

**Mitigation Monitoring and Reporting Program
Initial Study/Mitigated Negative Declaration
Persistence Mine MRP-2023-00001**

Prepared by:



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1 Introduction

The California Environmental Quality Act (CEQA) requires that a public agency adopting a Mitigated Negative Declaration (MND) take affirmative steps to determine that approved mitigation measures are implemented after project approval. The lead or responsible agency must adopt a reporting and monitoring program for the mitigation measures incorporated into a project or included as conditions of approval. The program must be designed to ensure compliance with the MND during project implementation (California Public Resources Code, Section 21081.6(a)(1)).

This Mitigation Monitoring and Reporting Program (MMRP) will be used by the County of San Bernardino (County) to ensure compliance with adopted mitigation measures identified in the MND for the Persistence Mine (MRP-2024-00001). The County, as the lead agency, will be responsible for ensuring that all mitigation measures are carried out. Implementation of the mitigation measures would reduce impacts to below a level of significance for Biological Resources.

The remainder of this MMRP consists of a table that identifies the mitigation measures by resource for each project component. Table 1 identifies the mitigation monitoring and reporting requirements, list of mitigation measures, party responsible for implementing mitigation measures, timing for implementation of mitigation measures, agency responsible for monitoring of implementation, and date of completion. With the MND and related documents, this MMRP will be kept on file at the following location:

County of San Bernardino
385 N. Arrowhead Avenue, First Floor
San Bernardino, California 92415

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2 Mitigation Monitoring and Reporting Program Table

Table 1
Mitigation Monitoring and Reporting Program

Mitigation Measure	Implementation Timing	Party Responsible for Implementation	Party Responsible for Monitoring	Date of Completion/Notes
LUPA-BIO-1: Conduct a habitat assessment of Focus and BLM Special Status Species' suitable habitat for all activities and identify and/or delineate the DRECP vegetation types, rare alliances, and special features (e.g., Aeolian sand transport resources, Joshua tree, microphyll woodlands, carbon sequestration characteristics, seeps, climate refugia) present using the most current information, data sources, and tools (e.g., DRECP land cover mapping, aerial photos, DRECP species models, and reconnaissance site visits) to identify suitable habitat for Focus and BLM Special Status Species. If required by the relevant species specific CMAs, conduct any subsequent protocol or adequate presence/absence surveys to identify species occupancy status and a more detailed mapping of suitable habitat to inform siting and design considerations. If required by relevant species specific CMAs, conduct analysis of percentage of impacts to suitable habitat and modeled suitable habitat. BLM will not require protocol surveys in sites determined by the designated biologist to be unviable for occupancy of the species, or if baseline studies inferred absence during the current or previous active season. Utilize the most recent and applicable assessment protocols and guidance documents for vegetation types and jurisdictional waters and wetlands that have been approved by BLM, and	Prior to Reclamation activities	Project Applicant and Mining operator	San Bernardino County	

Mitigation Measure	Implementation Timing	Party Responsible for Implementation	Party Responsible for Monitoring	Date of Completion/Notes
the appropriate responsible regulatory agencies, as applicable.				
LUPA-BIO-2: Designated biologist(s) will conduct and oversee where appropriate activity-specific required biological monitoring during pre-construction, construction, and decommissioning to ensure that avoidance and minimization measures are appropriately implemented and are effective. The appropriate required monitoring will be determined during the environmental analysis and BLM approval process. The designated biologist(s) will submit monitoring reports directly to BLM.	Prior to and during reclamation activities	Project Applicant and Mining operator	San Bernardino County	
<p>LUPA-BIO-3: Resource setbacks have been identified to avoid and minimize the adverse effects to specific biological resources. Setbacks are not considered additive and are measured as specified in the applicable CMA. Allowable minor incursions, as per specific CMAs do not affect the following setback measurement descriptions. Generally, setbacks (which range in distances for different biological resources) for the appropriate resources are measured from:</p> <ul style="list-style-type: none"> • The edge of each of the DRECP desert vegetation types, including but not limited to those in the riparian or wetland vegetation groups (as defined by alliances within the vegetation type descriptions and mapped based on the vegetation type habitat assessments described in LUPA-BIO-1). • The edge of the mapped riparian vegetation or the Federal Emergency Management Agency (FEMA) 100-year floodplain, whichever is greater, for the Mojave River. 	Prior to reclamation activities	Project Applicant and Mining operator	San Bernardino County	

Mitigation Measure	Implementation Timing	Party Responsible for Implementation	Party Responsible for Monitoring	Date of Completion/Notes
<ul style="list-style-type: none"> The edge of the vegetation extent for specified Focus and BLM sensitive plant species. The edge of suitable habitat or active nest substrates for the appropriate Focus and BLM Special Status Species. 				
LUPA-BIO-4: For activities that may impact Focus and BLM Special Status Species, implement all required species-specific seasonal restrictions on pre-construction, construction, operations, and decommissioning activities. Species-specific seasonal restriction dates are described in the applicable CMAs. Alternatively, to avoid a seasonal restriction associated with visual disturbance, installation of a visual barrier may be evaluated on a case-by-case basis that will result in the breeding, nesting, lambing, fawning, or roosting species not being affected by visual disturbance from construction activities subject to seasonal restriction. The proposed installation and use of a visual barrier to avoid a species seasonal restriction will be analyzed in the activity/project specific environmental analysis.	Prior to and during reclamation activities	Project Applicant and Mining operator	San Bernardino County	
LUPA-BIO-5: All activities, as determined appropriate on an activity-by-activity basis, will implement a worker education program that meets the approval of the BLM. The program will be carried out during all phases of the project (site mobilization, ground disturbance, grading, construction, operation, closure/decommissioning or project abandonment, and restoration/reclamation activities). The worker education program will provide interpretation for non-English speaking workers, and provide the same instruction for new workers prior to their working on site. As appropriate based on the activity, the program will contain information about: <ul style="list-style-type: none"> Site-specific biological and nonbiological resources. 	Prior to reclamation activities	Project Applicant and Mining operator	San Bernardino County	

Mitigation Measure	Implementation Timing	Party Responsible for Implementation	Party Responsible for Monitoring	Date of Completion/Notes
<ul style="list-style-type: none"> Information on the legal protection for protected resources and penalties for violation of federal and state laws and administrative sanctions for failure to comply with LUPA CMA requirements intended to protect site-specific biological and nonbiological resources. The required LUPA and project-specific measures for avoiding and minimizing effects during all project phases, including but not limited to resource setbacks, trash, speed limits, etc. Reporting requirements and measures to follow if protected resources are encountered, including potential work stoppage and requirements for notification of the designated biologist. Measures that personnel can take to promote the conservation of biological and nonbiological resources. 				
<p>LUPA-BIO-6: Subsidized predator standards, approved by BLM, in coordination with the USFWS and CDFW, will be implemented during all appropriate phases of activities, including but not limited to renewable energy activities, to manage predator food subsidies, water subsidies, and breeding sites including the following:</p> <ul style="list-style-type: none"> Common Raven management actions will be implemented for all activities to address food and water subsidies and roosting and nesting sites specific to the Common Raven. These include identification of monitoring reporting procedures and requirements; strategies for refuse management; as well as design strategies and passive repellent methods to avoid 	Prior to and during reclamation activities	Project Applicant and Mining operator	San Bernardino County	

Mitigation Measure	Implementation Timing	Party Responsible for Implementation	Party Responsible for Monitoring	Date of Completion/Notes
<p>providing perches, nesting sites, and roosting sites for common ravens.</p> <ul style="list-style-type: none"> • The application of water and/or other palliatives for dust abatement in construction areas and during project operations and maintenance will be done with the minimum amount of water necessary to meet safety and air quality standards and in a manner that prevents the formation of puddles, which could attract wildlife and wildlife predators. • Following the most recent national policy and guidance, BLM will take actions to not introduce, dispose of, or release any non- native species into areas of native habitat, suitable habitat, and natural or artificial waterways/water bodies containing native species. • All activity work areas will be kept free of trash and debris. Particular attention will be paid to “micro-trash” (including such small items as screws, nuts, washers, nails, coins, rags, small electrical components, small pieces of plastic, glass or wire, and any debris or trash that is colorful or shiny) and organic waste that may subsidize predators. All trash will be covered, kept in closed containers, or otherwise removed from the project site at the end of each day or at regular intervals prior to periods when workers are not present at the site. • In addition to implementing the measures above on activity sites, each activity will provide compensatory mitigation that contributes to LUPA-wide raven management. 				

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<p>LUPA-BIO-7: Where DRECP vegetation types or Focus or BLM Special Status Species habitats may be affected by ground- disturbance and/or vegetation removal during pre-construction, construction, operations, and decommissioning related activities but are not converted by long-term (i.e., more than two years of disturbance, see Glossary of Terms) ground disturbance, restore these areas following the standards, approved by BLM authorized officer, following the most recent BLM policies and procedures for the vegetation community or species habitat disturbance/impacts as appropriate, summarized below:</p> <ul style="list-style-type: none"> Implement site-specific habitat restoration actions for the areas affected including specifying and using: The appropriate seed (e.g., certified weed- free, native, and locally and genetically appropriate seed); Appropriate soils (e.g., topsoil of the same original type on site or that was previously stored by soil type after being salvaged during excavation and construction activities); Equipment; Timing (e.g., appropriate season, sufficient rainfall); Location; Success criteria; Monitoring measures; Contingency measures, relevant for restoration, which includes seeding that follows BLM policy when on BLM administered lands. Salvage and relocate cactus, nolina, and yucca from the site prior to disturbance using BLM protocols. To the maximum extent practicable for short-term disturbed areas, the cactus and yucca will be re-planted back to the original site. Restore and reclaim short-term (i.e. 2 years or less, see Glossary of Terms) disturbed areas, including pipelines, transmission projects, staging areas, and short-term construction-related roads immediately or during the most biologically appropriate season as determined in the activity/project specific 	Prior to and during reclamation activities	Project Applicant and Mining operator	San Bernardino County	

Mitigation Measure	Implementation Timing	Party Responsible for Implementation	Party Responsible for Monitoring	Date of Completion/Notes
environmental analysis and decision, following completion of construction activities to reduce the amount of habitat converted at any one time and promote recovery to natural habitats and vegetation as well as climate refugia and ecosystem services such as carbon storage.				
<p>LUPA-BIO-8: All activities that are required to close and decommission the site (e.g., renewable energy activities) will specify and implement project-specific closure and decommissioning actions that meet the approval of BLM, and that at a minimum address the following:</p> <ul style="list-style-type: none"> • Specifying and implementing the methods, timing (e.g., criteria for triggering closure and decommissioning actions), and criteria for success (including quantifiable and measurable criteria). • Recontouring of areas that were substantially altered from their original contour or gradient and installing erosion control measures in disturbed areas where potential for erosion exists. Restoring vegetation as well as soil profiles and functions that will support and maintain native plant communities, associated carbon sequestration and nutrient cycling processes, and native wildlife species. • Vegetation restoration actions will identify and use native vegetation composition, native seed composition, and the diversity to values commensurate with the natural ecological setting and climate projections. 	Prior to and during reclamation activities	Project Applicant and Mining operator	San Bernardino County	
LUPA-BIO-9: Implement the following general LUPA CMA for water and wetland dependent resources:	Prior to and during reclamation activities	Project Applicant and Mining operator	San Bernardino County	

Mitigation Measure	Implementation Timing	Party Responsible for Implementation	Party Responsible for Monitoring	Date of Completion/Notes
<ul style="list-style-type: none"> Implement construction site standard practices to prevent toxic chemicals, hazardous materials, and other fluids from entering vegetation type streams, washes, and tributary networks through water runoff, erosion, and sediment transport by, at a minimum, implementing the following: <ul style="list-style-type: none"> a) On project sites, vehicles and other equipment will be maintained in proper working condition and only stored in designated containment areas where runoff is collected or controlled and that are located outside of streams, washes, and distributary networks to minimize accidental fluids and hazardous materials spills. b) Hazardous material leaks, spills, or releases will be immediately cleaned and equipment will be repaired upon identification. Removal and disposal of spill and related clean-up materials will occur at an approved off-site landfill. c) Maintenance and operations vehicles will carry the appropriate equipment and materials to isolate, clean up, and repair any hazardous material leaks, spills, or releases. Activity-specific drainage, erosion, and sedimentation control actions, which meet the approval of BLM and the applicable regulatory agencies, will be carried out during all appropriate phases of the approved project. These actions, as needed, will address measures to ensure the proper protection of water quality, site-specific stormwater and sediment retention, and design of the project to minimize site disturbance, including the following: 				

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<ul style="list-style-type: none"> a) Identify site-specific surface water runoff patterns and implement measures to prevent excessive and unnatural soil deposition and erosion. b) Implement measures to maintain natural drainages and to maintain hydrologic function in the event drainages are disturbed. c) Reduce the amount of area covered by impervious surfaces through use of permeable pavement or other pervious surfaces. Direct runoff from impervious surfaces into retention basins. d) Stabilize disturbed areas following grading in the manner appropriate to the soil type so that wind or water erosion is minimized. e) Minimize irrigation runoff by using low or no irrigation native vegetation landscaping for landscaped retention basins. f) Conduct regular inspections and maintenance of long-term erosion control measures to ensure long-term effectiveness. g) Project applicants for sites that may affect intermittent and perennial streams, springs, swales, ephemeral washes, wetland vegetation, other DRECP water land covers, or sites occupied by aquatic or riparian Focus and BLM Special Status Species due to groundwater or surface water extraction will conduct hydrologic studies during project planning to determine the potential effect of groundwater and surface water extraction on the hydrologic unit. These studies will include 				

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<p>both watershed effects as well as effects on perched, alluvial, and regional aquifers. Projects that are likely to affect ground-water resources in a manner that would result in substantial loss of riparian or wetland communities or habitat for riparian or aquatic Focus and BLM Special Status Species are prohibited.</p> <p>h) The use of evaporation ponds for water management will be avoided when the water could harm birds or other terrestrial wildlife due to constituents of concern present in the wastewater (e.g., selenium, hypersalinity, etc.). Evaporation ponds will be configured to minimize attractiveness to shorebirds (e.g., maintain water depths over two feet; maintain steep slopes along edge; enclose evaporation ponds in long-term structures; or obscure evaporation ponds from view using materials that blend in with the natural surroundings).</p> <ul style="list-style-type: none"> • Ramps that allow the egress of wildlife from ponds or other water management infrastructure will be installed. 				
<p>LUPA-BIO-10: Consistent with BLM state and national policies and guidance, integrated weed management actions will be carried out during all phases of activities, as appropriate, and at a minimum will include the following:</p> <p>a) Thoroughly clean the tires and undercarriage of vehicles entering or reentering the project site to remove potential weeds.</p>	Prior to and during reclamation activities	Project Applicant and Mining operator	San Bernardino County	

Mitigation Measure	Implementation Timing	Party Responsible for Implementation	Party Responsible for Monitoring	Date of Completion/Notes
<ul style="list-style-type: none"> b) Store project vehicles on site in designated areas to minimize the need for multiple washings whenever vehicles re-enter the project site. c) Properly maintain vehicle wash and inspection stations to minimize the introduction of invasive weeds or subsidy of invasive weeds. d) Closely monitor the types of materials brought onto the site to avoid the introduction of invasive weeds and non-native species. e) Reestablish native vegetation quickly on disturbed sites. f) Monitor and quickly implement control measures to ensure early detection and eradication of weed invasions to avoid the spread of invasive weeds and non-native species on site and to adjacent off-site areas. g) Use certified weed-free mulch, straw, hay bales, or equivalent fabricated materials for installing sediment barriers. 				
<p>LUPA-BIO-11: Implement the following CMAs for controlling nuisance animals and invasive species:</p> <ul style="list-style-type: none"> a) No fumigant, treated bait, or other means of poisoning nuisance animals including rodenticides will be used in areas where Focus and BLM Special Status Species are known or suspected to occur. b) Manage the use of widely spread herbicides and do not apply herbicides effective against dicotyledonous plants within 1,000 feet from the edge of a 100-year floodplain, stream and wash channels, and riparian vegetation or to soils less than 25 feet from the edge of drains. Exceptions will be made when targeting the 	During reclamation activities	Project Applicant and Mining operator	San Bernardino County	

Mitigation Measure	Implementation Timing	Party Responsible for Implementation	Party Responsible for Monitoring	Date of Completion/Notes
<p>base and roots of invasive riparian species such as tamarisk and <i>Arundo donax</i> (giant reed). Manage herbicides consistent with the most current national and California BLM policies.</p> <p>c) Minimize herbicide, pesticide, and insecticide treatment in areas that have a high risk for groundwater contamination.</p> <p>d) Clean and dispose of pesticide containers and equipment following professional standards. Avoid use of pesticides and cleaning containers and equipment in or near surface or subsurface water.</p> <p>e) When near surface or subsurface water, restrict pesticide use to those products labeled safe for use in/near water and safe for aquatic species of animals and plants.</p>				
<p>LUPA-BIO-13: Implement the following CMA for project siting and design:</p> <ul style="list-style-type: none"> To the maximum extent practicable site and design projects to avoid impacts to vegetation types, unique plant assemblages, climate refugia as well as occupied habitat and suitable habitat for Focus and BLM Special Status Species (see “avoid to the maximum extent practicable” in Glossary of Terms). The siting of projects along the edges (i.e. general linkage border) of the biological linkages identified in Appendix D (Figures D-1 and D-2) will be configured (1) to maximize the retention of microphyll woodlands and their constituent vegetation type and inclusion of other physical and biological features conducive to Focus and BLM Special Status Species’ dispersal, and (2) informed by existing available information on 	Prior to and during reclamation activities	Project Applicant and Mining operator	San Bernardino County	

Mitigation Measure	Implementation Timing	Party Responsible for Implementation	Party Responsible for Monitoring	Date of Completion/Notes
<p>modeled focus and BLM Special Status Species habitat and element occurrence data, mapped delineations of vegetation types, and based on available empirical data, including radio telemetry, wildlife tracking sign, and road-kill information.</p> <ul style="list-style-type: none"> • Additionally, projects will be sited and designed to maintain the function of Special Status Species connectivity and their associated habitats in the following linkage and connectivity areas: <ul style="list-style-type: none"> - Within a 5-mile-wide linkage across Interstate 10 centered on Wiley's Well Road to connect the Mule and McCoy mountains (the majority of this linkage is within the Chuckwalla ACEC and Mule-McCoy Linkage ACEC). - Within a 3-mile-wide linkage across Interstate 10 to connect the Chuckwalla and Palen mountains. - Within a 1.5-mile-wide linkage across Interstate 10 to connect the Chuckwalla Mountains to the Chuckwalla Valley east of Desert Center. - The confluence of Milpitas Wash and Colorado River floodplain within 2 miles of California State Route 78 (this linkage is entirely within the Chuckwalla ACEC). • Delineate the boundaries of areas to be disturbed using temporary construction fencing and flagging prior to construction and confine disturbances, project vehicles, and equipment to the delineated project areas to protect vegetation types and focus and BLM Special Status Species. 				

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<ul style="list-style-type: none"> Long-term nighttime lighting on project features will be limited to the minimum necessary for project security, safety, and compliance with Federal Aviation Administration requirements and will avoid the use of constant-burn lighting. All long-term nighttime lighting will be directed away from riparian and wetland vegetation, occupied habitat, and suitable habitat areas for Focus and BLM Special Status Species. Long-term nighttime lighting will be directed and shielded downward to avoid interference with the navigation of night-migrating birds and to minimize the attraction of insects as well as insectivorous birds and bats to project infrastructure. To the maximum extent practicable, restrict construction activity to existing roads, routes, and utility corridors to minimize the number and length/size of new roads, routes, disturbance, laydown, and borrow areas. To the maximum extent practicable, confine vehicular traffic to designated open routes of travel to and from the project site, and prohibit, within project boundaries, cross-country vehicle and equipment use outside of approved designated work areas to prevent unnecessary ground and vegetation disturbance. To the maximum extent practicable (see Glossary of Terms), construction of new roads and/or routes will be avoided within Focus and BLM Special Status Species suitable habitat within identified linkages for those Focus and BLM Special Status Species, unless the new road and/or route is beneficial to minimize net impacts to natural or ecological resources of concern. 				

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<p>These areas will have a goal of “no net gain” of project roads and/or routes.</p> <ul style="list-style-type: none"> To the maximum extent practicable, any new road and/or route considered within Focus and BLM Special Status Species suitable habitat within identified linkages for those Focus and BLM Special Status Species will not be paved so as not to negatively affect the function of identified linkages. Use nontoxic road sealants and soil stabilizing agents. 				
<p>LUPA-BIO-14: Implement the following general standard practices to protect Focus and BLM Special Status Species:</p> <ul style="list-style-type: none"> Feeding of wildlife, leaving of food or trash as an attractive nuisance to wildlife, collection of native plants, or harassing of wildlife on a site is prohibited. Any wildlife encountered during the course of an activity, including construction, operation, and decommissioning will be allowed to leave the area unharmed. Domestic pets are prohibited on sites. This prohibition does not apply to the use of domestic animals (e.g., dogs) that may be used to aid in official and approved monitoring procedures/protocols, or service animals (dogs) under Title II and Title III of the American with Disabilities Act. All construction materials will be visually checked for the presence of wildlife prior to their movement or use. Any wildlife encountered during the course of these inspections will be allowed to leave the construction area unharmed. 	During reclamation activities	Project Applicant and Mining operator	San Bernardino County	

Mitigation Measure	Implementation Timing	Party Responsible for Implementation	Party Responsible for Monitoring	Date of Completion/Notes
<ul style="list-style-type: none"> All steep-walled trenches or excavations used during the project will be covered, except when being actively used, to prevent entrapment of wildlife. If trenches cannot be covered, they will be constructed with escape ramps, following up-to-date design standards to facilitate and allow wildlife to exit, or wildlife exclusion fencing will be installed around the trench(s) or excavation(s). Open trenches or other excavations will be inspected by a designated biologist immediately before backfilling, excavation, or other earthwork. Minimize natural vegetation removal through implementation of crush and drive or cut or mow vegetation rather than removing entirely. 				
LUPA-BIO-15: Use state-of-the-art, as approved by BLM, construction and installation techniques, appropriate for the specific activity/project and site, that minimize new site disturbance, soil erosion and deposition, soil compaction, disturbance to topography, and removal of vegetation.	During reclamation activities	Project Applicant and Mining operator	San Bernardino County	
LUPA-BIO-16: For activities that may impact Focus and BLM sensitive birds, protected by the ESA and/or Migratory Bird Treaty Act of 1918, and bat species, implement appropriate measures as per the most up-to-date BLM state and national policy and guidance, and data on birds and bats, including but not limited to activity specific plans and actions. The goal of the activity-specific bird and bat actions is to avoid and minimize direct mortality of birds and bats from the construction, operation, maintenance, and decommissioning of the specific activities.	Prior to and during reclamation activities	Project Applicant and Mining operator	San Bernardino County	

Mitigation Measure	Implementation Timing	Party Responsible for Implementation	Party Responsible for Monitoring	Date of Completion/Notes
<p>Activity-specific measures to avoid and minimize impacts may include, but are not limited to:</p> <ul style="list-style-type: none"> Siting and designing activities will avoid high bird and bat movement areas that separate birds and bats from their common nesting and roosting sites, feeding areas, or lakes and rivers. For activities that impact bird and bat Focus and BLM Special Status Species, during project siting and design, conducting monitoring of bird and bat presence as well as bird and bat use of the project site using the most current survey methods and best procedures available at the time. Reusing or co-locating new transmission facilities and other ancillary facilities with existing facilities and disturbed areas to reduce habitat destruction and avoid additional collision risks. Reducing bird and bat collision hazards by utilizing techniques such as unguyed monopole towers or tubular towers. Where the use of guywires is unavoidable, demarcate guywires using the best available methods to minimize avian species strikes. When fencing is necessary, use bird and bat-compatible design standards. Using lighting that does not attract birds and bats or their prey to project sites including using non-steady burning lights (red, dual red and white strobe, strobe-like flashing lights) to meet Federal Aviation Administration requirements, using motion or heat sensors and switches to reduce the time when lights are illuminated, using appropriate shielding to reduce horizontal or skyward illumination, and avoiding the 				

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<p>use of high-intensity lights (e.g., sodium vapor, quartz, and halogen).</p> <ul style="list-style-type: none"> Implementing a robust monitoring program to regularly check for wildlife carcasses, document the cause of mortality, and promptly remove the carcasses. Incorporating a bird and bat use and mortality monitoring program during operations using current protocols and best procedures available at time of monitoring. 				
LUPA-BIO-PLANT-1: Conduct properly timed protocol surveys in accordance with the BLM's most current (at time of activity) survey protocols for plant Focus and BLM Special Status Species.	Prior to reclamation activities	Project Applicant and Mining operator	San Bernardino County	
LUPA-BIO-VEG-1: Management of cactus, yucca, and other succulents will adhere to current up-to-date BLM policy.	Prior to and during reclamation activities	Project Applicant and Mining operator	San Bernardino County	
LUPA-BIO-VEG-2: Promote appropriate levels of dead and downed wood on the ground, outside of campground areas, to provide wildlife habitat, seed beds for vegetation establishment, and reduce soil erosion, as determined appropriate on an activity-specific basis.	During reclamation activities	Project Applicant and Mining operator	San Bernardino County	
LUPA-BIO-VEG-3: Allow for the collection of plant material consistent with the maintenance of natural ecosystem processes.	Prior to reclamation activities	Project Applicant and Mining operator	San Bernardino County	
LUPA-BIO-VEG-5: All activities will follow applicable BLM state and national regulations and policies for salvage and transplant of cactus, yucca, other succulents, and BLM Sensitive plants.	Prior to and during reclamation activities	Project Applicant and Mining operator	San Bernardino County	

Mitigation Measure	Implementation Timing	Party Responsible for Implementation	Party Responsible for Monitoring	Date of Completion/Notes
<p>LUPA-BIO-IFS-4: In areas where protocol and clearance surveys are required, prior to construction or commencement of any long-term activity that is likely to adversely affect desert tortoises, desert tortoise exclusion fencing shall be installed around the perimeter of the activity footprint in accordance with the Desert Tortoise Field Manual (USFWS 2009) or most up-to-date USFWS protocol. Additionally, short-term desert tortoise exclusion fencing will be installed around short-term construction and/or activity areas (e.g., staging areas, storage yards, excavations, and linear facilities), as appropriate, per the Desert Tortoise Field Manual (USFWS 2009) or most up-to-date USFWS protocol.</p> <p>³</p> <ul style="list-style-type: none"> Exemption from desert tortoise protocol survey requirements can be obtained from BLM, in coordination with USFWS, and CDFW as applicable, on a case-by-case basis if a designated biologist determines the activity site does not contain the elements of desert tortoise habitat, is unviable for occupancy, or if baseline studies inferred absence during the current or previous active season. Construction of desert tortoise exclusion fences will occur during the time of year when tortoise are less active in order to minimize impacts and to accommodate subsequent desert tortoise surveys. Any exemption or modification of desert tortoise exclusion fencing requirements will be based on the specifics of the activity and the site-specific population and habitat parameters. Sites with low population density and disturbed, fragmented, or poor habitat are likely to be candidates for fencing requirement exemptions or modifications. Substitute measures, such as on-site biological monitors in the place of the fencing requirement, may be required, as appropriate. 	Prior to and during reclamation activities	Project Applicant and Mining operator	San Bernardino County	

Mitigation Measure	Implementation Timing	Party Responsible for Implementation	Party Responsible for Monitoring	Date of Completion/Notes
<ul style="list-style-type: none"> • After an area is fenced, and until desert tortoises are removed, the designated biologist is responsible for ensuring that desert tortoises are not being exposed to extreme temperatures or predators as a result of their pacing the fence. Remedies may include the use of shelter sites placed along the fence, immediate translocation, removal to a secure holding area, or other means determined by the BLM, USFWS, and CDFW, as applicable. • Modification or elimination of the above requirement may also be approved if the activity design will allow retention of desert tortoise habitat within the footprint. if such a Modification is approved, modified protective measures may be required to minimize impacts to desert tortoises that may reside within the activity area. • Immediately prior to desert tortoise exclusion fence construction, a designated biologist will conduct a clearance survey of the fence alignment to clear desert tortoises from the proposed fence line's path. • All desert tortoise exclusion fencing will incorporate desert tortoise proof gates or other approved barriers to prevent access of desert tortoises to work sites through access road entry points. • Following installation, long-term desert tortoise exclusion fencing will be inspected for damage quarterly and within 48 hours of a surface flow of water due to a rain event that may damage the fencing. • All damage to long-term or short-term desert tortoise exclusion fencing will be immediately blocked to prevent desert tortoise access and repaired within 72 hours. 				

Mitigation Measure	Implementation Timing	Party Responsible for Implementation	Party Responsible for Monitoring	Date of Completion/Notes
<p>LUPA-BIO-IFS-5: Following the clearance surveys within sites that are fenced with long-term desert tortoise exclusion fencing, a designated biologist will monitor initial clearing and grading activities to ensure that desert tortoises missed during the initial clearance survey are moved from harm's way. A designated biologist will inspect construction pipes, culverts, or similar structures:</p> <ul style="list-style-type: none"> a) with a diameter greater than 3 inches, b) stored for one or more nights, c) less than 8 inches aboveground and d) within desert tortoise habitat (such as, outside the long-term fenced area), before the materials are moved, buried, or capped. As an alternative, such materials shall be capped before storing outside the fenced area or placing on pipe racks. Pipes stored within the long-term fenced area after completing desert tortoise clearance surveys will not require inspection. 	Prior to and during reclamation activities	Project Applicant and Mining operator	San Bernardino County	
<p>LUPA-BIO-IFS-8: Inspect the ground under the vehicle for the presence of desert tortoise any time a vehicle or construction equipment is parked in desert tortoise habitat outside of areas fenced with desert tortoise exclusion fencing. If a desert tortoise is seen, it may move on its own. If it does not move within 15 minutes, a designated biologist may remove and relocate the animal to a safe location.</p>	During reclamation activities	Project Applicant and Mining operator / qualified biologist	San Bernardino County	
<p>LUPA-BIO-IFS-9: Vehicular traffic will not exceed 15 miles per hour within the areas not cleared by protocol level surveys where desert tortoise may be impacted.</p>	During reclamation activities	Project Applicant and Mining operator	San Bernardino County	
<p>LUPA-BIO-IFS-12: If burrowing owls are present, a designated biologist will conduct appropriate activity-specific</p>	Prior to and during	Project Applicant and Mining operator	San Bernardino County	

Mitigation Measure	Implementation Timing	Party Responsible for Implementation	Party Responsible for Monitoring	Date of Completion/Notes
biological monitoring to ensure avoidance of occupied burrows and establishment of the 656 feet (200 meter) setback to sufficiently minimize disturbance during the nesting period on all activity sites, when practical.	reclamation activities			
LUPA-BIO-IFS-13: If burrows cannot be avoided on-site, passive burrow exclusion by a designated biologist through the use of one-way doors will occur according to the specifications in Appendix D or the most up-to-date agency BLM or CDFW specifications. Before exclusion, there must be verification that burrows are empty as specified in Appendix D or the most up-to-date BLM or CDFW protocols. Confirmation that the burrow is not currently supporting nesting or fledgling activities is required prior to any burrow exclusions or excavations.	Prior to and during reclamation activities	Project Applicant and Mining operator / qualified biologist	San Bernardino County	
LUPA-BIO-IFS-14: Activity-specific active translocation of burrowing owls may be considered, in coordination with CDFW.	During reclamation activities	Project Applicant and Mining operator / qualified biologist	San Bernardino County	
LUPA-BIO-IFS-39: During the typical active Mohave ground squirrel season (February 1 through August 31), conduct clearance surveys throughout the site, immediately prior to initial ground disturbance in the areas depicted in Appendix D. In the cleared areas, perform monitoring to determine if squirrels have entered cleared areas. Contain ground disturbance to within areas cleared of squirrels. Detected occurrences of Mohave ground squirrel will be flagged and avoided, with a minimum avoidance area of 50 feet, until the squirrels have moved out of harm's way. A designated biologist may also actively move squirrels out of harm's way.	Prior to and during reclamation activities	Project Applicant and Mining operator	San Bernardino County	

Mitigation Measure	Implementation Timing	Party Responsible for Implementation	Party Responsible for Monitoring	Date of Completion/Notes
LUPA-BIO-IFS-41: For any ground-disturbing (e.g., vegetation removal, earthwork, trenching) activities, occurrences of Mohave ground squirrel will be flagged and avoided, with a minimum avoidance area of 50 feet, until the squirrels have moved out of harm's way. A designated biologist may also actively move squirrels out of harm's way.	During reclamation activities	Project Applicant and Mining operator	San Bernardino County	
BIO-27: Before ground-disturbing activities begin, the Project proponent shall be responsible for obtaining approval as needed from the RWQCB, and/or the CDFW for any jurisdictional water features in the Project site. Such approvals may require a jurisdictional water preconstruction survey conducted by a biologist or regulatory specialist. The purpose of this survey is to confirm the extent of jurisdictional waters as defined by state and federal law within the project footprint. These survey results would then be used by RWQCB and CDFW to calculate impact acreages and determine the amount of compensatory mitigation required by the proponent to offset the loss of wetland functions and values.	Prior to reclamation	Project Applicant and Mining operator	San Bernardino County	

