



# United States Department of the Interior



## BUREAU OF LAND MANAGEMENT

Phoenix District

Hassayampa Field Office

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[www.blm.gov/az/](http://www.blm.gov/az/)

In Reply Refer To:

3809 (P010)

AZA-37212

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

June 12, 2017

Kirkland Mining Company  
Attn: Areta Zouvas, President  
9694 E. Chuckwagon Lane  
Scottsdale, AZ 85262

43 CFR 3809  
Surface Management  
AZA-37212

### **MINING PLAN OF OPERATIONS COMPLETENESS REVIEW: PLAN NOT COMPLETE**

The Kirkland Mining Company (KMC) revised Mining and Reclamation Plan of Operations (MRPO) AZA 37212 to conduct mining activities at T 13 N, R 4 W, southwest ¼ of Section 28 in Yavapai County near Kirkland Junction was received in this office June 2, 2017.

Consistent with the surface management regulations at 43 CFR 3809.411(a), the BLM has reviewed the Plan to determine if it meets the content requirements at 43 CFR 3809.401(b). Please resubmit the AZA 37212 MRPO to the BLM Hassayampa Field Office with the following two modifications:

1. Modification of Section 2.2 to include a more detailed Schedule of Operations with an estimate of the proposed life of mine based on current resource model and market forces. A schedule from startup through closure is needed to accurately predict potential impacts and ensure timely reclamation. The schedule helps the BLM determine if the project would meet the performance standards in 43 CFR 3809.420, assess periods of non-operation under 43 CFR 3809.424, and evaluate the duration of potential impacts for the NEPA analysis. The schedule can be modified by the operator under 43 CFR 3809.430. While there is no limit on the duration an approved Plan of Operations can remain in effect, the BLM will not approve Plans with open-ended, or indefinite, operating schedules. Where Plans propose a mine life longer than 10 years, the BLM will include provisions in the approval decision for periodic reviews.

Information on closure of all mine openings is required, whether the opening is an open pit, an adit, a portal, or a shaft associated with an underground operation. Mine pit backfilling may be part of the reclamation plan proposed by the operator or required by the BLM as a condition of approval. Pit backfilling is one aspect of the reclamation plan where the operator must provide the BLM with specific information so the BLM can determine the appropriate amount of backfilling, if any, required. The operator is required to provide information and analysis on pit backfilling that details economic, environmental, and safety factors. This includes the size and quality of potential pit lakes, and safety issues that may be associated with backfilling. An operator statement of “pit backfilling is not feasible” without providing supporting technical, environmental, or economic data does not meet the Plan content requirement.

The impermeable nature of the welded tuff deposit suggests that there will be at least a seasonal pit lake of meteoric waters in the current reclamation plan. Also documented water levels in nearby water wells, the elevation of riparian habitats on encircling drainages, and the direction of hydrostatic head due to the stratigraphic layering dipping gently to the northeast suggest that there may be a static water level that would potentially be fed into the west-northwest side of the proposed pit along sub-vertical fractures and faults mapped by DeWitt et al., 2008 referenced in the MRPO. These hydraulic conduits probably would not have been encountered in the diamond core drillhole program that has been performed so far because those drill holes were vertical and sub-parallelled the most pronounced structures in the pit area. If pit backfilling is deemed unfeasible please provide appropriate documentation supporting that assessment as well as a modification to the current reclamation plan addressing the potential ephemeral or permanent pit lake(s). Reclamation plans for open pits must describe the likely presence or absence of a pit lake and the anticipated water quality and quantity over time, and include a description of post-closure safety controls around the pit.

2. Modification of Section 2.3.5 to address public safety concerns of introducing haul truck traffic onto a busy county road, including documentation that the KMC MRPO satisfactorily meets or exceeds any Yavapai County and ADOT permits, regulations, and policies. When commercial hauling is involved for exploration or mining purposes, the operator may be required to make appropriate arrangements for the use of the road with the county or state.

Guidance related to these two matters can be found in Section 4.3.3.2.7 and Section 5.3.1.6, respectively, of the H-3809-1 - Surface Management Handbook. This is the national BLM policy manual related to 3809 Notices and Plans which is available for download at <https://www.blm.gov/media/blm-policy/handbooks> under Minerals Management. If you have any questions concerning this decision, please contact Shelby Cave, Geologist, at 623-580-5639.

D. Remington Hawes  
Field Manager, Hassayampa Field Office