

ENVIRONMENTAL ASSESSMENT
No. DOI-AZ-BLM-CO10-2012-0012

JOE BURKETT/EAGLE MINING PARTNERSHIP
MEAD CITY PLACER MINING

United States Department of the Interior
Bureau of Land Management
2755 Mission Boulevard
Kingman, Arizona 86401

August 15, 2012

TABLE OF CONTENTS

- 1.0 INTRODUCTION**
 - 1.1 PURPOSE AND NEED FOR PROPOSED ACTION
 - 1.2 CONFORMANCE WITH LAND USE PLANS
 - 1.3 RELATIONSHIP TO STATUTES, REGULATIONS, OR OTHER PLANS

- 2.0 PROPOSED ACTION AND ALTERNATIVES**
 - 2.1 PROPOSED ACTION
 - 2.2 NO ACTION ALTERNATIVE

- 3.0 AFFECTED ENVIRONMENT**
 - 3.1 MINERAL RESOURCES
 - 3.2 BIOLOGICAL RESOURCES
 - 3.3 AREA OF CRITICAL ENVIRONMENTAL CONCERN
 - 3.4 AIR QUALITY
 - 3.5 RANGE MANAGEMENT
 - 3.6 VISUAL RESOURCES
 - 3.7 CULTURAL RESOURCES

- 4.0 ENVIRONMENTAL IMPACTS**
 - 4.1 MINERAL RESOURCES
 - 4.2 BIOLOGICAL RESOURCES
 - 4.3 AIR QUALITY
 - 4.4 RANGE MANAGEMENT
 - 4.5 VISUAL RESOURCES
 - 4.6 CULTURAL RESOURCES
 - 4.7 CUMULATIVE IMPACTS
 - 4.8 RESIDUAL IMPACTS

- 5.0 MITIGATION**
 - 5.1 MINERAL RESOURCES
 - 5.2 BIOLOGICAL RESOURCES
 - 5.3 AIR QUALITY
 - 5.4 RANGE MANAGEMENT
 - 5.5 VISUAL RESOURCES

- 6.0 CONSULTATION AND COORDINATION**

- 7.0 BIBLIOGRAPHY**

1.0 INTRODUCTION

1.1 PURPOSE AND NEED FOR PROPOSED ACTION

This proposal is to mine gold from placer deposits on public land near the village of Mead City, Mohave County, Arizona . This action is necessary because the proponents have rights to the gold which has been concentrated by gravity in the gravels (placers) by virtue of mining claims.

1.2 CONFORMANCE WITH LAND USE PLANS

The proposed action is in conformance with the Kingman Resource Area Resource Management Plan (RMP) approved March 7, 1995. The area of the placer mining is designated as Visual Resource Management Class III and lies within the Joshua Tree Forest and Grand Wash Cliffs Area of Critical Environmental Concern (ACEC). Mining plans of operation and mandatory bonding are required by the RMP for all mineral exploration and development activities, other than casual use, in this ACEC.

1.3 RELATIONSHIP TO STATUTES, REGULATIONS, OR OTHER PLANS

The proposed action is currently or will be in conformance with all applicable statutes and regulations prior to construction. The laws, regulations, guidelines, and ordinances that apply to the proposed action include, but are not limited to, the following:

- National Environmental Policy Act of 1969, as amended
- Endangered Species Act of 1973, as amended
- Federal Water Pollution Control Act, as amended by the Clean Water Act of 1977
- Safe Drinking Water Act, as amended
- National Historic Preservation Act of 1966, as amended
- Clean Air Act, as amended
- Resource Conservation and Recovery Act of 1986
- Native American Graves Protection and Repatriation Act of 1990
- American Indian Religious Freedom Act of 1978
- Archaeological Resources Protection Act of 1979
- BLM Environmental Handbook (H- 1790-1)
- Arizona Native Plant Law

2.0 PROPOSED ACTION AND ALTERNATIVES

2.1 PROPOSED ACTION

This proposal is to mine gold from placer deposits on public land located in NW ¼ and NE ¼ Section 22, Township 29 North, Range 17 West, Gila & Salt River Meridian, near Meadview, Mohave County, Arizona. This area is highly prospective for gold as evidenced by widespread existing disturbances from previous placer operations. A portable dry washer will be parked at the site(s) to be excavated. A Case backhoe will be used to excavate gravel and dump it through a stationary screen to remove all material greater than two inches in diameter. The minus two inch material will be loaded into the dry washer's hopper. The dry washer will then separate the gold from the gravel. The gravel will then be returned to the excavation. Total disturbance will not exceed one acre and no more than one-half acre will be disturbed at any one time. No Joshua

trees will be destroyed, as these sites lie within the Joshua Tree and Grand Wash Cliffs Area of Critical Environmental Concern (ACEC). Other equipment will be a 500 gallon water tank for dust control and several utility vehicles (pick-up trucks). No permanent infrastructure (structures, utilities, etc.) will be installed. All equipment will be removed upon completion of operations. Revegetation will be accomplished with the planting of the BLM-approved seed mix.

Operations may exceed fourteen days at a time, because the operator lives in Texas and would spend extended periods on-site to reduce transportation costs. Therefore, the operator has requested concurrence with use and occupancy of the site from BLM, as permitted under Title 43 Code of Federal Regulations Subpart 3715, Use and Occupancy under the Mining Laws. Criteria justifying use and occupancy under the mining regulations which apply to this occupancy include: 1.) Protecting exposed, concentrated or otherwise accessible valuable minerals (placer gold) from theft or loss. 2.) Protecting from theft or loss appropriate, operable equipment which is regularly used, is not readily portable, and cannot be protected by means other than occupancy. 3.) Protecting the public from surface uses, workings, or improvements which, if left unattended, create a hazard to public safety.

2.2 NO-ACTION ALTERNATIVE

The no-action alternative consists of not approving the placer gold operation.

3.0 AFFECTED ENVIRONMENT

3.1 MINERAL RESOURCES

Placer gold is found in the gravels near Meadview, Arizona. The gold occurs partly as fines and partly as flat, angular nuggets that are known to weigh up to 1/6 troy ounce. This site is one-half mile east of the King Tut placer gold mine, which was the most productive placer mine in the district. The King Tut placers probably originated from erosion of a group of gold-bearing quartz veins in the Lost Basin Range. The angularity of the nuggets, many of which carry attached quartz, indicates a nearby source. The placers stretch for five miles against the eastern flank of the Lost Basin Range about five miles south of Meadview, Arizona.

3.2 BIOLOGICAL RESOURCES

Vegetation

Typical vegetation consists of typical Mojave Desert scrub which includes Joshua tree, creosote bush, white bursage throughout, and cheese weed on the edge of washes. Wildlife typically found in this area include: desert mule deer, jack rabbits, cottontail rabbits, Gambel's quail, coyote, migratory birds, and reptiles.

Threatened and Endangered Species

California condor – The project area is within the experimental nonessential range of the California condor. This status applies to condors only when they are within the experimental population area. Outside of this area, condors are considered endangered. Condors could potentially occur in the project area while foraging, however they have not been documented in this area. There are no historical or known nests or roost sites within the project area. The current known locations and concentrations of condors are not within the Kingman Field Office

boundaries (pers. comm. Chris Parish, Peregrine Fund, August. 2011).

There are no other federal threatened, endangered, or candidate species found within the project area.

3.3 AREA OF CRITICAL ENVIRONMENTAL CONCERN (ACEC)

The Joshua Tree Forest and Grand Wash Cliffs Area of Critical Environmental Concern was designated to protect a large Joshua tree forest and the scenic beauty of the Grand Wash Cliffs. The Grand Wash Cliffs mark a structural boundary between the Basin and Range and Colorado Plateau physiographic provinces, and measure an imposing 2,000 feet higher than adjacent Quaternary-age alluvial terraces. They are composed of Paleozoic-age sedimentary strata, the same which are found in the walls of the Grand Canyon.

3.4 AIR QUALITY

Air quality is affected by climatic conditions which are characterized by hot, windy summers and moderate, moist winter. Precipitation occurs as high-intensity thunderstorms during the summer “monsoon” season (July/August) and by periods of light rain during the later winter months (January/February/March). Snowfall is light to moderate. Average annual precipitation is eleven and one-half inches. Under the National ambient Air Quality Standards, most Kingman Field Office administered lands are rated Class II.

Air emissions at the site will include fugitive particulate emissions from excavation and truck traffic activities, and tailpipe emissions (dust, oxides of nitrogen, carbon monoxide and sulfur dioxide).

3.5 RANGE MANAGEMENT

The quarry is located within the boundaries of the Diamond Bar grazing allotment (GR00026). The allotment contains about 63,073 acres of public land and consists of scrub grassland. The permittee is Nigel Turner, owner of Diamond Bar Ranch.

3.6 VISUAL RESOURCES

The proposed project site lies on public land designated Visual Resource Management (VRM) Class III. The objective of this class is to partially retain the existing character of the landscape. The level of change to the characteristic landscape should be moderate. Management activities may attract attention but should not dominate the view of the casual observer. Changes should repeat the basic elements found in the predominant natural features of the characteristic landscape. New projects can be approved that are not large scale, dominating features (i.e., geothermal powerplant or major mining operation would not be approved).

3.7 CULTURAL RESOURCES

Cultural Resources reside in this area in varying densities. Sites range from archaic and prehistoric artifact scatters, procurement areas, and seasonal habitation/cave sites to historic ranching and mining sites. The actual density of archaeological resources in the area is poorly understood due to the lack of good survey information.

4.0 ENVIRONMENTAL IMPACTS

The following critical elements have been analyzed and would not be affected:

- Area of Critical Environmental Concern (See analysis below.)
- Prime or unique farmlands
- Floodplains
- Threatened and Endangered Species
- Water Resources
- Wetlands/Riparian zones
- Wilderness
- Invasive Weeds
- Area of Critical Environmental Concern
- Wild and Scenic Rivers
- Environmental Justice
- Cultural Resources

The Joshua Tree Forest and Grand Wash Cliffs Area of Critical Environmental Concern would not be affected. See Biological Resources sections below for analysis of impacts to the ACEC.

4.1 MINERAL RESOURCES

Impacts to mineral resources include the excavation and processing of gold-bearing gravels from an area which has been previously disturbed. Cumulative disturbance will not exceed one acre. However, the gravels will be excavated, screened, sent through the dry-washer to separate the gold, then reemplaced in the excavation. Disturbance will be restricted to no more than 100 ft. by 200 ft. (1/2 acre) at any given time.

4.2 BIOLOGICAL RESOURCES

One acre of vegetation and wildlife habitat would be removed as a result of the proposed action. In the long term, final reclamation and natural vegetation would result in the return of this land to useful wildlife habitat. Joshua trees will not be disturbed, reclamation of disturbance will be concurrent with mining, previous disturbance will be repaired and cultural resources will be avoided, thereby meeting the objectives of the Joshua Tree and Grand Wash Cliffs Area of Critical Environmental Concern. A mining plan and environmental assessment have been prepared as mandated by regulation for notice-level activities in an ACEC.

4.3 AIR QUALITY

The proposed project would result in a small increase in short-term air emissions including fugitive particulate emissions from excavation and truck traffic and tailpipe emissions (oxides of nitrogen, carbon monoxide, sulfur dioxide, and particulate matter).

4.4 RANGE MANAGEMENT

This operation will have no significant adverse impact to livestock management or grazing. One acre of land will be stripped of vegetation, and will eventually revegetate naturally.

4.5 VISUAL RESOURCES

The proposed action will be consistent with VRM Class III objectives. Until natural revegetation occurs, there will be a one acre landscape scar. Surrounding lands have pre-

existing scars from past placer gold mining operations, effectively eliminating contrast. The operator has offered to reclaim some disturbances from previous operations.

4.6 CULTURAL RESOURCES

Provided that a Class III cultural resource survey is conducted and no sites are found, the proposed action will have no effect on cultural resources.

4.7 CUMULATIVE IMPACTS

The scope of the project may eventually include up to an acre. Over the life of the mine at this location, the type of impacts would remain the same, but the increasing area of disturbance would result in the potential increase in the magnitude of adverse impacts. For example: As the affected area increases, more plant and wildlife habitat would be destroyed, more fugitive dust could be generated, more grazing land would be unusable, the disturbance would be visible for a longer distance, and so forth. Cumulative impacts will be reduced by requiring reclamation concurrent with mining. No more than one-half acre of land will be disturbed at any one time.

4.8 RESIDUAL IMPACTS

Residual impacts will be, the long term alteration of an acre of plant and animal habitat, and the permanent alteration of the landscape which will remain after the operation is complete and reclaimed.

5.0 MITIGATION

5.1 MINERAL RESOURCES

Prior to disturbance of each ½ acre parcel, cacti and agave will be transplanted immediately, by hand, adjacent (within 20 feet) to the proposed project area. Joshua trees will be left undisturbed.

Reclamation will be concurrent with mining. After each batch of gravel has been processed, it will be reemplaced in the excavation. Contours will be matched to the surrounding undisturbed topography, if any. Final topography will be hummocky to trap moisture and seed from nearby native plants to assist in revegetation. A seed mix will be provided to the operator by BLM staff to assist in reclamation of disturbances.

5.2 BIOLOGICAL RESOURCES

The long term alteration of plant and animal habitat is expected but unavoidable. The procedures proposed in reclamation provide an environment to accelerate the succession back to the habitat that exists at present.

5.3 AIR QUALITY

The tailpipe emissions caused by the loader and utility vehicles cannot be mitigated. Fugitive dust will be suppressed by frequent application of water to the work areas.

5.4 RANGE MANAGEMENT

The long term removal of an acre from available grazing land is inevitable and would be mitigated by reclamation and a long, slow revegetation of the affected area. Alternative grazing

areas with similar, low utility are in abundance in the immediate vicinity, however.

5.5 VISUAL RESOURCES

Visual resource mitigation would include keeping stockpiles and any structures at heights equal to or less than surrounding Joshua trees. There will be no permanent infrastructures installed on-site. To prevent light pollution there will be no all-night lighting present at the site.

5.6 CULTURAL RESOURCES

Mitigation for cultural resources would only be necessary if the proposed action were going to adversely affect resource(s). In order to avoid adverse effects, the project proponents will ensure that a class III cultural resources survey is conducted and that cultural resources, if any, are avoided by the proposed action.

6.0 CONSULTATION AND COORDINATION

This project was reviewed under the National Environmental Policy Act by Kingman Field Office staff in December, 2011. Those contributing to the environmental review process include:

Arizona Game & Fish Department
Mike Blanton, Grazing Management Specialist
Pete Bungart, Hualapai Department of Cultural Resources Archaeologist
Hualapai Tribe
Don McClure, BLM Asst. Field Manager
Paul Misiaszek, BLM Geologist
Rebecca Peck, BLM Wildlife Biologist
Ruben Sanchez, BLM Field Manager
Tim Watkins, BLM Archaeologist
Andy Whitefield, BLM Environmental Protection Specialist

7.0 BIBLIOGRAPHY

Arizona Bureau of Mines, 1933, Arizona Gold Placers and Placering, Mineral Technology Series No. 35, Bulletin No. 135.

Brown, David E., 1994, Biotic Communities Southwestern United States and Northwestern Mexico: Salt Lake City, University of Utah Press.

Bureau of Land Management, 1995, Kingman Resource Area Resource Management Plan and Final Environmental Impact Statement.

Lathrop, E.W., and Archbold, E.F., 1980, Plant response to utility right of way construction in the Mojave Desert. *Environ. Management* 4(3):215-226.

Natural Resources Conservation Service, 1996, Soil Survey of Central Mohave

County, Provisional Report.

Reynolds, Stephen J., 1988, Geological Map of Arizona, Arizona Geological Survey, Map 26.

Schrader, F.C., 1909, Mineral Deposits of the Cerbat Range, Black Mountains, and Grand Wash Cliffs, Mohave County, Arizona: U.S.G.S. Bulletin 397.

U.S. Geological Survey, Groundwater Atlas of the United States: HA-730-C.

Bureau of Land Management, Kingman Field Office
FINDING OF NO SIGNIFICANT IMPACT

NEPA Document Number: DOI-BLM-AZ-C010-2012-0012-EA

Finding of No Significant Impact: Based on the analysis of potential environmental impacts contained in the attached environmental assessment, I have determined that impacts are not expected to be significant and an environmental impact statement is not required.

/ s / Ruben A. Sanchez
Field Manager, Kingman

9/06/2012
Date

DECISION RECORD

NEPA Document Number: DOI-BLM-AZ-C010-2012-0012-EA

Decision: Mining plan for Joe Burkett/Eagle Mining Partnership is approved with the following conditions.

Rationale for Decision: Title 43 Code of Federal Regulations Subpart 3809 provides for the development of mineral resources and the prevention of unnecessary or undue degradation to public land and their natural resources. This Environmental Assessment analyzed the adverse impacts to public lands and ways to mitigate them (See Stipulations below). No significant impacts are expected.

Stipulations:

1.) CULTURAL RESOURCES

a.) Discovery of Cultural Resources in the Absence of Monitoring.

If, in its operations, operator/holder discovers any previously unidentified historic or prehistoric cultural resources, all work in the vicinity of the discovery will be suspended and the discovery promptly reported to BLM Kingman Field Office Manager. BLM will then specify what action is to be taken. If there is an approved “discovery plan” in place for the project, then the plan will be executed. In the absence of an approved plan, the BLM will evaluate the significance of the discovery and consult with the State Historic Preservation Officer in accordance with 36 CFR Section 800.11. Minor recordation, stabilization, or data recovery may be performed by BLM or a permitted cultural resources consultant. If warranted, more extensive treatment by a permitted cultural resources consultant may be required of the operator/holder prior to allowing the project to proceed. Further damage to significant cultural resource will not be allowed until any required treatment is completed.

Stipulations (continued)

Failure to notify the BLM about a discovery may result in civil or criminal penalties in accordance with the Archeological Resource Protection Act of 1979 (as amended).

b.) Discovery of Cultural Resources During monitoring.

If monitoring confirms the presence of previously unidentified cultural resources, all work in the vicinity of the discovery will be suspended and the monitor will promptly report the discovery to the BLM Kingman Field Office manager. BLM will then specify what action is to be taken. If there is an approved “discovery plan” in place for the project, then the plan will be executed. In the absence of an approved plan, the BLM will evaluate the significance of the discovery and consult with the State Historic Preservation Officer in accordance with 36 CFR Section 800.11. Minor recordation, stabilization, or data recovery may be performed by BLM or a permitted cultural resources consultant. If warranted, more extensive treatment by a permitted cultural resources consultant may be required of the operator/holder prior to allowing the project to proceed. Further damage to significant cultural resource will not be allowed until any required treatment is completed.

c.) Damage to Sites.

If, during operation, the operator damages, or is found to have damaged any previously documented or undocumented historic or prehistoric cultural resources, excluding “discoveries” as noted above, the operator/holder agrees at his/her expense to have a permitted cultural resources consultant prepare and execute a BLM-approved resource recovery plan. Damage to cultural resource may result in civil or criminal penalties in accordance with the Archeological Resources Protection Act of 1979 (as amended).

2.) No chemicals or fuels will be stored within the approved mining area without prior permission from the BLM Kingman Field Office Manager. If permission is granted, fuel will be kept in a confined area lined with an impervious material at least twelve (12) mils thick and twenty-four (24) inch berms around the storage facility that will adequately contain 110% of the volume being stored. During inclement weather, moisture will be removed from the confined area on a regular basis, so that the berms are never breached. The facility will be located away from drainages/washes, the edge of terraces, mesas or hillsides. Any spills will be reported to and coordinated for clean-up with the BLM.

3.) Fluids from equipment maintenance (i.e., oil, hydraulic fluids, filters, etc.) will be collected and disposed of properly. All trash, including that found adjacent to the permitted site and access road, will be hauled to an approved disposal facility on a periodic basis or when requested by BLM. No foreign substance (i.e., trash, asphalt milling or fragments, brush, logs or debris) will be introduced to the permitted site.

4.) The mining, processing and stockpile areas will be maintained in a manner which will prevent injury to people and wildlife.

Stipulations (continued)

- 5.) Extreme care and caution will be given to any underground pipelines traversing the site.
- 6.) On completion of each episode of mining, the site will be cleaned and dressed. All flagging, laths, scrap metal, trash and debris will be removed from the site and disposed of properly.
- 7.) To avoid a potential range fire, the permittee will ensure that: (a.) All cigarette butts will be disposed of properly in ash trays, and (b.) Caution will be used as to where vehicles with catalytic converters are parked.
- 8.) All unconsolidated sloped will be knocked down to a three horizontal to one vertical slope to minimize any hazard to injury to people, wildlife and /or livestock.
- 9.) Permittee shall not deviate from the approved Mining Plan of Operations without first obtaining BLM's approval of a plan modification.
- 10.) Prior to disturbance of each ½ acre parcel, cacti and agave will be transplanted immediately, by hand, adjacent (within 20 feet) to the proposed project area. Joshua trees will be left undisturbed.
- 11.) Reclamation will be performed concurrently with mining. After each batch of gravel has been processed, it will be reemplaced in the excavation. Contours will be matched to the surrounding undisturbed topography, if any. Final topography will be hummocky to trap moisture and seed from nearby native plants to assist in revegetation. Operator shall plant the BLM-approved seed mix BLM will be notified no less than three days before reclamation is to begin.
- 12.) Stockpiles will be kept at heights equal to or less than surrounding Joshua trees. There will be no permanent infrastructures installed on-site. To prevent light pollution, there will be no all-night lighting.

/ s / Ruben A. Sanchez
Field Manager, Kingman Field Office

9/06/2012
Date