

ENVIRONMENTAL ASSESSMENT

On an Application for an

OPENCUT MINING AMENDMENT

The Montana Department of Environmental Quality (DEQ) prepared this Environmental Assessment (EA) in accordance with requirements of the Montana Environmental Policy Act (MEPA). An EA functions to identify, disclose, and analyze the impacts of a proposed action. This document may disclose impacts that have no legislatively required mitigation measures, or over which there is no regulatory authority.

The state law that regulates gravel mining operations in Montana is the Opencut Mining Act. This law and the rules adopted thereunder place operational guidance and limitations on a project during its lifetime, and provide for the reclamation of land affected by opencut mining operations.

Local governments and other state agencies may have authority over different resources and activities under their regulations. Approval or denial of this Opencut Application will be based on a determination of whether or not the proposed operation complies with the Opencut Mining Act and the rules adopted thereunder. The DEQ approval of this application would not relieve the operator from the obligation to comply with any other applicable federal, state, or county statutes, regulations, or ordinances. The operator is responsible for obtaining any other permits, licenses, approvals, etc. that are required for any part of the proposed operation.

APPLICANT: Town of Lima

COUNTY: Beaverhead

SITE NAME: Lima South #161

DATE: October 2011

LOCATION: Section 5, T 14 S, R 8 W

PROPOSAL: The applicant proposes to assign and amend a long-term gravel pit for the purpose of stockpiling and transporting road maintenance materials. The 8.9 acre site would be assigned from MDT to the Town of Lima, and is located immediately west of the Town of Lima across Interstate 15. This site was originally permitted to MDT for 30 acres, but in June 2010, 21.1 acres were released from liability.

The Town of Lima would be liable to reclaim the site to grazing land by July 2036. This application contains all items required by the Opencut Mining Act and its implementing rules. Proponent commits to properly conducting opencut operations and would be legally bound by the permit.

IMPACTS ON THE PHYSICAL ENVIRONMENT

RESOURCE	POTENTIAL IMPACTS AND MITIGATION MEASURES
1. TOPOGRAPHY, GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE:	<p>The topography surrounding the site consists of flat land with 0 to 4 percent slopes in sagebrush/grassland. The site is located on what appears to be a stream terrace/alluvial fan east of the Tendoy Mountains.</p> <p>The onsite soils consist of loam. The operator will replace 6 inches of soil and 3 inches of overburden.</p> <p>The site receives approximately 11 inches of precipitation per year.</p> <p><i>Impacts:</i> Mining has occurred at this site for over 30 years. An irreversible and irretrievable impact has occurred at this site through the removal of gravel. An impact to the quantity and quality of soils from salvaging and stockpiling has also occurred, but this would not impair the capacity of the soils to support full reclamation. There are no unusual topographic, geologic, soil, or special reclamation considerations that would prevent reclamation success.</p>

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2. WATER QUALITY, QUANTITY AND DISTRIBUTION	<p>There are no wells or surface water located within 1,000 feet of the site. Activities at this site will be limited to stockpiling and transporting materials. Water obtained from the Town of Lima’s municipal supply will be used to control dust at the site when needed.</p> <p><i>Impacts:</i> The proposed activities would have a minimal effect on the quantity and quality of the surface and groundwater resources.</p> <p><i>Cumulative:</i> Cumulative impacts on resources by the proposed action would be negligible.</p>
3. AIR QUALITY	<p>Air quality standards are based upon the Clean Air Act of Montana and pursuant rules and are administered by the DEQ Air Resources Management Bureau (ARMB). Its program is approved by the Environmental Protection Agency (EPA). These rules and standards are designed to be protective of human health and the environment.</p> <p>Air quality permits would be required on the processing equipment before installment. Machinery, such as generators, crushers and asphalt plants, are individually permitted for allowable emissions. Best Available Control Technology (BACT) is the usual standard applied.</p> <p>Fugitive dust is that which blows off the pit floor, stockpiles, gravel roads, farm fields, etc. It is considered to be a nuisance but not harmful to health.</p> <p><i>Impacts:</i> Air quality standards as set by the federal government and enforced by the ARMB would allow minimal detrimental air impacts.</p>
4. VEGETATION COVER, QUANTITY AND QUALITY	<p>There are no known rare or sensitive plants or cover types present in the site area. On-site vegetation was previously removed when the soil was stripped. Vegetation on surrounding undisturbed land consists of sagebrush and pasture grass that provides approximately 75 to 85% cover. The site would be replanted with rangeland plant species.</p> <p><i>Impacts:</i> No long term detrimental impacts to the vegetation would occur.</p>
5. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:	<p>Although the area is used primarily for mining, it likely also supports populations of deer, rodents, song birds, coyotes, foxes, raptors, insects and various other animal species. Population numbers for these species are not known.</p> <p><i>Impacts:</i> The mine has likely temporarily displaced some individual species and it is possible that the site would be re-inhabited following reclamation to similar habitat.</p>
6. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES:	<p>The Montana Natural Heritage Program (MNHP) lists the following six species of concern in the vicinity of the site:</p> <p>Ferruginous hawk (<i>Buteo regalis</i>) is a large bird of prey. Most of Montana is summer range for this raptor. Fall migration begins in August and continues into early September. Young birds will migrate south earlier than, and independent of adults. The habitat of this hawk is described as mixed-grass prairie, shrub-grasslands, grasslands, grass-sagebrush complex, and sagebrush steppe.</p> <p>Black-tailed Jack Rabbit (<i>Lepus californicus</i>) is a medium sized hare with exceptionally long ears and hind legs. The pelage is grayish-brown to grayish-black in coloration, and the black tail is quite distinct. This species is considered non-migratory. The Black-tailed Jack Rabbit is known to occupy a small range</p>

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	<p>of habitats, including open plains, fields, and deserts. They are known to forage on herbaceous vegetation such as grasses and forbs during the spring and summer, but switch to the buds, bark, and leaves of woody plants in the fall and winter.</p> <p>Gray wolf (<i>Canus lupus</i>) is the largest of the wild dogs. In Montana, its range is predominately the western mountainous portion of the state. This species is not migratory but may move seasonally following migrating ungulates within its territory. The gray wolf exhibits no particular habitat preference except for the presence of native ungulates within its territory on a year round basis.</p> <p>Western spotted skunk (<i>Spilogale gracilis</i>) is found throughout the western United States, northern Mexico and southwestern British Columbia. The spotted skunk is smaller than the striped skunk and their habitat is mixed woodlands, open areas, and farmlands. They spray by standing on their forelegs and raising their hindlegs and tail in the air.</p> <p>Idaho sedge (<i>Carex idaho</i>) is a rhizomatous perennial producing small clumps that reach 20-35 cm in height. Idaho sedge inhabits moist alkaline meadows, often along streams and is susceptible to over grazing. It consistently occurs in sub-irrigated soils associated with low-gradient streams or springs and seeps.</p> <p>Letterman's Needlegrass (<i>Stipa lettermanii</i>) is a bunch-forming perennial with mostly glabrous stems which stand 2-6 dm tall. Species of Stipa are recognized by having spikelets with one floret, hardened lemmas, and distinctive strongly twisted, bent awns. Stipa lettermanii is distinguished from other Montana Stipa by having short, glabrous awns and paleas which are hairy and about 2/3 the length of the lemmas. Habitat includes limestone talus and dry fescue grassland in the valley and foothill zones.</p> <p><i>Impacts:</i> None of the listed species have been found on this site. Even if suitable habitat did exist on this site, the disturbance area would be small and large areas of similar or identical habitat surrounds the site. The possible impact to these species would be minimal.</p>
7. HISTORICAL AND ARCHAEOLOGICAL SITES	<p>The Montana State Historic Preservation Office (SHPO) was notified of the application. It reported that no sites have been discovered previously on this property. A pedestrian survey of the area by DEQ personnel did not reveal any artifacts or signs of occupation. No signs were evident at depth in the previously disturbed area. SHPO feels there is a low likelihood cultural properties will be impacted and therefore feel a cultural resource inventory is unwarranted at this time.</p> <p><i>Impacts:</i> If during operations resources were to be discovered, activities would be temporarily moved to another area or halted until SHPO was contacted and the importance of the resources was determined.</p>
8. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY	<p>There are no unusual demands on land, water, air or energy anticipated as a result of this project.</p> <p><i>Impacts:</i> Impacts to land, water, air, or energy would be negligible.</p>

IMPACTS ON THE HUMAN POPULATION	
RESOURCE	POTENTIAL IMPACTS AND MITIGATION MEASURES
9. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS	City/County zoning clearance has been obtained.
10. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING	As seen on the aerial photo of the surrounding area, there are no nearby residences to the north, west, or south. The Town of Lima is located to the east across Interstate 15. <i>Impact:</i> This city pit is being sited in this area because of the location of the resource, and to provide materials for road maintenance projects
11. AESTHETICS	The site has been mined for over 30 years. The surrounding area is made up of sagebrush/grassland used for grazing. The site will mostly be used for stockpiling road maintenance materials. Reclamation would return the area to a visually acceptable landscape. This project is considered to be long-term, i.e., planned to take 25 years to complete.
12. QUANTITY/ DISTRIBUTION OF EMPLOYMENT	Existing employees would mainly be utilized for this operation. There is low potential that this project would create a significant number of new jobs. <i>Impacts:</i> New employment opportunities would be limited.
13. INDUSTRIAL, COMMERCIAL, AGRICULTURAL ACTIVITIES AND PRODUCTION	The acreage listed in the proposal has been taken out of pastureland use. Upon completion of mining, the land would be reclaimed to grazing land. <i>Impacts:</i> The existing disturbance is planned to remain at 8.9 acres.
14. LOCAL, STATE TAX BASE AND TAX REVENUES, PERSONAL AND COMMUNITY INCOME	Local, state and federal governments would be responsible for appraising the property, setting tax rates, collecting taxes, etc., from the companies, employees, or landowners benefitting from this operation. Following reclamation, it is assumed the tax base would revert to pre-mine levels.
15. DEMAND FOR GOVERNMENT SERVICES	Limited oversight by DEQ Opencut Program personnel would be conducted in concert with other area activity when in the vicinity.
16. HUMAN HEALTH AND SAFETY	Any industrial activity will increase the opportunities for accidental injury. There are agencies that require specific safety measures are in place. If followed there is no reason to believe that significant safety issues would be present.
17. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES	This activity would not inhibit the use of the identified resources.
18. NATIVE CULTURAL CONCERNS	<i>Impacts:</i> None identified.

19. Alternatives Considered:

- A.** Denial Alternative: The Department would deny an application that does not comply with the Act and Rules. No impacts to the natural or human environment would occur.
- B.** Approval Alternative: The Department would approve an application that complies with the Act and Rules. Impacts of this application are addressed in the body of the EA.

PRIVATE PROPERTY ASSESSMENT ACT (PPAA) CHECKLIST

DOES THE PROPOSED AGENCY ACTION HAVE TAKINGS IMPLICATIONS UNDER THE PPAA?

YES	NO	
X		1. Does the action pertain to land or water management or environmental regulation affecting private real property or water rights?
	X	2. Does the action result in either a permanent or indefinite physical occupation of private property?
	X	3. Does the action deprive the owner of all economically viable uses of the property?
	X	4. Does the action deny a fundamental attribute of ownership?
	X	5. Does the action require a property owner to dedicate a portion of property or to grant an easement? (If answer is NO, skip questions 5a and 5b and continue with question 6.)
		5a. Is there a reasonable, specific connection between the government requirement and legitimate state interests?
		5b. Is the government requirement roughly proportional to the impact of the proposed use of the property?
	X	6. Does the action have a severe impact on the value of the property?
	X	7. Does the action damage the property by causing some physical disturbance with respect to the property in excess of that sustained by the public generally? (If the answer is NO, skip questions 7a-7c)
		7a. Is the impact of government action direct, peculiar, and significant?
		7b. Has the government action resulted in the property becoming practically inaccessible, waterlogged, or flooded?
		7c. Has the government action diminished property values by more than 30% and necessitated the physical taking of adjacent property or property across a public way from the property in question?

Taking or damaging implications exist if YES is checked in response to question 1 and also to any one or more of the following questions: 2, 3, 4, 6, 7a, 7b, 7c; or if NO is checked in response to questions 5a or 5b.

If taking or damaging implications exist, the agency must comply with § 5 of the Private Property Assessment Act, to include the preparation of a taking or damaging impact assessment. Normally, the preparation of an impact assessment will require consultation with agency legal staff.

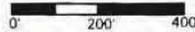
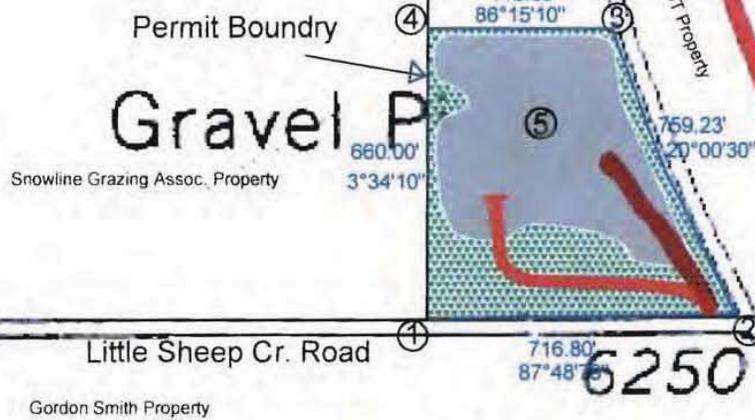
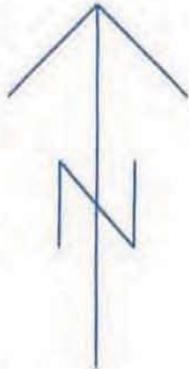
Operator Name: Town of Lima
 Sec. 5, T. 14 S R. 8 W

-  Existing Undisturbed
-  Existing Pit, Crushing, Loading Area
-  Roads (existing)

WGS 84 Latitude/Longitude

- ① -SW corner
44.6384190° N Lat
112.6040221 W Long
- ② -SE Corner
44.6384288° Lat
112.6012699 W Long
- ③ -NE Corner
44.67403609° N Lat
112.6023756 W Long
- ④ -NW Corner
44.6402389° N Lat
112.6039599 W Long
- ⑤ -Center of Pit
44.6397975 N Lat
112.6029140° W Long

Boundary 1-2-3-4-1 is Fenced



Lima South Pit #161

Area Map

DATE 05-05-2011	DWG FILE C:\lima400scale	REV 1 / 1
SCALE 1" = 400'	SHEET 1 / 1	DRAFTER Brennan Jones

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