

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: Revier, John

COUNTY: Sanders

SITE NAME: Burgess

DATE: June 2010

LOCATION: Section 25, T20 N, R26 W

PROPOSAL: The proponent has submitted an application to conduct opencut mining operations for sand and gravel on 7.4 acres of land that has witnessed significant gravel extraction but was previously utilized for livestock grazing and wildlife habitat. The operation is located one mile northeast of Plains off of Highway 28. If approved, the permit application would allow continued mining of approx. 10,000 cubic yards of sand and gravel annually, although that could be modified as demand dictates. A screen is currently the only processing machinery anticipated for use at this site. Dozers, loaders and trucks would be in use when the site is active.

As part of the permit application, the proponent has submitted a Plan of Operation that provides baseline information, operation plans, and plans for reclamation that would return the affected lands to a post-mine use of grazing. A reclamation bond would be held by DEQ to ensure that final reclamation to that use by 2015. The 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>This site is located on a very steep hillside that is a remnant of the catastrophic draining of glacial Lake Missoula. These glacial, fluvial deposits are very deep and at this location soils on the ridges are relatively shallow; 4-6 inches of rocky, sandy loam but deeper in the ravines. There do not appear to be any stability or erosion issues.</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. However, the original, unpermitted operator did</p>

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	not salvage all available soils and consequently, the resoiling will not result in the same depths as existed pre-mining. Because this will be a long 3:1 slope, the operator will mulch with straw to facilitate revegetation and reduce erosion.
2. WATER QUALITY, QUANTITY AND DISTRIBUTION	<p>An ephemeral drainage runs along the north edge of the site and would cross a portion of the permitted and mined area. Boyer Creek, a perennial stream runs north and south on the other side of highway 28 to the east.</p> <p><i>Impacts:</i> The proposed activities would have a minimal effect on the quantity and quality of the surface and groundwater resources. The pit floor will be at its current level and knick points will not be created. Sediment control will be implemented by use of silt fence and/or berms near the mine entrance.</p> <p><i>Cumulative:</i> Drainage and sedimentation from this and other nearby operations will create minimal cumulative impacts; the highway separates the mining from the creek and the very porous material reduces the potential for any off-site flow.</p>
3. AIR QUALITY	<p>Air quality standards are based upon the Clean Air Act of Montana and pursuant rules administered by the DEQ Air Resources Management Bureau (ARMB). Their program(s) is/are 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 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 and state law, administered and enforced by the ARMB would allow minimal detrimental air impacts. Watering of the hard stand area and screen will be implemented if the conditions so warrant.</p>
4. VEGETATION COVER, QUANTITY AND QUALITY	<p>This previously disturbed area of Big Arm gravelly loam would normally support stands of Idaho fescue, needle and threadgrass, thickspike wheatgrass and possibly bitterbrush.</p> <p><i>Impacts:</i> No long term detrimental impacts to the vegetation would occur. The site will be revegetated upon completion of mining.</p>
5. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:	<p>Although the area is used primarily for grazing, it also supports populations of deer, coyotes, rodents and nongame birds. 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 Slender Hareleaf as a species of concern in the vicinity of the site:</p> <p><i>Impacts:</i> The listed species has not been found on this site. Even if suitable habitat did exist on this site, the disturbance area would be small and large areas</p>

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	of similar or identical habitat surrounds the site. The possible impact to these species would be minimal. This species tends to inhabit dry areas in the valley areas rather than the steep hillsides of this site.
7. HISTORICAL AND ARCHAEOLOGICAL SITES	The Montana State Historic Preservation Office (SHPO) was notified of the application. Their report indicated that no sites have previously been discovered 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. <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.
8. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY	<i>Impacts:</i> Negligible impacts to land, water, air or energy would occur. Fuels are always consumed at this type of operation, but would not be greater than if it was located elsewhere.

IMPACTS ON THE HUMAN POPULATION	
RESOURCE	POTENTIAL IMPACTS AND MITIGATION MEASURES
9. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS	This area is not zoned.
10. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING	Over time, residential building has occurred on the ridges above this site and there are ranch properties to the east and on the other side of the highway. <i>Impact:</i> This commercial pit is sited in this area because of the location of the resource, and to service the growing population in this area of the county as well as provide materials for local and state government use.
11. AESTHETICS	Those nearby residents and passersby would experience some visual degradation and auditory impacts. Hours of operation are generally limited to 7am-7pm Monday – Friday although they could be infrequently extended for a specific project. Upon reclamation the site will be reclaimed to a visually acceptable landscape.
12. QUANTITY/ DISTRIBUTION OF EMPLOYMENT	<i>Impacts:</i> There will not be new employment as a result of this operation.
13. INDUSTRIAL, COMMERCIAL, AGRICULTURAL ACTIVITIES AND PRODUCTION	<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.
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

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15. DEMAND FOR GOVERNMENT SERVICES	Limited oversight by Opencut Program personnel would be conducted when in the vicinity to conduct compliance inspections and for permit or amendment applications.
16. HUMAN HEALTH AND SAFETY	Any industrial activity will increase the opportunities for accidental injury. There are agencies that require specific safety measures are put in place. If followed there is no reason to believe that significant safety issues would exist.
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.

20. Public Involvement, Agencies, Groups or Individuals contacted: Montana State Historic Preservation Office, Montana Natural Heritage Program. Sanders County: planning department and weed board.

21. Other Governmental Agencies which May Have Overlapping or Sole Jurisdiction include, but may not be limited to: Sanders County Commission or County Planning Department (zoning), Sanders 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

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Name Title

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Name Title

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.