United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Las Cruces District Office
1800 Marquess
Las Cruces, New Mexico 88005
www.blm.gov/nm

In Reply Refer To:
1792 (L0310)

December 10, 2009

Dear Interested Party,

Enclosed for your review is the Environmental Assessment (EA) concerning the Bureau of Land Management's (BLM's) Reclamation of Community Pit No. 1. BLM Community Pit No. 1 is located northwest of the City of Las Cruces, in Dona Ana County, New Mexico. The EA addresses reclamation operations for the BLM building stone quarry.

The BLM Las Cruces District Office is accepting comments on the EA through January 11, 2010. Written comments should be addressed to:

Edward Seum, Project Lead
BLM Las Cruces District Office
1800 Marquess Street
Las Cruces, New Mexico 88005

After consideration of the public's written comments, the BLM will determine if there is a need to revise the EA. These comments and changes to the document will be summarized in the Decision Record.

Thank you for your continued interest and participation in the planning process. If you have any questions, please contact Edward Seum at (505) 525-4313.

Sincerely,

/S/

Tim L. Sanders
Assistant District Manager
Division of Multi-Resources

United States Department of the Interior
Bureau of Land Management
Las Cruces District Office
1800 Marquess Street
Las Cruces, New Mexico 88005

ENVIRONMENTAL ASSESSMENT
DOI-BLM-NM-030-2009-0042-EA
For
Reclamation of Community Pit No. 1
NMNM-110639
T. 22 S., R. 1 E., Section 19, S1/2SE1/4 NMPM
Dona Aña County, New Mexico

Prepared by:	**/s/Edward Seum**	**12-9-09**
	Supervisory Multi-Resource Specialist	**Date**
Reviewed by:	**/s/ Jennifer Montoya**	**12-9-09**
	EA Coordinator	**Date**
Approved by:		
	Assistant District Manager	**Date**

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1 HISTORY AND BACKGROUND

The Bureau of Land Management (BLM) Community Pit No. 1 is located in S1/2SE1/4, sec.19, T. 22 S., R. 1 E., NMPM, Dona Ana County, New Mexico (see Map 1 for general location). Access to the pit is by an existing road starting in sec. 20, T. 22 S., R. 1 E. A Community Pit is defined as an area of public land from which the BLM can make disposals of mineral materials through contract sales to private citizens or businesses (Code of Federal Regulations 43 CFR 3603). The defined area is noted to the BLM public records (Master Title Plat).

The area known as Community Pit No. 1 has been mined since 1969. In 1979, BLM formally designated the defined area for Community Pit No. 1. The area designated as Community Pit No. 1 encompassed 50 acres and was a source of building stone for local building contractors for many years. In 1994, the BLM limited use of the community pit to four contractors (no private citizen use). Contractor activities were managed by the regulations found at 43 CFR 3600 and written stipulations developed by the BLM. The 43 CFR 3600 regulations do not require community pit operators to do reclamation. Mining in the community pit ended in 2007 with no reclamation of the pit having taken place.

2 INTRODUCTION AND NEED FOR THE PROPOSED ACTION

2.1 Proponent: Bureau of Land Management, Las Cruces District Office

2.2 Purpose and Need for the Proposed Action

Mining operations took place in the Community Pit No.1 from 1979 to 2007. Mineral materials were removed from the pit by contractors for use in the nearby communities. Mining disturbed approximately 50 acres with no reclamation taking place. The lack of reclamation resulted in a number of highwalls, spoil piles and pits being left behind. The site is hazardous in nature due to the leftover highwalls which are not stable, and the pits which tend to retain water for periods of time after rain events. As a result of pit expansion through mining over the years, soil has been pushed over the edge of the slopes on the south and southwest sides of the pit. When rain events occur, this material has washed down slope into the drainage where existing access roads exist. In addition to erosion issues (i.e., sedimentation into the surrounding drainages), this is also impacting public access to the surrounding area. Revegetation of the site has not taken place, so the lands are subject to erosion and are currently not meeting any kind of post mining land use.

The BLM would have a reclamation plan designed for reclamation of the site; and then have the site reclaimed in accordance with the reclamation plan.

Section 102 of the *Federal Land Policy and Management Act of 1976, as amended (FLPMA)*, declares that it is the policy of the United States to manage the public land "in a manner that will protect the quality of scientific, scenic, historical, ecological, environmental, air and atmospheric, water resource, and archaeological values; that, where appropriate, will preserve and protect certain public lands in their natural condition; that will provide food and habitat for fish and wildlife and domestic animals; and will provide for outdoor recreation and human occupancy and use." Section 302 of FLPMA requires that the Secretary of the Interior take any action necessary to prevent unnecessary or undue degradation of the

public land. The BLM is tasked with implementing policies and requirements under FLPMA and the 43 CFR 3600 Regulations on the Federal lands it manages. The need for the action is required by the BLM's responsibilities under FLPMA and the 43 CFR 3600 Regulations to reclaim public lands mined under a community pit designation.

2.3 Conformance with Land Use Plan

This Proposed Action is in conformance with the Mimbres Resource Management Plan (RMP) approved December 1993 because it is clearly consistent with the following decisions, objectives, and conditions of the RMP: It is clearly consistent with the objective on page 2-3, "The objective of the minerals program is to provide for the public use of leasable, locatable and saleable minerals consistent with the laws that govern these activities and to minimize environmental damage;" and

It is consistent with the Continuing Management Guidance and Actions on page 2-3, "The BLM is also responsible for ensuring that mineral development is carried out in a manner which minimizes environmental damage and provides for the rehabilitation of affected lands;" and

It is consistent with Continuing Management Guidance and Action, Salables on page 2-5, "Stipulations and reclamation and reseeding requirements for mineral material pits will be developed on a case-by-case basis."

3 DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES

3.1 Alternative A: Proposed Action - Reclaim Site to Approximate Original Contour

Acknowledging that public safety is the primary objective of the reclamation strategy, the BLM may incorporate opportunities for research and recreation into the final reclamation plan.

Exposed high walls along the northern and southern margins of the intact portion of the quarry body are composed of friable sandstone, siltstone and shale overlain by an approximately 65 foot thick layer of dense limestone. This structural arrangement is unstable due largely to decades of poorly engineered quarrying activities. However, this lithic profile has also revealed diagnostic strata containing a variety of Permian age fossil imprints that may be important to the interpretation of the fossil record within the Paleozoic Trackways National Monument.

Under either alternative, it *may* be possible to engineer access to an exposed section of the profiled strata, sufficient for some degree of interpretation and analysis and/or public visitation. Any such design would ultimately defer to considerations for public safety. BLM may seek interpretive and recreation recommendations from a design team and incorporate those recommendations into a final engineering design for the quarry. Visitor facilities such as an improved roadway, visitor parking facility and footpath(s) to direct visitors to any area of the quarry selected for study and interpretation would be considered.

If access to a stratigraphic profile cannot be engineered into the reclamation plan, the exposed fossil bearing strata around the quarry body would be mapped and recorded as a component of the reclamation design.

Existing mine site topography is dominated by a large hill and an alluvial wash. Hill slopes consist of cut banks 150 feet high and range from 2:1 horizontal to vertical (H:V) to nearly vertical. A reclamation plan would be developed based on the pre-mine slopes and adjacent landforms for the area. The site would be returned to as near original contour as possible once reclamation was completed.

All highwalls would be eliminated using a combination of blasting the 65-foot layer of limestone cap rock and backfilling. Elimination of the highwalls would remove any danger they present to the public when using the lands after reclamation has been completed. All pits would be backfilled and slopes would be reduced by backfilling and grading. Where possible, materials cast onto the out slopes during mining would be pulled back-up and used as part of the slope reduction. Once grading is completed, the area would be seeded with a native seed mixture to re-establish a vegetative cover.

Equipment that would be required for reclamation would include a drill and explosives truck for blasting; bull dozers, backhoes, front end loaders and pans to move and grade materials; a water truck for dust suppression and to possibly water the site post seeding; and various types of equipment for applying seed and mulch to the area. Reclamation activities would only be allowed to take place Monday through Friday from a half-hour after sunrise to a half-hour before sundown. It would take up to 4 months to complete reclamation once work started on the project based on the following estimate:

Drilling and blasting:	3 to 4 weeks
Backfilling and grading:	10 weeks
Final grading and seeding:	2 weeks

Measures would be taken to control erosion from the site. These would include final grading of slopes along contours; leaving rougher slopes in steeper areas; the use of mulch, jute netting or other materials on slopes after seeding; and the use of hay or rock check dams and diversions. Access into the surrounding areas would be maintained, however, the portion of the road leading into the pit would be removed by ripping from the existing gate in a westerly direction towards the pit. Access to the pit would continue be blocked by maintaining the existing gate until vegetation is re-established. Access would be further reduced by fencing to keep use off the site until vegetation can become established. Gates would be placed in the fence in order to remove any livestock which might get onto the site. Once successful reclamation is judged to have occurred, the fence and gate would be removed.

3.2 Alternative B: Reclaim Site to Less Than Approximate Original Contour Alternative

Acknowledging that public safety is the primary objective of the reclamation strategy, the BLM may incorporate opportunities for research and recreation into the final reclamation plan.

Exposed high walls along the northern and southern margins of the intact portion of the quarry body are composed of friable sandstone, siltstone and shale overlain by a 65-foot thick layer of dense limestone. This structural arrangement is unstable due largely to decades of poorly engineered quarrying activities. However, this lithic profile has also revealed diagnostic strata containing a variety of Permian age fossil imprints that may be important to the interpretation of the fossil record within the Paleozoic Trackways National Monument.

Under either alternative, it *may* be possible to engineer access to an exposed section of the profiled strata, sufficient for some degree of interpretation and analysis and/or public visitation. Any such design would ultimately defer to considerations for public safety. BLM may seek interpretive and recreation recommendations from a design team and incorporate those recommendations into a final engineering design for the quarry. Visitor facilities such as an improved roadway, visitor parking facility and footpath(s) to direct visitors to any area of the quarry selected for study and interpretation would be considered.

If access to a stratigraphic profile cannot be engineered into the reclamation plan, the exposed fossil bearing strata around the quarry body would be mapped and recorded as a component of the reclamation design.

A reclamation plan would be developed that would lessen the highwalls, to the extent possible without blasting. This might lead to some highwalls being left which could be a hazard during public use of the site. Pits would be eliminated by backfilling and grading. Where possible, materials cast onto the out slopes during mining would be pulled back-up and used as part of the slope reduction. Once grading was completed, the area would be seeded with a native seed mixture to re-establish a vegetative cover.

Equipment that would be required would be the same as in the Proposed Action except for a drill and explosives truck for blasting. Reclamation activities would only be allowed to take place Monday through Friday from a half-hour after sunrise to a half-hour before sundown. It would take up to 3 months to complete reclamation once work started on the project based on the following estimate:

Backfilling and grading:	10 weeks
Final grading and seeding:	2 weeks

Measures taken to control erosion from the site would be the same as in the Proposed Action. Access into the surrounding areas would be maintained, however, the portion of the road leading into the pit would be removed by ripping from the existing gate in a westerly direction towards the pit. Access to the pit would continue be blocked by maintaining the existing gate until vegetation is re-established. Access would be further reduced by fencing to keep use off the site until vegetation can become established. Gates would be placed in the fence in order to remove any livestock which might get onto the site. Once successful reclamation is judged to have occurred, the fence and gate would be removed.

3.3 Alternative C: No Action Alternative

The site would remain essentially as it currently exists. No reclamation would take place under this Alternative. The highwalls and pits would remain a hazard to the public land users. No measures would be taken to re-establish vegetation or to control erosion on the site.

4 AFFECTED ENVIRONMENT

The affected environment would be the same for all three alternatives. The area to be disturbed is located northwest of Las Cruces, New Mexico within the legal location of S1/2SE1/4, sec. 19, T. 22 S., R. 1 E., NMPM, Dona Ana County, New Mexico. Access to the pit is by an existing road starting in sec. 20, T. 22 S., R. 1 E. Mining in the area impacted approximately 50 acres of public land.

4.1 Lands and Access

The project is located on public land managed by the BLM. There are no rights-of-way associated with the BLM Community Pit. An existing road provides public access to ranchers and recreational users. The road is approximately 12 feet wide and allows for one lane of travel. There is a gate at the entrance to the Community Pit which remains closed to prevent access to the site.

4.2 Soils

The site has been highly disturbed in the past by mining so that there are only remnant areas where the original soils still exist. Original soils at the site were derived from the weathered remnants of a rocky ridge. The site is characterized by shallow, stony and cobbly soils interspersed between areas of limestone rock outcropping on slopes to 75 percent. Included within this unit are areas of deeper soils and outcroppings of sandstone and shale.

In a natural setting, local soils are generally stable. However, soil can become loose and "powdery" when disturbed. Dry, powdery soils become very susceptible to erosion by water and wind and create a significant amount of dust when the wind blows the soils off-site. Soils in areas which were previously mined, but not subjected to continuous disturbance form a chemical crust over the surface. When soils are allowed to remain undisturbed and a crust has formed, soil erosion by wind is significantly reduced.

4.3 Vegetation

The actual project area is currently void of any vegetative resources due to the past mining activities. Prior to the disturbance, there were two dominant range sites within the proposed project area: Limestone Hills and Gravelly.

These range sites occur within the New Mexico Southern Desert (SD-2) Major Land Resource Area (MLRA). A description of these range sites can be found at http://www.nm.nrcs.usda.gov/technical/fotg/section-2/esd/mlra1983map.html. The Limestone Hills range site is dominated by a mixed desert shrub community to (*Larrea tridentata*), ocotillo (*Foqueria cernua*), bush muhly (*Muhlenbergia porteri*) and black grama (*Bouteloua eriopoda*). The Gravelly range site is dominated by creosote and tarbush (*Flourensia cernua*) with an understory of bush muhly. Remnants of these two range sites still exist in the outer perimeters of the pit.

There are no invasive or noxious weeds known to occur on the proposed project site.

4.3.1 Special Status Species

Presence of special status plant species and their habitats in Doña Ana County was considered using Las Cruces District Office (LCDO) species occurrence/habitat records and New Mexico Natural Heritage Program species records. Species descriptions and distributions were derived from LCDO office records and New Mexico Rare Plant Technical Council [NMRPTC. 1999. New Mexico Rare Plants. Albuquerque, NM: New Mexico Rare Plants Home Page. http://nmrareplants.unm.edu (Latest update: 22 January 2009)]. Based on evaluation of the above information, one species and/or its habitat could potentially occur in the project area. There are no known locations of night-blooming cereus near the project area but suitable habitat does exist. Table 1 below identifies special status plant species considered and its conservation status.

Table 1 Special Status Plant Species

TABLE 1 SPECIAL STATUS PLANT SPECIES	
SPECIES	**STATUS**
Night-blooming cereus	BLM Special Status, US Fish & Wildlife Service Species of Concern, New Mexico Endangered

The night-blooming cereus (*Peniocereus greggii* variety *greggii*) is a slender, twig-like cactus that grows mostly in sandy to silty gravelly soils in gently broken to level terrain in desert grassland or Chihuahuan desert scrub. Typically, it is found growing up through and supported by shrubs, especially creosote (*Larrea tridentata)* and honey mesquite (*Prosopis glandulosa)*.

4.4 Wildlife

The BLM conducted an inventory of wildlife habitats using the Integrated Habitat Inventory and Classification System (IHICS) in 1981. There are two standard habitat sites (SHSs) adjacent to the project area. The existing boundary of Community Pit No.1 occurs within the Mixed Mountain Shrub SHS. The access road to the pit crosses the creosote rolling upland and creosote breaks SHSs.

The Mixed Shrub Mountain SHS has topography that is usually steep and includes a vegetative community consisting of various shrubs such as acacias, mimosa, rhus, eriogonum and cercocarpus and an understory of gramas, muhlenbergia, tridens and various forbs.

The Creosote Rolling Uplands and Creosote Breaks SHS are similar in topography, vegetation and wildlife occurrence. These SHSs are dissected by numerous arroyos or drainages are on uplands or edges of uplands. The vegetative community is primarily creosote with a variety of subdominant species such as muhlenbergia, scleropogon, tridens, hilaria, rhus and various forbs.

Common mammals that occur within these SHSs include various rodents, cottontail, bats, ringtail, skunks, coyote, fox, mountain lion and mule deer. Common birds include various raptors such as red-tailed hawk, Cooper's hawk, golden eagles and songbirds such as swifts, swallows, hummingbirds, flycatchers, jays, wrens, thrushes, thrashers, warblers, sparrows, blackbirds and tanagers. Reptile and amphibian species that may occur within this habitat type include toads, collared lizards, spiny lizards, horned lizards, whiptails, whipsnakes, kingsnakes and rattlesnakes.

4.4.1 Special Status Animals

The special status animal species list for Doña Ana County was compiled from: Biota Information System of New Mexico (BISON-M). http://www.bison-m.org. The results of this analysis list 53 special status animal species that may potentially occur in Doña Ana County.

Known geographic distribution and habitat requirements were considered for each species in comparison with habitat types in the proposed project area. The results of this analysis are that seven special status species potentially occur on the proposed project area. Table 2 identifies special status wildlife species considered and their conservation status.

Table 2 Special Status Wildlife Species

TABLE 2 SPECIAL STATUS WILDLIFE SPECIES	
SPECIES	**STATUS**
Texas horned lizard	BLM Sensitive
American peregrine falcon	USFWS Species of Concern, NM threatened
Common ground dove	NM Endangered
Burrowing owl	USFWS Species of Concern, BLM Sensitive
Loggerhead Shrike	BLM Sensitive, NM Sensitive
Townsend's big-eared bat	USFWS Species of Concern, BLM Sensitive, NM Sensitive
Fringed Myotis Bat	BLM Sensitive, NM Sensitive

Habitat descriptions for these special status wildlife species are available from the Bureau of Land Management, Las Cruces District Office upon request.

4.5 Range

There is one grazing allotment within the project area. The allotment name and number is Picacho Peak Allotment # 03008. Grazing authorization for this allotment is for 89 cattle year long (CYL) for a total of 822 Animal Unit Months (AUMs). An AUM is the amount of forage that one cow or one cow and calf will consume in a one month period.

An existing water pipeline runs along the access road to the Robledo Mountains. The pipeline (Robledo Pipeline, Project No. 634776) provides water to two concrete tanks adjacent to the pit and proceeds uphill to a storage tank west of the pit.

4.6 Cultural

A cultural resources survey of the mine site was conducted on June 15, 2004. No cultural resources were found.

4.7 Paleontology

The Community Pit is adjacent to the Prehistoric Trackways National Monument in the Robledo Mountains which is considered an important locality for vertebrate fossils. In March 2009, the Prehistoric Trackways National Monument was established through legislation. Approximately 5,300 acres were designated for the new National monument. The Community Pit is not included in the land designated for the monument.

In 1969, the BLM allowed a community quarry operation (which eventually became the Community Pit No. 1) to open up in the red beds of the Robledo Mountains. The bedded sandy siltstones were mined for flagstone and other building material. Pockets of tracks and fossil plants were unearthed at the quarry and the spoils piles of the pit became fertile hunting grounds for fossil collectors. The pieces with footprints and plant material became highly prized decorative stone. Prior to cessation of mining at the Community Pit in 2007, the trackway layer had been mined.

4.8 Visual Resources

The area was designated as a Class II area for visual resources in the Mimbres RMP (1993). In a Class II area, changes in the form, line, color, and texture of the landscape should not be evident. Past mining activities created substantial, visible changes to the form, lines, colors, and texture of the landscape.

4.9 Recreation

The area currently is used for off-highway vehicle use, mountain biking, hiking, hunting and target shooting. Access to the Robledo Mountains for these activities is provided by the road up the canyon on the south side of the mine.

4.10 Air Quality & Climate

Most of the year, air quality throughout Doña Ana County is very good. However, during dry spring months windstorms and blowing dust can create problems. National Ambient Air Quality Standards (NAAQS) for airborne particulate matter (PM10) have been exceeded since 1996. In 1999, air monitoring equipment recorded 16 days which exceeded NAAQS for PM10.

Excessive dust in the air can impair driving visibility and, when breathed, be potentially harmful to high-risk people with respiratory conditions. In December 2000, New Mexico Environmental Department (NMED) released a Natural Events Action Plan (NEAP) for Doña Ana County. In January 2001, Doña Ana County adopted Ordinance No. 194-2000, Erosion Control Regulations, which included provisions for surface-disturbing activities which might cause an increase in fugitive dust.

The Environmental Protection Agency (EPA) lists six types of greenhouse gases which contribute to global warming potential. These include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). The first three gases listed are naturally occurring as well as manmade, while the last three are predominantly manmade. These emissions are present in the project area naturally and due to human habitation and uses. They are also present due indirectly to the existing power line right-of-ways.

4.11 Water Quality

Surface water flows intermittently as ephemeral streams down west-to-east running arroyos on the north and south sides of the community pit. The Rio Grande is approximately 1 mile downstream from the Community Pit. A small drainage in the middle of the pit was closed to further drainage by dumping waste material into the small arroyo. This drainage is a tributary to a larger arroyo on the south side of the community pit. In the past, waste material was deposited on the side slopes in such a manner that a portion of the debris would ultimately reach the arroyos and be transported towards the river.

4.12 Noise

Currently, the only sources of noise come from the sporadic use of motorized vehicles accessing the area.

5 ENVIRONMENTAL EFFECTS

The environmental effects for all the alternatives are described below. The effects to the environment under Alternatives A and B would be the same for almost all of the resources. Where there may be a difference in impacts between the alternatives they are described.

5.1 Soils

The site has been highly disturbed in the past by mining so that there are only remnant areas where the original soils still exist. These areas could be impacted during reclamation through compaction of soils by heavy equipment traveling over them. There could also be some disruption to the soil profile during grading of the area. However, most of the area would benefit from reclamation. There would be a mixing of spoil materials during the reclamation process. These mixed spoils would then be redistributed over the area creating a new growth medium. Compacted areas would be ripped and soil amendments would be added to the growth medium prior to seeding the area with a native seed mixture.

Eventually, a new soil profile would develop, although it would differ from the original one. Some erosion may occur due to precipitation falling and concentrating on areas disturbed by the project. Erosion would be lessened through the use of erosion control measures described earlier in this document. Erosion would also lessen once a vegetative cover was re-established.

Under the No Action Alternative, the site would remain the same. Unstable slopes and areas with compacted slopes would remain. Erosion would continue at its current pace with each new storm event resulting in a more degraded environment.

5.2 Vegetation

There would be very minor impacts to the local vegetation in the Community Pit. Native vegetation was removed from most of the area during mining. The area to the west of the pit is also heavily impacted by activities other than those associated with the pit. This area receives a lot of recreational use, including off-highway vehicle (OHV) use. Currently, there is little vegetation over most of the area. Proper reclamation and the use of native seed should increase the occurrence of native plants on the area. Establishment of a new vegetative community should enhance the area's potential for use by wildlife and improve the overall watershed in the upper portions of the reclaimed area. The lower portions, around the wash, may continue to receive heavy public use and may be difficult to re-vegetate. Erosion control as part of the reclamation should prevent these lower areas from washing out and may allow for some recovery of the vegetation in the arroyos.

The possibility exists for noxious weeds to become established on the area after reclamation takes place. This would be due to vehicles from outside areas, which might contain weeds, coming onto the site causing the spread of weeds during reclamation. However, by following the mitigation measures, to include the requirement to wash all equipment prior to entry on the project area, should minimize noxious weeds to invade the site.

5.2.1 Special Status Plants

There are no known occurrences of night–blooming cereus plants within the project area; however, suitable habitat does exist. Reclamation should provide suitable habitat for this plant to potentially re-establish.

Under the No Action Alternative, re-vegetation of the site would take place at an extremely slow rate if at all. The site would depend on pioneer species to find niches where it could become established. There would be a higher likelihood that noxious weeds would become established in the area since they generally out-compete native species.

5.3 Wildlife

Burrowing mammals and reptiles occurring on the site may be killed during reclamation. However these species are generally common and widespread. Negative impacts would be minimal. Reclamation and successful establishment of a native vegetative community would increase species habitat. Some wildlife species which currently avoid the area would return to the site after disturbing activities cease. There is a slight chance that this action may affect migratory birds if disturbance occurs during their nesting season. The proponent must comply with the Migratory Bird Treaty Act and avoid potential impacts to protected birds within the project area. A list of protected birds can be found at 50 CFR 10.13.

5.3.1 Special Status Animals

Seven special status animal species potentially occur in the proposed project area:

Texas horned lizard *(Phrynosoma cornutum):* Activities associated with the reclamation of the Community Pit may potentially lead to mortality of horned lizards. Any mortality would be limited to individuals and not affect overall population sizes.

Loggerhead shrike *(Lanius ludovicianus)*: Loggerhead shrikes prefer open shrub and grasslands and are year-round residents of southern New Mexico. Removal of perch sites and potential nesting sites such as creosote and mesquite would not be on a large enough scale that it would adversely affect loggerhead shrikes. Reclamation could potentially create new habitat for the loggerhead shrike.

Burrowing owl *(Athene cunicularia hypugaea)*: Burrowing owls often inhabit disturbed areas such as gravel pits because of the availability of burrows and other cavities suitable for nesting. The Proposed Action could potentially cover up inhabited burrows, and activities associated with the reclamation could kill individual owls; however, the reclamation is not anticipated to affect overall populations of burrowing owls rather just individuals.

Implementation of the Proposed Action is not anticipated to affect the following species due to the lack of suitable habitat:

Common ground dove *(Columbina passerina pallescens)*
American peregrine falcon *(Falco peregrinus)*
Townsend's big-eared bat *(Corynorhinus townsendii pallescens)*
Fringed myotis bat *(Myotis thysanodes)*

Burrowing mammals, birds and reptiles occurring on the site would not be killed, and there would be no increase in habitat under the No Action Alternative.

5.4 Range

Reclamation of the site would have no negative impacts on the allotment and would not affect the existing livestock operation. Any fencing proposed would be coordinated with the livestock permittee to ensure no cattle traps are created and ensure gates are placed strategically to ensure livestock can be removed from the reclaimed area should they get inside.

Erosion control as part of the reclamation would allow for water flows to follow the natural drainage and prevent washout of the access road and water pipeline.

There would be effects to the livestock operations under the No Action Alternative. Under this Alternative, the potential exists for washout of the roads and pipeline located below the pit and potentially affecting the private land downstream of the pit. This would affect the availability of water cattle and could increase costs to manage the allotment.

5.5 Paleontology

Currently some collecting of fossils is taking place within the Community Pit. The collections are authorized through permit and take place in the loose materials left in the pit from mining operations. Reclamation of the site could impact this activity since fossils could be crushed or covered up during backfilling and grading operations. However, permit holders would probably try to increase their efforts to recover any noteworthy fossils once they know that the site will be reclaimed.

Under the No Action Alternative, the site would remain in its current condition. Any fossils currently exposed would remain that way.

5.6 Visual Resources

This action falls within a visual resource management (VRM) Class II area. In a Class II area, changes in the form, line, color, and texture of the landscape should not be evident. However, past mining activities created substantial visible changes to the form, line, color, and texture of the landscape. Vehicles and machinery used to reclaim the site would attract additional attention to the area until they were removed upon completion of reclamation. Returning the site to approximate original contour would also lessen the contrast of the site as the form, line and texture would approach the surrounding landscape areas. Reclaiming the site to less than approximate original contour would result in more visual impacts being left after reclamation is completed since there would be less change to the existing mined form, line and texture. This would lead to more contrast with the surrounding areas.

The site would remain a visual blight in the area under the No Action Alternative. Substantial visible changes to form, line, color and texture of the landscape would remain that way.

5.7 Recreation

The area currently is used for off-highway vehicle (OHV) use, mountain biking, hiking, hunting and target shooting. The quality of these pursuits would be raised if reclamation is completed on the site.

Safety of the site would increase the most under the Proposed Action since the highwall would be entirely eliminated.

The No Action Alternative would result in the area presenting a danger to the public through exposure to highwalls and pits. The highwalls would present a danger of falling rock from the highwall face or from a member of the public falling from above the highwall. The pits would represent a drowning hazard during the rainy season.

5.8 Air Quality & Climate

Air quality would be impacted by the operation during reclamation of the site. Some dust may be generated during blasting, backfilling, grading and seeding. Dust and emissions of hydrocarbons and other byproducts would occur during operating hours. Greenhouse gases would be emitted during operating hours as well. Upon completion of operations, emissions of dust and hydrocarbons would cease. Greenhouse gases emitted as part of the reclamation process would cease as well; however, they would be naturally present in the project area due to human habitation and uses. There could be an overall reduction in emissions in the area once re-vegetation of the site takes place. Growing plants would tend to remove carbon dioxide from the air.

The generation of dust and hydrocarbons could occur under the No Action Alternative if the site is disturbed by off-road vehicles. Hydrocarbons would be generated by the vehicles, and dust would occur since they would tend to break any crust which might have formed on the site since mining ceased. However, it is not likely that there would be a significant increase in either of these. There likely would be no reduction in greenhouse gases since the site would not be re-vegetated.

5.9 Water Quality

Reclamation of the site should lead to an increase in water quality. This is due to the fact that the reclaimed site would be less susceptible to erosion. Slopes would be more stable; land shaping and re-vegetation of the site would reduce the speed of water run-off. This would lead to less sediment loading and less negative impacts on downstream areas.

Water quality would continue to be degraded at its current rate under the No Action Alternative. Slopes would be less stable, and there would be no land shaping and re-vegetation of the site that would reduce the speed of water run-off.

5.10 Noise

There would be a temporary increase in noise levels while the area was being reclaimed. Noise would be generated by heavy equipment moving materials during backfilling and grading. Equipment noise levels predicted to be generated by this project (30 dBA) were compared with an EPA established 55 dBA. This established amount has been determined to protect the public health.

Noise would also be generated during the drilling and blasting process under the Proposed Action. The U. S. Bureau of Mines has developed both damage and annoyance criteria applied to air blasts from mining. The established criteria, determined to protect the public from air blast damage and annoyance is 129 dBA or less. These sources of noise would stop once reclamation was completed.

There would be no increase in noise levels under the No Action Alternative.

6 CUMULATIVE IMPACTS

The action area associated with this project are the lands located east of the Rio Grande, within sec. 19; W1/2, sec. 20; W1/2, sec. 29; and sec. 30, T. 22 S., R. 1 E., NMPM, Dona Ana County, New Mexico. The area contains approximately 1,920 acres of land.

6.1 Private Land

Private land makes up approximately 120 acres of the area. The land is not part of any developed community. Not all of the private land is developed. There are a few homes scattered throughout the private land. The area is not currently exhibiting any signs of growth and is likely to retain its rural character.

6.2 Public Land

Certain actions on public land, such as off-road vehicle use not associated with organized events, and dumping are difficult to control and may contribute to habitat destruction and degradation. These activities would increase as the development of private land in the area increases.

A Public Land Order, PLO 1866, withdraws all of the public land located in NW1/4NW1/4, sec. 29, and N1/2NE1/4, sec. 30, T. 22 S., R. 1 E., NMPM. The withdrawal is in support of the International Boundary and Water Commission. The land may be used to supply materials for the construction of levies. However, this has not happened to date.

Legislation passed in March 2009 established the Prehistoric Trackways National Monument on approximately 5,300 acres. No development of this land is expected to take place.

The Community Pit No. 1 is located on 50 acres in S1/2SE1/4, sec. 19, T. 22 S., R. 1 E., NMPM. Mining for mineral materials from the pit ceased in 2007, and no further mining will take place.

Parts of two grazing leases, mentioned previously, fall within the action area. At present, there is no known reason why these leases would not continue at their present levels into the near future.

No open mining claims exist in the area. No future mining operations for locatable minerals are expected. No other type of mineral development is expected to occur in the area.

7 MITIGATION MEASURES

7.1 Soils

1. Disturbance shall be limited to the smallest area possible in order to reduce soil compaction. Where practical, the permittee shall stay within the previously disturbed areas. When using spoils for a growth medium, they will be tested and soil amendments will be added as required to increase their potential for vegetative success.

2. Erosion control measures will be used to reduce erosion from reclaimed slopes. Measures should include final grading of slopes along contours; leaving rougher slopes in steeper areas; the use of mulch,

jute netting or other materials on slopes after seeding; and the use of hay or rock check dams and diversions.

7.2 Noxious Weeds

1. The contractor shall be responsible for controlling all undesirable invading plant species (including listed noxious weeds and other invasive plants identified as undesirable by Federal, state or local authorities) within the boundaries of their authorization area and Bureau-authorized ancillary facilities (e.g. access and utility corridors), including all operating and reclaimed areas, until re-vegetation activities have been deemed successful and responsibility released by the authorized officer. Control standards and measures proposed must conform to applicable state and Federal regulations.

2. The contractor shall use weed-free seed for reclamation and other organic products for erosion control, stabilization, or re-vegetation (e.g. straw bales, organic mulch) must be certified weed-free.

3. Prior to any application of herbicide on public land, the contractor shall have a current Pesticide Use Permit that outlines application methods, rates, weather constraints and the specific dates of applications. The contractor will coordinate project activities with the BLM Weed Coordinator regarding any proposed herbicide treatment. The contractor will prepare, submit, obtain and maintain a pesticide use proposal (PUP) for the Proposed Action. Weed treatments may include the use of herbicides, and only those herbicides approved for use on public land by the BLM.

4. The contractor is responsible for ensuring that all project related vehicles and equipment arriving at the site (including, but not limited to, drill rigs, dozers, support vehicles, pickups and passenger vehicles, including those of the contractor or subcontractor and invited visitors) do not transport noxious weeds onto the project site. The contractor shall ensure that all such vehicles and equipment that will be traveling off constructed and maintained roads or parking areas within the project area have been power washed, including the undercarriage, since their last off-road use and prior to off-road use on the project. When beginning off-road use on the project, such vehicles and equipment shall not harbor soil, mud or plant parts from another locale. Depending on the site setting such as remoteness, or other site condition, the contractor may be required to have an on-site wash area identified and readily available. If a noxious weed infestation is known or later discovered on the project site, project related vehicles or equipment that have traveled through such an infestation shall be power washed including the undercarriage prior to leaving the site, at an established, identified wash area. Wash water and sediment shall be contained in an adjacent settling basin. Should any vegetation emerge in the wash area or settling basin, it will be promptly identified and appropriately controlled if found to be an undesirable invasive plant.

5. Should undesirable invasive plants become established on developed areas prior to reclamation; appropriate measures will be taken to ensure that the invasive plants are eradicated prior to reclamation earthwork. Should undesirable invasive plants become established on reclaimed areas prior to reclamation seeding; appropriate measures will be taken to ensure that invasive plants are eradicated prior to seeding the site.

7.3 Migratory Birds

1. To prevent undue harm, habitat-altering projects or portions of projects should be scheduled outside bird breeding season. In upland desert habitats and ephemeral washes containing upland species, the season generally occurs between March 15 and July 30.

2. If a project that may alter any breeding habitat has to occur during the breeding season, then a qualified biologist must survey the area for nests prior to commencement of construction activities. This shall include burrowing and ground nesting species in addition to those nesting in vegetation. If any active nests (containing eggs or young) are found, an appropriately-sized buffer area must be avoided until the young birds fledge.

7.4 Air Quality

1. The contractor shall be required to obtain any applicable air quality permit prior to any surface disturbing activities. The permit holder shall carry out any monitoring requirements and pay any fees imposed by the permit. The contractor shall agree to indemnify the United States against any liability arising from the release of dust or other pollutants on the permit area. This agreement applies without regard to whether a release is caused by the holder, its agent or contractor, or unrelated third parties.

7.5 Water Quality

1. Measures shall be taken to control erosion from the site during and after reclamation. Measures will include final grading of slopes along contours; leaving rougher slopes in steeper areas; the use of mulch, jute netting or other materials on slopes after seeding; and the use of hay bale or rock check dams and diversions.

7.6 Noise

1. Reclamation activities, other than blasting, will only take place Monday through Friday from a half-hour after sunrise to a half-hour before sundown.

2. An overall blasting plan will be developed and distributed to residents in the area. Blasting will only take place between the hours of 10 a.m. and 2 p.m., Monday through Friday. Noise from blasting shall not exceed the U. S. Bureau of Mines damage and annoyance criteria applied to air blasts from mining. The established criteria, determined to protect the public from air blast damage and annoyance is 129 dBA or less.

7.7 Vegetation

The site will be seeded with the following seed mix after final grading of the site has taken place.

***Bouteloua gracilis*:** variety Hachita (blue grama grass), 10% purity, 55% germination rate, 3.0 pounds per acre.
***Bouteloua curtipendula*:** variety Niner or Vaughn (sideoats), 10% purity, 50% germination rate, 8.0 pounds per acre.
Sporobolus cryptandrus: (sand dropseed), 10% purity, 50% germination rate, 2.0 pounds per acre.
Baileya multiradiata: (desert marigold), 10% purity, 50% germination rate, 0.25 pounds per acre.
***Sphaeralcea incana*:** (globemallow), 80% purity, 60% germination rate, 1.0 pounds per rate.

Seeding rates are given in pounds per acre and are based on the above percent purity and germination rates. Percent pure live seed (PLS) can be calculated from commercial or custom collected seed by the following formula:

$$\%PLS = \frac{\%\text{ pure seed} \times \%\text{ germination}}{100}$$

If seed conforming to the requirements for purity or germination rate is not readily available, seed not conforming to these requirements may be used provided that the application rate for such seed is increased to compensate for the lower PLS. The seed application rate can be adjusted based on the preceding formula to compensate for germination rate or purity above or below that specified. Seed would be broadcast and mixed into the top 0.5 inch of the substrate by either raking or dragging a chain across the seedbed or other suitable method.

The reclamation plan would outline the timing for seeding, watering needs, and fencing requirements to allow for establishment.

Success of re-vegetation would be judged upon the effectiveness of the vegetation and by comparing quantified vegetative cover, density and number of species of the reclaimed mined land to local areas of naturally occurring vegetation or pre-mining conditions (Baseline).

	BASELINE	PERFORMANCE STANDARD
Cover	100%	75%
Species Richness	5 per 100 Sq. Ft.	3 per 100 Sq. Ft.

8 CONSULTATION AND COORDINATION

8.1 List of Preparers

Edward Seum	Supervisory Multi-Resource Specialist
John Thacker	Natural Resource Specialist
Leticia Lister	Supervisory Rangeland Management Specialist
Steven Torrez	Wildlife Biologist
Jennifer Montoya	Planning & Environmental Coordinator

8.2 Individuals, Organizations, or Agencies Consulted

The EA has been sent to a mailing list of approximately 300 individuals, State, Federal and local governments, Congressional representatives, Indian tribes, and other interested organizations.

8.3 Public Comment

The 30-day public review period for the Community Pit 1 Reclamation EA runs through January 11, 2010. If comments are received that result in changes to the EA, these comments and changes to the document will be summarized in the Decision Record.

9 RECOMMENDATION AND RATIONALE

9.1 Recommendation

Approve the project as proposed in Alternative A, incorporating the appropriate, recommended mitigating measures.

9.2 Rationale

Approval of the project is in conformance with Federal Mineral Material Regulations, the land use plan and current Bureau policy.

FINDING OF NO SIGNIFICANT IMPACT

Based on the analysis of potential environmental impacts contained in the attached EA, I have determined that impacts on the human environment are not expected to be significant and an environmental impact statement is not required.

Reclamation of the site will decrease soil erosion and enhance vegetation and wildlife habitat. Potential increase in weeds will be mitigated. Wildlife species may be killed during the reclamation process but this would be limited to individuals and not populations. During the reclamation process, impacts to air quality through increased dust will be short-term. Noise generated by blasting and heavy equipment (30dBA) will not exceed the threshold established by EPA for human safety (55dBA) and will be subject to mitigation measures.

_____ _____

Assistant District Manager Date