

APPENDIX D

Environmental Protection Measures

Note: The Section 508 amendment of the Rehabilitation Act of 1973 requires that the information in federal documents be accessible to individuals with disabilities. The Bureau of Land Management has made every effort to ensure that the information in the *Robinson Mine Plan of Operations Amendment Environmental Impact Statement* is accessible. However, this appendix is not fully compliant with Section 508, and readers with disabilities are encouraged to contact Tiera Arbogast at (775) 293-5042 or at tarbogast@blm.gov if they would like access to the information.

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APPENDIX A, SECTION 1 (RESOURCE PROGRAM BEST MANAGEMENT PRACTICES) OF THE *BUREAU OF LAND MANAGEMENT ELY DISTRICT RESOURCE MANAGEMENT*

The text in the following sections has been taken directly from Appendix A, Section 1 of the 2008 *Ely District Record of Decision and Approved Resource Management Plan* (Bureau of Land Management [BLM] 2008) and has not been edited or revised for this appendix.

Air Resources

1. Use dust abatement techniques on unpaved, unvegetated surfaces to minimize airborne dust.
2. Post and enforce speed limits (e.g., 25 miles per hour) to reduce airborne fugitive dust.
3. Cover construction materials and stockpiled soils if they are a source of fugitive dust.
4. Use dust abatement techniques before and during surface clearing, excavation, or blasting activities.

Water Resources

1. Avoid the application of fire retardant or foam within 300 feet of a stream channel or waterway, when possible, except for the protection of life and property. Aerial application and use of retardants and foams would be consistent with national policy guidelines established by the National Office of Fire and Aviation, as amended.
2. Fire engines that have surfactant foam mixes in tanks must be fitted with an anti-siphon (back flow protection valve) if filled directly from a stream channel.
3. Construct a containment barrier around all pumps and fuel containers utilized within 100 feet (30.5 meters) of a stream channel. The containment barrier would be of sufficient size to contain all fuel being stored or used on site.
4. Prior to use on lands administered by the Ely Field Office, all fire suppression equipment from outside the planning area utilized to extract water from lakes, streams, ponds, or spring sources (e.g., helicopter buckets, draft hoses, and screens) will be thoroughly rinsed to remove mud and debris and then disinfected to prevent the spread of invasive aquatic species. Rinsing equipment with disinfectant solution will not occur within 100 feet of natural water sources (i.e., lakes, streams, or springs). Ely suppression equipment utilized to extract water from water sources known to be contaminated with invasive aquatic species, as identified by the U.S. Fish and Wildlife Service and Nevada Department of Wildlife, also will be disinfected prior to use elsewhere on lands administered by the Ely Field Office.
5. Do not dump surfactant foam mixes from fire engines within 600 feet of a stream channel.
6. Do not conduct fire retardant mixing operations within 600 feet of a stream channel.
7. Remove all modifications made to impound or divert stream flow by mechanical or other means to facilitate extraction of water from a stream for fire suppression efforts when suppression efforts are completed.
8. When drafting or dipping water during fire operations, continuously monitor water levels at the site that water is being removed from. Do not allow water extraction to exceed the ability of the recharge inflow to maintain the water levels that exist at the time initial attack efforts began. If the water level drops below this predetermined level, all water removal would cease immediately until water levels are recharged.

9. When possible, do not cross or terminate fire control lines at the stream channel. Terminate control lines at the edge of the riparian zone at a location determined appropriate to meet fire suppression objectives based on fire behavior, vegetation/fuel types, and fire fighter safety.
10. Construct access roads and fords that cross stream channels to BLM road standards.
11. Do not construct new roads or mechanical fire control lines or improve existing roads within 300 feet of a stream channel unless authorized by the BLM Field Manager or Authorized Officer.
12. Limit stream crossings on travel routes and trails to the minimal number necessary to minimize sedimentation and compaction. The BLM Authorized Officer will determine if any impacts need to be rehabilitated by the permittee.
13. Conduct mixing of herbicides and rinsing of herbicide containers and spray equipment only in areas that are a safe distance from environmentally sensitive areas and points of entry to bodies of water (storm drains, irrigation ditches, streams, lakes, or wells).
14. A water well may be accepted by the BLM Ely Field Office upon completion of operations. The BLM authorized officer will make the determination whether to accept the well based upon the submission of the well completion forms and relevant hydrogeologic data reports. The well must be installed by drillers licensed by the state of Nevada according to specifications in Nevada Revised Statutes Title 48, Chapter 534.

Soil Resources

1. Require the use of specialized low-surface impact equipment (e.g., balloon tired vehicles) or helicopters, as determined by the BLM Authorized Officer, for activities in off-road areas where it is deemed necessary to protect fragile soils and other resource values.
2. During periods of adverse soil moisture conditions caused by climatic factors such as thawing, heavy rains, snow, flooding, or drought, suspend activities on existing roads that could create excessive surface rutting. When adverse conditions exist, the operator would contact the BLM Authorized Officer for an evaluation and decision based on soil types, soil moisture, slope, vegetation, and cover.
3. When preparing the site for reclamation, include contour furrowing, terracing, reduction of steep cut and fill slopes, and the installation of water bars, as determined appropriate for site-specific conditions.
4. Upon completion or temporary suspension of mining operations, backfill all holes and trenches and recontour the pit to the natural slope, if possible, with pit walls greater than 3 feet in height knocked down and sloped at 3 horizontal to 1 vertical or to the original topography, whichever is less.
5. Restoration requirements include reshaping, re-contouring, and/or resurfacing with topsoil, installation of water bars, and seeding on the contour. Removal of structures such as culverts, concrete pads, cattle guards, and signs would usually be required. Fertilization and/or fencing of the disturbance may be required. Additional erosion control measures (e.g., fiber matting and barriers) to discourage road travel may be required.

Vegetation Resources

1. Where seeding is required, use appropriate seed mixture and seeding techniques approved by the BLM Authorized Officer.
2. The BLM Authorized Officer will specify required special handling and recovery techniques for Joshua trees, yucca, and some cactus in the southern part of the planning area on a site-specific basis.

3. Keep removal and disturbance of vegetation to a minimum through construction site management (e.g., using previously disturbed areas and existing easements, limiting equipment/materials storage and staging area sites, etc.).
4. Generally, conduct reclamation with native seeds that are representative of the indigenous species present in the adjacent habitat. Document rationale for potential seeding with selected nonnative species. Possible exceptions would include use of nonnative species for a temporary cover crop to outcompete weeds. In all cases, ensure seed mixes are approved by the BLM Authorized Officer prior to planting.
5. Certify that all interim and final seed mixes, hay, straw, and hay/straw products are free of plant species listed on the Nevada noxious weed list.
6. An area is considered to be satisfactorily reclaimed when all disturbed areas have been recontoured to blend with the natural topography, erosion has been stabilized, and an acceptable vegetative cover has been established. Use the Nevada Guidelines for Successful Revegetation prepared by the Nevada Division of Environmental Protection, the BLM, and the U.S. Department of Agriculture Forest Service (or most current revision or replacement of this document) to determine if revegetation is successful.
7. Reclamation bond release criteria would include the following:
8. The perennial plant cover of the reclaimed area would equal or exceed perennial cover of selected comparison areas (normally adjacent habitat). If the adjacent habitat is severely disturbed, an ecological site description may be used as a cover standard. Cover is normally crown cover as estimated by the point intercept method. Selected cover can be determined using a method as described in Sampling Vegetation Attributes, Interagency Technical Reference, 1996, BLM/RS/ST-96/002+1730. The reclamation plan for the area project would identify the site-specific release criteria and associated statistical methods in the reclamation plan or permit.
9. Utility companies will manage vegetation in their rights-of-way for safe and reliable operation while maintaining vegetation and wildlife habitat.
10. Respread weed-free vegetation removed from the right-of-way to provide protection, nutrient recycling, and seed source.

Fish and Wildlife

1. Install wildlife escape ramps in all watering troughs, including temporary water haul facilities, and open storage tanks. Pipe the overflow away from the last water trough on an open system to provide water at ground level.
2. As appropriate, mark certain trees on BLM-administered lands for protection as wildlife trees.
3. Consider seasonal distribution of large wildlife species when determining methods used to accomplish weed and insect control objectives.
4. Protect active raptor nests in undisturbed areas within 0.25 mile of areas proposed for vegetation conversion using species-specific protection measures. Inventory areas containing suitable nesting habitat for active raptor nests prior to the initiation of any project.
5. When used to pump water from any pond or stream, screen the intake end of the draft hose to prevent fish from being ingested. Screen opening size would be a maximum of 3/16 inch (4.7 millimeters).
6. Special recreation use permittees will take action to ensure that race participants and spectators do not harass wildlife.

Special Status Species

1. Avoid line-of-sight views between the power poles along powerlines and sage grouse leks, whenever feasible.
2. Use current science, guidelines, and methodologies (Avian Power Line Interaction Committee 1994, 1996, 2005) for all new and existing powerlines to minimize raptor and other bird electrocution and collision potential.
3. When managing weeds in areas of special status species, carefully consider the impacts of the treatment on such species. Wherever possible, hand spraying of herbicides is preferred over other methods.
4. Do not conduct noxious and invasive weed control within 0.5 mile of nesting and brood rearing areas for special status species during the nesting and brood rearing season.
5. To the greatest extent possible, survey all mine adits and shafts slated for closure for bat presence and use prior to being closed. Minimize impacts to bat roosts and bat habitat through the use of current science, guidelines, and methodologies when closing and abandoning mine adits.
6. Develop grazing systems to minimize conflicts with special status species habitat.
7. For streams currently occupied by any special status species, do not allow extraction of water from ponds or pools if stream inflow is minimal (i.e., during drought situations) and extraction of water would lower the existing pond or pool level.
8. When new spring developments are constructed on BLM lands and BLM has the authority to design the project, the source and surrounding riparian area will be fenced, the spring will be developed in a manner that leaves surface water at the source and maintains the associated riparian area, water will be provided outside the enclosure in a manner that provides drinking water for large ungulates, wild horses, and/or livestock so they are less likely to break into the enclosure.
9. Salt and mineral supplements:
 - Base placement of salt and mineral supplements on site-specific assessment.
 - Normally place salt and mineral supplements at least 0.5 mile away from riparian areas, sensitive sites, populations of special status plant species, cultural resource sites.
 - Place salt at least 0.5 mile from any water source including troughs.
 - Place salt and mineral supplements at least 1 mile from sage grouse leks.

Water hauling:

- Place water haul sites at least 0.5 mile away from riparian areas, cultural sites, and special status species locations.
- Limit water hauling to existing roads when possible.

Wild Horses

1. To protect wild horses and wildlife flag all new fences every 16 feet with white flagging that is at least 1 inch wide and has at least 12 inches hanging free from the top wire of the fence.
2. If a project involves heavy or sustained traffic, require road signs for safety and protection of wild horses and wildlife

Cultural Resources

1. Ensure that all activities associated with the undertaking, within 100 meters of the discovery, are halted and the discovery is appropriately protected, until the BLM authorized officer issues a Notice to Proceed. A Notice to Proceed may be issued by the BLM under any of the following conditions:
 - a. Evaluation of potentially eligible resource(s) results in a determination that the resource(s) are not eligible;
 - b. The fieldwork phase of the treatment option has been completed; and
 - c. The BLM has accepted a summary description of the fieldwork performed and a reporting schedule for that work.
2. The operator will inform all persons associated with the project that knowingly disturbing cultural resources (historic or archaeological) or collecting artifacts is illegal.
3. The BLM may approve cross-country operations of seismic trucks and support vehicles on bare frozen ground or over sufficient snow depth (vehicle traffic does not reveal the ground) so as to prevent surface disturbance.
4. Perform viewshed reclamation when the setting of a site contributes to the significance of the property.

Paleontological Resources

1. When paleontological resources of potential scientific interest are encountered (including all vertebrate fossils and deposits of petrified wood), leave them intact and immediately bring them to the attention of the BLM Authorized Officer.

Visual Resources

1. On industrial facilities authorized by the Ely Field Office, utilize anti-glare light fixtures to limit light pollution.
2. During the implementation of vegetation treatments, create irregular margins around treatment areas to better maintain the existing scenic character of the landscape.
3. When feasible, bury utility lines on public land when in the viewshed of residential or community development.

Travel Management and Off-highway Vehicle Use

1. Design access roads requiring construction with cut and fill to minimize surface disturbance and take into account the character of the landform, natural contours, cut material, depth of cut, where the fill material would be deposited, resource concerns, and visual contrast. Avoid construction of access roads on steep hillsides and near watercourses where alternate routes provide adequate access.
2. Where adverse impacts or safety considerations warrant, limit or prohibit public access when authorizing specific routes to areas or sites under permit or lease.

Recreation

1. Do not allow surface or underground disturbance to occur within 100 yards (horizontally or vertically) of known cave resources.
2. Where appropriate, do not allow ground disturbing activities within 100 yards of cave entrances, drainage areas, subsurface passages, and developed recreation sites. Do not dispose of waste material

or chemicals in sinkholes or gates by cave entrances. If during construction activities any sinkholes or cave openings are discovered, cease construction activities and notify the BLM authorized officer.

Livestock Grazing

1. Water troughs
 - a. Place troughs connected with spring developments outside of riparian and wetland habitats to reduce livestock trampling damage to wet areas.
 - b. Control trough overflow at springs with float valves or deliver the overflow back into the native channel.
2. Based on allotment situations and circumstances associated with livestock grazing and multiple use management, implement any or all of the following appropriate management practices on winterfat dominated ecological sites.
 - a. Develop grazing systems to control or rest grazing use on winterfat sites after March 1 or when the critical growing season begins. Allow spring grazing use during the critical growing period if a grazing rotation system that provides rest from grazing during the critical growing period at least every other year for all areas is in place. Utilization during the critical growth period should not exceed 35 percent under any circumstances.
 - b. Place salt and supplements at least 0.5 mile away from winterfat dominated sites. Base placement on site-specific assessment and characteristics such as riparian, topography, cultural, special status species, etc.
 - c. Locate sheep bedding grounds and camps at least 0.5 mile away from winterfat dominated sites. Base placement on site-specific assessment and characteristics such as riparian, topography, cultural, special status species, etc.
 - d. Locate water haul sites at least 0.5 mile away from winterfat dominated sites. Base placement on site-specific assessment and characteristics such as riparian, topography, cultural, special status species, etc.
 - e. Construct livestock reservoirs away from winterfat dominated sites. Base placement on site-specific assessment and characteristics such as riparian, topography, cultural, special status species, etc.
 - f. If water wells are approved to be drilled in winterfat dominated sites, strive to pipe the water at least 0.5 mile away from winterfat dominated sites. Base placement on site-specific assessment and characteristics such as riparian, topography, cultural, special status species, etc.

Mineral Extraction

1. Applications for permit to drill would follow the best management practices as outlined in the BLM oil and gas Gold Book (http://www.blm.gov/wo/st/en/prog/energy/oil_and_gas/best_management_practices/gold_book.html), as well as on-shore regulations, individual surface use plans, and conditions of approval that may be part of the Record of Decision for EISs or Decision Records for environmental assessments/Findings of No Significant Impacts, Documentation of NEPA Adequacy, and Categorical Exclusions prepared for site-specific projects.
2. Do not permit blasting if it would be detrimental to the significant characteristics of archeological or historical values, recreation areas, known caves, water wells, or springs.
3. Notify the BLM authorized officer within 5 days of completion of reclamation work so that timely compliance inspections can be completed.

Watershed Management

1. Manage activities, uses, and authorizations on burned areas to best meet resource management objectives established for the area in specific stabilization, restoration, or activity plans. The BLM authorized officer may open areas to livestock grazing based upon those considerations.

Fire Management

1. Notify valid existing land users (such as mine claimants, holders of rights-of-way, and livestock permittees) prior to implementation of prescribed fires that may affect their investments.
2. Remove vegetation, where appropriate, to protect facilities (e.g., range improvements, communication sites, and recreation sites).
3. Within the area of operation, every effort will be made to prevent, control, or suppress any fire. Fire-fighting equipment may be required to be on site while operations are in progress, depending on hazards inherent in the type of operation and fire hazard levels. Report uncontrolled fires immediately to the BLM Ely Field Office Manager or Authorized Officer. The BLM Fire Dispatch telephone number is (775) 289-1925 or 1-800-633-6092. After working hours, call 911 or the White Pine County Sheriff's Office at (775) 289-8801, the Lincoln County Sheriff's Office at (775) 962-5151, or the Nye County Sheriff's Office at (775) 482-8101.

Noxious and Invasive Weed Management

1. Control or restrict the timing of livestock movement to minimize the transport of livestock-borne noxious weed seeds, roots, or rhizomes between weed-infested and weed-free areas.
2. When maintaining unpaved roads on BLM-administered lands, avoid the unnecessary disturbance of adjacent native vegetation and the spread of weeds. Grade road shoulders or barrow ditches only when necessary to provide for adequate drainage. Minimize the width of grading operations. The BLM Authorized Officer will meet with equipment operators to ensure that they understand this objective.

Health and Safety

1. Consider nozzle type, nozzle size, boom pressure, and adjuvant use and take appropriate measures for each herbicide application project to reduce the chance of chemical drift.
2. All applications of approved pesticides will be conducted only by certified pesticide applicators or by personnel under the direct supervision of a certified applicator.
3. Prior to commencing any chemical control program, and on a daily basis for the duration of the project, the certified applicator will provide a suitable safety briefing to all personnel working with or in the vicinity of the herbicide application. This briefing will include safe handling, spill prevention, cleanup, and first aid procedures.
4. Store all pesticides in areas where access can be controlled to prevent unauthorized/untrained people from gaining access to the chemicals.
5. Do not apply pesticides within 440 yards (0.25 mile) of residences without prior notification of the resident.
6. Areas treated with pesticides will be adequately posted to notify the public of the activity and of safe reentry dates, if a public notification requirement is specified on the label of the product applied. The public notice signs will be at least 8 1/2" x 11" in size and will contain the date of application and the date of safe re-entry.

7. The recreation permittee will post warning signs at all known mine shafts and other hazardous areas that occur within 100 feet of a race course or pit/spectator area and will verbally inform race participants of all hazards at the pre-race meeting.
8. The recreation permittee will assume liability for and clean up of any and all releases of hazardous substances or oil (more than one quart) disposed on public land as defined in the National Oil and Hazardous Substances Contingency Plan (Title 40 Code of Federal Regulations Subpart 300). The permittee will immediately notify the BLM Authorized Officer of any and all releases of hazardous substances or oil (more than one quart) on public land.
9. Properly dispose of all tailings, dumps, and deleterious materials or substances. Take measures to isolate, control, and properly dispose of toxic and hazardous materials.
10. Remove and properly dispose of all trash, garbage, debris, and foreign matter. Maintain the disposal site and leave it in a clean and safe condition. Do not allow burning at the site.
11. Do not drain oil or lubricants onto the ground surface. Immediately clean up any spills under 25 gallons; clean up spills over 25 gallons as soon as possible and report the incident to the BLM Authorized Officer and Nevada Division of Environmental Protection.
12. The operator will work with the BLM Authorized Officer on the containment of drilling fluids and drill hole cuttings. Adequately fence, post, or cover mud and separation pits, and hazardous material storage areas.
13. Locate powder magazines at least 0.25 mile from traveled roads. Attend loaded shot holes and charges at all times. Use explosives according to applicable federal and state regulations.
14. Containerize petroleum products such as gasoline, diesel fuel, helicopter fuel, and lubricants in approved containers. Properly store hazardous materials in separate containers to prevent mixing, drainage, or accidents.

ROBINSON PLAN OF OPERATIONS AMENDMENT FOR EXPANSION OF MINING ACTIVITIES

The text in the following sections has been taken directly from the *Robinson Plan of Operations Amendment for Expansion of Mining Activities* (KGHM Robinson Operation [KGHM] 2019) and associated appendices and has not been edited or revised for this appendix.

Air Quality

- If roads are to be utilized for more than one year, mulch and seed cut and fill slopes immediately after disturbance to control erosion and establish vegetative cover.
- Use water and possibly chemical additives to control dust from roads and construction areas.
- Collect and control particulate emissions from the crusher and the ore reclaim systems with dust control systems.
- Control dust emissions from the stacking conveyor system drop point with a pneumatic water spray dust suppression system.
- Use covered, enclosed mixer/settler tanks to limit the potential for airborne emission of reagents.
- Cover or stabilize concentrate during transport.
- Grade and seed soil stockpiles with an interim seed mixture to minimize wind erosion.

Cultural Resources

- If previously undocumented archaeological sites or subsurface components of documented sites are discovered during construction, Robinson would halt activities in the immediate area until the resources are examined by professional archaeologists in accordance with the procedures outlined in the 2016 Programmatic Agreement among the BLM, in consultation with SHPO, and Robinson (BLM and Nevada SHPO, 2016).
- If resources were eligible for the National Register of Historic Places , impacts will be mitigated through an appropriate treatment plan as stipulated in the Programmatic Agreement.

Soils

- If roads are to be utilized for more than one year, mulch and seed cut and fill slopes immediately after disturbance to control erosion and establish vegetative cover.
- Use water and possibly chemical additives to control fugitive dust from haul roads and construction areas.
- Stockpile up to one foot of available topsoil/growth media from disturbed areas for use in reclamation.
- Build secondary containment berms and ditches for the tailings embankment, waste rock dumps, and growth media stockpiles.
- Grade and seed soil stockpiles with an interim seed mix to minimize erosion.
- Use covered, enclosed mixer/settler tanks to prevent leaks to the environment.
- Prior to reclamation, limit slope lengths on the waste rock, leach facility sideslopes, and the tailings disposal embankments face to 100 feet with construction of berms, benches, or trenches. Rip along the contour and "moonscape," if appropriate.
- Robinson developed an Emergency Response Plan (Robinson, 2018b) (refer Appendix J).
- During construction and operations, stabilize or reclaim transmission line construction disturbance areas (excluding access roads), water supply line routes, the East Unit of the tailings impoundment (once the West Unit is operational), diversion channels, temporary access roads, soil stockpiles, portions of the waste rock facilities, and construction-related disturbances that would not be re-disturbed during operations.

Vegetation

- Restrict livestock and wild horse access to areas that have been seeded to allow for successful vegetation.
- Reduce impacts on area vegetation by controlling noxious weed infestations in disturbed and revegetated areas through the use of BMPs, such as proper reclamation, judicious use of herbicides, and monitoring to identify potential problems. [Note: Appendix G contains the Noxious Weed Management Plan (SRK, 2016) currently implemented at Robinson.]

Visual Resources

- During reclamation, fill slopes designed to be similar with the surrounding natural topography to the maximum extent practical in keeping with the Reclamation Plan.
- To the extent practicable, spread the soils or materials excavated during construction and not stockpiled for reclamation into the cleared area and grade them to conform with existing terrain.
- Reduce potential visual impacts by avoiding, to the extent possible, disturbances to foliage adjacent to the site, so that there would be maximum available screening of the site. Where possible, disturbances would be created with curvilinear boundaries instead of straight lines, and grading would be done in a manner that minimizes erosion and conforms to the natural topography.
- Robinson would develop a Lighting Management Plan to adhere to its BMPs.

Geology

- Design the tailings embankment to sustain a seismic event of 6.8 on the Richter scale.
- Monitor stability of the tailings dam, WRDs, leach heaps, and pit walls.

Water Quantity and Quality

- If roads are to be utilized for more than one year, mulch and seed cut and fill slopes immediately after disturbance to control erosion and establish vegetative cover.
- Divert surface water around the West Unit of the tailings impoundment, leach facilities, open pits, and WRDs.
- Line sideslopes of retention ponds to prevent retention pond water from seeping through waste rock material.
- Seed soil stockpiles with interim seed mix to minimize erosion.
- Implement waste rock management procedures to prevent the generation of acid and acid drainage from WRDs, including segregation, selective placement, mixing, covering of waste rock materials.
- Inspect the run-off containment system after major precipitation events.
- Create riprap diversion channels to limit erosion; inspect and maintain, as necessary.
- Place waste rock that has acid-generating potential in disposal areas in a manner that precludes infiltration by meteoric water (e.g., water derived from snow or rain) and air. PAG waste rock is placed interior to WRDs and encapsulated with non-PAG waste rock on the exterior of the WRDs. This placement encapsulates the PAG and prevents direct exposure to meteoric water and air.
- Robinson developed and implements groundwater monitoring program [Note: groundwater monitoring program has been implemented per the FMMP (Robinson, 2018c) included in Appendix H].
- Contain or control runoff from disturbed areas pursuant to surface water quality standards.
- During the life of the project, revise and improve, as necessary, stormwater pollution prevention practices, and procedures.

- Immediately prior to reclamation, limit slope lengths on waste rock, leach facility sideslopes, and the tailings disposal area embankment face to 100 feet with construction of appropriate benches, berms, or trenches. Rip along the contour and "moonscape," if appropriate.
- Regularly inspect berms, pipelines, pumps, secondary containment ditches, seepage collection ponds, spigots, the stormwater diversion channel, and the tailings impoundment pool.
- Use covered, enclosed mixer/settler tanks to prevent leaks to the environment.
- Dewater the Liberty and Ruth pits to provide some of the Robinson Mine's water requirements and reduce the amount of water withdrawn from production wells.
- Robinson developed a general Emergency Response Plan (Robinson, 2018b) (refer Appendix J).
- Take quarterly samples of tailings to test for acid-generating potential.
- Deepen wells in Gleason Creek, if impacted.
- Robinson upgraded the Murry Springs monitoring system. If it is demonstrated that Murry Springs water is affected due to operation of the Robinson Mine to the point that it no longer meets state standards for drinking water quality or is inadequate to meet the demands of the City; Robinson would take appropriate actions required by law, such as construction of a water treatment facility or development of a new source of water.
- Continue to manage mine-impacted waters in double-lined ponds and in accordance with the water pollution control permit.

Wildlife and Fisheries Resources

- Water sources would contain wildlife escape ramps.
- Installation of an eight-foot mesh wire fence around the seepage collection ponds.
- Monitor (observe and record) bird and other wildlife use of the pit and tailings impoundment waters during water sampling activities.
- Receive permission from BLM and NDOW prior to sealing any mine openings (potential bat habitat) within the Plan boundary.
- Prior to any vegetation removal conducted between March 1 and July 31, nesting migratory bird surveys would be conducted by a qualified biologist. If an active nest is present, it would be protected with the appropriate size buffer for that species until the young have fledged and the nest is determined inactive.
- Robinson committed to Greater Sage-Grouse required design features [as outlined in Appendix A: Greater Sage-Grouse Required Design Features of the 2019 FEA (BLM, 2019a)].
- Any new fences would be constructed in accordance with BLM wildlife specifications and when necessary in coordination with NDOW.
- Robinson prepared an Eagle Conservation Plan.

Wastes, Hazardous or Solid

- Robinson developed a general Emergency Response Plan (Robinson, 2018b) (refer Appendix J).
- Robinson adheres to regulations adopted by the U.S. Department of Transportation (49 CFR 171-177; 57 Federal Register 20944, May 15, 1992) designed to aid in reducing the potential for accidents and in mitigating releases that may occur during transport of hazardous materials. These rules require that the truck drivers bringing sulfuric acid and other hazardous materials to the Robinson Mine receive training in the following areas: methods and procedures for avoiding accidents; pre-trip safety inspections; use of vehicle, including dangers associated with weather or road conditions; and loading and unloading of materials. Additional specialized training is also required for drivers of tank trucks, such as those transporting acid, including training on vehicle handling characteristics, and retest and inspection requirements for cargo tanks. In addition to these federal requirements, Robinson would also require that any trucking companies transporting acid to the site have its own spill contingency plans emergency response and appropriate capabilities.
- Robinson works with the Ely Fire Department and White Pine County Fire District to ensure they are aware of the materials being transported to the Robinson Mine. Robinson provides appropriate training to the fire departments so that they are prepared in the event of a spill or other accident involving hazardous material.

Safety

- Robinson stationed a fire truck on-site.
- Robinson provided the Ely Fire Department and the White Pine County Fire District with emergency response training and equipment necessary for the potential spill of a Robinson Mine related hazardous material.
- Warning signs would be placed around the pits following reclamation.

Reclamation

- Stockpile topsoil growth medium from disturbed areas for use in reclamation.
- Include physical surface stabilization and revegetation procedures and financial assurance to ensure completion of successful reclamation of tailings and WRDs.
- Use concurrent reclamation practices in areas where no further disturbance is anticipated.
- Resurface soil in a manner that would minimize erosion and conform to the natural topography.
- Grade in a manner that will minimize erosion and approximate the pre-mining topography.

APPENDIX B OF THE ROBINSON PLAN OF OPERATIONS AMENDMENT FOR EXPANSION OF MINING ACTIVITIES

The text in the following sections has been taken directly from Appendix B of the *Robinson Plan of Operations Amendment for Expansion of Mining Activities* (KGHM 2019) and has not been edited or revised for this appendix.

Measures to be Taken to Prevent Undue Degradation

The primary closure and reclamation measures specific to the Robinson Operation include the following activities in areas shown on Drawing 150900.920.0900-1004:

- Re-grade affected areas that are subject to NAC 519A and 43 CFR 3809 to establish a stable topographic configuration, complete with drainage control;
- Replace topsoil and/or add soil amendments in areas that are subject to NAC 519A and 43 CFR 3809 as discussed in Section 3.A.4; and
- Revegetate affected areas that are subject to NAC 519A and 43 CFR 3809.

Measures Taken During Extended Periods of Non-Operation

The Robinson Operations was placed into “Temporary Closure” from June 1999 through April 2004 as a result of depressed copper prices. During this period the site was maintained consistent with a Temporary Closure Plan submitted to NDEP in August 1999. Activities were performed under this plan to meet the following objectives: 1) maintenance of facilities and equipment, and 2) management of process fluids. Additional specific activities performed to meet these objectives are detailed in the Temporary Closure Plan. Thus, the “measures taken during extended periods of non-operation” described in this section are based on procedures that have been tried and tested, and thus proved to work. An additional objective during Temporary Closure is to assure compliance with all applicable permits. Three permitted activities that require particular attention during Temporary Closure are: 1) management of solid and hazardous waste; 2) management of stormwater; and 3) management of abandoned mines.

Solid and Hazardous Waste

Solid waste is managed at an on-site landfill, which is permitted by NDEP under a Class III Waiver or shipped off-site to the City of Ely Public Landfill. Solid wastes are collected in central locations and regularly placed into the landfill or shipped off-site to maintain the site in a “clean manner”.

Hazardous wastes are not typically generated during Temporary Closure. However, any wastes classified as hazardous are managed in a satellite storage area and removed from the site consistent with timeframes identified in Nevada Regulation for a “Conditionally Exempt Small Quantity Generator.” All hazardous wastes will be shipped off site for disposal at a permitted facility.

Petroleum contaminated soils (PCS) are collected in a contaminated soils yard located in the mill area, as shown on Drawing 157900.920.0900-1008. After characterization, PCS are removed and shipped off site for disposal at Clean Harbors Grassy Mountain a permitted facility in Grantsville, Utah. Robinson prepared PCS Management Plan, submitted it NDEP on July 30, 2015 and the plan is currently under NDEP review.

Storm Water

The Robinson Operation has filed a Notice of Intent to discharge stormwater under Nevada's General Stormwater Permit, issued by NDEP's Bureau of Water Pollution Control. Pursuant to that permit authorization, Robinson Operation has developed a site-specific SWPPP that is designed to minimize erosion and related adverse impacts. Quarterly inspection and routine maintenance of stormwater erosion control BMPs is required under the SWPPP. Additionally, Robinson performs a detailed Annual Compliance Certification and submits this information to the Bureau of Water Pollution Control in an annual report. Additional details of this program are available in the SWPPP and annual reports.

Abandoned Mines

NAC 513.200 to 513.390, inclusive, apply to the Robinson Operations and address "Dangerous Conditions Created by Abandonment of Mines." The Commission on Mineral Revision 2: December 27, 2016 KGHM Robinson Operation Page 103 Reclamation Permit #0021/Plan of Operations NVN-68654 Minor Modification and Update to 3-Year Reclamation Plan Resources, Division of Minerals, implements this regulatory program. Robinson maintains an inventory of abandoned mine workings. An extensive program of blocking access and/or creating safe conditions in mine openings has been completed under the abandoned mines program. Additionally, requirements in the ROD, such as weed control, concurrent reclamation and implementation of reclamation test plots, are as applicable to periods of non-operation as they are to periods of operation.

APPENDIX C OF THE *ROBINSON PLAN OF OPERATIONS AMENDMENT FOR EXPANSION OF MINING ACTIVITIES*

The text in the following sections has been taken directly from Appendix C of the *Robinson Plan of Operations Amendment for Expansion of Mining Activities* (KGHM 2019) and has not been edited or revised for this appendix.

Liberty Mitigation Measures

Liberty Pit is determined to be a hydraulic sink relative to the surrounding groundwater system upon recovery. Therefore no degradation to surface or groundwater water will occur. Alternative closure conditions may help mitigate Liberty East pit lake water quality to some 5. LIBERTY PIT LAKE MODEL PITEAU ASSOCIATES USA LTD 55 degree and protect terrestrial and avian wildlife by: 1) reducing accessibility to the pit lake or 2) improving pit lake chemistry to above toxicity thresholds.

Rapid filling the Liberty East Pit Lake with South Block dewatering water could be achieved with the existing dewatering well infrastructure. The South Block is dewatered at a rate of 8,000 to 20,000 gpm using high capacity wells which will continue through the end of mining Ruth pits. South Block water can be diverted to the Liberty pit using dewatering infrastructure to fill to pits to the 6,630 ft elevation (which below the ultimate rebound elevation of the South Block). Rapid filling could be accomplished in a period of three to six months.

Filling Liberty pit to the 6,630 elevation would produce a combined pit lake for several years until water levels receded to equilibrium levels due to evaporation. Filling above the 6,630 elevation could enhance the rapid filling effect, however groundwater gradients between Liberty pit and adjacent groundwater systems would be reversed for a period, and may generate diffuse outflow during that time. Alternative

filling scenarios are possible of filling to the lake's equilibrium level, or above surrounding groundwater levels to flush the rock with alkaline water. Rapid filling with South Block water is more advantageous than amending the lake with slaked lime because of the higher natural alkalinity (~180 mg/L) and low TDS composition of the water. In practice lime slaking generates alkalinity in the range of 70 mg/L to 80 mg/L due to lower efficiency of reaction with the surface area of lime pellets and water.

A sensitivity analysis was performed to evaluate the effect that rapid filling the Liberty East Pit may have on the pit lake water chemistry. The water balance and geochemical models for the existing Liberty East Pit Lake were modified in the following manners to simulate rapid filling:

- South Block water was added to the Liberty East pit at a rate of 2,000 gpm, which overflowed into the Liberty Main pit until both pits recovered to a stage of 6,630 ft amsl. The pit lake elevations was maintained at 6,630 ft with South Block water for a period of 4 years via maintenance filling. Rapid filling was assumed to begin upon the end of mining.
- South Block water was assigned a water chemistry derived South Block wells (Table 3.2). Composite water chemistry of the South Block is shown in Table 6.1.
- The geochemical model was re-run with the new water balance components for the rapid filled Liberty East and Main pits.

Results from the Liberty pit rapid fill sensitivity analysis are summarized as follows:

- The pit is quickly filled to an elevation of 6,630 ft in period of ~ 3 months. After maintenance filling the pit lake stages begins to slowly decline in tandem until the lake level falls below the saddle. Liberty East pit declines faster because it's equilibrium elevation (6,471 ft) is lower. Liberty Main slowly declines to its equilibrium elevation (Figure 5.16). The pit lakes remain a hydraulic sink relative to surrounding groundwater.
- The percentage of South Block water for each pit by year is shown in Table 5.16. South Block water composes the majority of the pit lake through year 10 (73%). After this initial period, the continued contribution of precipitation, runoff, and groundwater overtake the initial slug of South Block water.
- Simulated pit lake chemistry for Liberty Main and East pits are shown in Tables 5.17 and 5.18. Rapid filling improves the pit lake chemistry for each constituent compared to natural recovery. The acidity from PAG flushing and rinsing is buffered by the application of high alkalinity South Block water. Simulated pH is significantly improved, between 8.2 and 8.5, and key metal concentrations are as follows: o Iron: 0.00 mg/l o Manganese: 0.000 to 0.0016 mg/l o Copper: 0.00 mg/l o Lead: 0.000 mg/l o Aluminium: 0.01 mg/l o Cadmium: 0.003 mg/l to 0.253 mg/l o Zinc: 0.35 mg/l to 22.58
- It is important to note that the sorption and cation exchange of cadmium with the calcium ions in calcite is an actual process observed by field and laboratory observations that is not included in the geochemical simulation due to lack of site specific thermodynamic data regarding the process. Cadmium sorption would be anticipated to occur in this scenario because of i) pH levels above 7.5, ii) availability of oxygen due to turnover, iii) the abundance of limestone in the wall rock as well as the predicted calcite precipitation in the pit lake (EPA, 1999).
- Fluoride remains above Profile III MCLs in Liberty Main regardless of rapid filling. Otherwise Liberty Main pit lake does not exceed other Profile III MCLs.

- Constituents continue to evapoconcentrate after rapid filling, particularly in the Liberty East pit where evapoconcentrated elements still exceed MCLs after year 50. However concentrations are lower than the naturally filled pit lake.
- By year 50 cadmium, fluoride, and TDS exceed Profile III MCLs at the Liberty East pit. By year 100 pH is greater than 8.5 s.u. These are the only constituents predicted to exceed Profile III MCLs.

Based on this preliminary analysis, rapid filling Liberty East pit will reduce the number of Profile III constituent exceedances, and improve pit lake quality as compared to that of natural filling. Additional mitigation measures to improve the pit lake chemistry and/or impede biological receptors from accessing the pit lake may include:

- Water quality monitoring during the early development of Liberty Main and East Pits Lakes to evaluate water chemistry evolution.
- Full or partial backfilling of the Liberty East pit, which is small and prevent the ingress of pore quality surface water.
- Fencing and berms to impede wildlife access to the pit lake.
- Additional mining in Liberty East.
- If water quality monitoring indicates ARD is beginning to form, Liberty Main and East Pit Lakes may be dosed with slaked lime ($\text{Ca}(\text{OH})_2$) slurry during formation. Slaked lime slurry moderates pit lake pH and adds alkalinity. Maximum alkalinity concentrations reach 60 to 80 mg/L, prior to the precipitation of calcite.

Wedge Pit Mitigation Measures

Wedge pit is predicted to have good water quality as a result of the large quantity of non-PAG material composing the buttress, wall rock, and potential backfill. Discharge rates from Wedge Pit are predicted to be a maximum of 3.2 gpm if the pit is backfilled. Discharged water from backfilled Wedge Pit is predicted to meet permit MCLs with the exception of manganese and iron. However background manganese and iron concentrations are high, with manganese at monitoring well W-28R ranging from 24.7 mg/L to 122 mg/L, and iron ranging from 360 mg/l to 420 mg/l. At well W-26RR manganese ranges from 0.27 mg/L to ~2.07 mg/L and iron ranges from 0.076 mg/l to 0.36 mg/l . The recommended mitigation measures are:

1. Continue water quality monitoring at down gradient bedrock wells. These wells include:
 - a. W-26RR: Well drilled in 2014.
 - b. W-28R: Well drilled in 2014.
 - c. W-8D: Well drilled in 2016 to replace W-8B.
 - d. R-H: This is a current WPCP compliance well, and is closest to Wedge Pit. However, water levels suggest it is compartmentalized (in poor hydraulic connection) with Robinson Canyon block groundwater levels.
 - e. W-10: This is a current WPCP compliance well. Water level data indicate it is disconnected from Robinson Canyon block water levels and K2P.
2. Continue monitoring water levels at W-26RR, W-28R, W-8B, and K2P is recommended to determine whether water levels recover in tandem with K2P to monitor changes in water quality in Robinson Canyon.

Ruth Mitigation Measures

Ruth East pit lake is predicted to have excellent water quality as a result of its hydraulic connection with the South Block. Therefore no additional mitigating measures are water quality.

A monitoring needed to modify pit lake well in the Kimbley backfill is recommended after mining has terminated and space is available. This location will monitor pore water chemistry and water level gradients in the backfill. The well will likely need to be drilled using casing advance techniques such as dual-rotary or stratex.

APPENDIX D-1 OF THE *ROBINSON PLAN OF OPERATIONS AMENDMENT FOR EXPANSION OF MINING ACTIVITIES*

The text in the following sections has been taken directly from Appendix D-1 of the *Robinson Plan of Operations Amendment for Expansion of Mining Activities* (KGHM 2019) and has not been edited or revised for this appendix.

Stormwater controls and BMPs

Structural Practices

- Run-on and storm water diversions
- Erosion and sediment control measures
- Stabilization practices
- Secondary containments and/or berms

Control measures

- Diverting runoff away from roads and other denuded areas by using berms, ditches, and other functionally equivalent diversions.
- Preparation of road drainages and outlets by removing fugitive outfalls and consolidating runoff into designated outfall structures capable of managing the expected runoff volume
- Reducing runoff velocities by using energy dissipation structures and minimizing slope grade, where practical
- trapping sediment on site in sediment control ponds, sumps, and other functionality equivalent structural controls
- keeping significant materials in containments and/or burmed areas

Non-Structural controls

- Good Housekeeping measures
- adequate training
- routine inspections and
- maintenance of mining components that potentially affect stormwater

APPENDIX G OF THE ROBINSON PLAN OF OPERATIONS AMENDMENT FOR EXPANSION OF MINING ACTIVITIES

The text in the following sections has been taken directly from Appendix G of the *Robinson Plan of Operations Amendment for Expansion of Mining Activities* (KGHM 2019) and has not been edited or revised for this appendix.

Construction Measures

To limit the spread of noxious and invasive weeds from previously infested zones into un-infested areas, the following measures will be implemented during construction:

- Pre-Cleaning Equipment - Equipment previously used in undisturbed areas at another site will be power-washed prior to entry into the Plan area. New equipment or equipment from disturbed areas will not need to be power washed prior to entry.
- Weed-Free Materials - Certified noxious and invasive weed-free materials (e.g., straw bales, certified weed-free seed) will be used where needed during construction, operation, reclamation, and maintenance.
- Disposal - Noxious weeds may be cut and disposed of in designated areas or destroyed in a manner acceptable to the Nevada Department of Agriculture Plant Industry Division and the Nevada Cooperative Extension.
- Containment - One, or both, of the following methods will be implemented to minimize the spread of noxious weed seeds and plant materials by equipment and vehicles during construction:
 - weed-infested growth media will be excavated, stored on-site, monitored, and treated, if necessary, to limit new infestations and spread, monitored, and treated following construction; and
 - layer(s) of mulch, degradable geotextiles, or similar materials will be placed over the infestation area and secured in a manner, so they will not be washed away.

Operation and Maintenance Measures

To avoid or limit the introduction and spread of noxious weeds into un-infested areas during project operation and maintenance activities, RNMC will implement the following measures:

- Cleaning Equipment and Vehicles - Equipment previously used in undisturbed areas at another site will be power-washed prior to entry into the Plan area. New equipment or equipment from disturbed areas will not need to be power washed prior to entry.
- Minimize Disturbance to Existing Vegetation - Vehicles should be confined to existing roadways and not permitted to conduct cross-country travel unless involved in approved activity (i.e., exploration, surveying, etc.). This will reduce the potential for new weed establishment.
- Avoiding Known Infestation Areas - Known areas of weed infestations will be avoided during periods when they could be spread by disturbance and vehicle use in the area, such as during seeding.
- Spraying Identified Noxious Weeds – Known areas of weed infestations will be treated to control and reduce the risk of spreading to other areas.

Treatment Management Measures

Treatments must be conducted in compliance with all federal, state, and local weed control regulations and in consultation with the BLM weed specialist. Herbicides must be applied by qualified and/or licensed personnel and used in accordance with label directions. To minimize further disturbance, treatments should be conducted in conjunction with invasive weed surveys to the extent possible.

REQUIRED DESIGN FEATURES (RDF) IDENTIFIED IN APPENDIX C, ATTACHMENT 3 OF THE NEVADA AND NORTHEASTERN CALIFORNIA SAGE-GROUSE APPROVED RESOURCE MANAGEMENT PLAN AMENDMENT

The text in the following tables has been taken directly from Appendix C, GRSG Proposed Activities Form IM 2016-038, Attachment 3 of the 2015 *Nevada and Northeastern California Sage-grouse Approved Resource Management Plan Amendment* (BLM 2016) and has not been edited or revised for this appendix.

General RDFs	
RDF Gen 7:	Require dust abatement practices when authorizing use on roads.
RDF Gen 9:	Upon completion, reclaim roads developed for the project access on public lands unless, based on site-specific analysis, the route provides specific benefits for public access and does not contribute to resource conflicts.
RDF Gen 12:	Control the spread and effects of nonnative, invasive plant species (e.g., by washing vehicles and equipment, minimize unnecessary surface disturbance; Evangelista et al. 2011). All projects would be required to have noxious weed management plan in place prior to construction and operations.
RDF Gen 13:	Implement project site-cleaning practices to preclude the accumulation of debris, solid waste, putrescible wastes, and other potential anthropogenic subsidies for predators of GRSG.
RDF Gen 15:	When interim reclamation is required, irrigate site to establish seedlings more quickly if the site requires it.
RDF Gen 16:	Utilize mulching techniques to expedite reclamation and to protect soils if the site requires it.
RDF Gen 18:	When authorizing ground-disturbing activities, require the use of vegetation and soil reclamation standards suitable for the site type prior to construction.
RDF Gen 19:	Instruct all construction employees to avoid harassment and disturbance of wildlife, especially during the GRSG breeding (e.g., courtship and nesting) season. In addition, pets shall not be permitted on site during construction (BLM 2005b [BLM 2005]).
RDF Gen 21:	Outfit all reservoirs, pits, tanks, troughs or similar features with appropriate type and number of wildlife escape ramps (BLM 1990; Taylor and Tuttle 2007).
RDF Gen 22:	Load and unload all equipment on existing roads to minimize disturbance to vegetation and soil.

Locatable Minerals RDFs	
RDF LOC 2:	Cluster disturbances associated with operations and facilities as close as possible, unless site-specific conditions indicate that disturbances to GRSG habitat would be reduced if operations and facilities locations would best fit a unique special arrangement.
RDF LOC 6:	Maximize the area of interim reclamation on long-term access roads and well pads including reshaping, topsoiling and revegetating cut and fill slopes.

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ATTACHMENT A
FOR MINING OPERATIONS

DOCUMENTATION OF RECLAMATION ACTIVITIES FOR SURETY RELEASE

An operator may request surety release in accordance with applicable State and Federal regulations. The following documentation must be submitted simultaneously to the Nevada Division of Environmental Protection and the federal land management agency prior to the agencies conducting a site inspection:

1. Map(s) clearly identifying the area, noting specific treatments and sampling locations (as applicable).
2. Description of the following activities:

Earthwork:

- ◆ The number of acres regraded and/or ripped.
- ◆ Final slope angles left after regrading.
- ◆ Methodology used to check final slope angles (e.g., clinometer, transit, etc.).
- ◆ The number of acres that received topsoil/growth medium.
- ◆ Depth and source of topsoil/growth medium and application method.
- ◆ Dates of initiation and completion of activities.

Revegetation Activities:

- ◆ The number of acres that were seeded and/or planted.
- ◆ Seed bed preparation methods utilized.
- ◆ Seeding/planting methods used (e.g., broadcast seeding, etc.).
- ◆ Provide information on how seed was covered.
- ◆ Seed mix and seeding rate; document by maintaining seed tags and any testing results (PLS, germination, noxious weeds, etc.).
- ◆ If applicable, the number of acres that received fertilization, mulch or amendments.
 - ▶ Fertilizer (N-P-K, type, application rate, application method).
 - ▶ Mulches and soil amendments (type, application rate, and application method).
 - ▶ Date of initiation and completion of activities.

Final Revegetation Sampling:

- ◆ Adjacent representative vegetation type or range site description (baseline data).
- ◆ Sampling method (e.g., line intercept).
- ◆ Number of samples taken (disturbed and adjacent representative sites).
- ◆ Statement of methodology demonstrating sample size, adequacy and how the locations of sampling sites were determined.
- ◆ Results of sampling (copy of sampling worksheet) for disturbed and representative areas. Indicate all perennial species located.
- ◆ Dates of sampling.

Other Reclamation Activities such as; structure and debris removal, safety feature installation, erosion control treatment, equipment removal or other permit requirements.

3. **Interim Fluid Management (IFM) and Process Fluid Stabilization (PFS) Bond Release:**

When the closure process of a heap leach pad (HLP) and/or tailings storage facility (TSF) is undertaken in a controlled manner by the operator, release of the project bond IFM and PFS amounts may occur at the following phases/intervals of the closure process:

- ◆ IFM – when evaporation (E) or evapotranspiration (ET) cells have been constructed and the steady state drain-down of process fluids can be managed entirely within the E/ET cells;
- ◆ PFS Phase I – recirculation of excess process fluids is no longer required and demonstration can be made that only active evaporation of process fluids is required;
- ◆ PFS Phase II – the process fluid drain-down rate is less than evaporation rate and demonstration can be made that process fluids can be managed without active evaporation, conversion of process pond(s) to E/ET cells has been completed, and the cover system on the HLP and/or the TSF has been constructed;
- ◆ PFS Phase III – drain-down managed entirely within the E/ET cells, demonstration is made that E/ET cells have functioned without overtopping for a minimum of 5 years;
- ◆ PFS Evaporation Costs – at completion of PFS (costs include evaporation equipment and power costs).

4. For bond reduction, an operator must provide detailed calculation of the surety amount proposed for release. This calculation should also show the surety amount required for the remaining reclamation work to be completed, and/or remaining PFS activities.

5. Prior to release, a field inspection is required to verify that reclamation has been performed in accordance with the approved reclamation plan and permit.

ATTACHMENT B

NEVADA GUIDELINES FOR SUCCESSFUL REVEGETATION FOR THE NEVADA DIVISION OF ENVIRONMENTAL PROTECTION, THE BUREAU OF LAND MANAGEMENT AND THE UNITED STATES FOREST SERVICE

MINING OPERATIONS

1. Reclaimed Desired Plant Communities (RDPC) for Mining Operation Disturbances

Reclamation goals for mining disturbances are: 1) stabilize the site, and 2) establish a productive community based on the applicable land use plan and designated post-mining land uses. To meet these goals, a *Reclaimed Desired Plant Community* (RDPC) should be selected for use on the disturbed mine sites.

The RDPC is defined as:

A perennial plant community established on a disturbed site which contributes to stability through management and land treatment, and which produces that type and amount of vegetation necessary to meet or exceed both the land use and activity plan objective established for the site.

Several RDPCs may be selected based on site-specific revegetation goals and variable site characteristics for the mining disturbances. When selecting RDPCs, major alterations in reconstructed soils and the subsequent effect of this on the site's capability to establish and sustain the desired vegetation must be considered. A RDPC must have a reasonable chance for success when making the selection.

The plant community for the RDPC should be diverse, and when appropriate for the site should include grasses, forbs, shrubs and/or trees. The RDPC shall be comprised of species native to the area, or introduced species where the need is documented for inclusion to achieve the approved post-mining land use. The RDPC must meet the requirements of applicable State and Federal seed, poisonous and noxious plants, and introduced species laws or regulations. All RDPCs must be approved by the agencies. Plants for RDPCs may be selected using one or more of the following methods:

- ◆ Select existing vegetation types around the mine site to represent the varied RDPCs.
- ◆ Use test plots, demonstration areas, or areas concurrently reclaimed within the minesite or within similar representative areas from adjacent mines to serve as the RDPCs as long as they meet the reclamation goal.
- ◆ For areas where existing vegetative types adjacent to the mine area are severely disturbed or where test plots or demonstration areas are not reasonable alternatives, RDPCs may be selected using appropriate ecological or range site descriptions or other technical sources.

2. Guidelines for Successful Revegetation

The revegetation release criteria for reclaimed mine sites will be to achieve as close to 100 percent of the perennial plant cover of selected comparison areas as possible. The comparison or reference areas will be selected from representative plant communities adjacent to the mine site, test plots or demonstration areas or, as appropriate, representative ecological or range site descriptions. As approved by the agencies, the selected plant communities or reference areas must have a reasonable chance for success on the mine site. Each plan-of-operations shall identify the site-specific release criteria in the reclamation plan or permit. The agencies may also require specific release standards for individual plant species or vegetative types (grasses, forbs, shrubs, trees). Cover would be estimated using a method as described in Sampling Vegetation Attributes, Interagency Technical Reference, 1996, BLM/RS/ST-96/002+1730 or other acceptable technical methods.

The determination of successful revegetation of mining disturbances will require an evaluation of the data by the agencies on a site-specific basis. These data must include all of the information requested in Attachment A of the Reclamation Permit, "Documentation of Reclamation Activities for Surety Release and Annual Fee Responding". When making this evaluation, the following information shall also be considered:

- ◆ Have the desirable species been successfully established, and do they provide sufficient aerial cover to adequately protect the site from soil erosion?
- ◆ Is there evidence that a self-sustaining community has been established? Are vegetative reproduction (e.g. rhizomes) and seedling establishment of the desirable seeded species occurring?
- ◆ Is there evidence of site stability, including the lack of surface soil erosion, gully formation and slumping?
- ◆ Has the revegetation goal in the reclamation plan been met?
- ◆ Has the operator taken reasonable measures to establish the RDPC?

3. Time Frames

The success of the vegetative growth on a reclaimed site may be evaluated for release no sooner than during the third growing season after earthwork, planting and irrigation (if used) has been completed. Final bond release may be considered at that time. Interim progress of reclamation will be monitored as appropriate by the agency and operator. Where it has been determined that revegetation success has not been met, the agencies and the operator will meet to decide on the best course of actions necessary to meet the reclamation goal.

EXPLORATION PROJECTS

The same guidelines as described above should be used to evaluate the success of the RDPCs for plan-level exploration disturbances. The agencies may also decide, depending on the size and scope of the project, to evaluate revegetation and reclamation success based on general ground reconnaissance and professional judgment. Extenuating circumstances may be considered when evaluating the success of the revegetation effort. If regulatory agencies determine that remediation is required on the site, the operator and agencies will meet to determine the procedures.

BLM NOTICES

Regarding notice-level activities on public lands, the BLM will evaluate revegetation and reclamation success based on general ground reconnaissance and professional judgment. Notice-level disturbance may be considered reclaimed if in the professional judgment of the regulatory agency effective action has been taken to stabilize and revegetate the site to a condition designed to result in the establishment of a productive post-mining land use. Extenuating circumstances may be considered when evaluating the success of the revegetation effort. If the BLM determines that further stabilization or revegetation efforts are needed, the operator and BLM will meet to determine what further steps are necessary.

MEMORANDUM OF UNDERSTANDING

For
**MINING AND MINERAL RELATED ACTIVITIES
WITHIN THE STATE OF NEVADA**

AMONG
**NEVADA DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL PROTECTION**

AND
**USDA, FOREST SERVICE
HUMBOLDT-TOIYABE NATIONAL FOREST**

AND
**USDA, FOREST SERVICE
INYO NATIONAL FOREST**

AND
**U.S. DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
NEVADA**

This MEMORANDUM OF UNDERSTANDING (MOU) is hereby made and entered into by and between the State of Nevada, Department of Conservation and Natural Resources, Division of Environmental Protection (NDEP); the United States Department of Agriculture, Forest Service, Humboldt-Toiyabe National Forest and Inyo National Forest (U.S. Forest Service); and the United States Department of the Interior - Bureau of Land Management, Nevada State Office (USDOI-BLM).

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- II. AUTHORITIES
- III. DEFINITION OF TERMS USED IN THE MOU
- IV. COMPLIANCE ENFORCEMENT
- V. PLANS AND PERMITS
- VI. DETERMINING THE RECLAMATION COST ESTIMATE/
ADMINISTERING THE BOND
- VII. DETERMINING THE LONG-TERM FUNDING MECHANISM COST
ESTIMATE/ADMINISTERING THE LONG-TERM FUNDING MECHANISM
- VIII. LIMITATIONS
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- XV. TERMINATION
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I. **PURPOSE.** The purpose of this MOU is to achieve the following:

- 1. Establish and maintain coordination among the NDEP, the U.S. Forest Service, and the USDOJ-BLM (“the agencies”) for their respective joint responsibilities pertaining to the administration and reclamation of lands disturbed by exploration projects and mining operations for locatable minerals on private and Federal lands administered by the U.S. Forest Service and USDOJ-BLM within the State of Nevada;
- 2. Expedite administration and enforcement of the agencies’ respective authorities pertaining to exploration and mining operations;
- 3. Prevent unnecessary or undue degradation of Federally-managed and private lands and minimize adverse environmental impacts on surface resources; and
- 4. Develop and maintain common guidance to regulate facilities and activities on operations consisting of a mixture of Federally-managed and private lands.

II. **AUTHORITIES.** This MOU is based on the following authorities:

A. **NDEP**

- 1. Nevada Revised Statutes, Chapter 519A (NRS 519A).
- 2. Nevada Revised Statutes, Chapter 445A (NRS 445A).
- 3. Nevada Administrative Code, Chapter 519A (NAC 519A).
- 4. Nevada Administrative Code, Chapter 445A (NAC 445A).

B. **U.S. Forest Service**

- 1. The General Mining Law of May 10, 1872, as amended (30 U.S.C. 22, et seq.).

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2. The Organic Administration Act of June 4, 1897, as amended (30 STAT 36, 16 U.S.C. 478 and 551).
3. Title 36 Code of Federal Regulations, Part 228, Subpart A, as amended.
4. Title 30 U.S.C. Section 612.
5. Title 36 Code of Federal Regulations, Part 219, as amended.
6. Title 36 Code of Federal Regulations, Part 261, as amended.

C. USDOI-BLM

1. The General Mining Law of May 10, 1872, as amended (30 U.S.C. 22, et seq.).
2. Title 30 U.S.C. Section 612.
3. Sections 102(a)(12), 302, 303 and 603 of The Federal Land Policy and Management Act of Oct. 1, 1976, as amended (90 STAT 2762, 43 U.S.C. 1732 et seq.).
4. Title 43 U.S.C. Sections 1201 and 1457.
5. Title 43 Code of Federal Regulations, Subparts 3802, 3809 and 3715.

III. DEFINITIONS OF TERMS USED IN THIS MOU.

1. Bureau of Land Management (BLM) Lands - Lands managed by the USDOI-BLM.
2. Compliance Enforcement - Administrative and legal remedies for violations of an agency's applicable laws and regulations.
3. Federal Agencies - For purposes of this MOU, "Federal Agencies" refers to the U.S. Forest Service and the USDOI-BLM.
4. Final Plan for Permanent Closure (FPPC) - A Final Plan for Permanent Closure provides closure goals, methods and final designs, as applicable, to achieve final chemical stabilization, removal or mitigation of pollutant source(s) for any process component. A process component is any constructed point source at a mine facility from which there is or may be the discharge of pollutants. A FPPC may apply to one or more individual process components or to all remaining process components at a facility as appropriate. Additional closure requirements and considerations for open pit and underground mines, heap leach pads, and tailings impoundments must also be addressed. A FPPC includes a post-closure monitoring plan to demonstrate that the closure goals have been met. The primary closure goal for all FPPCs is to prevent degradation of waters of the State beyond established limits under the environmental conditions that may reasonably be expected to exist at the site. Pit lakes have the additional closure goal of preventing the potential to adversely affect the

health of human, terrestrial or avian life. A FPPC for any process component must be submitted to NDEP at least two years prior to the anticipated permanent closure of that process component or at any time that permanent closure is mandated.

5. **Locatable Minerals** - All mineral deposits under the General Mining Law of 1872, **as amended**, except those minerals specifically excluded by the Mineral Leasing Act of 1920, **as amended**, and Mineral Materials Act of 1947, **as amended**.
6. **Long-Term Funding Mechanism (LTFM)** - A trust fund or other funding mechanism established by the operator to ensure the continuation of any long-term, post-mining treatment or maintenance requirements. Establishing a LTFM does not relieve the operator of their continuing responsibility to provide long-term management and maintenance of the site. The federal case file will not be closed and the NDEP Reclamation Permit will not be terminated before all long-term, post-mining treatment or maintenance requirements have been completed and the LTFM has accordingly been terminated. The NDEP water pollution control permit will not be terminated before the LTFM if the LTFM covers activities related to that permit.
7. **National Forest System (NFS) Lands** - Lands managed by the U.S. Forest Service.
8. **Notice of Intent to Operate** - Formal notification prior to initiating operations which might cause significant surface disturbance of surface resources administered by the U.S. Forest Service. If the District Ranger determines that the proposed operations will likely cause or are causing significant surface disturbance, then a Plan of Operations shall be submitted.
9. **Operator** - A person conducting or proposing to conduct operations. "Person" means any individual, firm, corporation, association, partnership, trust, consortium, joint venture, or any other entity conducting operations on Federally-managed and private lands.
10. **Plan of Operations (Plan)** - A classification of operations. A formal proposal to conduct operations, including reclamation, on Federally-managed lands. The appropriate land managing agency (ies) must review and approve the Plan. Approval requires an acceptable Reclamation Cost Estimate and Reclamation Bond for the Plan.
11. **Reclamation Bond** - The financial assurance provided by or on behalf of an Operator to guarantee the lands disturbed under an approved Plan are reclaimed in the event the Operator cannot or will not perform the required reclamation (i.e. a surety bond or a personal bond secured by a financial pledge).
12. **Reclamation Cost Estimate (RCE)** - A Reclamation Cost Estimate is prepared and submitted by an Operator and reviewed by the appropriate agencies. The RCE must cover the estimated costs as if the U.S. Forest Service and/or USDOI-BLM and/or NDEP were to contract with a third party to reclaim the operations according to the Reclamation Plan, including construction and maintenance costs for any treatment facilities necessary to meet Federal and State environmental standards. The RCE must also cover any interim stabilization and infrastructure maintenance costs needed to maintain the area of operations

in compliance with applicable environmental requirements while third-party contracts are developed and executed.

The U.S. Forest Service RCEs are based on the principles put forth in the "Training Guide for Reclamation Bond Estimation and Administration for Mineral Plans of Operation authorized and administered under 36 CFR 228A USDA – Forest Service, April 2004."

13. **Reclamation Permit** - The permit issued by the NDEP regarding reclamation of mining operations and exploration projects that disturb five acres or more. The permit application is reviewed per NAC 519A regulations. Once the permit application is deemed complete by NDEP and consistent with NAC 519A regulations, the Reclamation Permit is issued.
14. **Reclamation Plan (RecPlan)** - The part or section of the Plan that describes actions necessary to reclaim, rehabilitate, shape, stabilize, revegetate or otherwise treat the land in order to return it to a safe, stable condition consistent with the establishment of a productive post mining land use and to prevent unnecessary or undue degradation. Description of equipment, devices or practices proposed should be consistent with regulations at 36 CFR 228 Subpart A, 43 CFR 3809, and NAC 519A, as appropriate. Abandonment or demolition of facilities is conducted to maximize public health and safety and visual resource management.
15. **Tentative Plan for Permanent Closure (TPPC)** - A Tentative Plan for Permanent Closure is part of the operating plans submitted with a water pollution control permit application. The TPPC is a conceptual closure plan to chemically stabilize all pollutant sources at a mining facility, including but not limited to mine-impacted waters, and is required to include sufficient detail to support the RCE. All activities required in the TPPC should fall under the scope of the RecPlan/RCE, but some activities in the RecPlan/RCE may fall outside the scope of the TPPC (e.g., physical reclamation unrelated to pollutant sources).

IV. **COMPLIANCE ENFORCEMENT.** Each agency shall have the responsibility for enforcement of its applicable laws and regulations. The Federal Agencies and the NDEP will coordinate enforcement actions when appropriate. An Operator's failure to achieve Compliance Enforcement requirements by any agency may result in a request for bond forfeiture.

V. **PLANS AND PERMITS.** The USDOIBLM and the NDEP have developed a joint recommended RecPlan format for use by an Operator. The USDOIBLM also has a voluntary Plan outline available to assist Operators in complying with the requirements at 43 CFR 3809. The RecPlan is required by the Federal Agencies and the NDEP. The Federal Agencies and the NDEP acknowledge that a RecPlan written according to the Voluntary – 3809 Plan of Operations Outline/Format should satisfy USDOIBLM and the NDEP requirements, and the U.S. Forest Service Section V (H) Reclamation of the U.S. Forest Service Plan of Operations Form FS-2800-5 (Rev. 12/11).

The Federal Agencies and the NDEP will make every effort to participate in pre-Plan coordination meetings with the Operator prior to submittal of a new or amended Plan. This will allow the agencies to provide input into the conceptual design of the Plan and coordinate

baseline information needs and agency review schedules including, but not limited to, rock characterization analysis, hydrological and geochemical modeling requirements, and pit lake studies before the Plan is submitted for agency review.

Upon receipt of a new or an amended Plan by the USDOI-BLM or the U.S. Forest Service, the Federal Agency (ies) and the NDEP will make every effort to participate in a coordination meeting with the Operator, as appropriate, to discuss coordination, permitting, review processes, Reclamation Cost Estimate, bonding, National Environmental Policy Act (NEPA) requirements, and establish contacts for the Plan approval process. When an agency receives a new or amended Plan covered by this MOU, the agency will verify that a duplicate copy was filed with the other responsible agency (ies). The review and approval of the Plan will be coordinated between the agencies.

The agencies will coordinate reviews and approvals for mine closure requirements. When an Operator submits a TPPC, FPPC or closure report, the NDEP will verify that a duplicate copy has been filed with the other responsible agency (ies). The Federal Agency (ies) will review the closure documents to determine if a Plan amendment or a revised RCE is needed and the level of NEPA analysis required. The Federal Agency (ies) will notify the Operator and other agency (ies) involved of its determination.

VI. DETERMINING THE RECLAMATION COST ESTIMATE/ADMINISTERING THE BOND.

The provisions of this section describe coordination of the agencies in determining a RCE, the amount required for a Reclamation Bond, administering a bond, obtaining performance under a bond, and performing reclamation of Plans covered by this MOU.

1. Based on a complete and adequate RCE submitted by an Operator, the agencies shall determine a single amount required for the Reclamation Bond, write a Reclamation Bond decision letter and ensure the agency (ies) are copied on the decision.

If NFS lands are involved, the applicable portion of the RCE shall be documented by the U.S. Forest Service and that portion of the bond shall be allocated for the NFS lands. The NDEP or the U.S. Forest Service shall each have access to its appropriate allocation of the bond based on the bond amounts for NFS land and private land unless otherwise agreed to in writing. If a bond includes coverage of USDOI-BLM and NFS lands, then an interagency agreement may be executed as necessary.

2. All reviews of RecPlans, TPPCs and RCEs shall be coordinated between the agencies to the extent feasible to determine a mutually acceptable required bond amount. Descriptions of the activities included in both the TPPC and RecPlan should be consistent and provide sufficient detail to support the RCE. The agencies shall make every effort to resolve any major discrepancies between the RCE and the TPPC to the extent that their scopes overlap, including requiring the Operator to reconcile any such discrepancies by amending the RCE and TPPC when determined necessary. For projects involving USDOI-BLM and private

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lands, the USDOI-BLM and the NDEP will coordinate on correspondence of formal comments and approvals of the required bond amount.

If the Federal Agencies or the NDEP are unable to complete their RCE review in a timely manner, the agency that has completed its review will proceed with issuing a RCE determination as required by applicable state or federal regulations. An agency with an unanticipated delay in its review will issue a RCE determination upon completion of its review of the RCE. The agencies will make every effort to limit delays.

For operations involving NFS and private lands that cumulatively propose five acres or more of disturbance, the U.S. Forest Service and the NDEP will mutually determine whether a single Reclamation Bond or separate Reclamation Bonds will be held for the operation. A single Reclamation Bond may be provided if the RCE specifies the amount of the Reclamation Bond allocated to reclamation for the NFS lands. The basis for the allocations shall be the RCE determined by the agencies in provision 1 of this section of the MOU. The Reclamation Bond may be held by the U.S. Forest Service or by the NDEP. Such Reclamation Bond must be acceptable to both agencies, and must meet their respective requirements and standards.

If separate Reclamation Bonds are allocated for NFS and private lands, the U.S. Forest Service will review the RCE and adjust as necessary according to regulation/policy applicable to the RCE for the NFS lands associated with the project. The NDEP will review the RCE and subsequent updates to the RCE for the private portion of the operation. Both agencies will issue a determination of required Reclamation Bond upon the completion of their respective reviews.

The Standardized Reclamation Cost Estimator (SRCE) is a tool used by the NDEP and USDOI-BLM to calculate Reclamation Bond costs for exploration and mining projects proposing five acres or more disturbance. Appropriate use of SRCE can provide a consistent basis for estimating reclamation costs for operations in Nevada and can help ensure that RCEs meet applicable regulatory requirements. For Mining Plans on NFS lands in Nevada, the U.S. Forest Service may also use SRCE as a tool to calculate reclamation costs proposing 5 acres or more disturbance.

3. When the USDOI-BLM and the U.S. Forest Service require a Reclamation Bond for a Plan that involves lands managed by both agencies, a Reclamation Bond for the Plan may be held by either agency and shall be redeemable by either agency. Any such Reclamation Bond(s) must be acceptable to both agencies. An interagency agreement may be executed as necessary.
4. If the NDEP holds a single bond for a Plan covered by this MOU that includes Federally-managed lands, then the Reclamation Bond must be acceptable to the USDOI-BLM (consistent with regulations at 43 CFR 3809.203, § 3809.570, and § 3809.571) prior to the NDEP acceptance.

5. The amount of the Reclamation Bond provided for a Plan must be sufficient to satisfy the RCE for the lands under each agency's jurisdiction as required by the laws and regulations of each agency. Where a mutually acceptable RCE cannot be reached, the agencies shall enter into dispute resolution as outlined in Section X of this MOU. If dispute resolution is not successful, then the agencies shall be responsible for determining the RCE for lands under their separate jurisdictions and require bonding accordingly.
6. If an agency finds cause to demand payment of a Reclamation Bond held by another agency, the agency finding cause must provide adequate justification and request the holding agency to initiate collection action. The agency holding the Reclamation Bond will initiate the process to collect the Reclamation Bond to the extent provided by and consistent with its laws and regulations. It is further agreed the agency holding the Reclamation Bond will act on behalf of the other agencies on any matters concerning the Reclamation Bond, to the extent provided by or consistent with its laws and regulations.
7. When a Reclamation Bond is collected, forfeited, or relinquished, the agency holding the appropriated funds will coordinate with the jurisdictional agencies on site reclamation. Expenditure and allocation of funds will be a collaborative decision between the agencies based on a coordinated site visit to determine reclamation needs in the best interest of public health and safety, and to minimize unnecessary or undue degradation of the environment. Each agency, however, remains responsible for complying with its law and regulations when collecting, forfeiting, expending or allocating such reclamation funds and nothing in this MOU should be interpreted in contravention of each agency's legal authorities and mandates.
8. The agencies may enter into additional agreements when necessary to implement any provisions under this Section. Such agreements may be required to describe legal and procedural requirements that must be followed by the agencies in determining the required amount of a Reclamation Bond, administering the bond, collecting the Reclamation Bond and/or performing reclamation on Federally-managed and private lands.
9. Written concurrence will be required of all agencies to verify any reduction of the obligated amount of a bond prior to a reduction being allowed. A reduction of the obligated amount of the bond will be effected by the office of the agency which accepted and maintains the bond. All parties to the bond and/or operations will be advised if and when the obligated amount of the bond is reduced.

VII. DETERMINING THE LONG-TERM FUNDING MECHANISM COST ESTIMATE/ADMINISTERING THE LONG-TERM FUNDING MECHANISM. The provisions of this section describe how the agencies will coordinate in determining a LTFM cost estimate, the funding amount (present value) required for a LTFM, administering a LTFM, obtaining performance under a LTFM, and performing long-term site management of Plans covered by this MOU using a LTFM. NDEP's authority with respect to LTFMs is limited to those activities involving waters of the state, mine-impacted waters and activities required to maintain the effectiveness of reclamation and closure.

1. **The RecPlan for operations that require a LTFM must include a detailed description of the long-term management requirements for the site. The RecPlan is a component of the Plan. The agencies shall coordinate all reviews of RecPlans and LTFM cost estimates to the extent feasible to ensure that all appropriate activities and costs are identified. The agencies shall make every effort to resolve any major discrepancies between the RecPlan, TPPC (and FPPC if one exists) and LTFM cost estimate, to the extent that their scopes overlap, and when determined to be necessary shall require the Operator to reconcile any such discrepancies by amending the Plan, TPPC (and FPPC if one exists) and LTFM cost estimate. For projects involving BLM Lands and private lands, the USDOJ-BLM and the NDEP will coordinate on the communication of the agencies' formal comments.**
2. **The USDOJ-BLM shall be the lead agency regarding the determination of a LTFM cost estimate for operations that include BLM Lands. The USDOJ-BLM will issue a decision determining the required LTFM cost estimate and will ensure the appropriate agency (ies) is copied on the decision as appropriate.**
3. **For operations on BLM Lands, all aspects of fund administration, including but not limited to establishing the discount rate, identifying the funding amount (present value), determining the appropriate asset mix, and monitoring fund performance, will be the responsibility of the USDOJ-BLM.**
4. **The amount of the LTFM provided for a Plan must be sufficient to satisfy the cost estimate for the lands under each agency's jurisdiction as required by the laws and regulations of each agency. Where appropriate, the agencies may choose to develop separate LTFM cost estimates for lands under their separate jurisdictions and require financial assurances accordingly.**
5. **For operations on BLM Lands, the USDOJ-BLM will be the sole beneficiary of the LTFM. If the operator ceases to exist or is subject to a dissolution proceeding or a petition under Chapter 7 of the United States Bankruptcy Code, Title 11 U.S.C., as it may be amended or revised, or as otherwise provided for in the LTFM agreement, the USDOJ-BLM will use any and all withdrawals, distributions or disbursements from the LTFM to finance the long-term post-mining obligations described in the RecPlan. The USDOJ-BLM will coordinate with the jurisdictional agencies on long-term site management activities. Expenditure and allocation of funds on BLM Lands will be a USDOJ-BLM decision after considering input from the agencies based on a coordinated site visit to determine site management needs in the best interest of public health and safety, and to minimize unnecessary or undue degradation of the environment. Each agency, however, remains responsible for complying with its laws and regulations when withdrawing, distributing or dispersing such funds and nothing in this MOU should be interpreted in contravention of each agency's legal authorities and mandates.**
6. **For operations on lands in Nevada managed by the U.S. Forest Service, the U.S. Forest Service will work with the NDEP to establish the LTFM. NDEP will hold and administer the LTFM.**

7. The agencies may enter into additional agreements when necessary to implement any of the provisions under this Section. Such agreements may be required to describe legal and procedural requirements that must be followed by the agencies in administering the LTFM, withdrawing, distributing or dispersing the LTFM, and/or performing long-term site management on Federally-managed and private lands using the LTFM.
8. In the event that a LTFM cost estimate and/or funding amount is decreased, the affected agency (ies) will be notified by the agency administering the LTFM. The notification will explain why the LTFM cost estimate and/or funding amount is being reduced and the new LTFM cost estimate and/or funding amount required.

VIII. **LIMITATIONS.** This MOU is not intended to waive or otherwise limit any Federal or State laws, rules, or regulations, or any other requirements or duties under such laws and regulations. This MOU is not intended to give an agency additional authority beyond the agency's current legal authorities.

IX. **COORDINATION.** The Federal Agencies and the NDEP have many similar requirements for the Plan and/or water pollution control permit, including content requirements and compliance. The agencies will coordinate and exchange relevant information and correspondence as described below.

1. Each agency will promptly inform the other agencies of any new or recently discovered mineral-related activities on either Federally-managed or private lands to the agency (ies) with jurisdiction.

The Federal Agencies will inform the NDEP of any exploration greater than five acres, or mining and processing activities of any size, on Federally-managed lands.

2. Each agency will promptly inform the other agencies of any changes in law, regulation or policy that could affect this MOU.
3. Representatives from the agencies will meet as needed to coordinate activities, resolve issues or mutual concerns, exchange information on policies and procedures, and address any other matters of mutual concern that affect the implementation of this MOU.
4. Each agency will provide the other agencies a list of general personnel contacts corresponding to U.S. Forest Service and BLM Field Office management areas as a working directory of current locatable mineral projects and the points of contact for each operation. Points of contact lists shall be updated at least annually.
5. The agencies will coordinate and exchange relevant information and correspondence relating to inspections, Plans and RecPlans for projects affecting the agencies. When the Federal Agencies receive a new or amended Plan covered by this MOU they will verify that a duplicate copy was also provided to the Reclamation Branch of the NDEP, Bureau of Mining Regulation and Reclamation. The NDEP will allow submittal of duplicate copies in electronic format.

6. To the extent possible, in order to streamline the NEPA process and reduce potential for permitting delays, the agencies will make every effort to coordinate with each other and the Operator prior to the formal submittal of a new Plan or major modification to an existing Plan. This will allow the agencies to provide input into the conceptual design of the Plan and coordinate baseline information needs before the Plan is submitted for agency review.
7. The agencies will coordinate and exchange relevant information and correspondence relating to the water pollution control permit, including the following plans:
 - water management plans
 - waste rock management plans
 - hydrological and geochemical studies
 - design plans for mining areas and processing facilities, waste rock and tailing disposal facilities
 - monitoring plans
 - interim management plans
 - TPPCs, and
 - FPPCs.
8. To the extent possible, the agencies will make every effort to encourage and facilitate joint inspections.
9. The agencies will coordinate and exchange non-confidential information relating to Noncompliance Orders, Notices of Noncompliance and Findings of Alleged Violation and Orders.
10. The agencies will coordinate and exchange relevant information and correspondence relating to a change of operator, permit transfer, and related Reclamation Bond release. A Reclamation Bond release by NDEP requires the Operator to submit documentation of reclamation activities for surety release (Attachment A of the NDEP Reclamation Permit). The agencies will make every effort to review Attachment A prior to conducting joint site inspections and to coordinate authorization of bond releases. The agencies will not authorize Reclamation Bond releases without the other agencies' concurrence.
11. In instances where the NDEP has issued a Reclamation Permit for a project that includes BLM notice-level activity, extra effort is required by each agency to coordinate RCE reviews (on two-year intervals) and Reclamation Bond releases (with Attachment A submittals and joint inspections).
12. The USDOJ-BLM and the NDEP will jointly develop an annual schedule for operations that require a three (3) year RCE update. The agencies will coordinate correspondence to the Operators requiring the update and providing information on when submittals are required.

13. The U.S. Forest Service and the NDEP will coordinate on an annual basis to identify operations on NFS lands requiring a RCE update. The agencies will coordinate correspondence to the Operators requiring the update and providing information on when submittals are required.

14. Within 90 days of the effective date of this MOU, the agencies will create a joint one page MOU Fact Sheet summarizing the interagency coordination actions of this MOU. Within 30 days of completion, each of the agencies will post the Fact Sheet as allowed and distribute the MOU Fact Sheet to its staff and management who receive, review or approve submittals described herein from Operators. Upon hiring of new staff or management who receive, review or approve submittals described herein from Operators, each of the agencies will provide the MOU Fact Sheet to its new staff or management.

X. **DISPUTE RESOLUTION.** In the event the agencies reach an impasse in resolving an issue addressed in this MOU, two levels of resolution will be established under this MOU. The first level will involve the Field/District Manager for the USDOJ-BLM, the District Ranger for the U.S. Forest Service and the Bureau Chief for the NDEP Bureau of Mining Regulation and Reclamation. If resolution cannot be reached at this level, the next level will involve the State Director for the USDOJ-BLM, the Forest Supervisor for the U.S. Forest Service, and the Administrator for the NDEP.

XI. **EFFECTIVE DATE.** This MOU shall become effective upon signature by the Administrator of the NDEP, the Forest Supervisor for the Humboldt-Toiyabe and Inyo National Forests of the U.S. Forest Service, and the Nevada State Director for the USDOJ-BLM, and will remain in full force and effect for a period of five (5) years from the date of the last signature, at which time it will expire. The agencies agree to implement the terms and conditions of this MOU as of the date of the last signature below.

XII. **NOTICES.** Any communications affecting the operations covered by this agreement given by the Federal Agencies or NDEP is sufficient only if in writing and delivered in person, mailed, transmitted electronically by e-mail or fax.

Notices are effective when delivered in accordance with this provision, or on the effective date of the notice, whichever is later.

XIII. **ENDORSEMENT.** Any of the parties' contributions made under this MOU do not by direct reference or implication convey endorsement of other parties' products or activities.

XIV. **AMENDMENT.** Amendments to this MOU may be proposed at any time by any agency subject to this MOU and shall become effective upon written approval by all agencies to the MOU.

XV. **TERMINATION.** Any of the agencies, after sixty (60) days written notice to the other agencies, may terminate this MOU, in whole or in part, at any time before the date of expiration. In the event this MOU is terminated, each agency agrees to maintain any existing bond(s) to the extent consistent with applicable law until such time as an agreement can be

reached between the Operator, the NDEP, and the Federal Agencies as to the disposition of such bond(s).

XVI. NON-FUND OBLIGATION DOCUMENT. This MOU is neither a fiscal nor a funds obligation document. Any endeavor or transfer of anything of value involving reimbursement or contribution of funds among the agencies to this MOU will be handled in accordance with applicable laws, regulations and procedures including those for government procurement and printing. Such endeavors will be outlined in separate agreements, such as a cooperative agreement, that shall be made in writing by representatives of the agencies and shall be independently authorized according to appropriate statutory authority. This MOU does not provide such authority. Specifically, this MOU does not establish authority for noncompetitive award to the cooperator of any contract or other agreement. Any contract or agreement for training or other services must fully comply with all applicable requirements, including for competition.

XVII. NONBINDING AGREEMENT. This MOU creates no right, benefit, or trust responsibility, substantive or procedural, enforceable by law or equity. The parties shall manage their respective resources and activities in a separate, coordinated and mutually beneficial manner to meet the purpose(s) of this MOU. Nothing in this MOU authorizes any of the parties to obligate or transfer anything of value.

Specific, prospective projects or activities that involve the transfer of funds, services, property, and/or anything of value to a party requires the execution of separate agreements and are contingent upon numerous factors, including, as applicable, but not limited to: agency availability of appropriated funds and other resources; agency and cooperator administrative and legal requirements (including agency authorization by statute); etc. This MOU neither provides, nor meets such criteria. If the parties elect to enter into an obligation agreement that involves the transfer of funds, services, property, and/or anything of value to a party, then the applicable criteria must be met. Additionally, under a prospective agreement, each party operates under its own laws, regulations, and/or policies, and any agency's obligations will be subject to the availability of appropriated funds and other resources. The negotiation, execution, and administration of these prospective agreements must comply with all applicable law.

Nothing in this MOU is intended to alter, limit, or expand the respective agencies' statutory and regulatory authorities.

XVIII. MEMBERS OF U.S. CONGRESS. Pursuant to 41 U.S.C. 22, no U.S. member of, or U.S. delegate to, Congress shall be admitted to any share or part of this agreement, or benefits that may arise therefrom, either directly or indirectly.

XIX. TEXT MESSAGING WHILE DRIVING. In accordance with Executive Order (EO) 13513, "Federal Leadership on Reducing Text Messaging While Driving," any and all text messaging by Federal employees is banned: a) while driving a Government owned vehicle (GOV) or driving a privately owned vehicle (POV) while on official Government business; or b) using any electronic equipment supplied by the Government when driving any vehicle at any time.

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All cooperators, their employees, volunteers, and contractors are encouraged to adopt and enforce policies that ban text messaging when driving company owned, leased or rented vehicles, POVs or GOVs when driving while on official Government business or when performing any work for or on behalf of the Government.

- XX. **DEBARMENT AND SUSPENSION.** Each party shall immediately inform all other parties if they or any of their principals are presently excluded, debarred, or suspended from entering into covered transactions with the federal government according to the terms of 2 CFR Part 180. Additionally, should NDEP or any of their principals receive a transmittal letter or other official Federal notice of debarment or suspension, then they shall notify the U.S. Forest Service and BLM without undue delay. This applies whether the exclusion, debarment, or suspension is voluntary or involuntary.
- XXI. **FREEDOM OF INFORMATION ACT (FOIA) AND NEVADA PUBLIC RECORDS ACT.** Public access to MOU or agreement records must not be limited, except when such records must be kept confidential as a matter of law and/or are exempt from disclosure pursuant to the Freedom of Information Act (FOIA) regulations (5 U.S.C. 552) and Nevada Public Records Act (NRS Chapter 239).
- XXII. **PARTICIPATION IN SIMILAR ACTIVITIES.** This MOU in no way restricts the Federal Agencies or the NDEP from participating in similar activities with other public or private agencies, organizations, and individuals.

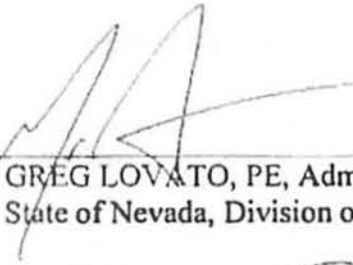
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XXIII. PRINCIPAL CONTACTS. Individuals listed below are authorized to act in their respective areas for matters related to this agreement.

AGENCY	PHONE
Nevada Division of Environmental Protection – Administrator Greg Lovato PE – glovato@ndep.nv.gov 901 S Stewart St, Suite 4001 Carson City, NV 89701	(775) 687-9373
Bureau of Mining Regulation & Reclamation – Bureau Chief Joe Sawyer PE – jsawyer@ndep.nv.gov 901 S Stewart St, Suite 4001 Carson City, NV 89701	(775) 687-9397
Humboldt-Toiyabe National Forest 1200 Franklin Way Sparks, NV 89431	(775) 331-6444
Minerals Program Manager, Humboldt-Toiyabe National Forest Susan Elliott – susan.elliott@usda.gov 660 S 12 th Street, Suite 108 Elko, NV 89801	(775) 778-6123
Inyo National Forest 351 Pacu Lane, Suite 200 Bishop, CA 93514	(760) 873-2400
Bureau of Land Management, Nevada State Office Mining Law Program Lead Kirk Rentmeister – krentmei@blm.gov 1340 Financial Blvd Reno, NV 89502	(775) 861-6451

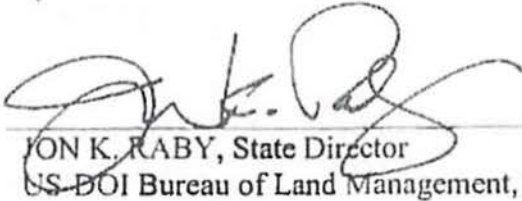
XXIV. AUTHORIZED REPRESENTATIVES. By signature on the following page, each party certifies that the individuals listed in this document as representatives of the individual parties are authorized to act in their respective areas for matters related to this MOU. In witness whereof, the parties hereto have executed this MOU as of the last date written below.

FS Agreement No. _____
NDEP Agreement No. _____
BLM Agreement No. _____



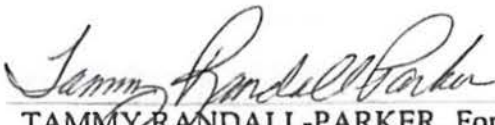
GREG LOVATO, PE, Administrator
State of Nevada, Division of Environmental Protection

May 23, 2019
Date



JON K. RABY, State Director
US DOI Bureau of Land Management, Nevada State Office

June 14, 2019
Date



TAMMY RANDALL-PARKER, Forest Supervisor
U.S. Forest Service, Inyo National Forest

8/2/2019
Date



WILLIAM A. DUNKELBERGER, Forest Supervisor
U.S. Forest Service, Humboldt-Toiyabe National Forest

6/27/19
Date

The authority and format of this agreement have been reviewed and approved for signature.



SARAH RUSSELL, Grants Management Specialist
U.S. Forest Service, Humboldt-Toiyabe National Forest

6/26/2019
Date



Digitally signed by AARON STOUT
Date: 2019.07.10 10:09:34 -07'00'

AARON STOUT, Grants Management Specialist
U.S. Forest Service, Inyo National Forest

Date