State of New Mexico Energy, Minerals and Natural Resources Department

Michelle Lujan Grisham Governor

Melanie A. Kenderdine Cabinet Secretary

Ben Shelton Acting Deputy Cabinet Secretary Albert Chang, Director Mining and Minerals Division



August 7, 2024

Raymond Irwin, Geologic Consultant New Mexico Copper Corporation P.O. Box 4209 Truth or Consequences, NM 87901

RE: Technical Comments on Copper Flat Exploration 2024 Application, Permit No. SI061EM

Dear Mr. Irwin,

The New Mexico Mining and Minerals Division (MMD) received an application from THEMAC for the Minimal Impact Exploration Application Copper Flat Exploration Project, Permit No. SI061EM on April 23, 2024.

On May 6th, MMD deemed the submitted application was administratively complete which was followed by a site inspection with THEMAC on May 23, 2024. MMD has conducted a technical review of the Application and, in accordance with 19.10.3.302.I 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) as well as the Bureau of Land Management (BLM).

Agency Responses: Attached for review and comment as Attachment A

New Mexico Department of Cultural Affairs Submitted July 16, 2024
New Mexico Department of Game and Fish Submitted June 24, 2024
New Mexico Environment Department Submitted July 5, 2024
New Mexico Office of the State Engineer No response.
EMNRD - Forestry Division Submitted July 25, 2024
Bureau of Land Management No Response.

General Comments:

MMD finds that the proposed area has significant historical mining disturbance. Many of the proposed holes and roads are easily accessible from current roads and will minimize potential disturbance footprint. See MMD's comments below.

Section 2.B. Right of Way. A portion of this project is on BLM lands, THEMAC is required
to follow the approved BLM requirements. BLM has previously issued a Mine Plan
Operations (MPO) and THEMAC needs to contact BLM to ensure compliance with the
MPO and obtain necessary authorizations under BLM jurisdiction. THEMAC has already
provided the NIO document as part of the application.

Operator response: and/or see attachment:

- 2. General Application. MMD requests future documents be typed electronically to aid in processing and review. No response from THEMAC needed.
- 3. General Application. It was noted documents such as surveys were performed but not submitted with the application. For example, Sections 2.C. Cultural Resources and 2.D. Wildlife and Vegetation surveys indicated there were surveys done, however; were not attached for reference. No response from THEMAC needed.
- 4. General Application. Attachment for the GPS coordinates was referenced as "See attachment". MMD requests future attachments be submitted with a serial naming convention for document reference. For example, "Attachment A...B...C..." etc. No response from THEMAC needed.
- 5. Section 7.D. Please provide the expected BLM seed mix.

Operator response: and/or see attachment:

6. Please refer to Attachment A for the complete technical comments from Agencies on this minimal impact exploration application.

Agency Response Attachment:

Please review and respond to the attached Agency technical comments within 60 days of receipt of this letter. If you have any questions regarding these comments, please contact me at (505) 216-8945 or at samantha.rynas@emnrd.nm.gov.

September 24, 2024 Page 3

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

Attachment A: Combined Agency Comment letters

CC: David (DJ) Ennis, Program Manager, MARP, MMD
Clint Chisler, Reclamation Specialist Supervisor, MARP, MMD
Mine File SI016EM

GOVERNOR
Michelle Lujan Grisham

STATE OF NEW MEXICO DEPARTMENT OF GAME & FISH



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For information call: (888) 248-6866

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DR. SABRINA PACK

24 June 2024

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

RE: Minimal Impact Exploration Permit Application, Copper Flat Exploration Project 2024, Sierra County, New Mexico. Permit No. SI061EM; NMDGF Project No. NMERT-3580.

Dear Ms. Rynas,

The New Mexico Department of Game and Fish (Department) has reviewed the above referenced exploration project submitted by THEMAC Resource Group (THEMAC). THEMAC is proposing to drill 26 exploratory holes across 26 drill pad sites. The hole depths will range from approximately 600 to 900 feet. The exploration project will be in Sections 26 and 35 in Township 15S, Range 7W. The total area that will be disturbed by proposed activities is approximately 4.03 acres. Staff from the Department were unable to attend the site inspection conducted on 23 May 2024.

The Department strongly recommends the use of a closed loop drilling system. Closed loop systems eliminate the need to build fences or install netting to exclude wildlife from mud pits, reduce the amount of surface disturbance associated with the drill pad site, and consume significantly less water. If THEMAC ultimately uses mud pits, the Department recommends netting or covering fenced mud pits to exclude birds and bats. If netting is used, the Department recommends extruded plastic, knit, or woven netting with a mesh size of three eighths of an inch to exclude smaller animals. The Department does not support the use of monofilament netting due to its tendency to ensnare wildlife, usually resulting in injury or death. Netting material must be held taught over a rigid and adequately supportive frame to prevent sagging into the mud pits.

It is important to prevent wildlife from entering and becoming trapped in stockpiled pipes used in the drilling process. The Department recommends capping drill pipes as the most effective way to prevent wildlife entry. At a minimum, each section of pipe should be visually inspected prior to use to verify that no wildlife, including small mammals or reptiles, are inside.

For site reclamation, THEMAC proposes to use a specified U.S. Bureau of Land Management seed mix. The Department recommends that only native plant species are used and that the reclamation seed mix is designed to enhance local pollinator habitat. The Department also

Samantha Rynas, Permit Lead 24 June 2024 Page -2-

recommends that only certified weed-free seed be used to avoid inadvertently introducing nonnative 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 proposed exploration project. 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, Ph.D.
Assistant Chief for Technical Guidance, Ecological and Environmental Planning Section

cc: USFWS NMES Field Office



MEMORANDUM

DATE: June 17, 2024

TO: Amber Rheubottom, Mining Environmental Compliance Section, Groundwater Quality Bureau

FROM: Alan Klatt, Watershed Protection Section, Surface Water Quality Bureau

SUBJECT: Request for Review and Comment, Minimal Impact Exploration, Copper Flat,

Themac, Sierra County, New Mexico, Mining Act Permit No. SI061EM

The New Mexico Environment Department (NMED)-Surface Water Quality Bureau (SWQB) received the subject request for comments on June 13, 2024 regarding a minimal impact exploration project submitted by THEMAC Resource Group (the Applicant). The project is located in Sierra County, approximately 4 miles north of Hillsboro, New Mexico. The project proposes to drill 26 holes measuring two and 7/8-inches in diameter to a maximum depth of 900 feet from 26 drill pads measuring 45 feet x 125 feet to explore for copper. A combination of existing and new roads will be utilized to access drill locations. The total disturbance is estimated at 4.03 acres. The application states that no drilling is proposed within 100 feet of any perennial, intermittent, or ephemeral stream. SWQB is providing the following comments pursuant to 19.10.4 New Mexico Administrative Code (NMAC):

This project will disturb one or more acres and storm water discharges may be covered under both/either the U.S. Environmental Protection Agency (EPA) National Pollutant Discharge Elimination System (NPDES) Construction General Permit (CGP) or under the Multi-Sector General Permit (MSGP) under Sector G Metal Mining. The Applicant must contact the EPA to determine whether this project is subject to NPDES permitting. For the MSGP, contact Nasim Jahan (jahan.nasim@epa.gov), (214) 665-7522. For the CGP, contact Suzanna Perea (perea.suzanna@epa.gov), (214) 665-7217. Additional information about the NPDES program for EPA Region 6 is available online: https://www.epa.gov/npdes-permits/npdes-stormwater-program-region-6.

This project is located within close proximity to Greyback Arroyo. Greyback Arroyo and its tributaries are subject to New Mexico surface water quality standards at 20.6.4.13 NMAC and 20.6.4.98 NMAC and have designated uses for livestock watering, wildlife habitat, marginal warmwater aquatic life, and primary contact. Surface waters of the state shall be free of any water contaminant in such quantity and of such duration as may with reasonable probability injure human health, animal or plant life or property, or unreasonably interfere with the public welfare or the use of property (20.6.4.13 NMAC). Any discharge of a water contaminant, in such quantity as may with reasonable probability injure or be detrimental to human health, animal or plant life, or property, or unreasonably interfere with the public welfare or the use of property, must be reported to the Environment Department within twenty-four hours (20.6.2.1203 NMAC). Mine exploration activities that have the potential to contribute pollutants to waters of the state must be implemented with appropriate and reasonable Best Management Practices (BMPs) in order to prevent impacts to water quality.

Appropriate and reasonable BMPs include, but are not limited to, the following:

- Spill clean-up materials such as absorbent pads must be available on-site at all times during road construction, site preparations, and drilling activities 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. For emergencies only, call 505-827-9329 twenty-four hours a day (New Mexico Department of Public Safety).
- Fuel, oil, hydraulic fluid, lubricants, and other petrochemicals must have a secondary containment system to prevent spills. Store these materials outside of the flood-prone zone.
- Process water must be contained within a closed-loop system or lined pits. A discharge of process water may require a discharge permit from NMED or the U.S. Environmental Protection Agency.
- Drilling cores and drilling mud must be collected and disposed of properly.
- Pressure wash and/or steam clean all mobile equipment used in the project area before the start
 of the project and inspect daily for leaks. A written log of inspections and maintenance should be
 completed.
- The use of overland travel and site selection, design, and construction of drill pads, reserve pits, and roads should comply with the guidelines described in the Bureau of Land Management "Gold Book" ¹. Suspend construction, maintenance activities, or off-road travel during periods when the soil is too wet to adequately support heavy equipment without causing surface disturbance. The operator should commit to repair any surface disturbance they caused.
- Structures and culverts at stream crossings must allow for the passage of sediment, bedload, woody debris, aquatic life, and prevent erosion problems such as headcuts, incision, bank erosion, and the diversion of the stream from its natural channel during flood events. Structures and culverts at stream crossings may require a Clean Water Act Section 404 Permit from the U.S. Army Corps of Engineers (Corps). The Applicant must contact the Corps to determine whether this project is subject to Clean Water Act Section 404. The Corps can be contacted at SPA-RD-NM@usace.army.mil or (505) 342-3419.
- Implement Best Management Practices to prevent direct impacts to watercourses, including springs, wetlands, and arroyos. For temporary surface disturbances during exploration and reclamation activities, the operator should implement erosion control measures that are designed, constructed and maintained using professionally recognized standards (e.g., Natural Resource Conservation Service standards, the Bureau of Land Management "Gold Book", or the National Best Management Practices for Water Quality on National Forest System Lands).
- The applicant should ensure that stormwater entering the project area ("run-on") is diverted from soil storage piles and should place piles uphill of excavations when possible.
- Roads, pads, and other facility structures should be set back a minimum of 100 feet from any watercourses, including springs, wetlands, and arroyos.

¹ https://www.blm.gov/programs/energy-and-minerals/oil-and-gas/operations-and-production/the-gold-book



Electronic Transmission

MEMORANDUM

Date: July 5, 2024

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

Through: Amber Rheubottom, Acting Mining Act Coordinator, Mining Environmental

Compliance Section (MECS)

From: Alan Klatt, Surface Water Quality Bureau (SWQB)

Sufi Mustafa, Air Quality Bureau (AQB)

Jordan Anderson (MECS)

Subject: New Mexico Environment Department (NMED) Comments, Copper Flat

Exploration Project, Exploration Permit Application, Themac Resource Group,

Sierra County, New Mexico, Mining Act Permit No. SI0161EM

The New Mexico Environment Department (NMED) received correspondence from the Mining and Minerals Division (MMD) on June 7, 2024, requesting that NMED review and provide comments on the above-referenced MMD permitting action. Pursuant to the Mining Act, the Copper Flat Exploration Project is a new minimal impact exploration permit. MMD requested comments on the application within 20 days of receipt of the request for comments. An extension was requested and granted until July 6, 2024.

Background

Themac Resource Group. (Applicant) proposes to disturb up to 4.03 acres of U.S. Forest Service (USFS) land. The applicant proposes to drill up to 26 boreholes, at a maximum depth of 900 feet below ground surface (bgs). This site is located approximately 4 miles north of Hillsboro, New Mexico.

Air Quality Bureau

The AQB comments are attached.

Surface Water Quality Bureau

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Mr. David Ennis Themac Copper Flat Exploration Project July 5, 2024 Page **2** of **2**

The SWQB comments are attached.

Mining Environmental Compliance Section

The MECS has no comments.

NMED Summary Comment

NMED has determined the proposed exploration activities will be protective of the environment.

If you have any questions, please contact Amber Rheubottom at (505) 660-2379.

cc: Joseph Fox, Program Manager, NMED-MECS Shelly Lemon, Bureau Chief, NMED-SWQB

Dana Bahar, Acting Bureau Chief, NMED-AQB

Samantha Rynas, EMNRD-MARP



MEMORANDUM

DATE: June 24, 2024

TO: Amber Rheubottom, Acting 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, Minimal Impact Exploration, Copper Flat, Themac, Sierra County, New Mexico, Mining Act Permit No. SI061EM

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.

Details

Applicant will explore for minerals by drilling 26 holes. The exploration will entail the creation of 26 drill pads and 26 mud pits. Total disturbed area will be less than 3.0 acres. The applicant did not propose processing of mined material on site.

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.

20.2.15 NMAC, Pumice, Mica and Perlite Processing. Including 20.2.15.110 NMAC, Other

Particulate Control: "The owner or operator of pumice, mica or perlite process equipment shall

not permit, cause, suffer or allow any material to be handled, transported, stored or disposed of or a building or road to be used, constructed, altered or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne."

Request for Review and Comment, Minimal Impact Exploration, Copper Flat, Themac, Sierra County, New Mexico, Mining Act Permit No. SI061EM

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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."

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

Air emissions from this project should be evaluated to determine if an air quality permit is required pursuant to 20.2.72.200.A NMAC (e.g. 10 lb/hour or 25 TPY). Fugitive dust is a common problem at mining sites and this project will temporarily impact air quality as a result of these emissions. However, with the appropriate dust control measures in place, the increased levels should be minimal. Disturbed surface areas, within and adjacent to the project area, should be reclaimed to avoid long-term problems with erosion and fugitive dust. EPA's Compilation of Air Pollutant Emission Factors, AP-42, "Miscellaneous Sources" lists a variety of

Request for Review and Comment, Minimal Impact Exploration, Copper Flat, Themac, Sierra County, New Mexico, Mining Act Permit No. SI061EM

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control strategies that can be included in a comprehensive facility dust control plan. A few possible control strategies are listed below:

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 Air Quality Bureau does not have any objection to this project.

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.



Department of Cultural Affairs

Historic Preservation Division State of New Mexico

Michelle Lujan Grisham Governor

Debra Garcia y Griego Secretary

July 16, 2024

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

RE: HPD Log #122696 Copper Flat Exploration Project 2024, Permit No. SI061EM, THEMAC Resource Group

VIA EMAIL: Samantha.Rynas@emnrd.nm.gov

Dear Ms. Rynas:

Thank you for submitting the Copper Flat Exploration Project 2024 to the New Mexico State Historic Preservation Office for review and comment. We received the initial consultation on June 10, 2024 and requested additional information from your office on June 10, 2024. We received the requested information on June 25, 2024.

At this time, we are requesting further information to complete our review. Please send a map with the roads going to the proposed drill holes. There are a number of sites eligible for or potentially eligible for listing in the National Register of Historic Places (NRHP) within the general project area and I need to ensure these will be avoided by the proposed project. The entire area is part of the Animas Hills Mining District which is eligible for listing in the NRHP.

Our records indicate some of the project exploration locations, and potentially some of the roads, are situated on lands owned by the BLM. Per Subsection F of 19.10.3.302 NMAC, "If the permit area includes state or federally-owned lands, no permit will be issued unless the appropriate land management agency has approved or acknowledged the proposed operation...." I recommend contacting the BLM regarding this project.

If you have any questions, please contact me at 505-476-1341 or via email at cortney.wands@dca.nm.gov.

Sincerely,

Cortney Wands Archaeological Reviewer

Cortney Wands

State of New Mexico Energy, Minerals and Natural Resources Department

Michelle Lujan Grisham Governor

Melanie A. Kenderdine Cabinet Secretary Designate

Benjamin Shelton Acting Deputy Cabinet Secretary **Laura McCarthy,** State Forester Forestry Division



July 25, 2024

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

RE: Request for Comments on Copper Flat Exploration Project 2024, Permit No. SI061EM, THEMAC Resource Group

Thank you for the opportunity to comment on the above-referenced project. I do not anticipate any impacts to NM State Listed Endangered Plants or Federally Endangered or Threatened plants, as a result of this project.

Please let me know if I can be of further help.

Sincerely,

Erika Rowe

State Botanist/Endangered Plant Program Coordinator EMNRD-Forestry Division 1220 S. St. Francis Dr.

Santa Fe, NM 87505

answe

erika.rowe@emnrd.nm.gov

cell: (505) 699-6371