

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

Serial Number  
NVN098586

THACKER PASS PROJECT  
PLAN OF OPERATIONS AND  
RECLAMATION PERMIT

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LANDS INVOLVED

Mount Diablo Baseline & Meridian

T44N, R34E, sections 1 and 12.  
T44N, R35E, sections 2-17.  
T44N, R36E, sections 7, 8, 14-23, and 29.  
Humboldt County, Nevada

16 May 2023

(Date)

Authorized Officer:

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Samuel R.M. Burton  
District Manager  
Bureau of Land Management

\_\_\_\_\_  
Date

Consistent with the summary judgment and remand order in *Bartell Ranch LLC v. McCullough*, No. 3:21-cv-00080-MMD-CLB, 2023 U.S. Dist. LEXIS 19280 (D. Nev. Feb. 6, 2023) and 43 C.F.R. 3809.411, the Bureau of Land Management (BLM) affirms its prior approval of the Thacker Pass Plan of Operations, with the caveat that eight of the mining claims underlying the plan of operations may not be used for the use proposed in the plan, namely waste rock storage.

On August 5, 2019, Lithium Nevada Corporation submitted the Thacker Pass Project Plan of Operations (Project) to the BLM, Humboldt River Field Office for review. The Thacker Pass Project is located in northern Humboldt County, Nevada, approximately 20 miles west-northwest of Orovada, Nevada, and approximately 20 miles south of the Oregon border. The Project proposes to disturb approximately 5,695 acres to develop an open pit lithium mine and processing plant with a life expectancy of 41 years.

BLM approved the Project in January 2021, and the decision was challenged in the United States District Court for the District of Nevada. Applying the Ninth Circuit’s decision in *Center for Biological Diversity v. United States Fish and Wildlife Service*, 33 F.4th 1202 (9th Cir. 2022) — commonly known as the “*Rosemont*” decision, after the mine at issue in that case — the Nevada District Court’s summary judgment order required BLM to “evaluate the mining project proponent’s rights under lands [the proponent] intend[s] to use for waste dumps before [BLM] approve[s] the use of that land for that purpose” *Bartell Ranch*, 2023 U.S. Dist. LEXIS 19280, at \*15. By “rights,” the Nevada District Court appears to have referred to what it characterized as the requirement—set forth in the Mining Law of 1872 at 30 U.S.C. 22—of a “discovery of a valuable mineral deposit for a mining project proponent . . . before that proponent may permanently occupy any land.” *Id.* at \*13.

The Nevada District Court supplied several further guidelines for BLM’s “evaluation.” Most notably, the Court distinguished the Thacker Pass Project from the project at issue in *Rosemont*. In *Rosemont*, there was not only “no evidence that valuable minerals ha[d] been found on Rosemont’s mining claims” covering the waste dump land, *id.* at \*16 (citing *Rosemont*, 33 F.4th at 1222)), but also “[u]ndisputed evidence in the administrative record *show[ing]* that no valuable minerals ha[d] been found on the mining claims . . . .” *Rosemont*, 33 F.4th at 1212 (emphasis added). Conversely, the record before the District Court in *Bartell Ranch* demonstrated potentially valuable “lithium mineralization throughout the Project area, including the area slated for burial under waste rock and mine tailings.” *Bartell Ranch* 2023 U.S. Dist. LEXIS 19280, at \*16. Thus, the District Court concluded that BLM, on remand, need only conduct an “analysis” of the record to determine whether, on the record before the agency, “Lithium Nevada has discovered valuable minerals.” *Id.* at 17.

In undertaking this analysis, BLM is mindful that *Rosemont*—the decision that the Nevada District Court repeatedly described as binding—does not require that BLM conduct a “validity determination,” i.e., an independent determination of the validity of the mining claims based on an on-the-ground field examination by licensed agency mineral examiners. 33 F.4th at 1222.

Indeed, the *Rosemont* court noted that such determinations were “irrelevant” for the analysis there. *Id.* Instead, the question before BLM now is whether, on the evidence before it, BLM may reasonably conclude that Lithium Nevada has discovered valuable minerals.<sup>1</sup> *See* Solicitor’s Opinion M- 37077, Use of Mining Claims for Mine Waste Deposition, and Rescission of M-37057 and M-37012, (May 16, 2023). That inquiry is not tantamount to a formal mining claim validity determination.

BLM has reviewed the available scientific literature for the Thacker Pass region and drill hole data provided by Lithium Nevada Corporation, specifically with regard to the lands on which the West waste rock storage facility (WRSF), East WRSF, and Clay Tailing Filter Stack (CTFS) would be placed.

BLM used three drill holes that directly intersect the West WRSF to evaluate the potential lithium mineralization at that location. Geologic inference would suggest that elevated lithium mineralization exists within the caldera lake sediments in the West WRSF location. There is a known ridge of volcanic tuff that affects up to four lode mining claims where elevated concentrations of lithium have not yet been found. All other lode mining claims associated with the West WRSF are expected to have lithium mineralization above the cutoff grade.

Six drill holes surrounding the CTFS indicate that elevated lithium mineralization is present throughout the facility. Geologic logs document a unit of basalt and other volcanics along the western edge of the CTFS, but that unit thins out or disappears to the east. The lithium mineralization is stratigraphically deeper below the CTFS than the proposed open pit, but concentrations below the CTFS consistently exceed 1,000 ppm. Geologic inference suggests that high concentrations of lithium mineralization exist at this location.

BLM used seven drill holes in proximity to the East WRSF to evaluate the potential lithium mineralization at that location. High concentrations of lithium mineralization were clearly identified in two drill holes and evidence of lithium mineralization was documented in three others. Two shallow drill holes did not encounter lithium, and as a result, four mining claims

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<sup>1</sup> The District Court remanded “this case” to BLM “without vacatur of the Record Decision” for BLM to analyze the potential discovery of valuable minerals. *Bartell Ranch* 2023 U.S. Dist. LEXIS 19280, at \*77-78. In so doing, the Court directed BLM to analyze the potential “to support” BLM’s prior decision to approve the Plan of Operations. *Id.* Likewise, the Court affirmed BLM’s analyses under the National Environmental Policy Act (“NEPA”) and National Historic Preservation Act (“NHPA”). *Id.* at \*2-3. BLM thus need not reopen nor revisit any analysis under NEPA or the NHPA, The NEPA and NHPA analyses of project impacts are independent of this description of Project geology: that geology would exist, as described herein, with or without the Project. And by upholding BLM’s prior analysis under NEPA and NHPA, declining to vacate BLM’s Record of Decision, and limiting the scope of this remand, the District Court indicated that it did not expect or require BLM to revisit the entire decision from scratch, as would be the case if the District Court had vacated the Record of Decision. Finally, and as noted more fully below, BLM’s existing NEPA and NHPA analyses encompass the effects of the plan of operations even after the minor modifications by this decision.

along the north edge of the East WRSF do not yet contain sufficient evidence of mineralization. Based on geologic inference, it is likely additional lithium mineralization exists below the East WRSF, similar to the CTFS, and could be confirmed with additional drilling.

Based on an independent literature search and the available information supplied by Lithium Nevada Corporation, BLM concludes that the lode mining claims located on the extent of the CTFS, all but four of the lode mining claims (Neutron 557, Neutron 580, BPE 504, and BPE 505) located on the extent of the West WRSF, and all but four of the lode mining claims (Neutron 609, Neutron 611, Neutron 612, and Neutron 615) located on the extent of the East WRSF likely contain elevated concentrations of a mineral commodity locatable under the Mining Law of 1872 (the Mining Law). In other words, the evidence before BLM supports a reasonable conclusion that there are valuable mineral deposits underlying these mining claims. Eight mining claims associated with these facilities do not yet have evidence of a locatable mineral deposit as of the date of the attached report.

The absence of evidence of mineralization for the eight remaining claims, totaling perhaps 45 acres of the West WRSF and 35 acres of the East WRSF, does not disturb BLM's prior approval of the mine plan of operations, even though—absent further action described below—Lithium Nevada may not use those claims as part of its storage facilities. Work Plan #1, submitted by Lithium Nevada on February 14, 2023, does not propose to initiate construction on the East WRSF or on approximately the north half of the CTFS in the immediate future. Accordingly, Lithium Nevada could, for example, use other lands to store mined material that would otherwise be placed on the four mining claims at the West WRSF, and in fact, the plan of operations describes using mined materials “as construction material for haul roads and the CTFS” (Lithium Nevada Corporation, 2020).

Lithium Nevada may also use other components of the mine for waste, such as the pit itself: the plan of operations states that mined material “will be directly backfilled when possible” (Lithium Nevada Corporation, 2020), the EIS and ROD for the project explicitly describe concurrent backfill of the open pit, and Figure 9 of the plan of operations shows sufficient capacity for additional storage within the pit backfill (Lithium Nevada Corporation, 2020). Alternatively, Lithium Nevada may, for example, seek to re-locate the mining claims at the West WRSF where BLM has found no evidence of mineralization at the time of this analysis, if those lands are non-mineral in character.

We further note that it will likely be some time before Lithium Nevada would use the affected acreage of the West WRSF, if at all: because development of the facility will likely begin at its southern terminus (i.e., where the elevation is lowest) and progress north, there is ample time for Lithium Nevada to assess the required configuration of the West WRSF and propose any appropriate action.

The plan of operations also includes an additional 150 acres of exploration-related disturbance within the Project area, and, although the evidence before BLM does not now show that locatable minerals have been found on eight claims at the West and East WRSFs, such minerals could be yet found through additional drilling prior to deposit of any waste rock.

In any other instance where Lithium Nevada proposes rock storage facilities other than those evaluated under the previously approved plan of operations, Lithium Nevada would be required to submit an amended plan of operations for appropriate analysis under NEPA and other applicable law.

If you have any questions, please contact Sam Burton, District Manager, Winnemucca District Office at 775-623-1501.

Attachment: Report