

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: Riverside Contracting, Inc

SITE NAME: DK Jan Site

LOCATION: Section 26, T4N, R10W

COUNTY: Deer Lodge

DATE: March 2010

PROPOSAL: The site is located approximately 7.4 miles southeast of Anaconda Montana and 600 feet north of 2nd Avenue South. The proponent proposes to mine, crush, screen, stockpile and transport 50,000 cubic yards of gravel from a proposed 15.9 acre site for use on a state road construction project. The applicant proposes to mine to a depth of 12 feet. The site would have an asphalt plant onsite to produce asphalt paving for the project. The site is proposed to be located within the Anaconda Superfund boundary approximately 200 feet west of Silver Bow Creek. The applicant proposes to keep mining activities a minimum of 3 feet above the high groundwater table.

Per U.S. Environmental Protection Agency (EPA) requirements, the applicant would strip and stockpile the top 12 inches of soil (growth media) from the entire permitted site. EPA has determined that the stripping and stockpiling process would effectively mix the soil and thereby mitigate metal concentrations present in the uppermost 3 - 4 inches of soil. During subsequent reclamation activities, the applicant would reapply the 12 inches of soil to the entire site, leaving the site with soil containing concentrations of metals below the residential level of 250 ppm for arsenic, lead, copper and other metals, and thereby meeting EPA Superfund cleanup requirements.

Once the soil has been reapplied, the site would be reclaimed back to grassland with 3:1 or flatter slopes. DEQ would hold sufficient bond on the 15.9 acres to ensure that final reclamation is completed by June 2012, in accordance with the approved Plan of Operation.

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:	This site is proposed to be located in the EPA superfund site, consisting of poor grasslands overlying alluvial gravel, sand, silt and clay deposits. The proposed site slopes to the east, towards Silver Bow creek.

IMPACTS ON THE PHYSICAL ENVIRONMENT	
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	<p>The soils are approximately 12 inches deep, with up to 6 inches of overburden underlying the soil. The average annual precipitation is approximately 14 inches.</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 would occur, but this would not impair the capacity of the soils to support full reclamation. In fact, mixing of the soil during stripping, stockpiling, and reapplication would mitigate metals concentrations that currently hinder the growth of vegetation.</p> <p>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>Groundwater is located approximately 16 to 20 feet below the ground surface. Silver Bow Creek is located approximately 200 feet east of the proposed site. The applicant has stated that the site will be graded to drain towards the proposed pit and if necessary, standard best management practices (BMP's) would be implemented to control runoff and sedimentation.</p> <p>A double-walled fuel tank would be utilized in the facility area. The applicant has stated that all solvents, waste, etc. would be handled according to state requirements and disposed of offsite at an approved disposal facility. The hot mix asphalt plant would be managed to protect the groundwater and soils, as described in the proposed Spill Prevention and Control Plan.</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 project is located to the west of several existing gravel mining operations. It is likely that cumulative impacts will occur, but unlikely that they will be significant.</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>

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	<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>Site vegetation is sparse with vegetation consisting mostly of weeds due to the upper few inches of soil having metal contamination with a relatively high pH. The site mainly consists of weeds, including but not limited to, spotted knapweed, thistle, kochia and a few grasses.</p> <p><i>Impacts:</i> No long term detrimental impacts to the vegetation would occur. In fact, it is anticipated that with the mixing of the soil, productivity of the site may be enhanced.</p>
5. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:	<p>The site currently supports very little wildlife due to its relatively sparse vegetation. However, it is likely small populations of deer, rodents, song birds, coyotes, foxes, raptors, insects and various other animal species may occasionally visit the site. Population numbers for these species are not known.</p> <p><i>Impacts:</i> The proposed mine may temporarily displace some individual animals; it is likely that the site would provide improved habitat after it has been reclaimed.</p>
6. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES:	<p>The Montana Natural Heritage Program (MNHP) lists the following three species of concern in the vicinity of the site:</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>Wolverine (<i>Gulo gulo</i>) is a bear-like mustelid with massive limbs and long, dense, dark brown pelage, paler on the head, with two broad yellowish stripes extending from the shoulders and joining on the rump. Wolverines are limited to alpine tundra, and boreal and mountain forests in the western mountains. They feed on a variety of roots, berries, small mammals, birds' eggs and young, fledglings, and fish. They may attack moose, caribou, and deer hampered by deep snow.</p> <p>Canada Lynx (<i>Lynx Canadensis</i>) is a medium sized cat with silver-gray to grayish-brown upperparts and a white belly and throat. Lynx have long legs and a relatively short, compact body. Lynx inhabit subalpine forests and avoid large openings, but often hunt along edges in areas of dense cover. The Lynx's primary food consists of the snowshoe hare, although they also diet on squirrels and other small mammals.</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>

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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 or near this property. A pedestrian survey of the area by DEQ personnel did not reveal any artifacts or signs of occupation.</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><i>Impacts:</i> Negligible impacts to land, water air, or energy would occur.</p>

IMPACTS ON THE HUMAN POPULATION	
RESOURCE	POTENTIAL IMPACTS AND MITIGATION MEASURES
9. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS	<p>The area is not zoned, but does require a Major Development Permit under the Anaconda-Deer Lodge County (ADLC) Development Permit System (DPS). The applicant has received its development permit for this proposed site.</p>
10. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING	<p>As seen on the aerial photo of the surrounding area, the site is located in a relatively urban/commercial environment near existing gravel pit operations.</p> <p><i>Impact:</i> This commercial pit is being sited in this area because of the location of the resource, and to service a specific project that has been awarded to the Operator.</p>
11. AESTHETICS	<p>There are no nearby residents or need for aesthetic berms. The proposed hours of operation are adequate for this site. Due to the existing poor soil conditions, it is likely that the site would be improved aesthetically after reclamation is complete.</p>
12. QUANTITY/ DISTRIBUTION OF EMPLOYMENT	<p><i>Impacts:</i> New employment opportunities would likely be limited due to the relatively short length this pit is proposed to operate. This is a relatively small operation.</p>
13. INDUSTRIAL, COMMERCIAL, AGRICULTURAL ACTIVITIES AND PRODUCTION	<p><i>Impacts:</i> Very little agricultural production currently exists at this site due to the existing concentrations of metals in soil. It is likely that the productivity of this site would be improved once reclamation is completed.</p>
14. LOCAL, STATE TAX BASE AND TAX REVENUES, PERSONAL AND COMMUNITY INCOME	<p>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.</p>

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.

RIVERSIDE CONTRACTING, INC
SITE MAP
DK JAN SITE
JANUARY 2010



SEC. 26, T4N, R10W
DEER LODGE COUNTY
LANDOWNER:
DENG KUI JAN