

Southern Silver Exploration (U.S.) Corporation

Response Comments for NMMD Permit Application No. GR087R Modification 24-1 Turquoise Mountain Project

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Following are responses to Agency Review Comments and requests for additional information regarding the Turquoise Mountain NMMD Regular Exploration Permit Modification electronically received from the New Mexico Energy, Minerals and Natural Resources Department dated September 24, 2024.

NMMD General Comments:

- Pad I (not drilled) – Southern Silver (SSV) agrees to move site I, which will be accessed along the existing dirt road that continues past Site J to the new Site I on private surface. See the attached map and UTM locations below.

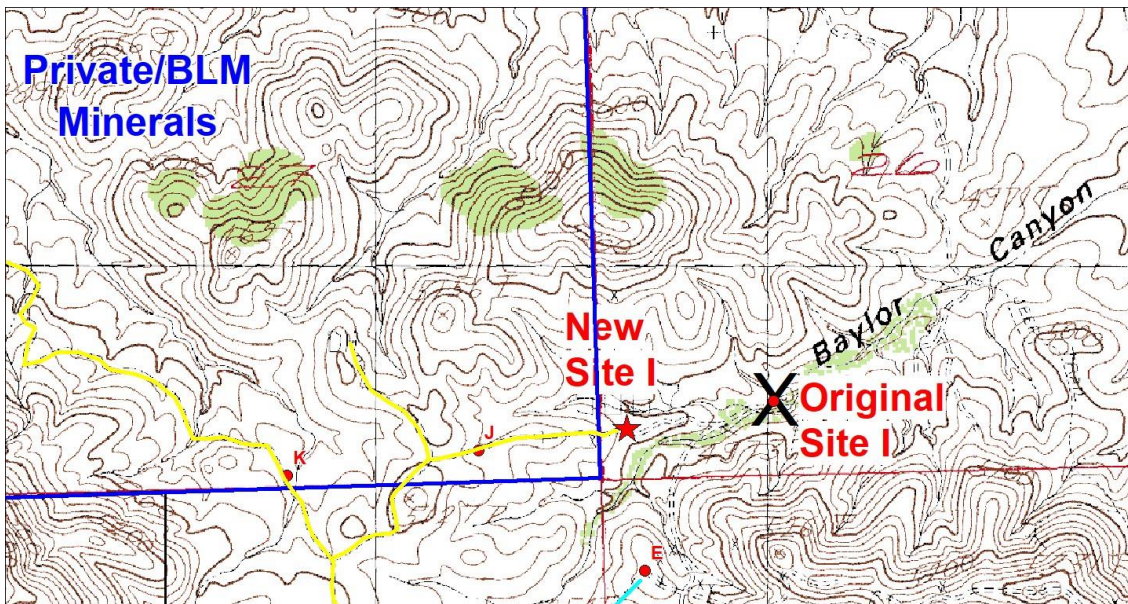
New Site I

Easting NAD27
740,640

Northing NAD27
3,534,570

Easting NAD83
740,577

Northing NAD83
3,534,766



- MMD correctly notes that all six drill pads were constructed. SSV originally intended to drill all of the sites. However, poor driller's performance and weather issues resulted in much higher costs compared to our previous drilling programs on the project. Consequently, SSV only drilled four holes (one hole from site A, two holes from site B, and one hole from site E). Sites A (drilled), D (not drilled), and H (not drilled) have been reclaimed and seeded; however, SSV would like to maintain these sites in the permit for possible additional drilling in the future. SSV will only prepare those sites planned for the drilling season to prevent unnecessary disturbance and issues related to the mud sumps.

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- Site F (undrilled) is located on New Mexico State land and has been reclaimed and seeded. SSV has dropped the two previously held State leases due to the inability for SSV to extend the lease term. Appendix #4 (Oro Mining Lease HG-0104) and site F are removed from the application.
- Night-blooming Cereus plants were identified at sites N and Q, but the sites were then moved only 50 feet from the plants instead of the required 100 feet minimum. The nearby Cereus plants will be fenced, and the sites will be moved the required distance. A new survey will be conducted to be sure no cereus plants will be disturbed by the new locations for N and Q and new locations will be provided to NMMD.

NMED Mining Environment Compliance Section, Ground Water Quality Bureau Comments:

The MECS had no comments.

NMED determined minimal impact if conducted in accordance with approved permits and pollution controls that were submitted by SSV.

SWQB commented the work program may be covered by both or either the US EPA National Pollutant Discharge Elimination System or under the Multi-Sector General Permit under Sector G Metal Mining and asks that SSV contact the EPA to determine if the project is subject to NPDES permitting. Fluids utilized in drilling are non-toxic and are circulated between individual drill holes and their mud sump. The drill sites are widely distributed within the project, and none will have discharge outside of the drill sites. SSV believes the program is not subject to the EPA permits noted.

SSV is aware of the responsibility to prevent impacts to water quality and utilizes non-toxic additives during drilling and has emergency materials and procedures for release of any toxic fluids, such as gasoline, grease, and diesel. SSV is also aware of reporting requirements in the event of a spill.

SSV is aware of the Best Management Practices noted in their response and intends to follow them.

The practices recommended to protect surface water quality are acknowledged and are standard operating procedure for reputable drill contractors. A SSV representative at the sites will monitor compliance and will ensure that any spills will be reported immediately to the NMED, as required by New Mexico Water Quality Control Commission regulations (20.6.2.1203 NMAC).

Recommendation for containment of petrochemicals will be followed, and spill clean-up materials will be available on sites during construction and drilling.

All sites are 100 feet or more from existing drainages, except Site K which is 80 feet from a drainage based on map measurements. The location will be field checked in the field and, if necessary, moved to the NW to be 100 feet or more from the drainage.

NMED Air Quality Bureau Comments:

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SSV acknowledges the comments made by NMED concerning air quality and will comply with all federal and state laws pertaining to air quality. As noted, no mining is associated with this permit, only exploration. No blade work or scraping is planned except to repair any local washout areas, in which case only sufficient leveling will be done for very short stretches of less than 100 feet and only to the extent to permit safe passage of persons and equipment. The soil is generally gravel-rich, and dust is not expected to be a problem. However, the area may be used by ranching and recreational drivers, and SSV has no control over those activities. Wetting (water dispersal on roads) and covering of material related to the disturbance activities will be done if a problem develops.

NMDG&F Comments:

SSV acknowledges the comments by NMDG&F. In past programs in New Mexico, it has been noted that if the entire sump (that contains the drill fluids) is surrounded by fencing, cattle break down the fence to drink the surface water floating on the non-toxic drill mud. This action may leave the steeper portions of the sump without a barrier and may allow entry into the steeper walls of the trench from which escape is more difficult. It was decided in discussions with previous New Mexico Wildlife Personnel that leaving the shallow end of the sloped sump open provided easy access to water the cattle desire and allowed easy access only to the safer, sloped end of the sump. Barbed wire was tried, but cattle tore it down and the ensuing tangle was a hazard. A shorter, finer mesh will be constructed around the sumps to prevent entry by reptiles and small animals.

SSV acknowledges the potential adverse impact to migratory birds and will conduct appropriate surveys prior to any ground disturbance during the noted migration seasons.

The male thread of drill pipe is always capped, but the female thread is not and usually blocked from entry by animals when stacked upright and when loaded onto the pipe truck because that end of the pipe is up against metal. The dual-pipe used by reverse-circulation drill rigs has a very small opening, so only mouse-size creatures can enter. When the uncapped end of drill pipe is not blocked from entry, such as being stacked on the ground, the uncapped end will be blocked from entry by a tarp.

Kangaroo rat mounds will be avoided as recommended.

Certified weed-free seed for reclamation will be a mixture approved by the Bureau of Land Management and SSV will discuss any modifications based on future potential climatic conditions.

NMOSE Comments:

NMOSE comments are acknowledged, and cement will be utilized to prevent inter-aquifer exchange. SSV acknowledges that when sulfate concentrations exceed 1,500 mg/L a high-sulfate resistant (HSR) plugging material is required. Although local ranchers could not provide SSV with any sulfate analyses on their wells to determine sulfate concentrations in ground water at the Project, and a limited literature search was not successful in finding data specific to the Project, ground water in the region does not appear to be high in sulfate. The figure below is from this link

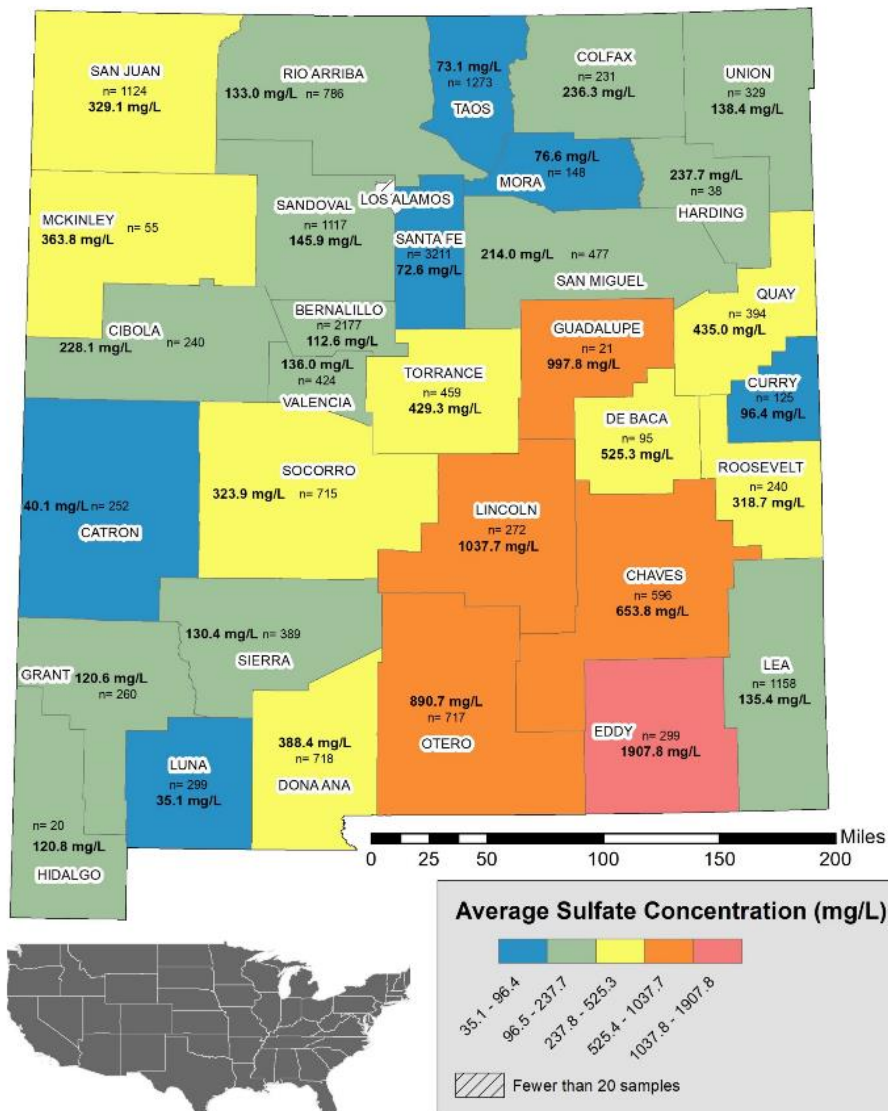
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<https://nmtracking.doh.nm.gov/environment/water/Sulfate.html>. SSV purchases clean water utilized in drilling from the Little Hachita drinking water well.

Sulfate Distribution in New Mexico Private Wells Wells Sampled August 1903 - October 2018

Average Sulfate Concentration (mg/L) by County

"n" is number samples per county.



Data Sources: NMED Water Fairs, NMBGMR, USEPA, USGS NWIS, NMDOH biomonitoring, Bernalillo County, Santa Fe County
Last Updated: 2/14/2019 NMDOH Private Wells Program <https://nmtracking.org/water>

NMEMRD-Forestry Division Comments:

SSV confirms it will move sites N and Q to 100 feet or more from night-blooming cactus to protect the plants.

NMHPD Comments:

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The NMHPD has no comment as SSV has conducted a cultural resource survey for this program; however, SSV will follow BLM guidelines should such resources be identified.