

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: Fisher Sand & Gravel

SITE NAME: Howard Berg Pit

LOCATION: Section 26, T35N, R31E

COUNTY: Phillips

DATE: February 2010

PROPOSAL: The site is located approximately 1/2 mile north of Whitewater Montana, adjacent to and west of North Whitewater Road. The proponent proposes to mine, crush, stockpile and transport 400,000 cubic yards of gravel from a proposed 28.8 acre site for use on a state road construction project. The applicant proposes to mine to a depth of 16 feet. The site would have an asphalt plant onsite to produce asphalt paving for the project. The site is proposed to be located in a fallow wheat field, approximately 300 feet south of Whitewater Creek. Once mining is complete, the site would be reclaimed back to cropland with 5:1 or flatter slopes. An acceptable Plan of Operation would be followed and a reclamation bond of \$144,492.00 would be held on **28.8** acres by the DEQ to ensure that final reclamation is completed to state standards by October 2015.

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:	<p>This site is proposed to be located in a fallow wheat field that overlays alluvial gravel, sand, silt and clay deposits. The proposed site slopes to the northeast towards the county road and Whitewater creek. The average annual precipitation is approximately 10.7 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. The topographic character of the land would change as a portion of the ridge would be mined away, resulting in a depression.</p>

IMPACTS ON THE PHYSICAL ENVIRONMENT	
RESOURCE	POTENTIAL IMPACTS AND MITIGATION MEASURES
	<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 19 to 24 feet below the ground surface. Whitewater Creek is located approximately 300 feet north of the proposed site. On January 25, 2010, the Department received a letter from the Bureau of Land Management (BLM) stating that Whitewater Creek was classified as a prairie fisheries stream. The BLM requested that the proposed pit be managed to prevent runoff and sediment from reaching the stream. The applicant has proposed erosion control measures (including but not limited to berming) to ensure that the creek is not impacted by the proposed gravel mining operations.</p> <p>A mobile fuel tank would be utilized at this site in the facility area. The applicant has stated that all solvents would be disposed of offsite and in an approved manner. The hot mix asphalt contractor would use biodegradable release agents to spray the boxes of the asphalt trucks in a location that would not affect groundwater.</p> <p><i>Impacts:</i> Due to site conditions and mitigations included in the permit, 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>Vegetation at this site normally consists of wheat. It would be removed as soil is stripped and the site would be replanted with plant species compatible with the proposed reclaimed use (i.e. wheat).</p>

IMPACTS ON THE PHYSICAL ENVIRONMENT	
RESOURCE	POTENTIAL IMPACTS AND MITIGATION MEASURES
	<i>Impacts:</i> No long term detrimental impacts to the vegetation would occur.
5. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:	<p>The land has been cultivated for wheat production and provides very limited habitat. Occasional deer, rodents, song birds, coyotes, foxes, raptors, insects and various other animal species may frequent the site. 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 the following 4 species of special concern in the vicinity of the proposed Fisher Sand & Gravel, Howard Berg site:</p> <p>Long-billed curlew (<i>Numenius americanus</i>) is a large North American shorebird. Adults have a very long bill curved downwards, a long neck and small head. The bird usually feeds in flocks, with food consisting of crabs and various other small invertebrates.</p> <p>Sprague's pipit (<i>Anthus spragueii</i>) is a sparrow-sized bird. Its summer range includes the eastern three-quarters of the state. It arrives in Montana in early May and breeds shortly thereafter. Fall migration begins at the end of August. This bird prefers native, medium to intermediate height prairie and, in a shortgrass prairie landscape, can often be found in areas with taller grasses.</p> <p>Chestnut-collared longspur (<i>Calcarius ornatus</i>) is a small, sparrow-like songbird. The eastern two-thirds of Montana, east of the rocky mountain front, make up a portion of its summer range. Species winter from Colorado and Kansas south to Texas and northern Mexico. Dry elevated prairies and short-grass plains are its preferred habitats.</p> <p>Swift fox (<i>Vulpes velox</i>) is small fox with white chest and belly and black tipped tail. Its habitat includes open prairie and arid plains, including areas intermixed with winter wheat fields. They utilize burrows located in sandy soil on high ground, such as hill tops. Its diet likely consists of small mammals and insects, although it is an opportunistic feeder.</p>
7. HISTORICAL AND ARCHAEOLOGICAL SITES	<p>The Montana State Historic Preservation Office (SHPO) was notified of the application. It reported that there have been some sites previously recorded as historic or archaeological within the designated search locale. SHPO recommended that a cultural resource inventory be conducted due to lack of information on this proposed site. A pedestrian survey of the area by DEQ personnel</p>

IMPACTS ON THE PHYSICAL ENVIRONMENT	
RESOURCE	POTENTIAL IMPACTS AND MITIGATION MEASURES
	<p>did not reveal any artifacts or signs of occupation. Due to the farming activities occurring at this site, it is likely that any surface artifacts have been disturbed or destroyed.</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>There are no unusual demands on land, water, air or energy anticipated as a result of this project.</p> <p><i>Impacts:</i> Negligible impacts to land, 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>County zoning clearance has been obtained and there is currently no zoning in this area.</p>
10. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING	<p>As seen on the aerial photo of the surrounding area, the nearest residences are located approximately ½ mile away in the town of Whitewater.</p> <p><i>Impact:</i> This proposed pit is being sited in this area because of the location of the resource in relation to the project.</p>
11. AESTHETICS	<p>The site is located in a common agricultural area. There would be a temporary alteration of the aesthetics while mining is under way. However, reclamation would return the area to a visually acceptable landscape. This project is considered to be relatively short-term as it is proposed to be reclaimed by October 2015.</p>
12. QUANTITY/ DISTRIBUTION OF EMPLOYMENT	<p>Existing employees would mainly be utilized for this operation. There is low potential that this project would create a significant number of new jobs.</p> <p><i>Impacts:</i> New employment opportunities would be limited.</p>
13. INDUSTRIAL, COMMERCIAL, AGRICULTURAL ACTIVITIES AND PRODUCTION	<p>The acreage listed in the proposal would be taken out of agricultural use and put into industrial/commercial use. Upon completion of mining, the land would be reclaimed back to cropland.</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>

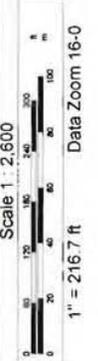
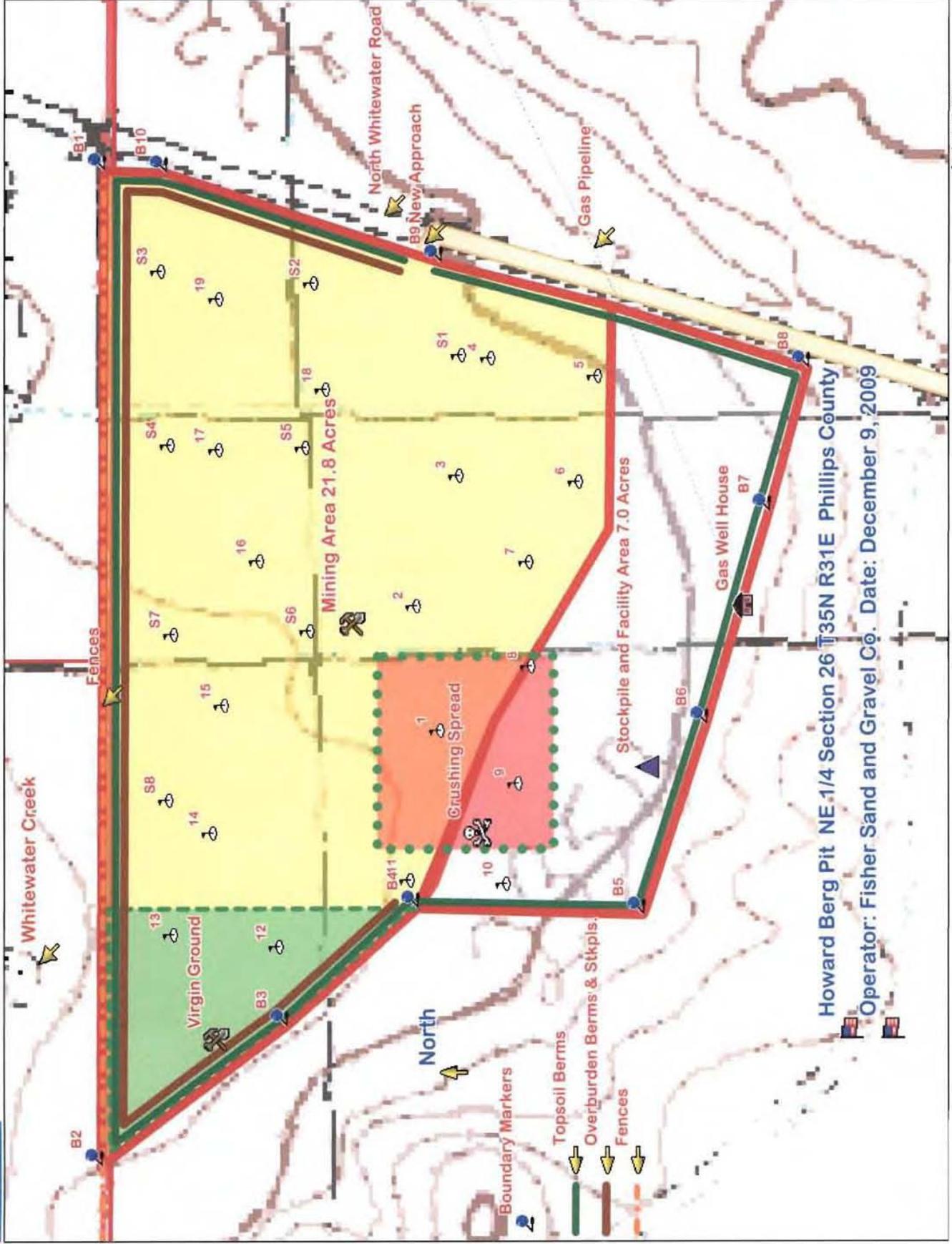
PRIVATE PROPERTY ASSESSMENT ACT (PPAA) CHECKLIST

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.



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DEC 29 2009
MTC

Howard Berg Pit NE 1/4 Section 26 T35N R31E Phillips County
Operator: Fisher Sand and Gravel Co. Date: December 9, 2009