

ENVIRONMENTAL ASSESSMENT

On an Application for an

OPENCUT MINING PERMIT AMENDMENT

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 provides 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 hereunder.

Applicant: Sanders County, District #2

SITE NAME: Camas Prairie

LOCATION: Section 12, T20N, R24W

COUNTY: Sanders

DATE: July 2011

PROPOSAL: The proponent has submitted an application to amend their existing Opencut mining operations for sand and gravel to increase the acreage from 10.0 acres to 39.6 acres of grazing land. The site is adjacent to Big Gulch Road, and located between Hot Springs and Perma. (See [FIGURE 1 – AREA MAP](#)). The application would grant a permit on land already mined for the sole purpose of reclaiming the site. The site would be reclaimed to rangeland/pasture and all work would be finished by November 2014.

As part of the permit amendment application, the proponent has submitted a Plan of Operation that provides baseline information, operation plans, and plans for reclamation that would replace soils, plant grasses and return the affected lands to a post-mine land use of rangeland/pasture. Reclamation is required by the Opencut Mining Act and the operator must comply with that statute and the rules and regulations promulgated under it.

IMPACTS ON THE PHYSICAL ENVIRONMENT	
RESOURCE	POTENTIAL IMPACTS AND MITIGATION MEASURES
1. TOPOGRAPHY, GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE:	<p>This site is a gently sloping basin located in glaciated terrain adjacent to Highway 387 in an intermontane valley between the Salish and Bitterroot Mountain Ranges, between Hot Springs and Perma (See FIGURE 2 – SITE MAP). The material is Quaternary alluvium deposited by glacial activity and influenced by fluvial episodes of flooding from Glacial Lake Missoula. The gravel deposit was formed into giant ripple marks as ancient floods washed over Markle Pass several miles north. Soils generally average 9 inches deep and overburden ranges from zero to 36 inches deep.</p> <p><i>Impacts:</i> Mining this area has resulted in irreversible and irretrievable removal of aggregate material from the site and has permanently altered a small portion of a unique topographic land feature. These giant ripple marks were designated as National Natural Landmarks by the National Park Service in 1966. Mining has impacted the quantity</p>

IMPACTS ON THE PHYSICAL ENVIRONMENT	
RESOURCE	POTENTIAL IMPACTS AND MITIGATION MEASURES
	and quality of soils from salvaging, stockpiling, and re-soiling activities, but this would not impair the capacity of the soils to support some level of reclamation. There are no unusual topographic, geologic, soils or special reclamation considerations that would lead to reclamation failure.
2. WATER QUALITY, QUANTITY AND DISTRIBUTION	The nearest surface water is a small intermittent tributary to Camas Creek about a half-mile northwest of the site. Significant vegetation and undisturbed land between the two preclude the potential for runoff into that water body. No fuel will be stored and no recycled materials will be stockpiled or processed at this site. Groundwater is greater than 87 feet from the surface and will not be impacted by this activity.
3. AIR QUALITY	<p>Air quality in this area is generally very good with very little industrial activity. Wood smoke and dust from vehicular traffic on local gravel roads are usually the only pollutants observed. Fugitive dust that blows off the pit floor, stockpiles, gravel roads, etc. could be present at times. It is considered to be a nuisance but not harmful to health and would be controlled by watering during periods of activity.</p> <p><i>Impacts:</i> Air quality standards as set by the federal government and enforced by the Air Resources Management Bureau of the DEQ would allow minimal detrimental air impacts.</p>
4. VEGETATION COVER, QUANTITY AND QUALITY	The general area on this gently sloping basin terrace is grassland. During soil stripping operations, much of the vegetation was removed. Some vegetative seed remains viable in the soil and could assist in regeneration of those species when soils are replaced. The applicant will re-seed the area to species compatible with the post-mine land use of grassland.
5. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:	<p>Since the site is primarily grassland, it 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 has temporarily displaced some individual species and it is likely that the site would be re-inhabited following reclamation to grassland.</p>
6. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES:	<p>The Montana Natural Heritage Program has indicated that species of special concern are located in this area including the Grasshopper sparrow. Additionally, vascular plant species including the Slender Hareleaf, Dwarf woolly-heads and Columbia Onion are found in this area. The bluebunch wheatgrass/oval-leaved buckwheat (<i>Pseudoroegneria spicata</i>/<i>Eriogonum ovalifolium</i>) community type occurs on the ridgetops of these ripples while the swale areas are a mix of native and exotic grasses and forbs.</p> <p><i>Impacts:</i> These species have not been found on this site. Since mining was conducted prior to the operator applying for this permit amendment, no opportunity was provided to observe the presence of these species or their habitats. Even if suitable habitat did exist at this specific location, the mining disturbance area is relatively small, and large areas of similar or identical habitat surround the site. Therefore,</p>

IMPACTS ON THE PHYSICAL ENVIRONMENT	
RESOURCE	POTENTIAL IMPACTS AND MITIGATION MEASURES
	the impact to these species was likely minimal.
7. HISTORICAL AND ARCHAEOLOGICAL SITES	The Montana State Historic Preservation Office (SHPO) has not identified any sites that have been previously discovered on this property. A walkover of the area by DEQ personnel did not reveal any artifacts or signs of occupation in places where mining had not already disturbed the site. No signs were evident at depth in the previously disturbed area. <i>Impacts:</i> Impacts, if there were any, have already occurred.
8. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY	Energy in the form of diesel fuel for dozers, loaders and trucks would be consumed while this site is reclaimed. Water in minimal amounts will be utilized as necessary for dust control.

IMPACTS ON THE HUMAN POPULATION	
RESOURCE	POTENTIAL IMPACTS AND MITIGATION MEASURES
9. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS	This area is not zoned and the site complies with Sanders County's zoning regulations. A Zoning Form was signed by a Sanders County Commissioner on June 22, 2011. Conservation Easements exist in this area and adjacent to the site.
10. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING	None of these resources will be affected.
11. AESTHETICS	This site is highly visible from Big Gulch Road and slightly visible from Montana Highway 382. Some residences and businesses in the area are visually exposed as well. Other than trucks entering and leaving the site, little activity will be noticeable to the general public as this site is reclaimed. No crushing or other processing facilities will be used, which will further eliminate odors and noise. Hours of operation will be 8:00 a.m. to 5:00 p.m., Monday through Friday. Conformance to the reclamation plan will ensure that the site will become visually acceptable. <i>Impacts:</i> There would be reclamation activity at this site during normal work hours in the summer, which could be noticeable to some. These impacts would be minimal.
12. QUANTITY/ DISTRIBUTION OF EMPLOYMENT	<i>Impacts:</i> No impact on employment; the same crews will be utilized for all operations.
13. INDUSTRIAL, COMMERCIAL, AGRICULTURAL ACTIVITIES AND PRODUCTION	Over the past few decades, this has become an industrial site with periods of stripping, mining, crushing and hauling during the summers. The County has not used the site in the past 10 years and will be reclaiming and closing it out. <i>Impacts:</i> This site would be taken out of grazing production during the project and would be returned to productive grassland within several years of project completion.
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.

IMPACTS ON THE HUMAN POPULATION	
RESOURCE	POTENTIAL IMPACTS AND MITIGATION MEASURES
15. DEMAND FOR GOVERNMENT SERVICES	Minimal oversight from DEQ, MDT, MSHA, and OSHA.
16. HUMAN HEALTH AND SAFETY	Industrial activities are inherently more dangerous than non-use of an area. The OSHA and MSHA regulations provide specific regulation and oversight to ensure safety is paramount.
17. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES	This site is not used as primary access to any recreational or wilderness resources.

18. 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. Proposed Action Alternative: Approval of the application with mitigating conditions. The Plan of Operation has been written with mitigating conditions including hours of operation, water protection, soil salvage and full reclamation.

19. Public Involvement, Agencies, Groups or Individuals contacted: Montana State Historic Preservation Office, Montana Natural Heritage Program, local planning department and Sanders County Weed District.

20. Other Governmental Agencies which May Have Overlapping or Sole Jurisdiction: Required: Sanders County Planning Department (zoning clearance), Sanders County Weed Control Board, MSHA and OSHA regarding mine safety.

21. 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.

22. Magnitude and Significance of Potential Impacts: Insignificant as proposed because of restrictions and oversight mandated by the Openpit Mining Act and the Montana Air Quality Act.

23. Recommendation for Further Environmental Analysis: EIS No Further Analysis

EA Prepared By: Rod Samdahl Opencut Mining Program Environmental Specialist
Name Title

EA Reviewed By: JJ Conner Opencut Mining Program Unit Coordinator
Name Title

FIGURE 1 – AREA MAP

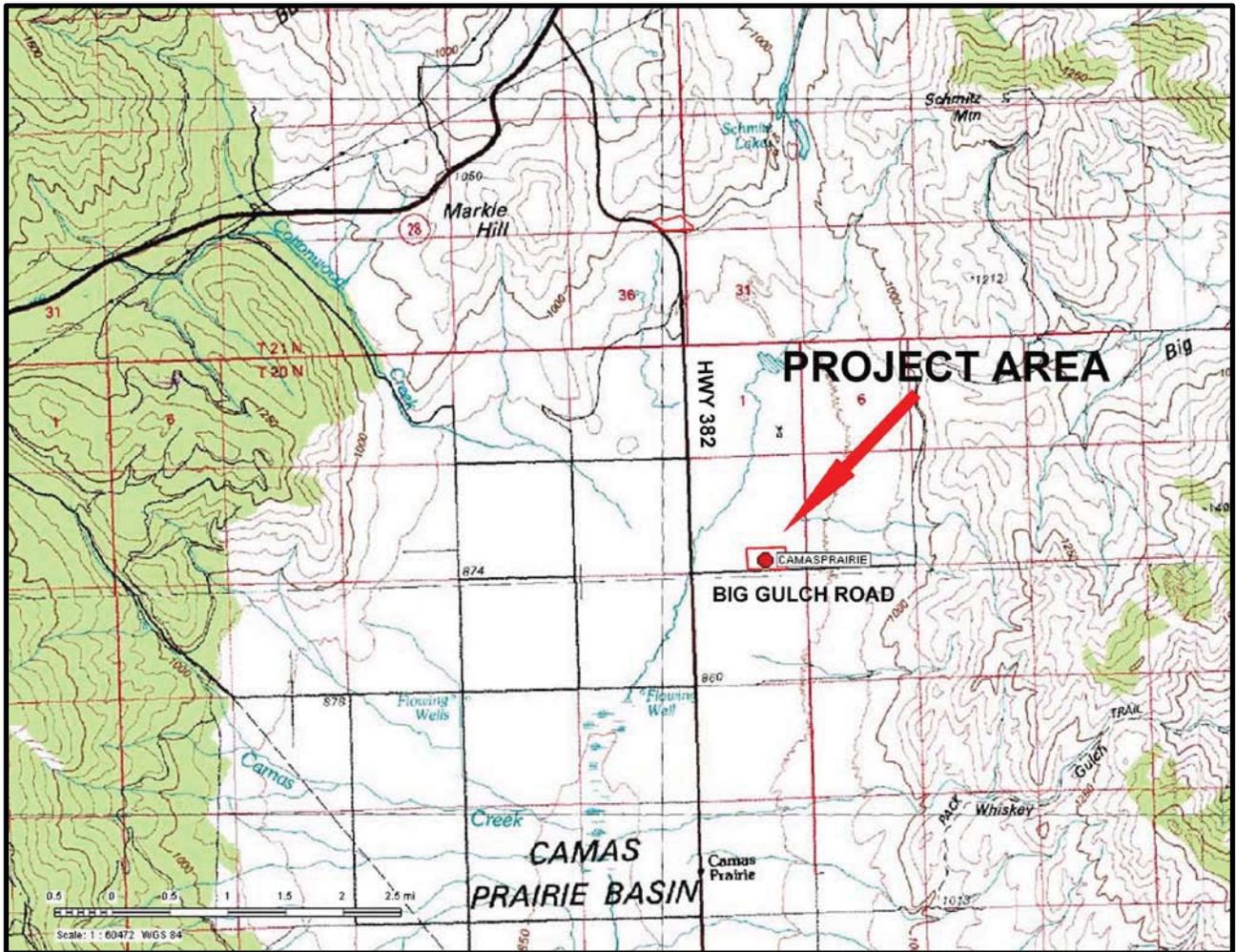
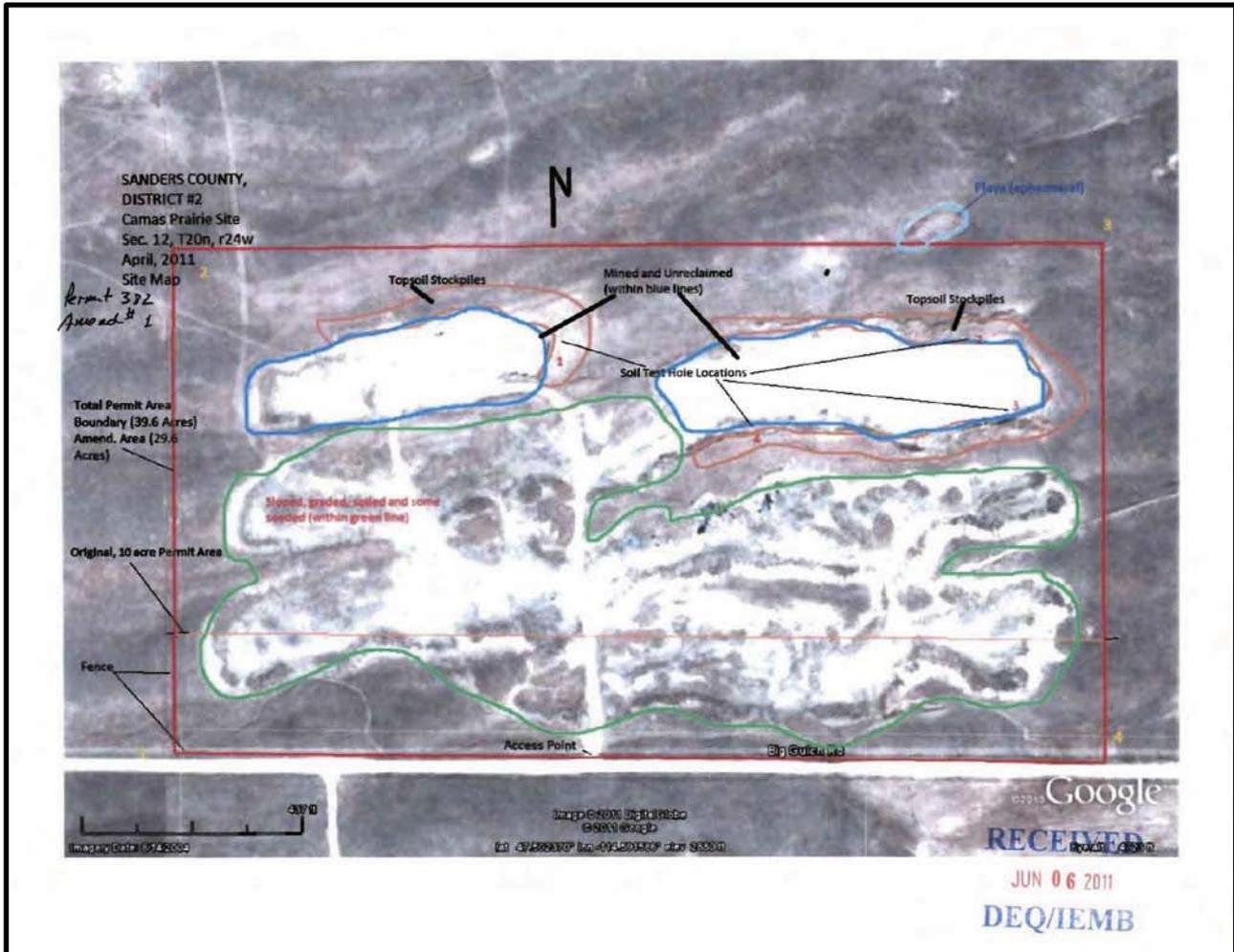


FIGURE 2 – SITE MAP



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.