

Responses to Comments to NMMD Permit Application #GR087EM – Turquoise Mountain Project

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The following narratives are in response to Agency Review Comments and requests for additional information regarding the Turquoise Mountain Project NMMD Minimal Impact Permit Application. These comments were electronically received by Southern Silver representatives from the New Mexico Energy, Minerals and Natural Resources Department dated May 26, 2021. A deadline of 30 days was included for a response by Southern Silver to the comments. These comments are being electronically returned to Jennifer Johnson with the New Mexico Mining and Minerals Department (NMMD).

**Comment #1 (NMMD) Request for new map of proposed activities and revised estimate of acreage disturbance:** A map showing the 6 drill sites (reduced from 8 sites originally planned) and a slight change in access to Site 21-F will be submitted to NMMD and the BLM. A list of revised UTM coordinates (NAD83) is also being provided to NMMD and the BLM. These changes of coordinates are minor. A revised bond estimate for the reclamation bond will also be submitted separately to NMMD and the BLM.

Estimates of disturbance are reduced from the originally planned 1.66 acres to 1.35 acres, due to the elimination of two drill sites originally planned that reside in a New Mexico Historic Preservation District. Eighty feet of overland travel was eliminated to Site 21-E due to the relocation of the site to the immediate vicinity of an existing road. One Hundred feet of overland travel to Site 21-A was added to the total area of disturbance. This additional 100 feet of overland travel will occur on a small level ridge within about 150 feet of Site 21-A and avoids a washed out section of the road that would be difficult to repair. Minor changes to the coordinates of the planned drill sites were made, but are less than 30m. These minor changes to the access to Site 21-A and the drill site locations have too little offset to those originally planned to be accurately depicted on the supplied map. The minor changes were discussed with New Mexico State and BLM personnel during the field inspection.

**Comment #2 (NMED Mining Environment Compliance Section, Ground Water Quality Bureau Comments “MECS”)** It is possible that more than one drill hole will be drilled from one or more sites by angling or wedging in order to minimize degradation to the public land by eliminating the construction of additional sites. Southern Silver will ensure that appropriate permits from the Office of the State Engineer including WR-07 and WD-08 (pre drilling forms) are approved and acquired prior to drilling any hole. Post Drilling Reports of Hole abandonment procedures and Well Records will also be provided to the NMOSE. It is understood that all holes are likely to be wet and wet drilling abandonment procedures will be permitted and performed on all drill holes. A Southern Silver representative will monitor the abandonment process and communicate the successful abandonment of each drill hole to NMMD in a timely manner, so that bonding can be reassigned to another hole.

**Comment #3 (NMED Surface Water Quality Bureau)** The practices recommended to protect surface water quality are acknowledged and are standard operating procedure for reputable drill contractors. A Southern Silver representative at the sites will monitor compliance.

The following discussion will address the comment that the proposed disturbance activities **MAY BE** covered under either the U. S. Environmental Protection Agency (USEPA) National Pollutant Discharge Elimination System (NPDES) Construction General Permitting. If the activities are “covered” a NPDES permit would be required. I interpreted the MAY BE to suggest that the permits may or may not be required but it was something Southern Silver should be aware of. I have made considerable effort to research the appropriateness of these permits and do not believe they apply to the Southern Silver exploration activities described in the NMMD permit application. I am providing a summary of why I have made this conclusion.

I have spent nearly a day studying more than 100 pages of available material and maps that relate to the CGP permit subject. I also have some previous experience in dealing with a similar type of permit request for the same area in 2010.

After studying the applicability of the permits, so that I could ask intelligent questions, I (Elliott Crist) spoke with Susan Lucus-Kamat with New Mexico Surface Water and solicited her advice and help in determining if area of Southern Silver activity was within a closed basin. Mrs. Lucus-Kamat was very helpful, although she said that she had no actual authority to declare engineering decisions. I interpreted her to indicate that, in New Mexico, only the EPA and the Army Corp of Engineers had the authority to make such decisions. Thus, I only list her name as evidence of my good faith effort to determine the applicability of such regulations. She directed me to some information on the web and looked at it while we spoke on the phone. The New Mexico Surface Water Website has a map that illustrates that the proposed area of Southern Silver activities will occur within the Southwestern Closed Basin of New Mexico. Mrs. Lucus-Kamat said that it appeared to her that the area that I described were within a closed basin and that there were no “streams” in the area. Again, I only list her consult as part of my good faith effort and do not wish to assign any responsibility to her of my assessment that the area of Southern Silver activities is in a closed basin.

In 2010, NMMD requested that Southern Silver obtain a 404 permit from the Army Corp of Engineers (ACE) due to possible contamination from sediment to waters of the United States. I studied the issue until I was able to ask intelligent questions and spoke with an ACE person who was responsible for issuing the permits. After reviewing the location of the work, for the same area that Southern Silver has submitted the 2021 permit application to NMMD, the ACE person said that no permit was necessary because it would not affect any waters that could be classified as a covered water, due to the lack of flowing streams, lakes and the closed basin with no effluents. I had prepared a lengthy permit application and the ACE person begged me not to submit it because he would still have to process it and it would create an unnecessary workload and detract from necessary functions of his job. He communicated with James Hollen, who was the lead for the MNND 2010 permit, with the simple email

“No Permit is Necessary”. It was attached to my email to him describing the conditions of the proposed disturbance.

A review of the fact sheet for NPDES permit fact sheet has the following quote: **“The Clean Water Act prohibits anybody from discharging “pollutants” through a “point source” into a “water of the United States” unless they have a NPDES permit.”**

**Point Source** is defined by the following quote from the fact sheet: “It means any discernible, confined and discreet conveyance, such as a pipe, ditch, channel, tunnel, conduit, discrete fissure or container.”

**A water of the United States** is defined by the fact sheet by the following quote: “It means navigable waters, tributaries to navigable waters, interstate waters, the oceans out to 200 miles, and intrastate waters which are used: by interstate travelers for recreation or other purposes, as a source of fish or shellfish sold in interstate commerce, or for industrial purposes by industries engaged in interstate commerce. “

Southern Silver believes that a CGP – NPDES permit for their operations is unnecessary for the following reasons:

- 1) No discharge of any pollutant will occur to any “waters of the United States” as defined by the EPA.
- 2) No effluent will be permitted off of the drill sites (practices recommended by NMED will be followed)
- 3) The disturbance activities are related to exploration and not mining.
- 4) The drill sites are separated by as much as 2 miles, some being as close as about ½ mile apart. Aside from the preceding overriding reasons, discharge of storm waters that may drain sediment off of the disturbance will occur through 3 separate drainages that could be regarded as 3 discrete point sources as defined by the fact sheet. None of the proposed disturbance drained by these three “point sources” drains more than 1 acre, with 1 acre being the threshold above which a permit may be necessary.

**NMED Air Quality Bureau Comments:** Southern Silver acknowledges the comments made by NMED concerning air quality. No blade work or scraping is planned except for local washout areas in which case only sufficient leveling will be done for very short stretches of less than 100 feet or so and only to the extent to permit safe passage of persons and equipment. It is planned to utilize a small backhoe to do all necessary repairs and minor improvements to the existing roads. No other equipment (bulldozers, graders) is planned to be utilized unless unusually strong monsoon storms in the summer of 2021 produce extreme road damage. The soil is quite rocky and dust has not been noted to be a problem in past programs. The area is frequented by ranching and recreational users, and road grading has been done on the roads at irregular intervals by unknown entities as observed in the past 15 years. Southern Silver has no control over these activities. If increased traffic by Southern Silver activities creates a “dust bowl” condition on a road, the problem may be mitigated by utilizing other access to the

drill sites of which there are three. Wetting (water dispersal on roads) and covering of material related to the disturbance activities will be done if a dust problem develops that cannot be mitigated by utilizing different access routes.

**NMDG&F Comments:** Southern Silver 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 safety 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 the 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.

A BLM biologist reviewed the sites and did discover some of the night blooming cactus near Site 21-B. Only one of the plants was near the site and it was flagged and made apparent to two Southern Silver representatives. Flagging of the plant location and careful avoidance of it will be observed.

**NMOSE Comments:** NMOSE comments are acknowledged. WR-07 and WD-08 forms have not been filed at this date because archeological surveys needed to be done (recently completed) and discovery of archeological items of significance could have caused a relocation of one or more of the sites. The WR-07 form will be filled in the near future. WD-08 forms have not been filed because they require a licensed driller working for the drill contractor that Southern Silver selects to fill out the form. Drill contractors are very busy at this date and Southern Silver is soliciting bids, with the availability of equipment and manpower in a specified time frame an important factor. The WD-08 forms will be filed when a satisfactory contractor is selected. Copies of these forms (with appropriate NMOSE approval) will be provided to NMMD prior to the commencement of drilling.

Southern Silver has obtained data from holes that were drilled to depths of more than 3,000 feet in the area of proposed drilling, and no record of artesian flow was recorded. In the unlikely event that artesian flow is encountered, the NMOSE District 1 Office will be contacted and if other necessary procedures or filings are necessary, they will be done. It is assumed that all holes will be wet and the NMOSE regulations for abandonment of wet holes will be followed.

**NMDCA/HPD Comments:** Southern Silver eliminated the two sites (21-C and 21-G) that were within an HPD. For this reason, NMDCA indicated that they had no further concerns. NMDCA did request a copy of the archeological survey done by Dos Rios Consultants for Southern Silver. The author of the archeological surveys, Neil Ackerly, will provide a copy of the survey to Mr. Reycraft with NMDCA.

**Navajo Nation Heritage and Historic Preservation Comments:** No issues of concern were raised.

**Hopi Cultural Preservation Office Comments:** A copy of the archeological surveys done on the 6 (reduced from 8) drill sites will be submitted to NMMD by Dos Rios Consultants. It is requested that NMMD forward a copy of this documentation to the Hopi Cultural preservation Office.

**White Mountain Apache Tribe Comments:** No issues of concern were raised.

**SOUTHERN SILVER EXPLORATION CORP (US)**  
**TURQUOISE MOUNTAIN PROJECT**  
**Playas Peak 7.5" Quadrangle**

February 20, 2021

Highway Rt 9

Gate To Hachita

Laydown Area

VALLI

HACHITA

Outline of Oro Unpatented Mining Claims on BLM Land

Mineral Patent Owned by Southern Silver

Washout

2,000 Feet

Mineral Patent (3 patents not owned by Southern Silver)

Southern Silver Oro Claims

State Lease

State Lease

21-E

21-B

21-A

21-H

21-D

21-F

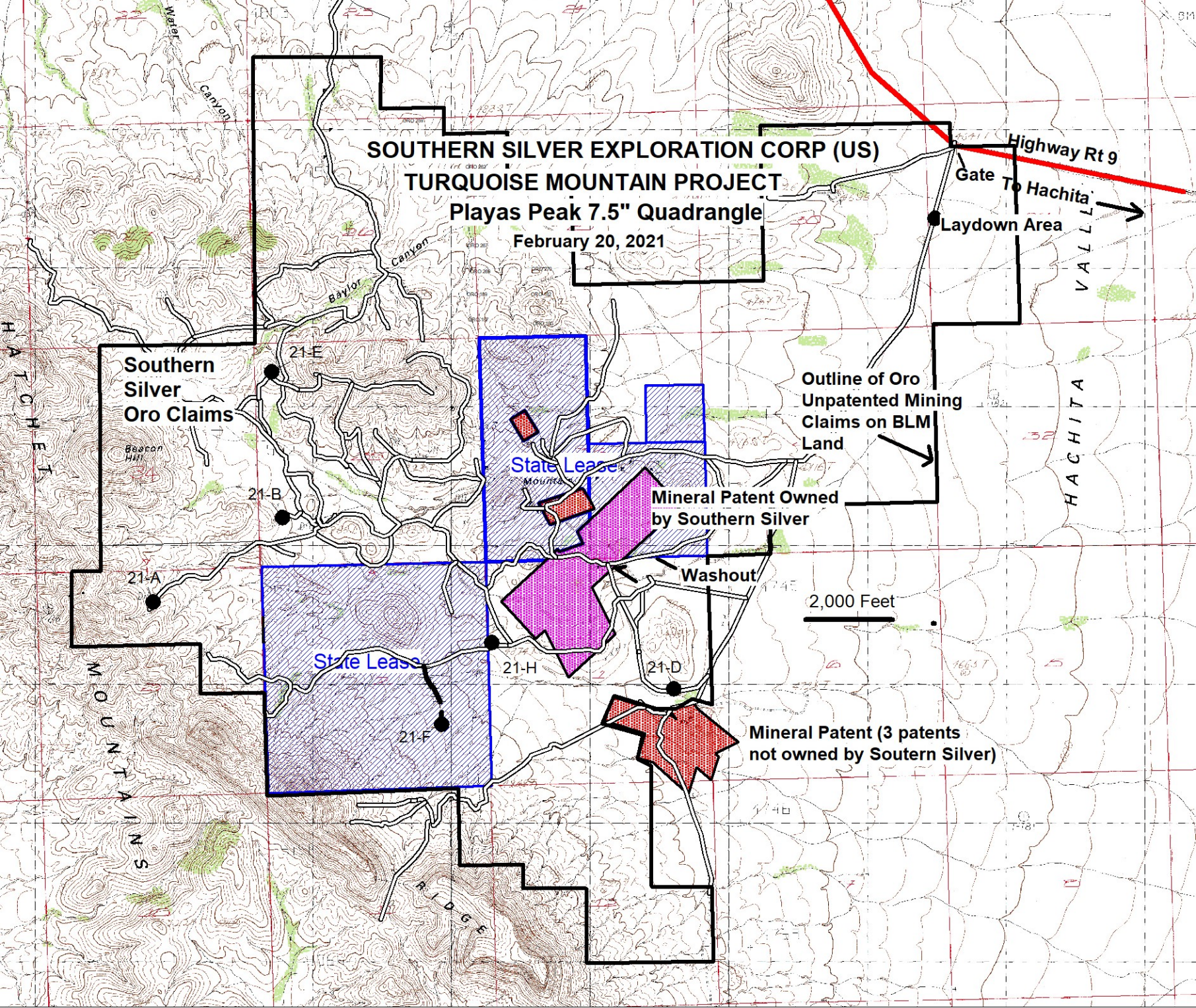
HATCHETT

MOUNTAINS

RIDGE

Water Canyon

Baylor Canyon





**Cost Estimate: Southern Silver/Turquoise Mountain Minimal Impact Exploration Project**

**Subsurface Plugging and Abandonment Financial Assurance**

2 hole floating option

\$ Cost/Ft.	Ft.	Number of Holes	Total
14	3,300	1	46200
14	2,630	1	36820
Total Abandonment			83020

**Surface Reclamation Financial Assurance**

Category	\$Cost/Acre	Number of Acres	Total
First acre or less	8900	1	8900.00
Additional acres	4900	0.35	1,715.00
Total Surface Disturbance = 1.35 acres			10615.00

**Total FA (\$)** 93,635.00

**Acreage Includedes:**

Drill Sites assumed to be maximum of 100 feet X 60 feet  
 (6 drill sites X 100' X60')/43560 = 0.82 acres

**Overland Travel**

1,440 feet to Site F

100 feet to Site A (to bypass washed out section of existing road)

1,540 feet Total Site E moved adjacent to road thereby eliminating 80' of that originally planned  
 (1,540' X15')/42560 = 0.53 acres.