

ENVIRONMENTAL ASSESSMENT

On an Application for an OPENCUT MINING PERMIT

This Environmental Assessment (EA) is required under 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 hereunder 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.

APPLICANT: LS Jensen Construction & Ready Mix **SITE NAME:** Townsend Pit

LOCATION: Section 19, T8N, R20W **COUNTY:** Ravalli

DATE: February 2010

PROPOSAL: The site is located approximately 1.4 miles north of Victor, Montana, adjacent to and west of Highway 93. The proponent proposes to mine, crush, screen, stockpile and transport 150,000 cubic yards of sand and gravel from a proposed 16.9 acre site for use on an MDT highway project. Once mining is complete, the site would be reclaimed to pastureland with an approximate 8 to 9 acre wildlife pond. An acceptable Plan of Operation would be followed and a reclamation bond of \$61,556.00 would be held on 16.9 acres by the DEQ to ensure that final reclamation is completed to state standards by November 2010.

This application contains all items required by the Opencut Act and 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 proposed site is located at the base of the Bitterroot Mountains and consists of alluvial gravel, sand, silt and clay deposits.</p> <p><i>Impacts:</i> An irreversible and irretrievable removal of gravel from the site would occur. A small impact to the quantity and quality of soils from salvaging, stockpiling, and resoiling activities also would occur, 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 the reclamation from being successful.</p>
2. WATER QUALITY, QUANTITY AND DISTRIBUTION	<p>The site is located approximately 1,900 feet to the west of the Bitterroot river, 200 feet north of an irrigation/drainage ditch and 20 feet east of an irrigation ditch. According to monitoring data which was provided by the Operator, groundwater is located approximately 6 to 8 feet below the ground surface.</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> The proposed gravel pit is a short term project with an expected reclamation date of November 2010 and should have minimal cumulative effects.</p>

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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>Onsite vegetation consists of pasture grasses (mostly wheat grasses); spotted knapweed and sulfur cinquefoil are also located onsite. The site has approximately 80% vegetative cover.</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 pasture, it 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 proposed mine is expected to temporarily displace some individual species and it is likely 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 10 species of concern in the vicinity of this proposed site:</p> <p>Western Toad (<i>Bufo boreas</i>) is a toad covered with small round oval warts on a background color that is usually green or brown; the warts may be a reddish-brown and encircled by dark pigment. The toads habitat consists of low elevation beaver ponds, reservoirs, streams, marshes, lake shores, potholes, and wet meadows to higher elevation ponds, fens, and tarns at or near treeline.</p> <p>Bald eagle (<i>Haliaeetus leucocephalus</i>) is a bird of prey found in North America that is most recognizable as the national bird and symbol of the United States of America. This sea eagle has two known subspecies and forms a species pair with the white-tailed eagle. Its range includes most of Canada and Alaska, all of the contiguous United States, and northern Mexico. It is found near large bodies of open water with an abundant food supply and old-growth trees for nesting.</p> <p>Bobolink (<i>Dolichonyx oryzivorus</i>) is a small new world blackbird and the only member of the genus <i>Dolichonyx</i>. These birds migrate to Argentina, Bolivia and Paraguay. Bobolinks forage near the ground, and mainly eat seeds and insects. They prefer tall prairie grass and other open areas with dense grass, but can also be found in hay fields.</p> <p>Westslope cutthroat trout (<i>Oncorhynchus clarkii lewisi</i>) is one of two subspecies of native cutthroat found in the state. It has been designated</p>

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	<p>as Montana’s state fish. Westslope cutthroat trout require cold water and seek out gravel substrates in riffles and pool crests for spawning habitat.</p> <p>Bull trout (<i>Salvelinus confluentus</i>) is a threatened species of fish that can be found in the Clark Fork and Flathead drainages of western Montana. Sub-adult and adult fluvial bull trout reside in larger streams and rivers and spawn in smaller tributary streams, whereas adfluvial bull trout reside in lakes and spawn in tributaries. Bull trout can grow to lengths of 37 inches and weights of 20+ pounds.</p> <p>Townsend’s big-eared bat (<i>Corynorhinus townsendii</i>) is a bat with very large ears joined at the base, prominent lumps on the nose, absence of large white spots in the pelage and a dorsal pelage that is darker at the tips than the base. The bat lives year-round in Montana. Habitat consists of caves, abandoned mines, abandoned buildings, etc and it feeds on various nocturnal flying insects found near the foliage of trees and shrubs.</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>Northern Alligator Lizard (<i>Elgaria coerulea</i>) has an elongated body with short legs. The lizard is found in western Montana and prefers the grassy, grown-over areas at the margins of woodlands, clearcuts, sagebrush habitats, rocky habitats and streams. Very little is known about this lizard in Montana.</p> <p>Western Skink (<i>Eumeces skiltonianus</i>) is a small lizard with a shiny appearance. The body is covered in smooth, shiny, rounded scales. The lizard is an invertivore. The lizard prefers southwest aspects and sites with gentle rolling to steep terrain with rocky areas containing ponderosa pine and Douglas-fir.</p> <p>A Subterranean Amphipod (<i>Stygobromus montanensis</i>) – little is known.</p> <p><i>Impacts:</i> None of the listed species are likely to be found on this site due to inadequate habitat. 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.</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>

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8. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY	<i>Impacts:</i> Negligible impacts to land, water, air, and energy would occur.

IMPACTS ON THE HUMAN POPULATION	
RESOURCE	POTENTIAL IMPACTS AND MITIGATION MEASURES
9. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS	The site is currently not zoned.
10. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING	As seen on the aerial photo of the surrounding area, the site is located in a relatively urban location, with very few homes located within ½ mile of the site. A lumber mill adjoins the north side of the site. <i>Impact:</i> This commercial pit being sited in this area because of the location of the resource, and to provide a gravel source for an MDT highway construction job.
11. AESTHETICS	The site is located in a relatively rural setting. The Operator is proposing to run the crusher and necessary auxiliary equipment from 7 am until 7 pm, Monday through Sunday. The proposed crushing operation would occur through March 2010. The highway construction portion of the project proposes hours from 7 am to 7 pm Monday through Friday. The Operator has proposed soil berms on the north, west and east borders to dampen noise resulting from the operation. The Operator proposed to set the crusher approximately 4 feet below the existing ground surface and encompass it with 5 foot high berms in order to minimize noise.
12. QUANTITY/ DISTRIBUTION OF EMPLOYMENT	<i>Impacts:</i> New employment opportunities would be limited. The company will likely use existing employees. This is a relatively short term operation.
13. INDUSTRIAL, COMMERCIAL, AGRICULTURAL ACTIVITIES AND PRODUCTION	<i>Impacts:</i> The site's agricultural production loss would be minimal as it has not been used for grazing in the last few years. It appears that the adjacent lumber mill has been using portions of the site for storage of materials.
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 officials that are generally conducted in concert with other area activity would occur.
16. HUMAN HEALTH AND SAFETY	Any industrial activity will increase the opportunities for accidental injury. Other government agencies (e.g. MSHA, OSHA) require specific safety measures. As a result, there is no reason to believe that significant safety issues would be present.

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.



LS Jensen Construction & Ready Mix
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 S19, T08N, R20W
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 Scale: 1" = 200'

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