

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

Fernando Martinez, Director
Mining and Minerals Division



May 14, 2019

Kennecott Exploration Company, Attn: Erik Best, Land Manager
2640 West 1700 South
Salt Lake City, UT 84104

**RE: Agency Review Comments and Request for Additional Information,
Kennecott Steeplerock Minimal Impact Exploration Project,
Permit No. GR082EM – Grant County, New Mexico**

Mr. Best:

The New Mexico Mining and Minerals Division (“MMD”) has reviewed the Permit Application Package (“PAP”), for a minimal impact exploration permit, submitted by Kennecott Exploration Company (“Kennecott”), under Subpart 3 of the New Mexico Mining Act Rules (“Rules”). MMD has also received agency comments on the February 26, 2019 submittal from Kennecott.

Enclosed with this letter are the reviewing agency comment letters submitted by the following state agencies: the New Mexico Environment Department (“NMED”), the NM Office of the State Engineer (“OSE”), the New Mexico Department of Game and Fish (“NMDG&F”), and the New Mexico Department of Cultural Affairs - Historic Preservation Division (“NMDCA/HPD”). Because this exploration project is proposed to take place on Federal Bureau of Land Management (“BLM”) lands, Kennecott will be required to follow those agencies requirements in conjunction with MMD’s Minimal Impact Exploration Permit (“Permit”).

In addition to State and Federal agencies the White Mountain Apache Tribe has commented on the Permit No. GR082EM PAP. Please take the tribal comments into consideration during this process. Additionally, please find general comments from MMD based on review of this application. Attached to this letter are all comments from State and Tribal agencies.

General Comments:

MMD has reviewed the PAP and deemed it administratively complete, pursuant to §19.10.3.302 G NMAC, in a letter to Kennecott dated April 1, 2019. **However, MMD has reviewed the PAP and has found it to be *technically incomplete* pending receipt of acceptable supplemental information identified in this letter. Please respond no later than 30 days of receipt of this letter, to the information requested.**

Eric Best, Land Manager – Kennecott Exploration Company

**RE: Agency Review Comments and Request for Additional Information,
Kennecott Steeplerock Minimal Impact Exploration Project,
Permit No. GR082EM – Hidalgo County, New Mexico**

May 10, 2019

Page 2 of 3

MMD Comments:

Please respond to the following items:

- A. Please provide the width of drill pads.
- B. Please provide the width of Mud/Fluid Pits.
- C. Please describe the extra measures that will be taken through the use of BMP's to reduce erosion for each area that is within 100 ft. of Bitter Creek.
- D. Please describe the reclamation that will occur to ensure ephemeral stream bank stability in areas where ephemeral streams will be crossed for this project.
- E. What measures will be taken to ensure traffic safety and road stability on drill sites that are adjacent to Bitter Creek Rd.?
- F. MMD recommends mulching all reclaimed areas at rate of 2 t/ac of weed free straw.

**NMED Mining Environmental Compliance Section, Ground Water Quality Bureau
Comments ("MECS)**

Please review the comment letter received by NMED MECS Ground Water Quality.

NMED Surface Water Quality Bureau Comments:

Please review the comment letter received by NMED Surface Water Quality Bureau.

NMED Air Quality Bureau Comments:

Please review the comment letter received by NMED Air Quality Bureau.

NMDCA/HPD Comments:

Please review the comment letter received by NMDCA/HPD.

NMOSE Comments:

Please review the comment letter received by NMOSE and respond the question regarding which type of well decommissioning products will be used in the approved WD-08 (*Well Plugging Plan of Operations*) regarding this exploration project.

Eric Best, Land Manager – Kennecott Exploration Company

RE: Agency Review Comments and Request for Additional Information,
Kennecott Steeplerock Minimal Impact Exploration Project,
Permit No. GR082EM – Hidalgo County, New Mexico

May 10, 2019

Page 3 of 3

NMDG&F Comments:

Please review the comment letter received by NMDG&F and respond to the following concerns.

- A. Please provide the approved BLM Seed Mix planned to be used on this project.
- B. Please describe in more detail the fencing and netting procedures for wildlife protection regarding the drill mud pit. NMDG&F recommends a small diameter mesh be wrapped around the bottom 2 ft. of mud pit fencing.
- C. Please discuss the option of moving drill sites 19PDS-Ar and 19PDS-Br to at least 100 ft. from either side of Bitter Creek.
- D. Please discuss any measures that will taken to avoid unintentional take of the Gila Monster (*Heloderma suspectum*) while construction activity is occurring related to the exploration project. NMDG&F is available for consultation on methods of avoidance and relocation.

Should you have any questions, comments, or require additional information concerning this letter or any enclosures, please contact me at (505) 476-3413, or via email at: clinton.chisler@state.nm.us.

Sincerely,



Clint Chisler – Permit Lead, GR082EM
Mining Act Reclamation Program (“MARF”)
New Mexico Mining and Minerals Division

Enclosures:

- April 22, 2019 Letter to MMD from NMDGF
- April 18, 2019, Letter to MMD from NMED
- April 10, 2019 Letter to MMD from NMDCA/HPD
- April 29, 2019 Letter to MMD from NM OSE
- April 09, 2019 Letter to MMD from the White Mountain Apache Tribe

Cc w/o enclosures:

Holland Shepherd, Program Manager, MARP/MMD
Mine File (GR082EM)



Michelle Lujan Grisham
Governor

Howie C. Morales
Lieutenant Governor

**NEW MEXICO
ENVIRONMENT DEPARTMENT**

Ground Water Quality Bureau

1190 Saint Francis Drive / PO Box 5469
Santa Fe, NM 87502-5469
Phone (505) 827-2900 Fax (505) 827-2965
www.env.nm.gov



James C. Kenney
Cabinet Secretary

Jennifer J. Pruett
Deputy Secretary

MEMORANDUM

Date: April 18, 2019

To: Holland Shepherd, Program Manager, Mining Act Reclamation Program

Through: Jeff Lewellin, Mining Act Team Leader, Mining Environmental Compliance Section

From: George Llewellyn, Mining Environmental Compliance Section
John Moeny, Surface Water Quality Bureau
Neal Butt, Air Quality Bureau

Subject: **NMED Comments, Kennecott Exploration Company, Steeplerock
Exploration Project, Minimal Impact Exploration Project, Grant County,
New Mexico, MMD Permit No. GR082EM**

The New Mexico Environment Department (NMED) received correspondence from the Mining and Minerals Division (MMD) on April 1, 2019 requesting NMED review and provide comments on the above-referenced MMD permitting action. In accordance with 19.10.3.302.G NMAC, NMED is providing comments within the 20-day period prescribed by the regulation. NMED has the following comments.

Background

Kennecott Exploration Company (Applicant) proposes a minimal impact exploration project to advance eleven borings to a depth of approximately 6,000 feet below ground surface. The borings will be located on private land and land managed by the Bureau of Land Management. Specifically, the borings will be located in Sections 20, 21, and 33, T16S, R21W which is indicated in the application as approximately 14 miles northeast of Duncan, AZ, in Grant County, New Mexico. The purpose of the proposed exploration project is to evaluate potential reserves of copper and associated base and precious metals.

Air Quality Bureau

The Air Quality Bureau comments are attached under separate letterhead.

Surface Water Quality Bureau

The Surface Water Quality Bureau comments are attached under separate letterhead.

Mining Environmental Compliance Section (MECS)

MECS personnel reviewed the Office of the State Engineer (OSE) Points of Diversion (POD) database to evaluate the presence of ground water production wells in the area of the proposed project. No ground water production wells are listed in the OSE POD database in the three Sections of the proposed project. The Applicant indicates a USGS well that is in the project area has a depth to ground water of 670 feet below ground surface and the total dissolved solids concentration of ground water in the well is estimated to be 2890 mg/l. The USGS well referenced in the application is not listed in the OSE POD database. In the likely instance ground water is encountered while advancing the borings to the total depth of 6,000 feet below ground surface, all plugging and abandonment of the borings should comply with OSE regulations for wet holes. The applicant must contain any water produced from the exploration holes at the drill sites.

NMED Summary Comment

NMED finds that the minimal impact exploration project is likely to have a minimal impact to the environment if operated and reclaimed with the approved permits, pollution controls and the comments above.

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

cc: Shelly Lemon, Bureau Chief, SWQB
Liz Bisbey-Kuehn, Bureau Chief, AQB
Fernando Martinez, Division Director, EMNRD-MMD
Clint Chisler, Lead Staff, EMNRD-MMD
Kurt Vollbrecht, Program Manager, MECS



Michelle Lujan Grisham
Governor

Howie C. Morales
Lt. Governor

**NEW MEXICO
ENVIRONMENT DEPARTMENT**

Harold Runnels Building
1190 Saint Francis Drive, PO Box 5469
Santa Fe, NM 87502-5469
Telephone (505) 827-2855
www.env.nm.gov



James C. Kenney
Cabinet Secretary

Jennifer J. Pruett
Deputy Secretary

MEMORANDUM

DATE: April 18, 2019

TO: Jeff Lewellin, Mining Act Team Leader
Mining Environmental Compliance Section
Ground Water Quality Bureau (GWQB)

FROM: John Moeny
Watershed Protection Section
Surface Water Quality Bureau (SWQB)

RE: **Request for Comments, Minimal Impact Exploration Project, Kennecott Exploration Company, Kennecott Steeple Rock Exploration Project, Grant County, MMD Permit No. GR082EM**

On April 1, 2019 NMED received a request for comments regarding a minimal impact exploration project targeting copper and other precious metals within the Steeple Rock Mining District located in Grant County.

Summary of Proposed Action

The applicant, Kennecott Exploration Company, seeks to bore eleven (11) holes to a depth of up to 6,000 feet on a combination of private and public lands managed by the Bureau of Land Management. There are also associated disturbances from new road construction and drilling pads. Total new disturbance is estimated to be 3.6 acres. Several of the proposed bore holes lie adjacent to Bitter Creek, an unclassified tributary to the Gila River in Arizona.

Relevant State and Federal Water Quality Regulations

Intermittent water quality standards under 20.6.4.98 NMAC apply to all unclassified waters of the state including ephemeral drainages in the project area, until a hydrology protocol (HP) survey is conducted and a Use Attainability Analysis (UAA) is approved by the Water Quality Control Commission (WQCC) in accordance with 20.6.4.15 NMAC.

This Project will disturb one or more acres and storm water discharges may be covered under either the U.S. Environmental Protection Agency (USEPA) National Pollutant Discharge Elimination System (NPDES) Construction General Permit (CGP) or under the Multi-Sector General Permit (MSGP) under Sector G Metal Mining.

Among other things, a SWPPP must be prepared for the site and that appropriate Best Management Practices (BMPs) be installed and maintained both during and after construction to prevent, to the extent practicable, pollutants (primarily sediment, oil & grease and construction materials from construction sites) in storm water runoff from entering waters of the U.S. This permit also requires that permanent stabilization measures (revegetation, paving, etc.), and permanent storm water management measures (storm water detention/retention structures, velocity dissipation devices, etc.) be implemented post construction to minimize, in the long term, pollutants in storm water runoff from entering these waters.

Operators of certain small construction activity (disturbance of one to five acres) may be waived from permit requirements under limited circumstances. To be eligible for this waiver, operators must certify to USEPA that they are eligible (see Section 9 Appendix C of the CGP). Waivers are only available to stormwater discharges associated with small construction activities (i.e., 1-5 acres). If this Project transitions into mining activities, MSGP coverage would be required at that time.

The CGP was re-issued January 11, 2017 and is effective February 16, 2017. The CGP and the eReporting tool (NeT-CGP) to apply for coverage or waivers is available at: <https://www.epa.gov/npdes/2017-construction-general-permit-cgp>.

The MSGP was re-issued effective June 4, 2015, that Permit information is available at <https://www.epa.gov/npdes/stormwater-discharges-industrial-activities>

In addition to the regulations above, the following best management practices are recommended to protect surface water quality.

- Fuel, oil, hydraulic fluid, lubricants, and other petrochemicals must have a secondary containment system to prevent spills.
- Ground water sump pits may not be used as disposal locations for hydraulic fluids, oils, contaminated drilling mud or other materials that may pose a pollution risk to surface and ground water.
- Ground water sump pits should be setback from drainages by a minimum of 100 feet or the maximum practical distance given the site conditions.
- If drilling will be completed during the summer monsoon season (July through September) it is recommended that ground water sumps, equipment and supplies be located well above the flood prone width of any channel or drainage bottom

- Appropriate spill clean-up materials such as absorbent pads must be available on-site at all times during road construction, site preparations, drilling and reclamation to address potential spills.
- Report all spills immediately to the 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 505-428-2500. 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 Dept of Public Safety).

Impacts to Surface Water Quality

The SWQB finds Kennecott's proposed exploration is likely to have a minimal impact to surface waters if operated and reclaimed with the approved permits and pollution controls and the comments above.

If you have any questions, please phone me at (575) 956-1545.



Michelle Lujan Grisham
Governor

Howie C. Morales
Lt. Governor

**NEW MEXICO
ENVIRONMENT DEPARTMENT**

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



James C. Kenney
Cabinet Secretary

Jennifer J. Pruett
Deputy Secretary

MEMORANDUM

DATE: April 5, 2019

TO: Jeff Lewellin, Mining Act Team Leader
Mining Environmental Compliance Section, Ground Water Quality Bureau

FROM: Neal Butt, Environmental Analyst
Control Strategies Section, Air Quality Bureau

RE: Request for Comments, Minimal Impact Exploration Project, Kennecott Exploration Company, Kennecott Steeple Rock Exploration Project, Grant County, MMD Permit No. GR082EM

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.

Air Quality Permitting History

The AQB has not issued any air quality permits for this operation.

Details

The applicant, Kennecott Exploration Company, has requested a minimal impact exploration permit for the Steeple Rock Exploration Project, Permit No. GR082EM. Applicant proposes to drill 11 drill holes up to 6,000 feet deep utilizing 11 drill pads, in Grant County, New Mexico. The proposed drilling sites are located approximately 14 miles by road, NE of Duncan, Arizona (across the New Mexico state line). Total acreage to be disturbed by project= 3.6 acres

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:

Paragraph (1) of Subsection A of 20.2.72.200 NMAC, *Application for Construction, Modification, NSPS, and NESHAP - Permits and Revisions*, states that air quality permits must be obtained by:

“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.”

Further, Paragraph (3) of this subsection states that air quality permits must be obtained by:

“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:

“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.”

In addition, pursuant to Subsection A of 19.10.3.302 NMAC, *Minimal Impact Exploration Operations*:

“A minimal impact exploration operation will not exceed 1000 cubic yards of excavation per permit. Disturbances for constructed roads, drill pads and mud pits shall be no more than 5 acres total and will not be counted in the excavated materials. The type of road construction, the number and type of drill pads, and other disturbances when considered with site specific conditions will be major factors in determining eligibility for minimal impact status which is in the discretion of the director.”

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. Therefore, we recommend controls to minimize emissions of particulate matter from fugitive dust sources to limit public health and traffic safety impacts. The following control strategies can be included in a comprehensive fugitive 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.

Recommendation

The AQB has no objection to the current request for exploration.

The applicant is expected to comply with all requirements of federal and state laws pertaining to air quality. 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.