

**UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
BATTLE MOUNTAIN DISTRICT/MOUNT LEWIS FIELD OFFICE**

DOI-BLM-NV-B020-2015-0054-EA

FINDING OF NO SIGNIFICANT IMPACT

I have reviewed Environmental Assessment (EA) DOI-BLM-NV-B020-2015-0054-EA dated October 2015. After consideration of the environmental effects as described in the EA (and incorporated herein), I have determined that the Proposed Action with the Applicant Committed Environmental Protection Measures (ACEPMs) and mitigation measures identified in the EA will not significantly affect the quality of the human environment, individually or cumulatively with other actions in the general area. No environmental effects meet the definition of significance in context or intensity as described in 40 Code of Federal Regulations (CFR) 1508.27. Therefore, preparation of an Environmental Impact Statement (EIS) is not required per section 102(2)(c) of the National Environmental Policy Act (NEPA).

DOI-BLM-NV-B020-2015-0054-EA has been reviewed through the interdisciplinary team process, and has been sent to the Nevada State Clearinghouse and the public for a 30-day comment period.

After consideration of the environmental effects of the Bureau of Land Management's (BLM) preferred alternative (the Proposed Action) described in the EA and the supporting baseline documentation, it has been determined that the Proposed Action identified in the EA is not a major Federal action and will not significantly affect the quality of human environment.

It has been determined that the Proposed Action is in conformance with the approved Tonopah Resource Management Plan and its amendments, and is consistent with the plans and policies of neighboring local, county, state, tribal, and federal agencies and governments.

Context

The Bureau of Land Management (BLM), Tonopah Field Office (TFO), has prepared an EA, DOI-BLM-B020-2015-0054-EA, that analyzes the affected environment, environmental impacts, and identifies Applicant-Committed Environmental Protection Measures (ACEPMs) associated with *WK Mining (USA) Ltd. (WKM) Three Hills Mine Project Plan of Operations (N-93515)/Nevada Reclamation Permit Application (Plan)* for the Three Hills Mine Project (Project). The final Plan was submitted in November 2015, in accordance with the BLM Surface Management Regulations 43 CFR 3809, as amended. It has been assigned BLM case file number N-93515. In addition, one right-of-way (ROW) amendment application (N-73706) and associated Plan of Development (POD) for activities associated with the Project have been proposed. The Project and associated activities are located in portions or all of Sections 33, and 34, Township 3 North, Range 42 East (T. 3 N., R. 42 E.), and Sections 3, 4, 5, and 14, T. 2 N., R. 42 E., Mount Diablo Base and Meridian (MDB&M) (Project Area), approximately one mile west

of the town of Tonopah, Nevada. The Project Area is comprised of approximately 722 acres, of which approximately 459 acres would be new surface disturbance.

WKM proposes to construct, operate, and close an open pit gold mine and processing plant. The POD and amended ROW application (N-73706) that was submitted proposes to realign an existing buried fiber optic cable. The Project would include the following major components: one open pit; waste rock storage areas; run-of-mine ore placement; a heap leach pad with associated process water tanks and an Event Pond; an Absorption-Desorption-Recovery processing plant; a refinery; exploration; a lime silo; a water supply pipeline and associated water delivery pipelines; on-site power generation and distribution system; access and haul roads; ancillary facilities that include the following: haul, secondary, and exploration roads; ready line; maintenance area; storm water diversions; sediment control basins; reagent and fuel storage; storage and laydown yards; prill silo and explosive magazines; fresh water storage; monitoring wells; meteorological station; an administration/security building; borrow areas; growth media stockpiles; solid and hazardous waste management facilities to manage wastes; reclamation and closure, including the development of an evapotranspiration cell; realignment of an existing buried fiber optic cable; and modifications to US Highway 95 at the junction with the South Access Road.

For a complete description of the proposed project, please refer to the EA, Section 2.1, Proposed Action.

Pursuant to the NEPA and the Council on Environmental Quality regulations on implementing NEPA, the EA identifies, describes, and evaluates resource protection measures that would mitigate the possible impacts of the proposed Project. The short- and long-term impacts as disclosed in the EA are not considered to be significant to the human environment. The short-term impacts from implementation of the Proposed Action are local; they are not regional or national in nature. The long-term impacts resulting from the Proposed Action would be mitigated by concurrent reclamation during the life of the Project and would meet all reclamation requirements prior to closure of the Project.

Intensity

1. Impacts that may be both beneficial and adverse.

Potential impacts to the environment as identified in Chapters 3 and 4 of the EA include the following: potential for spread of noxious weeds and invasive non-native species within the Project; temporary vegetation loss; temporary wildlife habitat loss and displacement due to Project activities and human presence; and the potential release of hazardous, and regulated materials. Many of these impacts would be minimized by the ACEPMs included in Section 2.1.11 of the EA as well as by concurrent reclamation and other measures committed to by WKM.

Dust from the use of roads and excavation activities would be minimized to the extent acceptable by the Authorized Officer (AO) by using Best Management Practices (BMPs) such as using prudent vehicle speeds and watering to minimize fugitive dust. The potential impacts would be

temporary and would cease upon completion of the Project and successful revegetation of the surface disturbance.

The EA addresses visual resources in Chapters 3 and 4. Impacts to visual resources will generally be temporary and short term. Successful reclamation of the site would minimize the linear contrasts with the natural landscapes. Impacts to visual resources resulting from implementation of the Proposed Action are anticipated to be minimal and are in conformance with the objectives of the VRM Class IV objectives and the project meets all of the requirements associated with that classification.

Impacts that would be avoided or minimized by operating and reclamation measures committed to by WKM are presented in Chapter 2. Reclamation and revegetation of the Project disturbance would gradually reestablish soils, vegetative cover and wildlife habitat. None of the environmental impacts disclosed above and discussed in detail in Chapters 3 and 4 of the EA are considered significant.

Reclamation will be completed to the standards described in 43 CFR 3809.420 and Nevada Administrative Code (NAC) 519A. Reclamation would meet its objectives as outlined in the United States Department of the Interior Solid Minerals Reclamation Handbook #H-3042-1, Surface Management of Mining Operations Handbook H-3809-1, and revegetation success standards per BLM/Nevada Division of Environment Protection (NDEP) "Revised Guidelines for Successful Mining and Exploration Revegetation."

The No Action Alternative represents no change to the current management direction. Under the No Action Alternative, WKM would not be authorized to develop the Project and mine the Three Hills ore body as currently defined under the Proposed Action. The No Action Alternative would result from the BLM not approving the activities proposed under the Plan and the ROW amendment. However, WKM would be able to continue exploration activities as outlined in the Notice (N-91216). Refer to Section 1.2 of the EA for a discussion of the existing Notice-level activities. The area would remain available for future mineral development or for other purposes as approved by the BLM. Any additional activities proposed within the area would be analyzed under their own site-specific NEPA analysis at the time they are proposed

2. The degree to which the proposed action affects public health and safety.

The effects of the Proposed Action on both public health and safety would not have significant adverse impacts because WKM will be required to follow all Mine Safety and Health Administration regulations along with maintaining all equipment and facilities in a safe and orderly manner.

Through adherence to ACEPMs, and BMPs, the Proposed Action would not result in potentially substantial or adverse impacts to public health and safety. Public safety would be maintained throughout the life of the Project. WKM would commit to the following ACEPMs and practices to insure public health and safety:

- Air emissions, including point and fugitive sources, would be controlled in accordance with the air quality operating permits obtained for the Project and would be controlled in

accordance with BMPs. For example, dust control would be provided for haul roads through water application. Point sources would maintain their appropriate controls as identified in the air quality permits.

- WKM commits to the following practices for the control of fugitive dust from mining activities and exhaust emissions:
 - Use dust abatement techniques on unpaved, unvegetated surfaces;
 - Conduct regular maintenance on equipment to ensure proper function;
 - Post and enforce speed limits;
 - Comply with NDEP BAPC Air Quality Operating Permits; and
 - Use dust abatement techniques before and during surface clearing activities by enforcing a Dust Control Plan.
- Public safety would be maintained throughout the life of the Project by excluding unauthorized access to the mining areas through fencing, security, and traffic-control measures.
- WKM would establish post-mining configuration of access roads in coordination with the BLM and NDEP with a focus on public safety.
- Construction, operation and maintenance activities would comply with applicable federal, state, and local laws and regulations regarding the use of hazardous substances and the protection of air and water quality.
- Hazardous waste would be stored in appropriate containers, dumpsters, or barrels which would be clearly labeled. Storage containers would be in good repair with no defects and suitable for off-site shipment under Nevada Department of Transportation requirements.
- Hazardous wastes would be shipped to an approved location by a certified vendor in accordance with Resource Conservation and Recovery Act requirements.
- WKM would follow the spill contingency measures outlined in the Emergency Response Plan (Appendix J of the Mine Plan). Measures would include spill response, cleanup, and reporting procedures.

3. Unique characteristics of the geographic area such as proximity of historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.

The Project is located in Esmeralda County, Nevada, approximately one mile west of the town of Tonopah. There are no park lands, prime farmlands, wetlands, or wild and scenic rivers in the vicinity.

No cultural resources eligible for listing in the National Register of Historic Places (NRHP) are located within the Project Area. Inadvertent discoveries of previously undetected cultural resources will be mitigated or addressed as described in the ACEPMs in Section 2.1.11 of the EA.

4. The degree to which the effects on the quality of the human environment are likely to be highly controversial.

The Proposed Action is not expected to have highly controversial effects on the quality of the human environment. The parameters of the closure activities along with associated reclamation of the Project facilities are well established. Reclamation should return the land to its pre-mining uses of livestock grazing, mineral exploration, dispersed recreation, and wildlife habitat.

5. The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.

There are no known effects of the Proposed Action identified in the EA that are considered highly uncertain or involve unique or unknown risks. Closure activities similar to what has been included in the Proposed Action have been conducted numerous times over many years on BLM-administered land and the effects are well understood. This is demonstrated through the effects analysis in Chapters 3 and 4 of the EA.

6. The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.

The Proposed Action will not establish a precedent for future actions with significant effects or represent a decision about a future consideration. Completion of the EA does not establish a precedent for other assessments or authorizations of other closure projects or include additional actions for this Project. Any future projects within the area or in surrounding areas will be analyzed on their own merits, independent of the actions currently selected.

7. Whether the action is related to other actions with individually insignificant but cumulatively significant impacts.

Direct and indirect impacts of the Proposed Action were analyzed in Chapters 3 and 4 (Environmental Consequences/Cumulative Impacts) of the EA. None of the environmental impacts disclosed under item 1 above and discussed in detail in Chapters 3 and 4 of the EA are considered significant. Past, present and reasonably foreseeable future actions have been considered in the cumulative impacts analysis within Chapter 4 of the EA. The cumulative impacts analysis examined all of the affected resources and all other appropriate actions within the Cumulative Effects Study Areas and determined that the Proposed Action would not incrementally contribute to any significant impacts. In addition, for any actions that might be proposed in the future, further site-specific environmental analysis, including assessment of cumulative impacts, would be required.

8. The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historic resources.

A Class III cultural resources inventory was conducted for the Project within a 1,012-acre area, which included the Project Area in 2014 (Johnson and McQueen 2015; Sigler and Johnson 2015). The inventory resulted in the identification of 27 newly recorded archaeological sites, two

previously recorded archaeological sites, one object treated as an architectural resource, and 16 isolated finds. The BLM determined that none of the 29 sites or the architectural object are eligible for listing in the NRHP. Isolated finds are categorically excluded from inclusion on the National Register of Historic Places (NRHP) per Section V.B.1. of the State Protocol Agreement between the Bureau of Land Management and the Nevada State Historic Preservation Office for Implementing the National Historic Preservation Act (Protocol) (revised 2014).

The BLM determined there would be No Effect to historic properties as there are No Historic Properties Present (Protocol Section V. D.1) within the Project Area; however, in the event inadvertent discoveries occur, the procedures outlined in 43 CFR 10.4, 43 CFR 3809.420(8)(b), and Section IV.B. of the Protocol be followed. Any such discovery would be immediately reported to the BLM's Authorized BLM Officer, all operations in the immediate area within 100 meters of the discovery would be suspended, and the discovery would be protected until the Authorized Officer could develop an appropriate plan for management of the resource, followed by a notice to proceed.

Cumulative effects to cultural resources are not anticipated; however, ACEPMs outlined in Section 2.1.11 of the EA, will be implemented as part of this project.

The Project Area falls within a location with very low potential for encountering significant paleontological resources; therefore, impacts to scientifically important fossil resources resulting from the Proposed Action are unlikely. In the event paleontological resources are encountered during operations, impacts would be mitigated in accordance with the ACEPMs outlined in Section 2.1.11 of the EA.

9. The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act (ESA) of 1973.

The United States Fish and Wildlife Service, the Nevada Natural Heritage Program, and the Nevada Department of Wildlife (NDOW) were contacted to obtain a list of threatened and endangered and sensitive species with the potential to occur within and surrounding the Project Area. In addition, evaluations of the most recent BLM Sensitive Species List and Special Status Species lists for the BMD were conducted to determine if any species had the potential to occur within and surrounding the Project Area. The list includes certain species designated by the State of Nevada, as well as species designated as "sensitive" by the Nevada BLM State Director. Special status species known or believed to occur in the Project include a number of bat species, golden eagles, as well as migratory bird species. The NDOW reported there were no federally listed or Candidate species within the vicinity of the Project Area based on a database search; however, the Endangered California condor has been directly observed within the vicinity of the Project Area.

Impacts to special status wildlife species or their habitat from the Proposed Action are analyzed in Chapters 3 and 4 of the EA. Impacts to special status species which would occur under the Proposed Action would be minimized by the implementation of ACEPMs outlined in Chapter 2 (Section 2.1.11) of the EA, which include:

- Land clearing or other surface disturbance associated with the activities within the Project Area would be conducted outside of the avian breeding season, whenever feasible, to avoid potential destruction of active bird nests or young birds in the area. When surface disturbance must be created during the avian breeding season (March 1 through July 31), a qualified biologist would survey the area prior to land clearing activities in accordance with current BLM protocols. Pre-disturbance surveys for migratory birds are only valid for 14 days. If the disturbance for the specific location does not occur within 14 days of the survey, another survey would be needed. However, if the vegetation has been fully cleared from the work area within the 14 day clearance survey time frame, no additional clearance survey would be required for the disturbed area because it would no longer consist of potential migratory bird nesting habitat. If active nests are located, or if other evidence of nesting (i.e., mated pairs, territorial defense, carrying nesting material, transporting of food) is observed, a protective buffer (the size depending on the habitat requirements of the species and location of the nest) would be delineated after consultation with the BLM resource specialist and the entire area avoided, preventing destruction or disturbance to nests until birds are no longer actively breeding or rearing young, or until the young have fledged.
- WKM has prepared a Bird and Bat Conservation Strategy (Appendix A of the EA) with commitment to measures that include new surface disturbance performed outside of avian breeding season to the degree possible, performing breeding season surveys prior to any new disturbance activities, posting and enforcing speed limits, removing trash from the site on a regular basis, reporting mortalities to NDOW, incorporating standard raptor protection designs on overhead powerlines, controlling lighting to minimize the potential for bird and bat collisions, installing bat grates/cupolas to protect existing bat habitat, and limiting exposure to hazardous materials. Conservation measures include the design of Project components, monitoring, and adaptive management.
- Following Project construction, areas of disturbed land no longer required for operations would be reclaimed as required by the BLM to promote the reestablishment of native plant and wildlife habitat.
- Operators would be trained to monitor mining and process areas for the presence of larger wildlife such as pronghorn antelope as well as avian and other terrestrial wildlife. Mortality information would be collected in accordance with the NDOW Industrial Artificial Pond Permit. WKM would establish wildlife protection policies that would prohibit the feeding or harassment of wildlife.
- As part of the existing monitoring plan for wildlife, the top of the heap leach pad (s) would be monitored daily for any substantial pooling of cyanide solutions and wildlife mortalities would be reported in accordance with the NDOW Industrial Artificial Pond Permit.
- Areas that are being actively leached on the heap leach pad would be inspected on a daily basis. If any ponding is found on the surface, the cause would be determined and measures taken to eliminate the solution accumulation. Measures can include solution

delivery system repair, adjustment of solution application rates, and ripping of the heap leach pad surface.

- HDPE-lined event pond would include an area of textured pond liner to minimize wildlife entrapment and allow safe egress from the pond. Exploration sumps would be constructed with one sloping side to allow for wildlife egress should wildlife enter the sump.

Golden Eagles

There were no golden eagle nests observed within the Project Area during 2014 aerial surveys. Annual monitoring of raptor nesting sites in the ten-mile survey buffer would occur throughout the life of the Project, and would continue for at least one year after the Project is complete, as outlined in Section 7.1 of the BBCS (Appendix A of EA). In addition, ACEPMs identified in Section 2.1.11 would reduce impacts to golden eagles that would result from mining activities. No long-term effects are anticipated to golden eagles.

Bats

Seven BLM sensitive bat species were detected during acoustic surveys: big brown bat (*Eptesicus fuscus*); Brazilian free-tailed bat (*Tadarida brasiliensis*); little brown bat (*Myotis lucifugus*); California myotis (*Myotis californicus*); western pipistrelle (*Parastrellus hesperus*); pallid bat (*Antrozous pallidus*); and western small-footed myotis (*Myotis ciliolabrum*). Only two adits and two shafts were documented within the Project Area.

The following mitigation would be implemented to minimize impacts to the loss of bat habitat:

- In order to minimize impacts to bat habitat, the bat exclusions would be installed at adits 17 and 18 in the early spring (early April) or late summer/early fall (between September 1 and October 31) after the cessation of maternity activities and prior the onset of hibernation. WKM would provide funding to NDOW to be utilized as off-site mitigation to protect underground workings through the installation of steel bat gates at the portal of working(s) identified as significant bat habitat within Esmeralda County. Installation of the bat exclusions are the responsibility of WKM and would be installed by an experienced contractor in coordination with the BLM and NDOW. A cooperative agreement between WKM, the BLM, and the NDOW should be developed.

The Proposed Action complies with the Endangered Species Act of 1973, as amended (ESA), in that potential effects of this decision on listed species have been analyzed and documented. The action will not adversely affect any endangered or threatened species or its habitat that has been determined to be critical under the ESA.

10. Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.

The Proposed Action will not violate or threaten to violate any federal, state, or local law or requirement imposed for the protection of the environment.



Timothy J. Coward
Field Manager
Tonopah Field Office

25 November 2015
Date