



Michelle Lujan  
Grisham  
Governor

STATE OF NEW MEXICO  
**DEPARTMENT OF CULTURAL AFFAIRS**  
**HISTORIC PRESERVATION DIVISION**

BATAAN MEMORIAL BUILDING  
407 GALISTEO STREET, SUITE 236  
SANTA FE, NEW MEXICO 87501  
PHONE (505) 827-6320

September 11, 2023

Kevin Myers  
Hydrologist  
Mining and Minerals Division  
kevin.myers@emnrd.nm.gov

Re: HPD Log# 120517, CN Exploration CA028EM

Dear Mr. Myers:

I am writing in response to your request for comment on the above referenced permit application, of which was received by this office on September 6, 2023.

Pursuant to 19.10.4.03 NMAC, Minimal Impact Exploration Operations, the Director shall determine whether a permit would have an adverse impact on cultural resources listed on, or eligible for, either the National Register of Historic Places (NRHP) or the State Register of Cultural Properties (SRCP) or be located in a known cemetery or other burial ground.

Our database indicates that drill hole locations 1-9 have not been previously surveyed for the presence of cultural resources. We recommend that drill locations 1-9 be archaeologically surveyed prior to ground disturbance. Drill hole location #10 has been surveyed and it does not contain a historic property. The project area does not contain a cultural resource listed on the NRHP or SRCP. It does not contain a known burial ground.

Finally, the permit application indicates that the project location is situated on public land, of which the surface estate managed by the United States Forest Service (USFS) and the mineral estate is managed by the Bureau of Land Management (BLM). The USFS & BLM should be contacted regarding their requirements for archaeological survey of the drill hole project area.

Sincerely,

*Richard Reycraft*

Richard Reycraft  
HPD Staff Archaeologist



DIRECTOR AND SECRETARY  
TO THE COMMISSION  
Michael B. Sloane

STATE OF NEW MEXICO  
DEPARTMENT OF GAME & FISH

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Santa Fe

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22 September 2023

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

***RE: New Minimal Impact Exploration Permit Application, CN Exploration Project, Catron County, New Mexico. Permit No. CA028EM; NMDGF Project No. NMERT-2851.***

Dear Mr. Myers,

The New Mexico Department of Game and Fish (Department) has reviewed the above referenced exploration project submitted by Sierra Gold and Silver, Ltd. (Sierra). Sierra is proposing to drill 16 exploratory holes at 10 drill pad sites. Hole depths will be approximately 300 feet. The exploration project will be located in Sections 34 and 35 in Township 9S, Range 9W and in Section 3 in Township 10S, Range 9W. The total area that will be disturbed is approximately 0.3 acres. Staff from the Department, MMD, U.S. Forest Service (USFS), New Mexico Environment Department, and the Operator conducted a site inspection on 14 September 2023.

All 10 proposed drill pad sites will be located on existing USFS roads and no vegetation removal or clearing is anticipated in undisturbed habitat. The Department supports the use of existing roads as drill pad sites to avoid any unnecessary disturbance to forest habitat.

In the permit application, it states that Sierra will use a closed loop drilling system. However, during the site inspection, when the Department asked for more details about the drilling system, the Operator described a system that would utilize a mud pit and not a fully contained, closed loop system. The Department requests that Sierra clarify if excavated mud pits or a fully contained, closed loop will be used. 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 Sierra 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 inches 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, Sierra proposes to use a USFS 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 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 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](mailto:ronald.kellermueller@dgf.nm.gov).

Sincerely,

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

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**Michelle Lujan Grisham**  
Governor

**Sarah Cottrell Propst**  
Cabinet Secretary

**Todd E. Leahy, JD, PhD**  
Deputy Cabinet Secretary

**Laura McCarthy**, State Forester  
Forestry Division



September 25, 2023

Kevin C. Myers  
Hydrologist  
Mining Act Reclamation Program (MARP)-Mining and Minerals Division (MMD) Energy, Minerals and Natural Resources Department (EMNRD)  
1220 S. St. Francis Drive  
Santa Fe, NM 87505

**RE: Request for Comments on New Minimal Impact Exploration Permit Application, CN  
Exploration Project, Permit No. CA028EM, Catron County**

Thank you for the opportunity to comment on the above referenced project. I do not anticipate any impacts to New Mexico State Endangered Plants or Federally Listed Endangered or Threatened plants as a result of this new minimal impact exploration request, as described in the application.

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

Sincerely,

A handwritten signature in blue ink that reads "Erika Rowe".

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](mailto:erika.rowe@emnrd.nm.gov) / <http://www.emnrd.state.nm.us/SFD/>  
cell: (505) 699-6371

###

**MEMORANDUM**  
**OFFICE OF THE STATE ENGINEER**  
*Hydrology Bureau*

**DATE:** October 3, 2023

**TO:** Kevin Myers, Permit Lead, Mining Act Reclamation Program (MARP)/MMD  
Sharon Kindel, District I Manager, Water Rights Division (WRD)

**THROUGH:** Katie Zemlick, Ph.D., Hydrology Bureau Chief *KZ*  
Laura Petronis, Water Resources Manager I, Hydrology Bureau *LJP*

**FROM:** Max Gersh, Water Resources Professional IV, Hydrology Bureau *MG*

**SUBJECT:** Review and Comments, Minimal Impact Exploration Permit Application, CN  
Exploration Project, Catron County, New Mexico.  
Permit No. CA028EM.

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**INTRODUCTION**

On September 6, 2023, State of New Mexico Energy, Minerals, and Natural Resources Department (EMNRD) requested the New Mexico Office of the State Engineer (NMOSE/OSE) Hydrology Bureau review and comment on the Mining and Mineral Division (MMD) Permit No. CA028EM Part 3 Minimal Impact Exploration Operation Permit Application (application) for the CN Exploration Project (project). The application, submitted by Sierra Gold and Silver Ltd. (applicant), proposes to engage in exploratory drilling activities to support gold and silver exploration within Catron County, New Mexico. In doing so, the applicant proposes to disturb a total of 0.268388 acres of land (including drill pads, cuttings disposal pits, new roads, improved roads, and overland travel routes) within the project area. The applicant is proposing 10 drill pad locations within the project area and 16 boreholes estimated to a depth of approximately 300 feet below ground surface (BGS). Further details are provided in Table 1.

The project area is generally located approximately 38 miles northwest of Truth or Consequences, New Mexico. The nearest town to the project area is Winston, New Mexico. Drill pads are proposed on the north and south side of State Highway 59, just north of the Catron and Sierra County borderline. The project area is located within Sections 34 and 35, Township 9 South, Range 9 West, and Section 3, Township 10 South, Range 9 West, NMPM. The general location is shown in Figure 1. The proposed drill pad locations are shown in Figure 2.

**Table 1.** Proposed drill pad locations for the CN Exploration Project.<sup>1</sup>

Drill Pad Name	Drill Pad Location	
	NAD83 UTM Zone 13 Easting (m)	NAD83 UTM Zone 13 Northing (m)
CN-23-01	243986	3707615
CN-23-02	244019	3707646
CN-23-03	244904	3707986
CN-23-04	243833	3708075
CN-23-05	244094	3707644
CN-23-06	243889	3707908
CN-23-07	243904	3707970
CN-23-08	243741	3707908
CN-23-09	243672	3707935
CN-23-10	243791	3708140

### COMMENTS

The NMOSE Hydrology Bureau has completed a review of the application and provides the following comments:

#### **Specific Comments**

##### *Section 4 – Exploration Description:*

- **4.A.** – The applicant lists an anticipated exploration start and end date of May 1, 2023, and August 31, 2023, respectively. These dates should be updated to reflect an updated start and end period.
- **4.C.** – The applicant lists Godbe Drilling as the anticipated drilling contractor. The License No. listed is 1827. However, in the NMOSE Current Driller List, John D. Godbe, Godbe Drilling, LLC, has a listed Driller License No. of 1677. The applicant should ensure the License No. listed on the Minimal Impact Exploration Operation Permit Application is accurate and in accordance with 19.27.4 New Mexico Administrative Code (NMAC).

##### *Section 6 – Groundwater/Surface Water Information*

- **6.B.** – The applicant states, “*Shallow drilling does not anticipate significant water. All produced fluids will be contained in sump at drill site.*” Although the applicant does not

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<sup>1</sup> The applicant specifies 16 boreholes are proposed, but it is unclear which drill pad location they will be drilled at. Additionally, the applicant does not provide unique well identification names. For these reason, specific boreholes were not included in Table 1.

anticipate encountering groundwater, the limited available data suggests groundwater may be encountered. Exploration drilling where any form of groundwater is encountered will be subject to appropriate sections of 19.27.4 NMAC. If groundwater is encountered, it is required that the proper NMOSE forms for drilling and plugging wells (*WR-07 Application for Permit to Drill a Well with No Water Right* and *WR-08 Well Plugging Plan of Operations*) shall be submitted and approved by the NMOSE Water Rights Division (WRD). These forms should be submitted, and drilling activities shall not commence before approval from the NMOSE WRD. Additionally, if groundwater is encountered, the applicant shall ensure that a *Well Record and Log (WR-20)* be submitted for each borehole to provide the NMOSE WRD with proper documentation in accordance with 19.27.4.29.N NMAC.

- **6.F.** – The applicant states that drilling activities will not occur within 100 feet of any perennial, intermittent, or ephemeral streams. However, according to the USGS Topographic Map, Figure 2 of this memorandum, and Map 1 submitted by the applicant, an ephemeral waterway exists within the project area and within 100 feet of the proposed drill pad locations. The applicant does indicate, under Section 4.C., that all drilling mud and fluids will be contained within a closed loop system. If the applicant is aware of, and does not violate, NMOSE regulation 19.27.4.29.P.(2) NMAC and the Federal Clean Water Act, with the use of a closed loop system, there should be no issue regarding drill materials entering the ephemeral waterway.

## **General Comments**

### **Surface Water**

NMOSE regulation 19.27.4.29.P.(2) New Mexico Administrative Code (NMAC) notes that drilling fluids and cuttings shall not be allowed to migrate or be discharged off property under the control of the well owner, and that no drilling fluid or cuttings be discharged into any waters of the State. The applicant has indicated that excess drill cuttings, mud, and fluids will be contained in a closed loop system.

As shown in Figure 2, an ephemeral waterway flows across the project area. It appears that the waterway only flows during times of localized precipitation events and does not flow perennially. While it may be uncommon, flow from the unnamed waterway may flow far enough to make it to Alamosa Creek, a tributary to the Rio Grande.

Due to the proposed project area being within 100 feet of the above-noted ephemeral waterway, it is required that the applicant keep all drill fluids enclosed in a closed system, as signified on the application. If the applicant follows these procedures, any precipitation event shall not cause drill fluids to be discharged off the project site through surface water flow. If the applicant is compliant with NMOSE regulation 19.27.4.29.P.(2) NMAC and maintains best practice in keeping drill fluids and cuttings contained within a closed system on the property, there should be no issues regarding surface water flow.

Additionally, it is required that any changes made to the land (berms, roadways, etc.), within the ephemeral waterway, be returned to the pre-project condition so as not alter surface water flow through the project area.

### **Groundwater**

The applicant states, “*Depth to groundwater will be highly variable in the mountainous terrain of the project area*” and lists an estimated depth to groundwater as being 300 feet. While the applicant lists an approximate depth of the proposed boreholes to be 300 feet as well, they state, “*shallow drilling does not anticipate significant water.*” However, in a search using the New Mexico Water Right Reporting System (NMWRRS), 9 wells, 4 having well construction and depth to water information, were identified within a 2-mile radius from the proposed project area. While the reported depth of well and depth to water of the 4 nearby wells are variable, the average depth of the wells is 169 feet with an average reported depth to water being 91 feet. With the limited groundwater information, it is unknown whether groundwater will be encountered in any of the proposed boreholes, however, the given information suggests it may be very likely that groundwater is encountered.

Since it may be likely that groundwater will be encountered, the proper NMOSE forms for drilling and plugging wells (*WR-07 Application for Permit to Drill a Well with No Water Right* and *WR-08 Well Plugging Plan of Operations*) shall be submitted and approved by the NMOSE WRD District I Office before drilling operations can commence. Additionally, if groundwater is encountered, the applicant shall ensure that a *Well Record and Log (WR-20)* be submitted for each borehole to provide the NMOSE WRD with proper documentation in accordance with 19.27.4.29.N NMAC.

The NMOSE requirements for the drilling and plugging of the proposed boreholes should be met in accordance with NMOSE regulation 19.27.4 NMAC. In accordance with NMOSE regulation 19.27.4.29.A NMAC, on-site supervision of well drilling and plugging by the holder of a New Mexico Well Driller License or a NMOSE-registered Drill Rig Supervisor is required. The New Mexico licensed Well Driller shall ensure that well drilling activities are completed in accordance with NMOSE regulation 19.27.4.29 and 19.27.4.30 NMAC. If artesian conditions are encountered during drilling, drill operations should cease immediately and the NMOSE District I Office should be contacted, in which well drilling activities shall be completed in accordance with NMOSE regulation 19.27.4.31 NMAC.

### **Borehole Abandonment**

If groundwater *is* encountered during exploratory drilling, borehole plugging should be done in accordance with the NMOSE regulations, 19.27.4 NMAC, the pre-approved *Well Plugging Plan of Operations*, and the subject conditions of approval. However, if groundwater *is not* encountered during exploratory drilling, MMD regulations for Minimal Impact Operations, 19.10.3 NMAC, prevail over the NMOSE regulations, and borehole plugging should be done in accordance with MMD plugging regulation 19.10.3.302.L NMAC.

The applicant has successfully addressed wet and dry hole abandonment in Section 6.D. of the application, indicating a neat cement slurry, mixed appropriately, emplaced with a tremie pipe. A Well Plugging Record shall be submitted for every and all plugged boreholes that have encountered groundwater, in accordance with NMOSE regulation 19.27.4.30.C.(3) NMAC.

Additional details regarding borehole drilling and plugging requirements under NMOSE regulation 19.27.4 NMAC are included in the attached appendix (“General Concerns Related to NMOSE Regulation of Exploratory Borehole Drilling”).

## **REFERENCES**

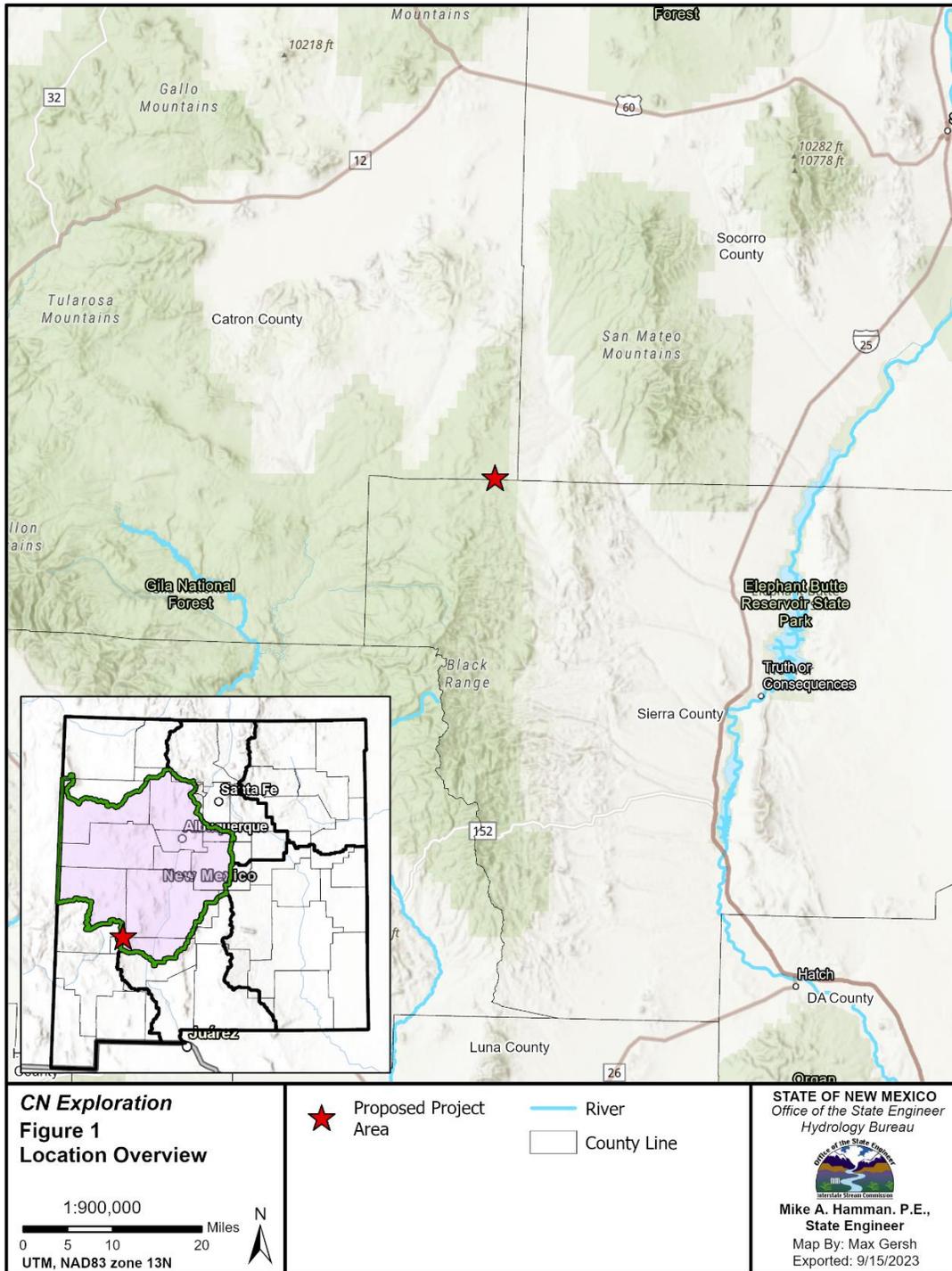
Mining and Minerals Division, 2011, Guidance Document for Part 3 Permitting Under the New Mexico Mining Act Energy, Minerals and Natural Resources Department, Mining Act Reclamation Program October 2011.

Mining and Minerals Division, 2012, Part 3 Minimal Impact Exploration Operation: PERMIT APPLICATION INSTRUCTIONS. Energy, Minerals and Natural Resources Department.

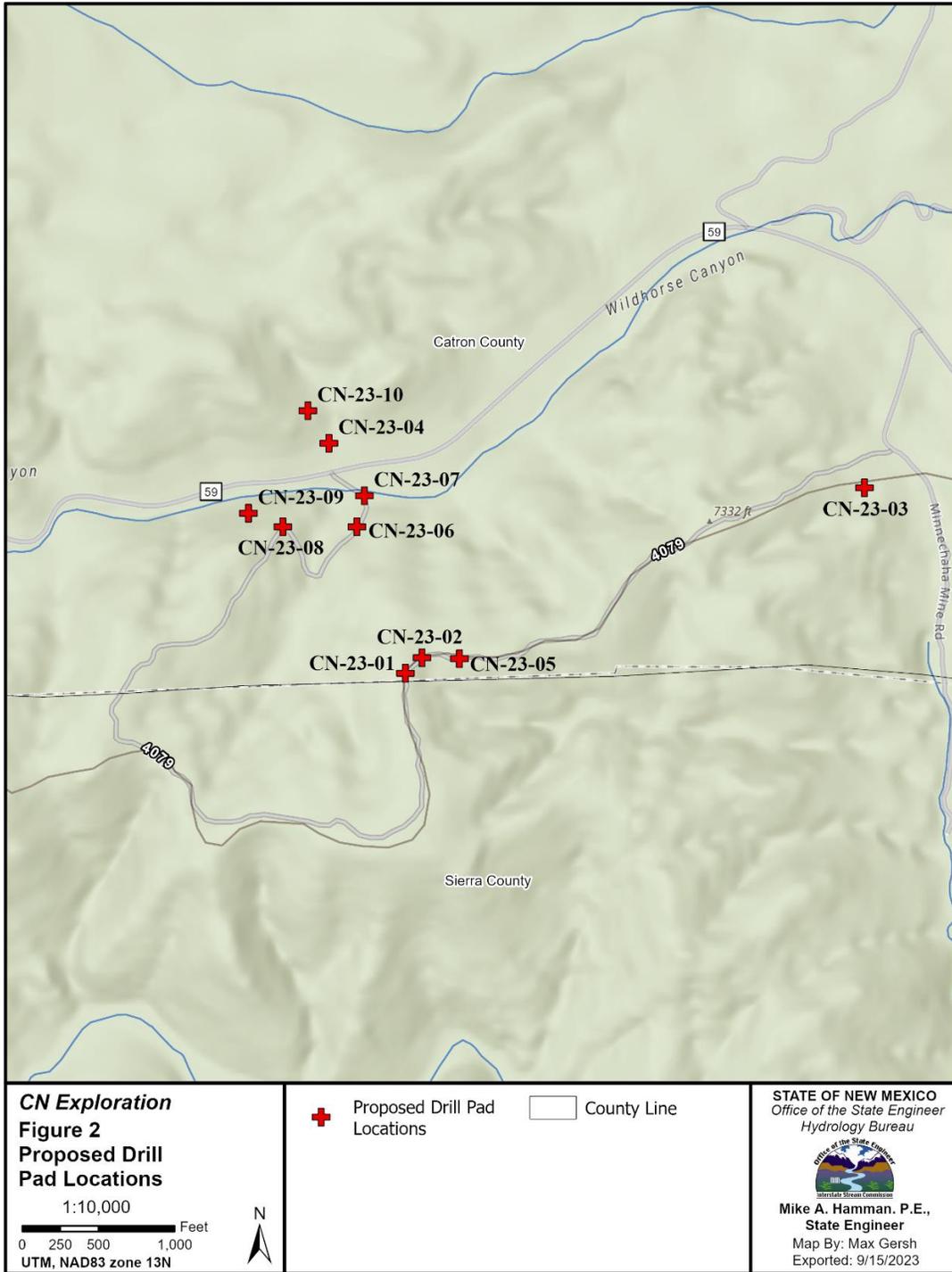
New Mexico Office of the State Engineer and New Mexico State Engineer and Interstate Stream Commission. New Mexico Water Rights Reporting System (NMWRRS).

U.S. Geological Survey, USGS US Topo 30 x 60-minute quadrangle map for Truth or Consequences, NM 1979.

# FIGURES



**Figure 1. Overview of the Proposed Project Location**



**Figure 2. Proposed Drill Pad Locations**

## APPENDIX A

### GENERAL CONCERNS RELATED TO NMOSE REGULATION OF EXPLORATORY BOREHOLE DRILLING

#### **Encountering Groundwater and Associated Plugging of Those Borings**

Well drilling activities (including mineral exploration borehole drilling ("mine drill holes") that penetrate a water-bearing stratum) and well plugging, are regulated in part under 19.27.4 NMAC. 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.

Exploration 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; 19.27.4.31 NMAC for artesian wells/borings; and 19.27.4.36 NMAC for mine drill holes that encounter water. A complete version of the NMOSE 19.27.4 NMAC regulations can be found on the NMOSE website at: <https://www.ose.state.nm.us/Statewide/wdRules.php>.

MMD will likely place additional conditions on the drilling and plugging of all mineral exploration borings via the MMD project permit.

All onsite drilling and 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.

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

#### **Use/Extraction of Temporary Casing**

When drilling through overburden or caving, poorly consolidated, or karst geologic units, use of temporary casing may be desired. Any temporary casing should be installed with the full intention of its removal before borehole plugging, therefore temporary casing should be inserted into a borehole of sufficiently large diameter to allow easy extraction upon termination of drilling. NMAC 19.27.4 regulations dictate methodology for the installation of permanent well casing, including the installation of required annular seal, should that option be more prudent.

If a temporary casing lacking a rule-compliant annular seal or casing grade becomes stuck in-place down hole, the potential for permanent commingling of aquifers or down hole surface water drainage may occur via an unsealed annulus. In these cases, staged casing cutting and extraction, or remedial casing perforation and squeeze-cementing will be required to the satisfaction of the State Engineer as part of final well decommissioning. Steps should be taken during drilling to

prevent deleterious fall-in or drainage of cuttings/sediments into the annulus outside the temporary casing to best allow for full retrieval and proper borehole plugging.

When setting of temporary casing occurs or is expected, appropriate detail of the proposed casing extraction and borehole clean-out process prior to plugging will be required in the NMOSE Well Plugging Plan of Operations form. If exploratory drilling through stratified or artesian aquifer systems, filing a NMOSE Artesian Well Plan of Operations may be required to preemptively assess and address NMOSE concerns regarding best borehole decommissioning practices.

### **Exploratory Borehole Plugging**

Terms of borehole 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 water-bearing boreholes. 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 flowing artesian boreholes. If the exploratory boreholes do not encounter groundwater, MMD plugging regulations (19.10.3 NMAC) prevail over those of 19.27.4 NMAC.

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 water-bearing exploratory borings shall occur within the timeframe specified by either the NMOSE or MMD to minimize cave-in and the potential for incomplete plugging due to blockages in the borehole.

### **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 exploration 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 is also a good practice.



## Electronic Transmission

### MEMORANDUM

Date: October 4, 2023

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

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

From: David Mercer, MECS  
Susan Styer, Surface Water Quality Bureau (SWQB)  
Sufi Mustafa, Air Quality Bureau (AQB)

Subject: **New Mexico Environment Department (NMED) Comments, CN Exploration, New Minimal Impact Exploration Permit Application, Sierra Gold and Silver, Catron County, New Mexico, Mining Act Permit No. CA028EM**

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The New Mexico Environment Department (NMED) received correspondence from the Mining and Minerals Division (MMD) on September 6, 2023 requesting that NMED review and provide comments on the above-referenced MMD permitting action. Pursuant to the Mining Act, the CN 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. NMED has the following comments.

#### **Background**

Sierra Gold and Silver (applicant) proposes to disturb up to 0.268 acres of U.S. Forest Service (USFS) land. The applicant proposes to drill up to 16 boreholes on 10 drill pads, all approximately 300 feet below ground surface (bgs). The applicant does not anticipate encountering groundwater in the boreholes. This site is located approximately 15 miles northwest of Winston, NM.

Mr. David Ennis  
CN Exploration Project  
October 4, 2023

### **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. The depth to groundwater listed in the application is 300 feet bgs. The applicant does not anticipate encountering groundwater, but stated during a field inspection held on September 14, 2023, that they will backfill the boreholes as appropriate per the New Mexico Office of the State Engineer (OSE) regulations. According to the site geologist, the applicant will contact the OSE to file well permitting and plugging and abandonment permits. Since OSE forms WR-07 and WD-08 were not provided in the application, the applicant needs to comply with all OSE requirements for permitting and abandoning monitoring wells/boreholes.
2. Regulations associated with minimal impact exploration operations are found at 19.10.3.302 NMAC. Required information associated with application for a minimal impact exploration operation with regard to groundwater are found at 19.10.3.302.D(5) NMAC and state, "an estimate of depth to groundwater and total dissolved solids concentration". The applicant lists a Total Dissolved Solids concentration of 100 mg/L, but no reference is cited. The applicant should sample groundwater from at least one of the borings that encounters groundwater and provide sample results as part of project.

### **NMED Summary Comment**

NMED has determined that the activities proposed in the application 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



MICHELLE LUJAN GRISHAM  
GOVERNOR

JAMES C. KENNEY  
CABINET SECRETARY

## MEMORANDUM

Date: September 27, 2023

To: Anne Maurer, Mining Act Team Leader  
Mining Environmental Compliance Section  
Ground Water Quality Bureau (GWQB)

From: Susan Styer  
Watershed Protection Section  
Surface Water Quality Bureau (SWQB)

Subject: **Request for Review and Comment, Minimal Impact Exploration Permit Application, CN Exploration Project, Catron Co., NM, Permit Tracking No. CA028EM.**

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On September 6, 2023 NMED received a request for comments regarding a new minimal impact exploration permit submitted by Sierra Gold and Silver Ltd. ("Applicant"). The project is on public lands managed by the U.S Forest Service located within the Gila National Forest. It is approximately 12 air miles northwest of Winston in Catron County. SWQB received a request for review and comment on September 12, 2023 and attended a site inspection with MARP, NM Game and Fish, and MECS staff on September 14, 2023.

### *Summary of Proposed Action*

The Applicant seeks to explore for gold and silver metals at up to 10 locations within the Webber Mine project area. The application states that sixteen (16) 2" inch diameter bore holes will be drilled to a maximum depth of 300 feet using a closed-loop drilling fluid system. The Applicant will construct ten drill pads (600 sq feet each) and sump pits (360 cubic feet each) adjacent to the drilling locations. Total disturbance for (10) drill pads is estimated at 0.1374 acres. The Applicant will reclaim each drill pad site by filling sump pits, regrading to match preexisting topography, replacing topsoil and reseeding using a species mix specified by the U.S. Forest Service.

### *Relevant State and Federal Water Quality Regulations*

The Applicant, as described in the project application, will disturb an estimated total of 0.268388 acres. The Applicant is utilizing existing roads which will minimize impact to the land. However, if conditions of the project change to disturb more than one acre, the Applicant may be required to obtain coverage for storm water discharges under either the U.S. Environmental Protection Agency (USEPA) National Pollutant Discharge Elimination System (NPDES) Construction General Permit (CGP) or under USEPA's Multi-Sector General Permit (MSGP) under Sector G Metal Mining.

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 USEPA 2022 Construction General Permit (CGP) for stormwater discharges from construction activities became effective on February 17, 2022, and replaces the 2017 CGP. The CGP and the eReporting tool (NeT-CGP) to apply for coverage or waivers is available at: <https://www.epa.gov/npdes/2022-construction-general-permit-cgp>

The USEPA 2021 MSGP became effective on March 1, 2021. Subsequently, USEPA finalized a minor modification to the 2021 MSGP that became effective on September 29, 2021. Permit information is available at: at <https://www.epa.gov/npdes/stormwater-discharges-industrial-activities>

In addition, NMED recommends the following practices to protect surface water quality:

- Best Management Practice (BMPs) that were identified in the permit application must be implemented to limit erosion from surface water runoff on areas of your site that, due to topography, activities, soils, cover, materials, or other factors are likely to experience erosion. At no time should construction materials including fuel, oil, grease or other contaminants be staged or stored in flood prone areas during the summer monsoon season, typically July-September.
- Any water produced during drilling must be contained on-site and not discharged to adjacent drainages unless a discharge permit has been secured from the USEPA.
- Mineralized native rock and cuttings should be hauled off-site or buried at the bottom of each sump prior to reclamation.
- Sump pits may not be used as disposal sites for oil, gas, grease or other potential contaminants to surface and ground water.
- Fuel, oil, hydraulic fluid, lubricants, and other petrochemicals must have a secondary containment system to prevent spills.
- 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).

If you have any questions, please phone Susan Styer (NMED-SWQB) at 505-819-9923.



## MEMORANDUM

DATE: October 3, 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, Minimal Impact Exploration Project, CN Exploration Project, Sierra Gold and Silver, Catron County, New Mexico, Mining Act Permit No. CA028EM**

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

The applicant has requested a minimal impact exploration permit near Winston in Catron County. The exploration will result in 16 drilled holes, 10 drill pads and 10 mud pits. Total area disturbed will be approximately quarter an acre.

### 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."

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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 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 has no objection to this 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