

KINGMAN FIELD OFFICE SCOPING FORM

Proposal:

DOI-BLM-AZ-C010-2011-0026-EA
NEPA Document Number

_____ RMP Implementation No.

S:/BLMshare: Minerals.
Document Location

Land Description: S½, Section 4, T. 26 N., R. 18 W., G. & S. R. M., near Dolan Springs, Mohave County, Arizona

Applicant: Mohave County Public Works

Authorization: 43 CFR, Free Use of Mineral Materials – Dolan Springs Gravel Pit

INVOLVEMENT: Indicate in the left column which disciplines need to provide information into the EA.

Needed Input (X)	Discipline	Signature
X	Lands	/s/ Andy Whitefield
X	Minerals	/s/ Paul L. Misiaszek 04/05/2011
X	Range	/s/ Abe Clark 08/01/2011
X	Wild Horse and Burro	/s/ Chad Benson 08/01/2011
	General Recreation	
X	Cultural and Paleontological Resources	/s/ Tim Watkins 7/12/2011
	Wilderness	
X	Soils	/s/ Paul L. Misiaszek 04/05/2011
	Surface and Groundwater Quality/Water Rights	
	Air Quality	
X	Wildlife	/s/ Ammon Wilhelm 07/13/2011
X	Threatened and Endangered Plants and Animals	/s/ Ammon Wilhelm 07/13/2011
	Migratory Birds	/s/ Ammon Wilhelm 07/13/2011
	Surface Protection	
	Hazardous Materials	
	Areas of Critical Environmental Concern	
	Visual Resources	
	Socio-Economics/Environmental Justice	
	General Botany/Noxious Weeds	
	Energy Policy	

Writer: /s/ Paul L. Misiaszek

Date: 04/05/2011

Environmental Coordinator: /s/ David Brock

Date: 08/01/2011

Field Manager: /s/ Don McClure

Date: _____

ENVIRONMENTAL ASSESSMENT
No. DOI-BLM-AZ-CO10-2011-026-EA

Mohave County Public Works
Free Use Permit
Dolan Springs Gravel Pit

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

October 31, 2011

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1.0 INTRODUCTION

1.1 PURPOSE AND NEED FOR PROPOSED ACTION

This proposal will allow Mohave Public Works Department to extract sand and gravel from public land near Dolan Springs, Mohave County, Arizona. This gravel pit is needed as a source of aggregate for repair and maintenance of public works infrastructure, including roads. This gravel pit is located adjacent to Pierce Ferry Road to facilitate rapid and inexpensive transport of material to work sites.

1.2 CONFORMANCE WITH LAND USE PLANS

The proposed action is in conformance with the Kingman Resource Area Resource Management Plan approved March 7, 1995. The area is open to mineral material disposal. The area is designated visual resource management (VRM) Class IV.

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 allow extraction of sand and gravel from Section 4, Township 26 North, Range 18 West, Gila and Salt River Meridian (Latitude 35° 39' 41" North, Longitude 114° 12' 46" West); located on public lands approximately six miles northeast of the town of Dolan Springs, Mohave County, Arizona (See attached mining plan for details.). On-site production of cold-mix asphalt would also be authorized. . These are authorized activities for designated Free Use Permit sites, as described in the BLM Mineral Materials Disposal Handbook (H-3600-1), Chapter II, Part D, which states:

2.1 PROPOSED ACTION (continued)

“Subject to Sec. 3601.21, the purchaser or permittee may use and occupy the site to the extent necessary for fulfillment of the contract or permit. These uses include mining, crushing, washing, screening,

separating and stockpiling the material. Generally temporary and occasionally permanent structures such as scales, concrete or asphalt mix plants and guard house/site office are part of aggregate operations. Value-added products such as the asphalt, concrete or ready mix concrete could be considered separate from mining and processing operations and BLM could require a separate authorization such as a special use permit outside of the permit area. However, when possible, the site (generally already disturbed by mining) may be beneficial to the public from an environmental point of view. Contemplated use of concrete or asphalt mix plants, and construction of any permanent structures, such as a guard house, should be included in the mining plan and considered in the analysis under the NEPA during the BLM's permitting process. Approval may also be obtained from the BLM under Sec.3601.44 as a request for the modification of an approved plan."

2.2 NO-ACTION ALTERNATIVE

The no-action alternative consists of not authorizing the gravel pit and production of cold-mix asphalt.

2.3 OTHER ALTERNATIVE

Another alternative would be to relocate the gravel pit. This would destroy more resources while not providing any additional benefit to Mohave County Public Works. Reclamation of the existing disturbance would have to be completed before the existing gravel pit is depleted.

3.0 AFFECTED ENVIRONMENT

3.1 MINERAL RESOURCES

The Dolan Springs Gravel Pit has been developed in Quaternary sand, gravel and conglomerate.

The alluvium consists of grain-sizes ranging from sand to cobbles eroded from pre-Cambrian igneous and metamorphic basement rock (meta-granite, gneiss and schist), overlying Tertiary volcanic extrusives (basalt, andesite, latite, trachyte, and tuffs) and intrusives (granite porphyry and rhyolite).

Soils Description (excerpted from Soil Survey of Mohave County, Arizona, Central Part)

The soil map units that cover the gravel pit site is Arizo-Riverwash complex, 1 - 4 percent slopes. This soil occurs on floodplains at an elevation of around 3,400 feet, with a mean annual precipitation of 9 - 13 inches. This map unit consists of 50% Arizo soils and similar soils, and **3.0 AFFECTED ENVIRONMENT (continued)**

25% Riverwash soils. Minor components (inclusions) are 25%.

The Arizo soil is classified as a Sandy-skeletal, mixed, thermic Typic Torriorthents. This soil is derived from mixed alluvium from mixed rock sources. This soil is excessively-drained with a rapid permeability (6 - 20 in/hr). Available water-holding capacity is 2.2 total inches. Shrink swell potential is low. Flooding hazard is frequent. Runoff class is negligible. Ecological Site assignment is Sandy Wash 10 – 13 p.z. (R030XC322AZ).

Typical profile:

C1 0 - 6 inches; gravelly, loamy sand

C2 6 - 20 inches; extremely gravelly, coarse sand

C3 20 - 60 inches; extremely gravelly, loamy, coarse sand

Riverwash soil is barren fluvial channels, usually coarse-textured, exposed along narrow drainage-ways, subject to shifting during flood events.

3.2 BIOLOGICAL RESOURCES

Wildlife: several species of wildlife use this type of habitat but due to residential development and past disturbance it is likely only used by smaller wildlife species like ground squirrels, migratory birds, lizards, and snakes.

Vegetation: The vegetation is Mojave desert scrub and consists of Joshua trees, Catclaw acacia, big galleta grass, creosote bush, white bursage and other perennial shrubs.

3.3 AIR QUALITY

Air quality is affected by climatic conditions which are characterized by hot, windy summers and moderate, moist winters. 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 rare. Average annual precipitation is less than five 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 (oxides of nitrogen, carbon monoxide, sulfur dioxide, and PM10). These emissions will be authorized under the air quality control general permit for crushing/screening plants operating within Arizona issued by the Arizona Department of Environmental Quality.

3.0 AFFECTED ENVIRONMENT (continued)

3.4 RANGE MANAGEMENT

The proposed project site lies within the Dolan Springs grazing allotment. The rancher generally runs a cow/calf operation on the ranch. The current number of cattle permitted on a yearlong basis on the allotment is 164 (1692 AUMs at 86% Public Land). Ephemeral use is not included in the active preference. Ephemeral use can be applied for on years with higher than average rainfall and annual forage production. The forage and allocation are calculated on a case by case basis. "Ephemeral use authorization" means a temporary grazing authorization to harvest forage produced by ephemeral plants.

3.5 VISUAL RESOURCES

The proposed project site lies within Visual Resource Management Classes IV. This class allows for developments that dominate the view shed.

3.6 CULTURAL RESOURCES

There are a variety of archaeological and historical sites near Dolan Springs, however, very little inventory has been conducted in the area so the exact density is unknown. Site types include prehistoric rock art locales, lithic scatters, artifact scatters, temporary habitations, historic ranching sites, and historic mining sites.

4.0 ENVIRONMENTAL IMPACTS

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

- Areas of Critical Environmental Concern
- Prime or unique farmlands
- Floodplains
- Threatened and Endangered Species
- Water Resources
- Wetlands/Riparian zones
- Wilderness
- Invasive Weeds
- Areas of Critical Environmental Concern
- Wild and Scenic Rivers
- Environmental Justice
- Cultural Resources

4.1 MINERAL RESOURCES

Adverse impacts to mineral resources include the excavation of sand and gravel from about ten acres. Final pit floor elevation will reach a depth of no more than twenty feet below surrounding undisturbed terrain. This amount of sand and gravel to be taken is insignificant when compared to the vast potential reserves in the area.

4.0 ENVIRONMENTAL IMPACTS (continued)

4.2 BIOLOGICAL RESOURCES

Wildlife: Due to the residential development and the associated roads and fences it is unlikely that the habitat around the gravel pit is important to larger species of wildlife such as deer, javelina or coyotes. Small wildlife species such as ground squirrels, lizards, snakes, and migratory birds would still use the area. As the vegetation is cleared from the gravel pits some individuals would be pushed out of the area or would be killed by equipment. 5 acres represents a very small portion of the available habitat for these species.

Vegetation: Approximately 5 acres within the gravel pit have already been cleared of vegetation. An additional five acres would be cleared in the future, the gravel pit is on a section of BLM land that is surrounded by private land. Three of the sections of private land have been subdivided. The removal of the 5 additional acres of vegetation would not impact any plant populations in the area. After the gravel pit is fully extracted the full ten acres would be allowed to re-vegetate. Re-vegetation would take 10 or more years to complete because of low precipitation. State Harvest protected species would be transplanted outside of the project area.

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 (nitrogen oxides, carbon monoxide, sulfur dioxide, and particulate matter (PM10)). Periodic episodes of cold-mix asphalt would emit volatile organic compounds for short periods of time. The ever-present wind would quickly dissipate these fumes, minimizing any hazardous exposure to flora and fauna.

4.4 RANGE MANAGEMENT

The proposed project would have slight to no significant impacts to livestock grazing due to the small size of disturbance. Cattle in the area are accustomed to vehicles and equipment.

4.5 VISUAL RESOURCES

After re-vegetation, the residual disturbance will be a wedge-shaped, ten acre depression, sixty feet deep, in the alluvial surface. Upon completion the pit would be re-contoured to remove piles and steep slopes and then the surface would be ripped or scarified to allow natural re-vegetation. This project would continue to meet the objectives of class IV visual resource management.

4.6 CULTURAL RESOURCES

Previous Class III surveys for the gravel pit yielded no cultural materials.

4.7 CUMULATIVE IMPACTS

The scope of the project may eventually include up to ten acres, as proposed in the mining plan. At present, disturbance caused by past gravel mining measures about five acres. 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.

4.0 ENVIRONMENTAL IMPACTS (continued)

For example: As the affected area increases, more plant and wildlife habitat would be destroyed, more fugitive dust could be generated, the disturbance would be visible from a greater distance, and so forth. Cumulative impacts could be reduced by requiring reclamation of depleted areas of the gravel pit to be reclaimed concurrently with on-going excavation. Disturbance of areas for production of cold-mix asphalt would be at the current level.

4.8 RESIDUAL IMPACTS

Residual impacts will be the loss of mineral material from this site, the long term alteration of up to ten acres of plant and animal habitat, and the permanent alteration of the landscape which will remain after the operation is complete and reclaimed. Areas used for production of cold-mix asphalt would be ripped and all asphalt removed to the county landfill on Mineral Park Road.

5.0 MITIGATION

5.1 MINERAL RESOURCES

Reclamation of the affected area will commence when it has been depleted of mineral and a new area of mining has been begun. Final reclamation will commence within thirty days of the permanent end of mining. All faces and slopes

within the affected area will be graded to a slope no steeper than one vertical on three horizontal to minimize erosion. When final contours are achieved, they will be scarified in preparation for natural re-vegetation. The surface will be left with a hummocky texture to promote micro-climates conducive to the entrapment and germination of native seeds from plants on adjacent undisturbed land.

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. Prior to any new disturbance any state harvest protected plant species would be transplanted to outside of the disturbed areas.

When final contours are achieved, they will be scarified in preparation for natural re-vegetation. The surface will be left with a hummocky texture to promote micro-climates conducive to entrapment and germination of native seeds. Site would be seeded with native seeds appropriate to the precipitation zone of the project area in increase the chances of re-vegetation.

5.3 AIR QUALITY

The increase in tailpipe emissions caused by the loader and haul trucks cannot be mitigated. Fugitive dust will be suppressed as required by Arizona Department of Environmental Quality regulations by frequent application of water to haul roads. Episodes of cold-mix asphalt production will cause the release of volatile organic compounds, however these releases will be

no greater than those caused by highway construction and maintenance. The usually windy days in Dolan Springs would surely dissipate any fugitive fumes to a level undetectable to passing motorists and the nearest neighbors.

5.4 RANGE MANAGEMENT

No mitigation is required for range management.

5.5 VISUAL RESOURCES

No Mitigation measures are recommended beyond the reclamation efforts already in place.

5.6 CULTURAL RESOURCES

No mitigation is required for cultural resources.

6.0 CONSULTATION AND COORDINATION

No consultation with Indian tribes is necessary for the proposed permit renewal.

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

Mike Blanton, BLM Range Conservation Specialist

Dave Brock, BLM Range Conservation Specialist/ Planning and Environmental Specialist

Paul Hobbs, BLM Soil Scientist

Len Marceau, BLM Outdoor Recreation Planner

Paul Misiaszek, BLM Geologist

Ruben Sanchez, Field Manager
Tim Watkins, BLM Archaeologist
June Wendlandt, Wild Horse and Burro Specialist
Andy Whitefield, Environmental Protection Specialist
Ammon Wilhelm, BLM Wildlife Biologist

7.0 BIBLIOGRAPHY

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

NEPA Document Number: DOI-BLM-AZ-C010-2011-0026-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/ Don McClure acting
Field Manager, Kingman

11/1/2011

Date

DECISION RECORD

NEPA Document Number: DOI-BLM-AZ-C010-2011-0026-EA

Decision: The Dolan Springs Gravel Pit is authorized under a Free Use Permit as described in the referenced EA. This gravel pit is located in S½ Section 4, T. 26 N., R. 18 W., G. & S. R. M., near Dolan Springs, Mohave County, Arizona.

Rationale for Decision: Title 43 Code of Federal Regulations Subpart 3600, mineral material Disposal, provides government agencies access to mineral materials found on public lands free of charge. This benefits the agencies and the communities which they serve. These materials are required to construct and maintain roads and other public works.

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. BL 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 resource 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 resources will not be allowed until any required treatment is completed. 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 resource, all work in the vicinity of the discovery will be suspended and the discovery promptly reported to BLM Kingman Field Office Manager. BL 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 resource 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 resources will not be allowed until any required treatment is completed.

c.) Damage to Sites.

If, during operations, 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 resources may result in civil or criminal penalties in accordance with the Archeological Resource Protection Act of 1979 (as amended).

2.) Copies of the production log(s), which detail the date, time, and tonnage of each shipment will be provided to the BLM authorized officer within two weeks of the end of each month of the permit term.

3.) No chemicals or fuel 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, mesa or hillsides. Any spills will be reported to and coordinated for clean-up with the BLM.

4.) Fluids from equipment maintenance (i.e., oil, hydraulic fluids, filter, 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 substances (i.e., trash, asphalt millings or fragments, brush, logs or debris) will be introduced to the permitted site.

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

- 6.) Extreme care and caution will be given to any underground pipelines traversing the site.
- 7.) 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.
- 8.) 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 the where vehicles with catalytic converters are parked.
- 9.) All unconsolidated slopes will be knocked down to a three to one to minimized any hazard of injury to people, wildlife, and/or livestock.
- 10.) Where final pit floor elevation has been reached, reclamation of these areas will commence immediately and will be completed concurrent with mining. Permittee shall coordinate with BLM prior to performing any reclamation.
- 11.) Permittee shall not deviate from the approved Mining Plan of operations without first obtaining BLM's approval of a plan modification.

/s/ Don McClure acting
Field Manager, Kingman

11/1/2011
Date