

**UNITED STATES DEPARTMENT OF THE INTERIOR**

**Bureau of Land Management**  
Vale District, Malheur Field Office  
100 Oregon Street  
Vale, OR 97918

**DECISION RECORD**

**for McDermitt Exploration Project Environmental Assessment**

DOI-BLM-ORWA-V000-2023-0045-EA

December 8, 2025

**I. DECISION**

The action for this decision is approving the Exploration Plan of Operations (EPO) and authorizing HiTech Minerals, Inc. (HiTech) to conduct phased lithium exploration activities in the McDermitt Exploration Project area, located approximately 20 miles west of McDermitt, Nevada, in Malheur County, Oregon. The Project area of 7,200 acres of active mining claims is located entirely on public lands administered by the Bureau of Land Management (BLM) Malheur Field Office (MFO). There are two alternatives analyzed in the EA, Alternative A, the No Action, and Alternative B, the Proposed Action. This decision selects Alternative B, including all applicant committed design features (EA, Appendix E), entails approving the EPO actions to construct up to 168 drill sites with sumps, 21.5 miles of temporary access roads, and one laydown area, for up to approximately 73 acres of proposed disturbance over five years within the Project Area. The Proposed Action and the EPO incorporate the existing Notice-level of work (4.1 acres) and the phased work of the EPO (69 acres) for up to total of 73 acres of disturbance. The proposed action also includes an upgraded 10-meter meteorological (MET) station, maintenance of 44 miles of existing roads, and reclamation of all 73 acres of disturbance.

The second action for this decision is concurring with the occupancy of public land in relation to the exploration activity, primarily the storage of equipment during the seasonal operation period, and the upgraded 10-meter MET station, installed during the duration of the project. Per 43 CFR 3715, the BLM completed a review of the proposed occupancy of public land concurrently with its review of the exploration and concurs and has determined that it meets the criteria within 43 CFR 3715.2 and 3715.2-1, including whether the proposed occupancy is “reasonably incident to mining” in support of mining operations that are “regular and substantial.”

The operator will hold and comply with all applicable Federal, State, and local laws, regulations, and permit requirements.

**A. Monitoring**

BLM conducts regular inspections under 43 CFR § 3809.600 to ensure compliance and to prevent unnecessary or undue degradation, with monitoring data used to guide enforcement actions. A minimum of two inspections will be conducted annually in accordance with BLM’s policy for Plans of Operations. BLM may increase inspection frequency based on site-specific risks, public concerns, or noncompliance history (Surface Management Handbook H-3809-1, Section 9.1.2).

The BLM will conduct compliance inspections to verify that all project design features outlined in Appendix E and C of the EA (DOI-BLM-ORWA-V000-2023-0045-EA) are being properly implemented. If any activities are found to be out of compliance with the approved plan of operations, the BLM will initiate enforcement actions pursuant to 43 CFR 3809.601.

The monitoring for cultural resources (BLM, Proponent, and Tribal) is all included within the signed and executed Programmatic Agreement (Appendix F of the EA). HiTech and the BLM will fully implement and comply with all monitoring requirements established in the executed Programmatic Agreement (PA), including the agreed upon Monitoring and Inadvertent Discovery Plan (MIDP) of any archaeological or human remains.

## II. COMPLIANCE AND CONFORMANCE

This Decision is in conformance with the following applicable lands use plans.

**Land Use Plan Name:** *2002 Southeastern Oregon Record of Decision (ROD) and Approved Resource Management Plan (RMP)*. – The Proposed Action is in conformance with the goals and objectives of the 2002 Southeastern Oregon ROD and Approved RMP. The RMP provides opportunities for exploration and development of locatable mineral resources while protecting other sensitive resources, in accordance with the General Mining Law of 1872, 30 U.S.C. §§ 22–53 (SEORMP 2024, p. 190)

**Land Use Plan Name:** *2024 Southeastern Oregon ROD and Approved Resource Management Plan Amendment (BLM, 2024)*. – This RMP did not amend the 2002 RMP objectives for locatable minerals, nor did the Plan withdraw additional land from entry under the General Mining Act. The Project area is open to mineral entry under the RMP, as amended.

In the reasonably foreseeable future actions section (RFFAs) of the 2024 plan amendment, the BLM identified the McDermitt Lithium Exploration project as an RFFA and indicated that it would prepare an EIS for the project. Reasonably foreseeable future actions are an estimate used to support the analysis of reasonably foreseeable environmental effects, previously referred to as cumulative effects. Our original estimate that an EIS would be necessary for the McDermitt Lithium Exploration project as an RFFA was based on a larger project footprint that included a greater amount of ground disturbance. More specifically, the applicant's original plan of operations included a 9160-acre planning area, 260 bore holes, and 29 miles of temporary access roads. In addition, one unit was located in wilderness and baseline information on cultural and wildlife resources was lacking. Now, in contrast, the applicant has reduced the project scale to a 7,200- acre planning area, 168 boreholes, and approximately 22 miles of temporary access routes. In addition, the exploration unit that was in wilderness was completely dropped from the proposal. Since the SEORMPA was issued, baseline studies for cultural and wildlife for the McDermitt Lithium Exploration have been completed and are applied in the current effects analysis and are applied in the current effects analysis (EA Chapter 3 and Appendix D). At any time during the preparation of the EA had the BLM identified any potential for significance, the BLM would have suspended the work on the EA and moved to preparation of an EIS. The EA supported a FONSI and therefore an EIS is not necessary for this project. Additionally, a crosswalk was conducted between the 2024 SEORMPA and the McDermitt Lithium Exploration EA to ensure that all environmental effects were considered, disclosed, and in conformance. This

comparison confirmed that no effects were omitted between the EA and the SEORMPA (Appendix H.).

**Land Use Plan Name:** *Oregon Greater Sage-Grouse ROD and Approved Resource Management Plan Amendment (BLM, 2015)* – The Proposed Action is in conformance with the goals and objectives of the 2015 ROD and Oregon Greater Sage Grouse Approved RMP, which identifies specific goals, objectives, and management actions for Greater Sage-grouse and its habitat. The primary goals and objectives are too “conserve, enhance, and restore the sagebrush system upon which Greater Sage-Grouse (GRSG) populations depend in an effort to maintain and/or increase their abundance and distribution, in cooperation with other conservation partners.” (SEORMP, Goal SSS 1.) The Proposed Action meets these specific conformance standards, which the EA documents in the Project’s GRSG Conformance Sheet, provided in Appendix C of the EA.

During the development of the EA, the Greater Sage-Grouse Rangewide Planning Record of Decision and Approved Resource Management Plan Amendment for Oregon was finalized and signed. The ROD for the GRSG Rangewide Planning ROD and Approved RMP for Oregon specifies that the HiTech Lithium Exploration Plan of Operation is not subject to the decisions made in the 2025 Amendment (SEORMP 2024, p. 1-30). Therefore, the EA will only use the 2015 plan to evaluate RMP conformance.

The proposed action and alternatives are also consistent with other plans, federal environmental laws and regulations. The EA complies with following federal laws:

- Federal Land Policy and Management Act (FLPMA) (1976), as amended.
- General Mining Act (1872), as amended.
- National Environmental Policy Act (NEPA) (1969), as amended.
- Clean Air Act (1963), as amended.
- Clean Water Act (1972), as amended.
- National Historic Preservation Act (NHPA) (1966), as amended.
- Archaeological Resources Protection Act of 1979, as amended.
- Native American Graves Protection and Repatriation Act (NAGPRA) (1990).
- American Indian Religious Freedom Act (AIRFA) (1978), as amended.
- Endangered Species Act (ESA) (1973), as amended.
- Bald and Golden Eagle Protection Act (BGEPA) (1962).
- Migratory Bird Treaty Act (MBTA) (1918), as amended.

### III. PUBLIC INVOLVEMENT

The BLM initiated the project and issued a news release on July 31, 2023, and opened a 30-day public scoping period, later extended to September 15 to gather public input on the Project. The BLM considered all public scoping comments received in writing the EA. The BLM also consulted with the Oregon Department of Fish & Wildlife, U.S. Fish & Wildlife Service, Oregon Department of Agriculture, Oregon Water Resources Department, and the Fort McDermitt Paiute and Shoshone Tribes of the Fort McDermitt Indian Reservation, Nevada and Oregon prior to the

draft EA Public Comment Period. The Vale District further initiated consultation with the U.S. Fish and Wildlife Service pursuant to Section 7 of the Endangered Species Act, and with the Oregon State Historic Preservation Officer pursuant to Section 106 of the National Historic Preservation Act. A full accounting is provided in Section 4.2.2, Regulatory Agency Consultation, of the EA.

The BLM then posted the draft EA and an unsigned Finding of No Significant Impact (FONSI) on the ePlanning website for public comment and announced their availability through a Public News Release. The BLM initially provided a 5-day public comment period but later extended the public comment period to a total of 30 days. The full comment period was from March 26–April 25, 2025.

The BLM received a total of 2,300 comments: 2,017 electronic submissions from ePlanning, 230 letters by email, and 48 by physical mail. The comments covered a wide spectrum of thoughts, opinions, ideas, and concerns. To ensure that all public comments were properly reviewed and considered, the BLM developed and utilized a comment analysis methodology, as directed by the NEPA regulations, and detailed in the Department of the Interior NEPA Handbook (516 DM 1). The BLM's response to substantive comments is in Appendix E of EA (DOI-BLM-ORWA-V000-2023-0045-EA).

The BLM also identified 16 potentially interested Tribes and began conducting formal consultation in May 2023. The BLM sent initial letters to Tribes between May 2023 and November 2023 to invite them to participate in government-to-government consultation. (See Section 4.2.1 Tribes). The Burns Paiute Tribe, Fort McDermitt Paiute and Shoshone Tribes of the Fort McDermitt Indian Reservation, Nevada and Oregon, and the Shoshone Paiute Tribes of the Duck Valley Reservation, Nevada, expressed interest in conducting government-to-government consultation and completing discrete cultural studies in relation to the Project. Cultural studies include the identification of culturally significant areas within the Project Area, including traditional uses and ethnobotany, to provide additional information to avoid, minimize, or mitigate potential adverse effects to historic properties. The Vale District invited the Tribes to be part of the crafting and signing of the Programmatic Agreement and provided the opportunity for consultation to identify potential effects on historic properties and to resolve any effects determined to be adverse.

The BLM will continue government-to-government consultation with the Tribes throughout the life of the project. The BLM will not issue a Notice to Proceed for ground disturbing activities until Section 106 is complete and the Historic Properties Treatment Plan, the Inadvertent Discovery Plan, and the Native American Graves Protection and Repatriation Act Plan of Action are in place.

After the close of the comment period the BLM received additional comments from the public with concerns about sage-grouse, mule deer, and invasive annual grasses; these comments referenced a few recent papers and reports. The BLM considered these comments and the cited references and determined that they do not provide significant new circumstances or information that would impact the analysis or its outcome. The updated EA provides adequate information to

allow informed decision-making on these three topics and no further revision or supplementation is necessary.

#### **IV. CERTIFICATION OF PAGE AND TIME LIMITS**

This document has been completed to not exceed the page limit of 75 pages and the approved time limit extensions.

#### **V. RATIONALE FOR DECISION**

The BLM will authorize HiTech Minerals Inc. to proceed with the McDermitt Exploration Project as described in Alternative B (Proposed Action) of the Environmental Assessment (DOI-BLM-ORWA-V000-2023-0045-EA). This decision authorizes HiTech Minerals Inc., a wholly owned subsidiary of Jindalee Resources Limited, to conduct phased lithium mineral exploration activities on approximately 7,200 acres of public lands administered by the BLM MFO in Malheur County, Oregon. The selected action includes the construction of up to 168 drill sites with sumps, 21.5 miles of temporary access roads, a 2.4-acre laydown and storage area, up to 40 groundwater monitoring wells, and a 10-meter MET station. The total surface disturbance will not exceed 73 acres over a five-year period. Activities will occur seasonally (July 1 to November 30) and will be phased to minimize environmental impacts. Reclamation will be conducted concurrently with exploration to restore disturbed areas to pre-exploration conditions.

The Vale District Manager selected Alternative B because it best meets the purpose and need to respond to HiTech's EPO in accordance with FLPMA and the General Mining Law of 1872. The Proposed Action allows for mineral exploration while incorporating design features and mitigation measures that avoid or minimize adverse impacts on natural and cultural resources. The decision reflects BLM's obligation to prevent unnecessary or undue degradation (UUD) of public lands (43 CFR 3809.420) while honoring valid existing rights.

Based on the review of the attached EA (DOI-BLM-ORWA-V000-2023-0045-EA) and supporting FONSI, the Authorized Officer has determined that Alternative B will not significantly affect the quality of the human environment. The degree of effects are not significant with respect to the specific action (mineral exploration), the affected area (local), and the resources contained therein; therefore, preparation of an Environmental Impact Statement (EIS) is not required under section 106(b) of NEPA. Furthermore, the Lithium Exploration and the Proposed Action described in Chapter 2 of EA and the EPO does not cause unnecessary or undue degradation (UUD) of the human and natural environment, as defined in 43 CFR 3809.5 and complies with the performance standards defined in the 43 CFR 3809.420. Additionally, the Proposed Action and the EPO meet the goals and objectives of the 2002 Southeastern Oregon ROD and Approved Resource Management Plan to provide opportunities for exploration and development of locatable mineral resources while protecting sensitive resources in accordance with the General Mining Law of 1872, 30 U.S.C. §§ 22–53 and its implementing regulations (SEORMP 2024, p. 190).

Second, based on the review of the EA (DOI-BLM-ORWA-V000-2023-0045-EA) and FONSI, the request for occupancy in the EPO meets the requirements of 43 CFR 3715.2 and 3715.2-1 for occupancy related to mining including and constituting “substantially regular work” and

occupancy being “reasonably incident” to mining. Additionally, the related occupancy does not significantly affect the quality of the human environment. Therefore, an EIS is not required.

The No Action Alternative was considered but did not meet the purpose and need for the project. Under the No Action Alternative, HiTech would not be authorized to expand exploration beyond the existing Notice-level disturbance or engage in occupancy reasonably incident to mining, limiting the ability to assess mineral potential. Alternative B was selected because it allows for exploration while minimizing environmental impacts through phased implementation, seasonal restrictions, and concurrent reclamation. Five other alternatives, such as helicopter drilling or year-round operations, were considered but eliminated from analysis due to technical infeasibility, similarity of effects, inconsistency with policy objectives, or because they were speculative, and/or ineffective (EA Section 2.3).

The FONSI key findings are summarized and the BLM has determined that the Proposed Action for the McDermitt Exploration Project will not result in significant impacts to the human environment. Cultural resources within the project area are protected through avoidance measures, design features, and a Programmatic Agreement that allows for phased investigations when necessary, ensuring compliance with federal law and preventing significant effects (EA Section 3.1). Sensitive plant species, including six BLM-listed species, may experience minor short- and long-term impacts from surface disturbance and invasive species competition; however, these effects are limited in scope and would not trend any species toward listing under the Endangered Species Act (EA Section 3.2). Greater Sage-Grouse habitat would be minimally affected by the proposed disturbance, with impacts mitigated through seasonal restrictions, phased development, and habitat protection measures, resulting in no significant effects to habitat, populations, or connectivity (EA Section 3.3). Water resources may experience short-term erosion and sedimentation, but these are mitigated through buffers, erosion controls, and minimal groundwater use, with no long-term degradation expected (EA Section 3.4). The EPO includes the installation of six instream monitoring stations to monitor surface water conditions. Four of these stations were previously installed under a Categorical Exclusion (DOI-BLM-ORWA-V000-2024-0009-CX) and the remaining two will be installed as part of the implementation of this decision. Locations, sampling parameters, quality assurance/quality control procedures, and sediment related trigger thresholds and response actions are set out in the Appendix E (Monitoring Plan). The Stormwater Pollution Control Plan (Appendix H) prohibits any project related discharges, requires drill fluids and any groundwater produced during drilling to be contained in pad sumps, and maintains at least a 300-foot construction buffer from perennial and intermittent streams. Vehicle crossings are limited to existing fords and culverts under low water conditions with temporary protection. Appendix G of the EPO identifies specific parameters and includes trigger thresholds and response actions related to sedimentation to ensure the success of the project design features. BLM inspections (minimum twice annually) will verify implementation and effectiveness of these measures.

Public health and safety of the project incorporate a range of protective measures. A comprehensive Emergency Response Plan (ERP) outlines protocols for communication, fire prevention, spill response, and coordination with local emergency services (Appendix I). Fire safety measures include the use of spark arrestors, fire suppression tools, and seasonal restrictions in coordination with the BLM. Spill prevention protocols and hazardous materials

handling are designed to minimize environmental and human health risks, with compliance ensured through regular inspections and adherence to the Stormwater Pollution Prevention Plan (SWPPP). Traffic management strategies, temporary fencing, and signage will help protect both workers and the public in active work areas. Sanitation and waste management practices, including portable latrines and wildlife-proof trash containers, further support health and safety on-site.

Some short-term impacts on quality of life may occur due to increased industrial activity in this remote and traditionally quiet area. These may be noticeable to nearby residents and visitors who value solitude and the natural landscape. There may also be some short-term job opportunities that may benefit local workers. Nonetheless, the scale and duration of the project are too limited to meaningfully affect poverty rates, public services, or overall economic well-being in either Malheur County, Oregon, or neighboring Humboldt County, Nevada, and the Proposed Action would not result in significant adverse effects.

This project aligns with Executive Order 14154 and Secretarial Order 3418 by encouraging energy exploration and production on Federal lands and waters (Executive Order 14154, Section 2(a)).

## **VI. RIGHT OF PROTEST AND/OR APPEAL:**

### **Appeal of a Decision under 43 CFR Subpart 3809**

If you are adversely affected by this decision, you may request State Director review of this decision. If you request State Director review, the request must be received in the BLM Oregon/Washington State Office at 1220 SW 3rd Avenue, Portland, OR, 97204 no later than 30 calendar days after you receive or are notified of this decision. The request for State Director review must be filed in accordance with the provisions in 43 CFR 3809.805. This decision will remain in effect while the State Director review is pending unless you request and obtain a stay from the State Director. If you request a stay with the State Director, you have the burden of proof to demonstrate that a stay should be granted using the standards and procedures for obtaining a stay from the Interior Board of Land Appeals (IBLA).

If the State Director does not make a decision on your request for review of this decision within 21 days of receipt of the request, you should consider the request declined and you may appeal this decision to the IBLA. You may contact the BLM (enter appropriate state) State Office to determine when the BLM received the request for State Director Review. You have 30 days from the end of the 21-day period in which to file your Notice of Appeal with the Interior Board of Land Appeals (IBLA) in accordance with the regulations at 43 CFR Part 4.

Under 43 CFR 3809.801(a)(1), if you wish to bypass a State Director Review, this decision may be appealed directly to the IBLA in accordance with the regulations contained in 43 CFR Part 4. The notice of appeal must be filed no later than 30 days after the date of receiving notice of this decision. Any notice of appeal must be filed with the IBLA and must include a copy of the decision being appealed, a statement of standing, and a statement of timeliness.

If you wish to file a petition for a stay of the effectiveness of this decision during the time that your appeal is being reviewed by the Board, the petition for a stay must show sufficient justification based on the criteria at 43 CFR 4.405(b).

You must serve a copy of the notice of appeal and any accompanying documents on the office of the officer who made the decision, each person or entity named in the decision, and the appropriate Office of the Solicitor at the time of filing with IBLA (see 43 CFR 4.403(b); 4.407(b)). Parties must serve the Office of the Solicitor at the address shown on Form 1842-1. Service on a party known to be represented by an attorney or other designated representative must be made on the representative. If a statement of reasons for the appeal is not included with the notice of appeal, it must be filed within 30 days after the record on appeal is filed with the IBLA. Failure to file a statement of reasons within the time required will subject the challenged decision to summary affirmance (see 43 CFR 4.412(a)).

Appeal of a Decision under 43 CFR Subpart 3715 [Except an Immediate Suspension Order Issued under 43 CFR 3715.7-1(a)]

This decision may be appealed to the Interior Board of Land Appeals (IBLA), Office of Hearings and Appeals, in accordance with the regulations contained in 43 CFR Part 4. Any appeal must be filed within 30 days after the date of receiving notice of this decision. Any notice of appeal must be filed with the IBLA and must include a copy of the decision being appealed, a statement of standing, and a statement of timeliness.

If you wish to file a petition for a stay of the effectiveness of this decision during the time that your appeal is being reviewed by the Board, the petition for a stay must show sufficient justification based on the criteria at 43 CFR 4.405(b).

You must serve a copy of the notice of appeal and any accompanying documents on the office of the officer who made the decision, each person or entity named in the decision, and the appropriate Office of the Solicitor at the time of filing with IBLA (see 43 CFR 4.403(b); 4.407(b)). You must serve the Office of the Solicitor at the address shown on Form 1842-1. Service on a party known to be represented by an attorney or other designated representative must be made on the representative. If a statement of reasons for the appeal is not included with the notice of appeal, it must be filed within 30 days after the record on appeal is filed with the IBLA. Failure to file a statement of reasons within the time required will subject the challenged decision to summary affirmance (see 43 CFR 4.412(a)).

## **VII. APPROVAL**

Shane Deforest  
District Manager



## **ATTACHMENTS:**

### **Attachment A: Project Design Features and Applicant Committed Environmental Protection Measures.**

- **Appendix E: Project Design Features and Applicant Committed Environmental Protection Measures**

- **Air Quality (AQ)**

1. Water roads and drill sites as necessary in conformance with Oregon Department of Environmental Quality (ODEQ) Visible Emission and Nuisance Requirements to control fugitive dust.
2. When other methods are not adequate, chemical soil binders or gravel overlay may be considered for dust and erosion control on the first 8 miles of Disaster Peak Road.
3. Reduce vehicle speeds in areas of disturbance to minimize fugitive dust.
4. Observe prudent speed limits not exceeding 35 miles per hour (mph) on the main Disaster Peak Road and 15 to 25 mph for all other roads as conditions warrant.
5. Consolidate trips to and from the Project Area as practical to the minimum necessary to safely complete the Project.
6. Water disturbed routes during grading and active use.
7. Grade to remove ruts and washboards contributing to dust on established or designated roads.
8. Water drill pad surfaces and approaches during heavy use or windy conditions.
9. Minimize unnecessary traffic across un-stabilized areas.
10. Water soils during ripping, grading, contouring, and seeding to suppress dust.
11. Restrict traffic across reclaimed areas unless needed for monitoring or reseeding.
12. Use dust abatement measures commensurate with soil type, equipment use, wind conditions, and the effects of other erosion control measures.
13. Sequence and schedule work to reduce the exposure of bare soil to wind erosion.

#### Reclamation:

14. Activities occur annually limiting the duration of exposed bare ground.
15. Erosion prevention based on slopes including waddles, fences, etc.
16. Design Features from EA
17. Comply with all applicable state air quality standards, including Requirements for Fugitive Emissions (OAR 340-208-0210).
18. Water roads, drill sites, and other disturbed areas as necessary in conformance with Oregon Department of Environmental Quality (ODEQ) Visible Emission and Nuisance Requirements to control fugitive dust.
19. Minimize vehicular traffic and maintain a safe and appropriate speed limit for existing road conditions.

20. Implement the Dust Control Plan including dust control commitments, measures, monitoring, record keeping (Appendix C of the EPO).

### **BLM Sensitive Species – Plants**

21. Conduct biological clearance surveys of work sites targeted for that season's construction prior to construction. Clearance surveys would be performed during the flowering season and include BLM Sensitive plant species, as appropriate.
22. If possible, adjust proposed activities to provide a 100-foot buffer for BLM Sensitive plant species. Should avoidance not be possible, consult the BLM so they can consider the species-specific information and monitoring and mitigation recommendations in the Special Status Plant Assessment to determine the likelihood of activities trending this species toward a listing under the ESA.
23. Maintain strict weed control near BLM Sensitive plant species and avoid using herbicides where they occur.

### **Reclamation:**

24. HiTech will apply seeding treatments of BLM approved weed free seed mixes via drill or broadcast seeding in the late fall. The seed mix will match the local vegetation community.
25. HiTech will apply herbicide in disturbed areas prior to grading and revegetation activities. HiTech will construct temporary fencing for selected environments.
26. Hitech will monitor reclamation sites for revegetation success at least once per year during the growing season for a total of five years. Hitech will perform monitoring and maintenance until the reclamation success criteria outlined in section 6.19 of the plan of operations.
27. As necessary, HiTech will protect the existing low water ford at Cherokee Creek with either clean washed gravel or manufactured mats according to the standards for temporary crossings provided by the Portland District Army Corps of Engineers (USACE) and the Oregon Department of State Lands (DSL). Installation of clean gravel or mats would only occur during periods approved by USACE, DSL and Oregon DEQ (e.g. the in-water work window (October 1 - March 1)).
28. All drill additives and hole abandonment supplies used for the Project will meet NSF/ANSI Standard 60.
29. On drill sites located on slopes greater than 10 percent HiTech will implement erosion and sediment control BMPs including stormwater run-on diversion channels where necessary, straw wattles at the toe of the fill slopes and a minimum 1-foot earthen berm on the down gradient portion of the pad.
30. Use of more stringent stormwater BMPs will be associated with drill sites on slopes greater than 20 percent, such as silt fencing and additional earthen berms.
31. Material from the construction of temporary roads and drill sites will be side cast for reclamation. An interim seed mix will be applied to the material stockpiles as necessary for erosional stabilization or weed control purposes. Prior to final reclamation, newly

constructed roads will be water barred to minimize erosional damage as BLM directs to meet performance standards.

32. Sediment control structures may include fabric and/or certified weed free straw filter fences, siltation or filter berms, sumps, mulch, and down gradient drainage channels to prevent unnecessary or undue degradation to the environment.
33. Stormwater controls will be installed where necessary to prevent or minimize erosion and sedimentation. Controls may consist of water bars, borrow ditches, contour furrows, and culverts sized to handle maximum seasonal water flows. Sediment controls, such as certified weed-free hay bales, filter fences, or other controls will be implemented, as necessary.
34. Where slopes are greater than 10%, regardless of the classification, straw wattles will be staked on the ground surface perpendicular to slopes at the top and bottom of the reclaimed area to prevent erosion. Straw wattles will be certified as weed-free, and all components will be biodegradable. Biodegradable straw wattles will remain in place in perpetuity.
35. If slopes exceed 33%, wattles will be placed perpendicular to the slopes at 20-foot intervals.
36. Sumps constructed within drill sites will be used to settle drill cuttings and prevent release. Groundwater encountered during drilling will be completely contained in the associated sump. Certified weed-free straw bales and silt fences will be used to control erosion and capture sediment at drill sites and sumps when necessary.
37. Conduct all new construction at least 300 feet from either side of the flood-prone width for all perennial and intermittent waters, and outside of riparian habitat, whichever is greater.
38. Intermittent and ephemeral drainages may be crossed with vehicles and equipment during low water conditions only. Only existing crossings will be used. No new crossings will be established.
39. Work and associated road use would occur during the dry season July-November. Travel through washes will be minimized to the extent practicable. Travel will not occur through ephemeral washes if flowing water is present. Any drill sites or roads occurring near washes will implement erosion and sediment controls similar to those used in steep-slope terrain (e.g. straw bales, wattles).
40. Equipment will not be operated during periods of high precipitation (i.e., a 100-year 24-hour storm event) or when ground conditions are such that excessive resource damage or increased sediment transport could occur.
41. Containment structures will be provided for petroleum storage tanks. Containment structures will have the capacity to contain at least 110 percent of the largest tank or flanged tanks within the structure, and additional capacity to hold the 100-year, 24-hour storm. An open-sided cover will be placed over the well head/fuel tank to prevent rainfall from entering the containment structure. This roof and fuel tank will be removed at the end of the project.
42. Designated fueling areas will be located at level, upland sites (typically at drill sites or in the laydown areas). dri will not occur in drainages or near open water. Vehicles will

always be attended during fueling. Fueling equipment will include a shut-off nozzle to contain drips and to eliminate accidental overflow. The practice of “topping off” the tank will not be allowed. Should a spill occur, employees and contractors will be trained and follow proper spill management protocols as detailed in the EPO.

43. The laydown area adjacent to the supply water well will be used to store drill additives, hole abandonment supplies including bentonite and cement. This flat area is located at least 0.29 miles from the nearest perennial or intermittent stream. The laydown area will be fenced, and straw wattles will surround the perimeter of the laydown area. Drilling additives, cement, and bentonite will be stored in Conex trailers or on pallets in the laydown area and transported to drill sites on as needed basis. Palletized material will be covered with waterproof tarpaulins. If utilized, the Conex trailer will be moved to the Project Area at the start of the 5-month work window and removed at the end of the season. All drill additives and hole abandonment supplies are National Sanitation Foundation certified.
44. Equipment required during this exploration Project will be well maintained. Whenever practicable, equipment maintenance will be performed off-site.
45. Hydraulic fluid will be stored on the drill rig or transported by drill trucks to the Project Area in driller’s pickups for daily use. Drip pans and/or absorbents under and around vehicles will be available when lubricating equipment. Any oily or greasy waste will be collected and disposed of in accordance with the appropriate regulation.
46. Portable toilets will be pumped out by contracting service and disposed of in a sanitary sewer system.
47. Dust-abatement chemicals will be non-toxic, biodegradable, and approved for use near aquatic environments. Petroleum-based products will not be used.
48. Do not apply dust-abatement chemicals (e.g., magnesium chloride, calcium chloride salts, ligninsulfonate) within 25 feet of a water body, or in other areas where they may run off into a wetland or water body.
49. Do not apply ligninsulfonate within 24 hours of predicted rain.
50. Do not apply ligninsulfonate at rates exceeding 0.5 gallons per square yard of road surface, assuming a 50:50 solution of ligninsulfonate to water.
51. Maintain spill containment supplies on-site whenever dust abatement chemicals are being applied.
52. HiTech will train all employees, contractors, and other related personnel on the responsibilities outlined in the SWPCP as well as state and federal laws relevant to the proposed exploration plan. All subcontractors will be provided with a copy of the SWPCP. The Project Manager will be responsible for ensuring HiTech personnel and contractors receive the proper spill prevention and response training.
53. Inspection will be conducted by the project manager or appointed personnel. In areas where active construction is occurring, erosion and sediment control structures will be visually inspected at least once every 7 days. Inspections will also be conducted within 24hr of a storm event of 0.75 inches or greater, or when runoff from snowmelt is enough to cause a discharge

54. Inspection frequency will decreased in portions of the site which have been reclaimed or during the seasonal closure period. Inspection frequency will be decreased to twice per month.

### **Cultural Resources (CR)**

1. Avoid cultural resource sites (historic or pre-contact) that are eligible or potentially eligible/unevaluated for the National Register of Historic Places with a 30-meter buffer area as agreed to in the PA, by all Project activities as possible. In conformance with BLM direction and the PA, HiTech will establish an appropriate activity and disturbance exclusion zone.
2. If avoidance of eligible or potentially eligible cultural sites is not possible, HiTech will coordinate with the BLM to determine mitigation of adverse effects under Section 106 of the NHPA in coordination with the SHPO, ACHP, affected Tribes, and other interested parties such as local historical societies, as applicable.
3. Immediately cease activities within 30 meters (100 ft) of any previously unidentified cultural (archaeological or historical) resources encountered during Project operations. Ensure such discovery is appropriately protected and immediately notify the BLM authorized officer. Comply with the Project's Inadvertent Discovery Plan (IDP), the Programmatic Agreement (PA) and any cultural mitigation plan established under the PA. HiTech will be responsible for ensuring that employees, contractors, or any others associated with the Project do not damage, destroy, or vandalize archaeological or historical sites and that field-going personnel are aware of the IDP and types of cultural resources that may be encountered that would require protection. HiTech will be responsible for costs of rehabilitation or mitigation should damage cultural resources within or near the Project Area occur during the period of construction, operation, or rehabilitation due to the unauthorized, negligent, or inadvertent actions of HiTech or other Project personnel.
4. Do not knowingly disturb, alter, injure, or destroy any scientifically important paleontological remains or any historical archaeological site, structure, building, or object encountered in the Project Area under 43 CFR 3809.420(b)(8)(i).
5. Immediately cease activities within 60 meters (200 ft) of any discovery of suspected human remains or burials during Project operations and follow guidance for discovery of human remains outlined in the NAGPRA Plan of Action or Inadvertent Discovery Plan and according to 43 CFR Part 10 (Native American Graves Protection and Repatriation Act) and associated regulations. Oregon Revised Statutes (ORS 97.745) protect Native American burials, cairns, and certain cultural items. Ensure such discovery is appropriately protected and notify the BLM authorized officer immediately by telephone with written follow-up. Leave the discovery intact and do not take photographs or speak to the public about the find.

## **Fire and Fuels (FF)**

55. No open fires will be allowed by HiTech or its employees, contractors, or subcontractors during Project operations.
56. Wildland fires will immediately be reported to the Vale District Dispatch Center at 541-473-3144. Information reported will include the location (latitude and longitude if possible), fuels involved, time started, who or what is near the fire, and the direction of fire spread.
57. Smoking will only be permitted in areas that are free of flammable materials and only if allowed by state law or federal regulations. If smoking is allowed, smokers will position themselves in such a manner that burning material will fall within cleared areas. Smoking materials will be pressed into mineral soils to be extinguished. When completely extinguished, debris will then be put into containers designed solely for this purpose and properly disposed of offsite.
58. Vehicles and equipment will meet proper wildland fire preparedness requirements which include being equipped with approved spark arrestors, fire suppression tools, and other appropriate supplies. Power equipment will be equipped with fire extinguishers, buckets, and shovels during the exploration program.
59. If necessary, welding operations will be conducted on constructed drill sites or in an area free from vegetation. A minimum of ten gallons of water and a shovel will be on hand to extinguish any potential sparks. Extra personnel will be at the welding site to watch for fires created by welding sparks. Welding aprons will be used when conditions warrant (i.e., during red flag warnings).

## **Soils (S)**

60. Use road closure mechanisms to restrict overland travel routes to administrative use during drilling operations and to prevent use after drilling operations have ceased.
61. Wherever possible, overland travel would be used, limiting road construction.
62. Observe prudent speed limits not exceeding 35 miles per hour (mph) on the main Disaster Peak Road and 15 to 25 mph for all other roads as conditions warrant.
63. Install water bars on slopes to stabilize surfaces.
64. Access roads will be constructed along contours, where feasible.
65. On drill sites located on slopes greater than 10 percent HiTech will implement erosion and sediment control BMPs including stormwater run-on diversion channels where necessary, straw wattles at the toe of the fill slopes and a minimum 1-foot earthen berm on the down gradient portion of the pad. Straw wattles will be certified as weed-free, and all components will be biodegradable. Biodegradable straw wattles will remain in place in perpetuity.
66. Use of more stringent stormwater BMPs will be associated with drill sites on slopes greater than 20 percent, such as silt fencing and additional earthen berms.
67. Material from the construction of temporary roads and drill sites will be side cast for reclamation. An interim seed mix will be applied to the material stockpiles as necessary

for erosional stabilization or weed control purposes. Prior to final reclamation, newly constructed roads will be water barred to minimize erosional damage as BLM directs to meet performance standards.

68. Sediment control structures may include fabric and/or certified weed free straw filter fences, siltation or filter berms, sumps, mulch, and down gradient drainage channels to prevent unnecessary or undue degradation to the environment.
69. Stormwater controls will be installed where necessary to prevent or minimize erosion and sedimentation. Controls may consist of water bars, borrow ditches, contour furrows, and culverts sized to handle maximum seasonal water flows. Sediment controls, such as certified weed-free hay bales, filter fences, or other controls will be implemented, as necessary.
70. Where slopes are greater than 10%, regardless of the classification, straw wattles will be staked on the ground surface perpendicular to slopes at the top and bottom of the reclaimed area to prevent erosion. Straw wattles will be certified as weed-free, and all components will be biodegradable. Biodegradable straw wattles will remain in place in perpetuity.
71. If slopes exceed 33%, wattles will be placed perpendicular to the slopes at 20-foot intervals.
72. No areas will be considered with slopes greater than 30 percent where there is evidence of soil eroding into or off either the toe or the head of the slope. This will include areas where there is evidence of surface water runoff.
73. Sumps constructed within drill sites will be used to settle drill cuttings and prevent release. Groundwater encountered during drilling will be completely contained in the associated sump. Certified weed-free straw bales and silt fences will be used to control erosion and capture sediment at drill sites and sumps when necessary.
74. HiTech will not operate equipment during periods of high precipitation or when ground conditions are such that excessive resource damage or increased sediment transport could occur as determined by visual assessment during operations.
75. Conduct all new construction at least 300 feet from either side of the flood-prone width for all perennial and intermittent waters, and outside of riparian habitat, whichever is greater.
76. Water disturbed routes during grading and active use.
77. Grade to remove ruts and washboards.
78. Spread masticated vegetation as mulch for soil stabilization.
79. Apply weed-free gravel where watering alone is not sufficient.
80. Water drill pad surfaces and approaches during heavy use or windy conditions.
81. Minimize unnecessary traffic across un-stabilized areas.
82. Water soils during ripping, grading, contouring, and seeding to suppress dust.
83. Restrict traffic across reclaimed areas unless needed for monitoring or reseeding.
84. Use dust abatement measures commensurate with soil type, equipment use, wind conditions, and the effects of other erosion control measures.
85. Dust-abatement chemicals will be non-toxic, biodegradable, and approved for use near aquatic environments. Petroleum-based products will not be used.

86. Do not apply dust-abatement chemicals (e.g., magnesium chloride, calcium chloride salts, ligninsulfonate) within 25 feet of a water body, or in other areas where they may run off into a wetland or water body.
87. Do not apply ligninsulfonate within 24 hours of predicted rain.
88. Do not apply ligninsulfonate at rates exceeding 0.5 gallons per square yard of road surface, assuming a 50:50 solution of ligninsulfonate to water.
89. Sequence and schedule work to reduce the exposure of bare soil to wind erosion.
90. Maintain spill containment supplies on-site whenever dust abatement chemicals are being applied.
91. Maintain Disaster Peak Road in accordance with the Road Maintenance Agreement HiTech holds with Malheur County, including repair road damage to pre-operational conditions.  
Reclamation:
92. Activities occur annually limiting the duration of exposed bare ground.
93. Erosion prevention based on slopes including waddles, fences, etc.

## **Vegetation (V)**

94. Limit vegetation disturbance to the areas identified under the Proposed Action. Conduct reclamation of disturbed areas as soon as the area is no longer needed in accordance with the standards in the Southeastern Oregon RMP and CFR 3809.420, the Oregon Department of Geology and Mineral Industries (DOGAMI) chapter 632 Division 33 (632-33) (CFR 3809.420), and as summarized in the EPO.
95. Stabilize and seed all disturbed areas during seasonal closures and implement erosion controls in accordance with the Stormwater Pollution and Control Plan (Appendix A).
96. Wherever possible, overland travel would be used, limiting road construction.
97. Conduct all new construction at least 300 feet from either side of the flood-prone width for all perennial and intermittent waters, and outside of riparian habitat, whichever is greater.
98. Minimize disturbance to existing vegetation - Vehicles will be confined to existing roadways and permitted access routes only.
99. Use road closure mechanisms to restrict overland travel routes to administrative use during drilling operations and to prevent use after drilling operations have ceased.
100. During construction of drill sites, temporary roads, laydown storage areas, and wells, sensitive plant occurrences would be avoided with a 100-foot buffer when possible.
101. Material from the construction of temporary roads and drill sites will be side cast for reclamation. An interim seed mix will be applied to the material stockpiles as necessary for erosional stabilization or weed control purposes. Material stockpiles will be kept separate and returned to the same general area it was removed from during the reclamation phase. Prior to final reclamation, newly constructed roads will be water barred to minimize erosional damage as BLM directs to meet performance standards.



102. Slash, sagebrush, and other woody plants will be set aside to be dispersed as cover over disturbed areas after reclamation to facilitate growth of vegetation and inhibit motor vehicle traffic.
103. Sediment control structures may include fabric and/or certified weed free straw filter fences, siltation or filter berms, sumps, mulch, and down gradient drainage channels to prevent unnecessary or undue degradation to the environment.
104. Stormwater controls will be installed where necessary to prevent or minimize erosion and sedimentation. Controls may consist of water bars, borrow ditches, contour furrows, and culverts sized to handle maximum seasonal water flows. Sediment controls, such as certified weed-free hay bales, filter fences, or other controls will be implemented, as necessary.
105. Where slopes are greater than 10%, regardless of the classification, straw wattles will be staked on the ground surface perpendicular to slopes at the top and bottom of the reclaimed area to prevent erosion. Straw wattles will be certified as weed-free, and all components will be biodegradable. Biodegradable straw wattles will remain in place in perpetuity.
106. If slopes exceed 33%, wattles will be placed perpendicular to the slopes at 20-foot intervals.
107. Sumps constructed within drill sites will be used to settle drill cuttings and prevent release. Groundwater encountered during drilling will be completely contained in the associated sump. Certified weed-free straw bales and silt fences will be used to control erosion and capture sediment at drill sites and sumps when necessary.
108. HiTech will not operate equipment during periods of high precipitation or when ground conditions are such that excessive resource damage or increased sediment transport could occur as determined by visual assessment during operations.
109. No areas will be considered with slopes greater than 30 percent where there is evidence of soil eroding into or off either the toe or the head of the slope. This will include areas where there is evidence of surface water runoff.
110. Conduct all new construction at least 300 feet from either side of the flood-prone width for all perennial and intermittent waters, and outside of riparian habitat, whichever is greater.
111. Dust-abatement chemicals will be non-toxic, biodegradable, and approved for use near aquatic environments. Petroleum-based products will not be used.
112. Do not apply dust-abatement chemicals (e.g., magnesium chloride, calcium chloride salts, ligninsulfonate) within 25 feet of a water body, or in other areas where they may run off into a wetland or water body.
113. Do not apply ligninsulfonate within 24 hours of predicted rain.
114. Do not apply ligninsulfonate at rates exceeding 0.5 gallons per square yard of road surface, assuming a 50:50 solution of ligninsulfonate to water.

Reclamation:

- 115. HiTech will apply seeding treatments of BLM approved weed free seed mixes via drill or broadcast seeding in the late fall. The seed mix will match the local vegetation community.
- 116. HiTech will apply herbicide in disturbed areas prior to grading and revegetation activities.
- 117. HiTech will construct Temporary fencing for selected environments.
- 118. HiTech will monitor reclamation sites for revegetation success at least once per year during the growing season for a total of five years. HiTech will perform monitoring and maintenance until the reclamation success criteria outlined in section 6.19 of the Plan of Operations is met.

**Noxious And Invasive, Non-Native Species (NI, NSS)**

- 119. Awareness and Education - Training materials and tailgate sessions for contractors regarding best management practices for noxious weed control and identification.
- 120. Cleaning and inspecting - Cleaning and inspecting of new equipment before use in the Project Area and cleaning of vehicles and equipment that have encountered areas with noxious weeds.
- 121. Monitoring - Monitoring and documenting noxious weed occurrences to ensure that new invaders are not colonizing areas of disturbance.
- 122. Reclamation and seeding - Reclamation of disturbed areas as soon as they are no longer needed for the Project according to the Reclamation Plan included in the Exploration Plan of Operations (EPO).
- 123. Minimize disturbance to existing vegetation - Vehicles will be confined to existing roadways and permitted access routes only.
- 124. Certified weed-free materials - Straw bales, coir logs or other materials used for erosion and sediment control will be certified weed free.
- 125. Seeding - Any location that has been treated for noxious weeds will be seeded with a BLM approved certified weed free seed mix during the fall after treatment.
- 126. Restrict Travel Routes - Ensure that personnel and contractors avoid, as much as possible, travel through areas identified as containing noxious weeds to prevent their spread to uncontaminated areas.
- 127. Decontaminate vehicles - Personnel or contractors, who transport equipment on site, or those that must travel through identified noxious weed areas, are required to power-wash or use compressed air to blow off vehicles and equipment, particularly the undercarriage, to ensure that the spread of noxious weeds is minimized. Cleaning will be conducted prior to leaving the infestation area. Vehicles will not be cleaned within 300 feet of a stream.
- 128. Disposal - Noxious weeds that are mechanically removed will be disposed of in a location and manner acceptable to the BLM. Access roads and other sites that will have exposed soil for more than one growing season will be seeded with a BLM approved certified weed free seed mix. The seed mix will be certified pure live seed, weed free, and

will include aggressive native perennial grass species approved by the BLM capable of competing with invasive annual plants.

- 129. Mechanical Treatment - Manual removal techniques such as hand-pulling, cutting, shoveling, and hoeing prior to seed dispersal will be utilized as possible for small infestations.
- 130. Avoidance - Areas with established noxious weeds will be avoided as possible.
- 131. Chemical Treatment - Chemical treatment may be necessary when treating large noxious weed infestations. It may also be used to control invasive species that establish in disturbed areas and interfere with successful reclamation.
- 132. Implement a seasonal drilling shutdown December 1 through June 30 each year to avoid impacts to big game wintering and greater sage-grouse lek season.

Reclamation:

- 133. Native seed mix including locally collected seed.
- 134. Noxious and Invasive Plant Species management.
- 135. Temporary fencing for selected environments.
- 136. Five years of monitoring and maintenance.

**Terrestrial And Aquatic Wildlife, Including Special Status Species (TAW)**

- 137. Avoid disturbance of habitat for special status species, as much as practicable. If avoidance is not possible, exploration construction and drilling activities within the species' habitat would be modified to mitigate for potential impacts.
- 138. Conduct all new construction at least 300 feet from either side of the flood-prone width for all perennial and intermittent waters, and outside of riparian habitat, whichever is greater.
- 139. Take all available and practical measures to ensure wildlife is not unduly disturbed, whether through spatial avoidance or timing of exploration activities.
- 140. Do not knowingly disturb nesting migratory or game birds whether through spatial avoidance or timing of exploration activities. If active nests or burrows cannot be avoided with spatial buffers or timing of activities, BLM would contact the USFWS for guidance to minimize impacts and determine if a Migratory Bird Permit would be required
- 141. Conduct biological clearance surveys of work sites targeted for that season's construction. Clearance surveys would include avian species (including migratory birds), and nests (including burrows).
- 142. Observe prudent speed limits not exceeding 35 miles per hour (mph) on the main Disaster Peak Road and 15 to 25 mph for all other roads as conditions warrant.
- 143. Reduce vehicle speeds in areas of disturbance to minimize fugitive dust, protect wildlife and livestock, and to maintain operational safety.
- 144. Implement a seasonal drilling shutdown December 1 through June 30 each year to avoid impacts to big game wintering and greater sage-grouse lek season. Equipment may be utilized during the closure for unanticipated maintenance; however, this is considered

unlikely and will be conducted in coordination with BLM biologists to ensure biological resources will not be impacted.

145. All threatened, endangered, and sensitive species encounters will be documented by HiTech or their contractors and reported to the BLM, USFWS, and ODFW in annual reports or by other means, as appropriate.
146. Consolidate trips to and from the Project Area as practical to the minimum necessary to safely complete the Project.
147. Use road closure mechanisms to restrict overland travel routes to administrative use during drilling operations and to prevent use after drilling operations have ceased.
148. Sumps at each drill site will be backfilled and recontoured following the completion of drilling once fluids have been absorbed into the ground or evaporated. Drill sites will be recontoured with saved growth media to the pre-existing topography and seeded.
149. Non-hazardous Project-related refuse or solid waste will be collected in approved trash bins and/or containers equipped with lids. Trash bins and/or containers will be removed from the Project Area by HiTech or their contractors and disposed of at an approved landfill. Trash bins will be regularly inspected for leaks, and the lids will remain closed except when depositing debris. Materials that may attract wildlife will be removed from the Project Area each shift.
150. Fully or partially shield all outdoor light fixtures except incandescent fixtures of 150 watts or less and other sources of 70 watts or less. LEDs in warm colors will only be used. Direct lights down and use the lowest lumens possible to safely conduct operations.
151. All sumps would be temporarily fenced and sloped, or ramped, at one end to allow escape by humans or animals.
152. Drill pads will be fenced during reclamation and will be solar powered electric fences, three strands, approximately 40 inches in height and include reflective markers on the first and third strand to reduce wildlife collisions.
153. Bird deterrents will be installed on the MET station.
154. Coordinate with ODFW to determine an appropriate compensation level to meet the requirements of a future greater sage-grouse mitigation plan and be compliant with OAR 660-023-0115 and OAR 635-140-0025.
155. Milkweed occurrences (both known and newly discovered) will be protected with 10m no-work protection buffers. Preclearance surveys would be conducted prior to any development, and all milkweed individuals or patches would be buffered by 10m.
156. Pesticides that could kill monarch butterflies or milkweed species would not be used.

## **Water Resources (WR)**

157. Only use existing stream crossings/fords. Do not establish new crossings.
158. Conduct all new construction at least 300 feet from either side of the flood-prone width for all perennial and intermittent waters, and outside of riparian habitat, whichever is greater.
159. If necessary, protect existing low water crossings/fords at Cherokee Creeks with clean, washed gravel or temporary mats according to the standards for temporary crossings

provided by the Portland District USACE and Oregon DSL. Incorporate construction BMPs for timing of in-water work and sediment and erosion control as described in the Stormwater Pollution and Control Plan (SWPCP; Appendix H of the EPO).

160. Conduct surface water monitoring according to the protocol provided in the Monitoring Plan (Appendix G of the EPO) and implement investigative and corrective actions accordingly. The results of the surface water monitoring will assist HiTech in determining the effectiveness of the mitigation activities and provide the opportunity for modifications.
161. Completely contain groundwater encountered during drilling in the associated sump.
162. Properly abandon each borehole or convert to a monitoring well before the drill rig moves from the drill site. Plug boreholes in accordance with OAR 632-033-0025(7)(e), construct, develop, and abandon groundwater monitoring wells in accordance with OAR 690-240, and abandon and reclaim the monitoring wells and water supply well at the end of permitted use per Oregon abandonment regulations OAR 690-0030 through 690-220-0140.
163. On drill sites located on slopes greater than 10 percent HiTech will implement erosion and sediment control BMPs including stormwater run-on diversion channels where necessary, straw wattles at the toe of the fill slopes and a minimum 1-foot earthen berm on the down gradient portion of the pad. Use of more stringent BMP's will be associated with drill sites on slopes greater than 20 percent, such as silt fencing and additional earthen berms in accordance with SWPCP (Appendix H of the EPO).
164. Do not exceed the permitted pumping rate of 41,250 gallons of water per day from March 1 to November 30 each year from the water supply well, in accordance with the Limited License Issuance LL-1941.

### **Livestock Grazing (LG)**

165. Reduce vehicle speeds in areas of disturbance to protect livestock.
166. Observe prudent speed limits not exceeding 35 miles per hour (mph) on the main Disaster Peak Road and 15 to 25 mph for all other roads as conditions warrant.
167. Sumps within each drill site will be backfilled and recontoured following the completion of drilling once fluids have been absorbed into the ground or evaporated. Drill sites will be recontoured with saved growth media to the pre-existing topography and seeded.
168. HiTech will not operate equipment during periods of high precipitation or when ground conditions are such that excessive resource damage or increased sediment transport could occur as determined by visual assessment during operations.
169. No areas will be considered with slopes greater than 30 percent where there is evidence of soil eroding into or off either the toe or the head of the slope. This will include areas where there is evidence of surface water runoff.
170. Conduct all new construction at least 300 feet from either side of the flood-prone width for all perennial and intermittent waters, and outside of riparian habitat, whichever is greater.

171. All sumps would be temporarily fenced, sloped, or ramped, at one end to allow escape by humans or animals.
172. The BLM will provide direction to HiTech regarding the condition in which fences and gates are to be left (i.e., leave gates open or closed as appropriate) and coordinate with authorized grazing permittee to ensure that cattle operations are not impacted by Project activities.
173. Retain fence repair equipment in personnel and contractor vehicles to make any light field repairs to fences and gates as needed.
174. Should cattle guards along the access routes fill up with debris and sediment, HiTech would conduct maintenance of these features to ensure their integrity.
175. Should cattle guards and wings be damaged, hindering the operability of the cattle guards, HiTech would conduct maintenance of these features to ensure their integrity.
176. Coordinate with the authorized grazing permittee to ensure that cattle operations are not impacted by Project activities.
177. Coordinate with the BLM to establish and implement an appropriate plan to minimize impacts from Project activities known to cause leaks or breaks in the pipeline used to fill livestock water troughs, repairing or replacing damaged pipelines, other appropriate maintenance, or seasonal timing with the authorized grazing permittee.
178. Hitech will ensure that cattle operations are not impacted by working with the permittee throughout the life of the project, and any damage caused by exploration is repaired to the state prior to the action.
179. The BLM will provide direction to HiTech regarding the condition in which fences and gates are to be left (i.e., leave gates open or closed as appropriate) and coordinate with authorized grazing permittee to ensure that cattle operations are not impacted by Project activities.
180. Retain fence repair equipment in personnel and contractor vehicles to make any light field repairs to fences and gates as needed.
181. Should cattle guards along the access routes fill up with debris and sediment, HiTech would conduct maintenance of these features to ensure their integrity.
182. Should cattle guards and wings be damaged, hindering the operability of the cattle guards, HiTech would conduct maintenance of these features to ensure their integrity.
183. Coordinate with the authorized grazing permittee to ensure that cattle operations are not impacted by Project activities.
184. Coordinate with the BLM to establish and implement an appropriate plan to minimize impacts from Project activities known to cause leaks or breaks in the pipeline used to fill livestock water troughs, repairing or replacing pipelines, other appropriate maintenance, or seasonal timing with the authorized grazing permittee.
185. The Proponent will inspect weekly (photo documentation) areas where travel routes cross pipelines to prevent/repair breakages. If indication of breakage or leaks is present, repair will begin immediately, and exploration activities will cease until repaired.
186. Observe prudent speed limits (15 to 25 mph as conditions warrant). Reduce vehicle speeds in areas of disturbance to minimize fugitive dust, protect wildlife and livestock, and to maintain operational safety.

187. Maintain Disaster Peak Road in accordance with the Road Maintenance Agreement HiTech holds with Malheur County, including repair road damage to pre-operational conditions.
188. In coordination with the authorized livestock grazing permittee, the Proponent can construct and maintain temporary sound barriers or sound-absorbing fences between active drill sites and adjacent livestock pastures or arrange drill rigs strategically to reduce or minimize sound effects.
189. If additional temporary fencing is desired for reclamation success, the Proponent will, prior to the placement of fencing, coordinate with, and seek approval from, the BLM on the need and placement to prevent impacting livestock distribution and management.

### **Visual Resources (VR)**

190. Reclamation will occur concurrently, and sites will be reclaimed as soon as they are no longer needed.
191. Sumps at each drill site will be backfilled and recontoured following the completion of drilling once fluids have been absorbed into the ground or evaporated. Drill sites will be recontoured with saved growth media to the pre-existing topography and seeded.
192. Fully or partially shield all outdoor light fixtures except incandescent fixtures of 150 watts or less and other sources of 70 watts or less. LEDs in warm colors will only be used. Direct lights down and use the lowest lumens possible to safely conduct operations.
193. Avoid adjacent lands with wilderness characteristics.
194. Reclaim and revegetate all disturbed areas to the approximate original contour in a timely manner and according to reclamation methods.
195. Remove or secure equipment and supplies from the Project Area and remove or appropriately secure temporary facilities (water tanks and portable toilets) during temporary periods of inactivity, including seasonal shutdown.

### **Erosion And Spill Prevention and Control and Stormwater Control (ESPCSC)**

196. Do not operate equipment during periods of high precipitation or when ground conditions are such that excessive resource damage or increased sediment transport could occur as determined by visual assessment during operations.
197. Install, maintain, and monitor erosion and sediment and stormwater BMPs in accordance with SWPCP (Appendix H of the EPO).
198. Implement spill prevention practices and cleanup measures in accordance with the SWPCP (Appendix H of the EPO).
199. Use a weed free gravel source where necessary to maintain roads.
200. No areas will be considered with slopes greater than 30 percent where there is evidence of soils eroding into or off either the toe or the head of the slope. This will include areas where there is evidence of surface water runoff. A 300-foot buffer has been placed around perennial and intermittent streams.

## **Scenic Values (SV)**

- 201. Avoid adjacent lands with wilderness characteristics.
- 202. Reclaim and revegetate all disturbed areas to the approximate original contour in a timely manner and according to reclamation methods.
- 203. Remove or secure equipment and supplies from the Project Area and remove or appropriately secure temporary facilities (water tanks and portable toilets) during temporary periods of inactivity, including seasonal shutdown.