

## ENVIRONMENTAL ASSESSMENT

On an Application for an

### OPENCUT MINING PERMIT

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:** Riverside Contracting, Inc.

**COUNTY:** Blaine

**SITE NAME:** Baltrusch

**DATE:** August 2010

**LOCATION:** Section 14 and 15, T32N, R18 E

**PROPOSAL:** Riverside Contracting proposes to mine and crush 230,000 yards of gravel for an MDT road reconstruction project from a 57-acre mine site 4 miles south of Highway 2 and east of Logie Road. A pug mill and asphalt plant would also be used. The mine area would be 39 acres on 2 different landowners' property. The facilities area is located on the eastern, Ortner property. Both landowners request the improved road be left for ranch access, and 20,000 yards of crushed material be left for each landowners use or sale.

A reclamation bond would be held by DEQ to ensure that final reclamation of the site to rangeland and landowner stockpile areas. Reclamation would be completed by November 2013. 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.

<b>IMPACTS ON THE PHYSICAL ENVIRONMENT</b>	
<b>RESOURCE</b>	<b>POTENTIAL IMPACTS AND MITIGATION MEASURES</b>
<b>1. TOPOGRAPHY, GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE:</b>	<p>The site lies on the north-facing side slope of a small ridge. The overall elevation drop is between 60 and 100 feet. The depth of mining would be 15 feet.</p> <p>The area was glaciated. The rock fraction of the gravels is from the glacial till. Gravel underlies the entire site. The soils and overburden seem to be derived from alluvium that travelled down ridge slopes. Overburden depths vary considerably from 1 foot to 8 feet deep. The topsoils are clay loams or loams of the Vida and Hedoe series.</p> <p>Due to the northward land slope, the depth to groundwater decreases to the north. Mining would be up to 15 feet deep. Mining would come within 1 foot of</p>

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	<p>the groundwater along the north end of the permit area. A total of forty-two inches of overburden and topsoil would be replaced. This would raise the reclaimed land level to at least 4 feet above the high groundwater level along the north side of the site (i.e. the lowest area topographically). During mining and after reclamation, topography would be dish-shaped with no external drainage, so the site would collect precipitation. Average annual precipitation is 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. There are no unusual topographic, geologic, soil, or special reclamation considerations that would prevent reclamation success. Vegetative growth should be very good.</p>
<b>2. WATER QUALITY, QUANTITY AND DISTRIBUTION</b>	<p>Two stockponds and a connecting swale lie along the northern site boundary. This has been a very wet season. At the time of the site inspection in the beginning of August 2010, the ponds were between 10 and 20 feet below the site's north boundary elevation. According to the test pit data, several holes stopped in clay. Two pits, neither one near the lower end of the site, ended in water at 13 feet and 6 feet. Since neighboring holes were dry, it could be that those holes collected rain water or runoff.</p> <p>No wells are near the site. Riverside would pump process water from the stock pond. Mining would stay above the water table. By replacing 42 inches of topsoil and overburden, the bottom of the reclaimed pit would be at least 3 feet above the water table.</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>
<b>3. AIR QUALITY</b>	<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>
<b>4. VEGETATION COVER, QUANTITY AND QUALITY</b>	<p>The site has native range including range grasses, forbs and some sagebrush.</p> <p><i>Impacts:</i> No long term detrimental impacts to the vegetation would occur.</p>
<b>5. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:</b>	<p>Although the area is used primarily for pasture, it also supports populations of This is typical northern range habitat supporting mule deer, antelope, upland game birds, coyotes, rabbits, etc. The ponds do not provide a fishery but do support occasional waterfowl. Population numbers for these species are not known.</p>

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	<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.
<b>6. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES:</b>	<p>The Montana Natural Heritage Program (MNHP) has no listing of species of concern in the vicinity of the site.</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>
<b>7. HISTORICAL AND ARCHAEOLOGICAL SITES</b>	<p>The Montana State Historic Preservation Office (SHPO) was notified of the application. It reported no cultural 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 test hole debris or 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>
<b>8. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY</b>	<i>Impacts:</i> Negligible impacts to land, water, air, or energy would occur.

<b>IMPACTS ON THE HUMAN POPULATION</b>	
<b>RESOURCE</b>	<b>POTENTIAL IMPACTS AND MITIGATION MEASURES</b>
<b>9. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS</b>	The area is not zoned. No subdivision or other development plans are in the area.
<b>10. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING</b>	No persons reside in the area. Only a few homes are along the 4 miles of Logie Road.
<b>11. AESTHETICS</b>	There is no need for special aesthetic mitigation or restricted hours of operation.
<b>12. QUANTITY/ DISTRIBUTION OF EMPLOYMENT</b>	<i>Impacts:</i> New employment opportunities would be limited and temporary. Employees would be temporary and transferred from other locations for the duration of the job.
<b>13. INDUSTRIAL, COMMERCIAL, AGRICULTURAL ACTIVITIES AND PRODUCTION</b>	<i>Impacts:</i> The acreage listed in the Proposal would be taken out of agricultural/pastureland use and put into industrial/commercial use. Upon completion of mining, the land would be reclaimed back to pastureland.
<b>14. LOCAL, STATE TAX BASE AND TAX REVENUES, PERSONAL AND COMMUNITY INCOME</b>	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

IMPACTS ON THE HUMAN POPULATION	
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<b>15. DEMAND FOR GOVERNMENT SERVICES</b>	Limited oversight by DEQ Opencut Program personnel would be conducted in concert with other area activity when in the vicinity.
<b>16. HUMAN HEALTH AND SAFETY</b>	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.
<b>17. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES</b>	This activity would not inhibit the use of the identified resources.
<b>18. NATIVE CULTURAL CONCERNS</b>	<i>Impacts:</i> Although Native Americans have traversed this region for generations and it is located between the Fort Peck and Rocky Boy reservations about 20 miles from the Bear paw Mountains, this is a nondescript small draw with

**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.

**20. Public Involvement, Agencies, Groups or Individuals contacted:** Montana State Historic Preservation Office, Montana Natural Heritage Program.

**21. Other Governmental Agencies which May Have Overlapping or Sole Jurisdiction include, but may not be limited to:** Blaine County Commission (zoning), Blaine County Weed Control Board, MSHA and OSHA (worker safety), DEQ ARMB (air quality) and Water Protection Bureau (groundwater and surface water discharge; stormwater), DNRC (water rights), and MDT (road access).

**22. Regulatory Impact on Private Property:** The analysis done in response to the Private Property Assessment Act indicates no impact. The Department does not plan to deny the application or impose conditions that would restrict the use of private property so as to constitute a taking.

**23. Magnitude and Significance of Potential Impacts:** This proposal is not likely to create impacts of significance due to mitigation, restrictions, and oversight mandated by the Opencut Mining Act and pursuant rules and the Montana Clean Air Act.

**24. Recommendation for Further Environmental Analysis:**  EIS  No Further Analysis

EA Prepared By: Jo Stephen Opencut Mining Program Environmental Specialist  
Name Title

EA Reviewed By: Chris Cronin Opencut Mining Program Supervisor

## 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.