

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

SITE NAME: St. John

LOCATION: Section 32, T5N R34E

COUNTY: Yellowstone

DATE: January 2010

PROPOSAL: Riverside Contracting proposes to mine and crush 100,000 yards of sand and gravel from a 26.7-acre site that was reclaimed about 8 years ago by Empire Sand and Gravel. An asphalt plant would also be moved in when necessary. The access road was left by Empire as a public access to the adjacent MDT Maintenance yard.

The site would be reclaimed to grassland by 2015. A reclamation bond of \$125,473 would be held by DEQ to ensure final reclamation.

IMPACTS ON THE PHYSICAL ENVIRONMENT	
RESOURCE	POTENTIAL IMPACTS AND MITIGATION MEASURES
1. TOPOGRAPHY, GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE:	<p>The site is at the edge of the high bench about 200 feet above the Big Horn River. It is part of a large alluvial deposit.</p> <p>Soil is a rocky loam about a foot deep. It was previously salvaged and replaced by Empire Sand and Gravel. Empire's previous reclamation had established very well.</p> <p>Precipitation in the area is about 15 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 also would occur, but this would not impair the capacity of the soils to support full reclamation.</p> <p>There are no unusual topographic, geologic, soil, or special reclamation considerations that would lead to reclamation failure.</p>
2. WATER QUALITY, QUANTITY AND DISTRIBUTION	<p>There are no water features on site. The Big Horn and Yellowstone Rivers are about a half mile to the east and a mile to north respectively. The Victory Irrigation Ditch flows at the foot of the bench.</p> <p>There are no wells nearby.</p>

IMPACTS ON THE PHYSICAL ENVIRONMENT	
RESOURCE	POTENTIAL IMPACTS AND MITIGATION MEASURES
	<p>A maximum of 50,000 gallons of process water would be hauled daily from a landowner source.</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>
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>The site was reclaimed about 8 years ago with a seed mix of wheatgrasses. Reclamation was very successful.</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 5 species of concern in the vicinity of the site. Two are aquatic and reside in the Yellowstone River. The bald eagle and the burrowing owl both might utilize this site. The bald eagle nests along the Yellowstone and its hunting range would encompass this area. The burrowing owl uses old burrows originally dug by ground squirrels or badgers, etc. Since this site was mined about 10 years ago if these animals had occupied the site, they were displaced and no evidence exists that they have returned. There is no evidence that burrowing owls inhabit this site.</p> <p>The Bush Morning Glory has not been seen on this site. The Montana sitings are in this vicinity along the Yellowstone and Big Horn Rivers. Since this site was previously mined it is highly unlikely that it provides secure habitat for this morning glory.</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>

IMPACTS ON THE PHYSICAL ENVIRONMENT	
RESOURCE	POTENTIAL IMPACTS AND MITIGATION MEASURES
7. HISTORICAL AND ARCHAEOLOGICAL SITES	<p>The Montana State Historic Preservation Office (SHPO) was notified of the application. It reported 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>
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	
10. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING	<p>No homes are nearby this site.</p> <p><i>Impact:</i> This commercial pit is being sited in this area because of the location of the resource, and to service the growing population in this area of the county.</p>
11. AESTHETICS	<p>This site has no homes nearby. It is immediately adjacent to the interstate. There is no reason for any special aesthetic mitigation.</p>
12. QUANTITY/ DISTRIBUTION OF EMPLOYMENT	<p><i>Impacts:</i> New employment opportunities would be limited. Most of the employees permanently work for Riverside at different locations. This is a relatively small operation.</p>
13. INDUSTRIAL, COMMERCIAL, AGRICULTURAL ACTIVITIES AND PRODUCTION	<p>Range pasture would be limited on this site until reclamation was reestablished.</p> <p><i>Impacts:</i> Agricultural production would be reduced on the site for the life of the permit.</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>
15. DEMAND FOR GOVERNMENT SERVICES	<p>Inspections by DEQ officials are generally conducted in concert with other area activity.</p>
16. HUMAN HEALTH AND SAFETY	<p>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.</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.