance and reclamation standards and requirements of Subsection D, Paragraphs 6 through 8, of §19.10.3.304 NMAC.
- B. The Permittee has paid the initial permit application fee of \$1,000.00, as required by Subsection D of §19.10.2.201 NMAC.
- C. The PAP provides that the proposed operation meets the standards of a "Minimal impact mining operation," addressed in §19.10.1.7.M(2) NMAC, and in §19.10.3.304 NMAC, and does not fall within the exclusions in §19.10.1.7.M(2) NMAC. MMD and the other agencies, pursuant to §19.10.3.304.H NMAC, reviewed the minimal impact designation.
- D. The proposed and approved Post Mining Land Use ("PMLU") is designated as grazing and wildlife. The reclamation plan described in the PAP, subject to conditions in this Permit, demonstrates that the work to be done will reclaim disturbed areas within the Permit Area to a condition that allows for the establishment of a self-sustaining ecosystem appropriate for the life zone of the surrounding areas.
- E. The term of the Permit is governed by Subsections A, C and D of §19.10.6.607 NMAC.

*Right-To-Enter / Property Access Information*

- F. The Permit does not grant or create any property rights. Nor does MMD, by issuing this Permit or otherwise, make any comment on the surface or mineral rights that the Permittee may or may not have in the area covered by the Permit; only that the Permittee has provided a statement of basis on which the Permittee has a right-to-enter the property to conduct

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mining, exploration and reclamation. Permittee is solely responsible to take whatever steps are necessary to ensure that Permittee has property rights sufficient to support the activities contemplated by the Permit.

- G. The surface and mineral estate is owned by private entities, the identity of which were requested by the Permittee to remain confidential. The Permittee has satisfactorily demonstrated its right of access pursuant to §19.10.3.304.D(1) NMAC through an active and executed Mining Lease previously provided to MMD. The Permittee has also requested that the Mining Lease be held by MMD as confidential.

*General Information Regarding the Permittee*

- H. Neither the Permittee, entities that are directly controlled by the Permittee, nor entities that directly control the Permittee: (i) are in violation of the terms of another permit issued by the Director or in violation of a substantial environmental law or substantive regulation, as those terms are defined in §19.10.3.304.J(4)(a) NMAC at another mining operation in the United States, (ii) have forfeited or had forfeited financial assurance required for another mining, reclamation or exploration permit in the United States, or (iii) have demonstrated a pattern of willful violations of the Act or other New Mexico environmental statutes.
- I. The Permittee has signed a notarized statement agreeing to comply with the requirements of the Permit, the Rules, and the Act, and allows the Director to enter the Permit Area for the purpose of conducting inspections.

*MMD's Request for Comments to the Agencies and Tribes*

- J. MMD provided the agencies (the New Mexico Environment Department ("NMED"), the Department of Game & Fish, the State Forestry Division, the State Historic Preservation Office, and the Office of the State Engineer) with a copy of the PAP and requested comments from the agencies.
- K. The Secretary of NMED has provided a written determination, received by MMD on March 31, 2017, stating that the Permittee has demonstrated that the operation permitted hereunder is likely to have minimal environmental impact if operated and reclaimed in accordance with the approved permits and NMED comments, and will be expected to achieve compliance with all applicable air, water quality and other environmental standards if carried out according to the reclamation plan. This written determination addresses applicable standards for air, surface water and ground water protection enforced by or for which NMED is otherwise responsible.

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- L. MMD provided the PAP to the following tribal entities and requested review and comment: Pueblo of Acoma, Hopi Tribe, Pueblo of Isleta, Pueblo of Laguna, Navajo Nation, Pueblo of Tesuque, White Mountain Apache Tribe, and Pueblo of Zuni.
- M. MMD provided the Permittee with MMD's comments and comments provided by the other agencies in an email dated March 20, 2017. The comments have been satisfactorily addressed by the Permittee.

*Financial Assurance*

- N. The design limit for this Permit is less than two (2) acres of total disturbance, therefore, pursuant to §19.10.3.304(E) NMAC, permittee is not required to provide financial assurance.

**Section 5. COMPLIANCE REQUIREMENTS**

- A. The Permittee shall comply with the statutes and regulations referred to in Section 1 of this Permit and with all other applicable state or federal statutory, regulatory or permitting requirements. The issuance of this Permit does not relieve the Permittee from the responsibility of complying with other state and federal requirements and standards.
- B. Since the Permit Area is on private land, the expiration or termination of Landholder authorization to conduct mining and/or exploration operations on the property automatically suspends the Permittee's authority to continue mining and exploration operations on the property. Such suspension does not include reclamation operations by the Permit issued under §19.10.3 NMAC.

**Section 6. AGENCY RIGHT OF ENTRY**

- A. The Permittee shall allow the authorized representatives of the Director, without advanced notice, upon presentation of appropriate credentials, and without delay:
  - 1. to enter upon, or through, any mining or reclamation operation at any time, as provided for in §19.10.3.304.J(5) NMAC and §19.10.11.1101.E(1) NMAC for the purpose of conducting inspections and to determine if the Permittee is in compliance with the Permit requirements and conditions; and
  - 2. at reasonable times, and without delay, have access to and copies of any records associated with permitting and compliance required by the Act, §19.10 NMAC or the Permit.

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- B. In the event that the Landholder revokes, terminates, or otherwise prevents or impedes access to the Permit Area by the authorized representatives of the Director, the Director will notify the Permittee. The Permittee shall immediately cease all mining operations within the Permit Area and will not resume mining operations until such authorized representatives' access to the Permit Area has been restored.
- C. In the event that the Director's authorized representatives' access to the Permit Area is not restored by the Landholder within 60 days after the Director has given Permittee the notice provided for in subparagraph B of this Section 6, the Permittee shall immediately begin reclamation of the Permit Area.

**Section 7. PERMIT COVERAGE**

- A. This Permit shall be binding on any person or persons conducting mining, exploration and reclamation operations under this Permit.

**Section 8. ENVIRONMENTAL COVERAGE**

- A. The Permittee shall take all necessary steps to minimize any adverse impact to the environment or public health and safety resulting from non-compliance with any term or condition of the Permit, the Rules or the Act.

**Section 9. COMPLIANCE WITH THE PERMIT & PAP**

- A. The Permittee shall conduct mining, exploration and reclamation operations only as described in the approved PAP, this Permit, and any other modifications approved by the Director, pursuant to §19.10.6.608 NMAC. The Permittee shall comply with the statutes and regulations in Section 1 of this Permit, the applicable regulatory and permitting requirements, and any and all conditions that are incorporated into this Permit.
- B. Where the PAP is ambiguous or in apparent conflict with the provisions outlined in this Permit, the language of this Permit will supersede the PAP.

**Section 10. GENERAL OBLIGATIONS AND CONDITIONS**

*Description of Project / Authorized Disturbances*

- A. Within the approved Permit Area, the Permittee will stage a conventional surface pit humate extraction operation and access road. All mined humate will be hauled by truck

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off-site to be processed. Overburden and other excavated materials not hauled by truck off-site will be returned to the surface pit.

- B. Pursuant to §19.10.3.304.A of the Rules, the Permittee will conduct mining and exploration activities within the two (2) acre design limit. The Permittee is obligated to complete reclamation of all disturbed areas upon completion of mining and/or exploration or upon termination or withdrawal of approval to operate by the landholder.
- C. The Permittee shall maintain this Permit until reclamation is complete at the site.

*Stockpiled Materials*

- D. Prior to conducting humate removal activities, the area to be mined shall be cleared and grubbed and the material stockpiled for future use as mulch. Additionally, the top 6 to 12 inches of topsoil shall be removed and stockpiled. Subsequent removal of overburden below 6 to 12 inches shall be stockpiled separately from the stockpiles of topsoil and grubbed material. All stockpiles shall be segregated. Topsoil stockpiles will be located and protected so that wind and water erosion to this resource are minimized.

*Reclamation Requirements*

- E. Backfilling of the surface pit with overburden and rough grading shall occur concurrently during mining. When mining is complete, the entire area shall be regraded and re-contoured to approximate the contour of the surrounding terrain.
- F. Stockpiled topsoil will be applied as top dressing over the entire area, and the area shall be scarified and seeded. Scarification shall consist of ripping, furrowing or disking.
- G. Any areas where vegetation is disturbed will be reseeded utilizing the following weed free, pure live seed ("PLS") mixture:

<u>SPECIES</u>	<u>SEEDING RATE (lbs. PLS/acre)</u>
Blue Grama	7.0
Western Wheatgrass	5.0
Sand Dropseed	4.0
Indian Ricegrass	4.0
Fourwing Saltbush	2.0
Scarlet Globemallow	2.0
TOTAL	24.0 lbs. PLS/acre

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- H. Stockpiles of mulch material (grubbed vegetation) shall be applied to the surface to mitigate erosion. A combination of certified weed-free straw/mulch and grubbed vegetation chipped or ground as mulch from the site shall be applied to the reclaimed areas and shall total a minimum of 2 tons per acre. The mulch shall be crimped in place or otherwise incorporated into the soil.
- I. Following the re-vegetation and restoration activities, periodic site monitoring shall be conducted by the Permittee to ensure the successful establishment of vegetation and stabilization of the site. Re-vegetated areas that do not exhibit satisfactory vegetative growth by the end of the third growing season shall be mitigated by reseeding, mulching, grading, and/or application of best management practices ("BMPs") to prevent erosion and site degradation.
- J. The site will be considered reclaimed and eligible for release once the following criteria have been met:
  - 1. canopy cover within the reclaimed area equals at least 75% of canopy cover within the identified reference area(s);
  - 2. species diversity within the reclaimed area approximates the species diversity within identified reference area(s) or within the ecological site description provided by the Natural Resources Conservation Service;
  - 3. noxious weed species percent cover does not exceed that of the reference area(s);
  - 4. no significant erosion is evident on reclaimed areas.
- K. The Permittee shall leave all disturbances in a manner that is stable, both long term and short term, and non-hazardous to humans and wildlife. The reclamation plan for the site is described in the PAP and this Permit.
- L. All lands to be disturbed by the mining operation will be addressed under the performance reclamation standards and requirements of §19.10.3.304 NMAC and in accordance with the reclamation plan provided in the PAP and this Permit.
- M. The Permittee shall notify MMD at least thirty (30) days prior to initiating any reclamation pursuant to this Permit.

*Noxious Weed Management*

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- N. Noxious weeds and/or competitive vegetation shall be controlled by the Permittee. Noxious weed management shall consist, at a minimum, of the following:
1. training of on-site personnel to recognize Halogeton, a Class B noxious weed known to occur on disturbed areas within McKinley County;
  2. completion of two inspections per year (early growing season [May-June] and after the monsoon season [September]), of all disturbed areas such as roads, reclaimed areas, pits, and stockpiles within the Permit Area;
  3. annual spot-treatment of visually identifiable Halogeton plants, or other identified noxious weeds, using an appropriate herbicide, applied in strict accordance with the manufacturer's recommendations, and/or mechanical removal methods within disturbed areas, affected areas, and reclaimed areas within the Permit Area;
  4. decontamination (i.e., pressure or steam washing) of mining equipment prior to introducing any equipment into the Permit Area in order to help prevent the introduction of non-native species to the Permit Area.

*Best Management Practices ("BMPs")*

- O. A minimum setback of 100 feet from any defined watercourse within the Permit Area is recommended. No excavation or filling shall take place within any watercourse until the required permits or consultations are obtained from the U.S. Army Corps of Engineers.
- P. No storage of fuels or chemicals shall take place within any watercourse.
- Q. The Permittee shall implement BMPs in a manner that prevents direct impacts to surface water and ephemeral, intermittent, and perennial water courses. The Permittee shall implement erosion control measures that are designed, constructed and maintained using professionally recognized standards.
- R. The Permittee must contain any water produced from the operation at the site. Discharge of water or any industrial fluids to any watercourse may be a violation of the Clean Water Act. All waste material shall be collected and disposed of properly.
- S. Travel should be suspended during wet, muddy conditions. Construction or maintenance activities should not be performed during periods when the soil is too wet to adequately support heavy equipment. If such equipment creates ruts in excess of six inches deep, the soil is considered too wet to adequately support equipment.



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- T. Appropriate spill clean-up materials, such as absorbent pads, must be available on-site at all times during mining activities to address potential spills. Spills must be reported immediately to NMED as required by the New Mexico Water Quality Control Commission Regulations (§20.6.2.1203 NMAC). For non-emergencies during normal business hours, call (505) 476-6000. For non-emergencies after hours, call (866) 428-6535 or (505) 428-6535 (voice mail, twenty-four hours a day). For emergencies only, call (505) 827-9329 twenty-four hours a day (NM Department of Public Safety).

*Cultural and Paleontological Resource Preservation Requirements*

- U. The Permittee is obligated to comply with procedures established in Section 18-6-11.2 of the Cultural Properties Act, NMSA and §4.10.11 NMAC to protect such cultural items as human remains, associated funerary objects, sacred objects, and objects of cultural patrimony discovered inadvertently during the course of project implementation. In the event that any of the cultural items listed above are discovered during the course of project work, the Permittee shall immediately halt the disturbance and contact the Office of the Medical Investigator and the local law enforcement agency pursuant to Section 18-6-11.2 of the Cultural Properties Act and the Department of Cultural Affairs within 24 hours for instructions. The Permittee shall be held responsible for protecting, evaluating, reporting, excavating, treating, and disposing of these cultural items according to the procedures established by the Department of Cultural Affairs in consultation with Indian Tribes.

*Changes, Modifications, or Revisions to the Permit*

- V. Any changes, modifications or amendments to the approved Permit must be approved, in writing, prior to implementation.

*Financial Assurance*

- W. The Permittee is not required to provide financial assurance in accordance with §19.10.3.304.E NMAC.

*Annual Report and Fees*

- X. The Permittee shall submit annual reports pursuant to §19.10.6.610 NMAC, and any fees as required by §19.10.2 NMAC. The Permittee shall identify any areas of new disturbance in each annual report submitted to MMD.

*Additional Obligations*

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- Y. The Permittee will maintain this Permit until reclamation is completed at the site. The term of this Permit is governed by §19.10.6.607 NMAC.
- Z. The Permittee shall monitor the site, at least once per year, for the duration of the Permit in order to assure knowledge of the general site conditions and compliance with the Permit and the approved Permit Area.

**Section 11. CONCLUSIONS OF LAW**

- A. The Director concludes the application meets the requirements of a “Minimal Impact Mining Operation,” addressed in §19.10.1.7.M(2) NMAC. The operation authorized by this Permit is eligible as a minimal impact operation, and the Permittee is authorized to operate a minimal impact mining operation, pursuant to §19.10.1.7.M(2) NMAC and §19.10.3.304 NMAC. The Fruitland Mine will no longer qualify as a Minimal Impact operation if permit authority is exceeded or if any of the characteristics described in §19.10.1.7.M(2) NMAC exist.
- B. The PAP is complete and accurate and complies with the requirements of the Act and §19.10.3.304 NMAC.
- C. The Director has jurisdiction over the Permittee and the subject matter of this Permit and process.
- D. The Permittee is permitted to conduct mining and reclamation operations on the Permit Area and within the two (2) acre design limit upon the condition that the Permittee complies with the requirements and conditions of the Act, the Rules, and this Permit, and upon the submission of such annual reports and fees as may be required under §19.10.6.610 NMAC and §19.10.2 NMAC.

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**ORDER**

NOW THEREFORE, IT IS HEREBY ORDERED that Permit No. MK052MN, for the construction and operation of the humate mine referred to as the Fruitland Mine, located in Sections 13, 14, 23, and 24, Township 20 North, Range 7 West, McKinley County, New Mexico, is approved. The Permit may not be transferred without approval by the Director.

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:

  
\_\_\_\_\_  
Fernando Martinez, Director  
Mining and Minerals Division  
Energy, Minerals and Natural Resources Department

Date:

5/18/2017

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CERTIFICATION

I certify that I have read, understand and will comply with the requirements of the Permit. I further certify that I am not in violation of the Act or §19.10 NMAC. I also agree to comply with the performance and reclamation standards and requirements of the Permit, the Rules, and the Act, and allow the Director to enter the Permit Area without delay for the purpose of conducting inspections during exploration and reclamation.

Steven Brady  
Authorized Representative of the Permittee

Operations Manager  
Title

Miocene LLC  
Company

Subscribed and sworn to before me this 27<sup>th</sup> day of April, 2017

Shirley Up  
Notary Public

My Commission Expires

So 2/25, 2019



OFFICIAL SEAL  
Lucy M. Morfin  
NOTARY PUBLIC - STATE OF NEW MEXICO

My Commission Expires: 02/25/2019