

ENVIRONMENTAL ASSESSMENT

PROPONENT:	Roger Mikesell	SITE NAME:	Granite Creek Site
LOCATION:	NE4 NW4 Section 10, T10N, R19W	COUNTY:	Ravalli
		DATE:	March 18, 2009

TYPE AND PURPOSE OF ACTION:

The applicant proposes to mine and haul 20,000 cubic yards of sand and gravel from a 6.5 acre site near the intersection of Eight Mile Creek Road and Granite Creek Road, approximately 5 miles east of Florence. The site is currently a pasture at an elevation of approximately 3700 feet, adjacent to Eight Mile Creek (see FIGURE 1 – SITE MAP). The site is located on a rocky, sagebrush-covered stream terrace that lies parallel to Eight Mile Creek, 150 feet south of the creek. Mining would proceed into the terrace toward the south, leaving the pit floor at the same elevation as the ground along the creek. No depression would be dug below the creek level. The applicant would reclaim the site to a pasture with slopes no steeper than 3:1, re-soiled and seeded to grass. A performance bond has been posted to ensure that final reclamation is completed. The Ravalli County zoning office has signed a DEQ form stating that the site and proposed mining complies with the zoning in effect. Hours of operation proposed are from 7:00 a.m. to 7:00 p.m., Monday through Friday.

This environmental assessment (EA) is required under the **Montana Environmental Policy Act (MEPA)**. An EA functions to identify, disclose and analyze the impacts of an action, in this case operating a gravel pit on which the state must make a decision, so that an informed decision can be made. MEPA sets no environmental standards, even though it requires analysis of both the natural and human environment. This document may disclose many impacts that have no legislatively required mitigation measures or over which there is no regulatory authority. The state legislature has provided no authority in MEPA to allow DEQ or any other state agency to require conditions or impose mitigations on a proposed permitting action that are not included in the permitting authority and operating standards in the governing state law, such as the Opencut Mining Act, the Clean Air Act of Montana, or any other applicable state environmental regulatory law. Beyond that, a company may agree to voluntarily modify its proposed activities or accept permit conditions.

The state law that regulates gravel-mining operations in Montana is the **Opencut Mining Act**. This law and its approved rules place operational guidance and limitations on a project during its life, and provide for the reclamation of land subjected to opencut materials mining. This law requires that a reclamation bond, cash deposit or other financial instrument be submitted to the state to cover the complete costs of reclaiming the site to its approved, post-mining land use, if the permittee fails to reclaim the site as required by the law, the rules, and the permit.

The decision to issue a permit is based on whether or not the proponent has met the requirements of the Opencut Mining Act, pursuant rules, and other laws pertaining to its proposed actions.

IMPACTS ON THE PHYSICAL ENVIRONMENT

RESOURCE AND EXAMPLE/GUIDANCE QUESTIONS	POTENTIAL IMPACTS AND MITIGATION MEASURES
<p>1. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE:</p>	<p>The proposed site area is located on a small stream terrace along Eight Mile Creek in sediments of unconsolidated silt, sand, rock and gravel. The deposit consists of water-worked glacial debris overlying deeper valley bedrock. The site is currently used as pasture.</p> <p>Soil, which is rocky and variable in thickness, would be salvaged and stockpiled away from the pit, road and facility area. Following mining, grading and ripping, the soils would be replaced, disked and seeded to grass. There are no fragile, compactable or unstable soils present, no unusual geologic features and no special reclamation considerations.</p>
<p>2. WATER QUALITY, QUANTITY AND DISTRIBUTION:</p>	<p>The site is located on a gravelly stream terrace and would mine southward into the terrace staying approximately 15 feet above the stream level. There is an old irrigation ditch that runs parallel to the creek that passes through site. Irrigation is controlled by the applicant and it will no longer be directed into the site. Eight Mile Creek runs toward the west, 150 feet north of the site. Runoff during spring snowmelt and rainstorms has a direct effect on the creek level, and at high water parts of the minesite may be partly flooded by backwater. However, no surface water would run through this site, and no negative effects are expected on surface waters in the area as a result of mining at this location. No fuel would be stored onsite; portable equipment would be refueled by pumping from mobile trucks.</p> <p>There are four water wells registered in the Montana Bureau of Mines and Geology, Ground Water Information Center web site within ½ mile of this site. Water levels reported for these wells range from 20 to 55 feet below ground surface. The estimated depth of mining would be 15 feet, and would not intercept the water table. The proposed post-mining use is a pasture.</p>
<p>3. AIR QUALITY:</p>	<p>There would be some increase in particulate matter at times as a result of operating equipment and trucks as a result of this permit, but the impacts on air quality would be controlled by watering the road during operations and by planting grass into the overburden and topsoil piles. Dust from sand and gravel operations of this type generally contribute somewhat to a decline in overall air quality, especially during the hot, dry summer months when mining, loading and trucking equipment would be most active. However, air quality regulations must be followed at this site, and the impacts must be kept below an acceptable level.</p>
<p>4. VEGETATION COVER, QUANTITY AND QUALITY:</p>	<p>There are no known rare or sensitive plants in the site area. Vegetation consists of pasture grasses, sagebrush, greasewood, cheatgrass and knapweed, and covers 85% of the ground. It would be removed and the site replanted with grass species compatible with the proposed reclaimed use.</p>

5. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:	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. The proposed mine is expected to temporarily displace some individual species and it is likely that the site would be re-inhabited following reclamation.
6. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES:	Site evaluations and DEQ staff analyses have not revealed any unique, endangered or threatened plant or animal species that would be directly affected to a significant degree. Animal species of special concern are known to utilize the general area, but none have been reported at this site. Species of special concern include the Canada lynx, Townsend's Big-eared Bat, Olive-sided Flycatcher, Bobolink, and the Westslope Cutthroat trout.
7. HISTORICAL AND ARCHAEOLOGICAL SITES:	Although there are cultural values in the general area, much of this site has been previously disturbed by modern man by logging and ranching, thus destroying the integrity of resources that may have existed. The operator is committed to give appropriate protection to any values or artifacts discovered in the affected area in the permit area. If significant resources are found, the State Historic Preservation Office would be promptly notified.
8. AESTHETICS:	The site is visible from the Eight Mile Creek Road and from homes a quarter mile to the south up on higher ground. Hours of operation for the site are 7:00 a.m. to 7:00 p.m., Monday through Friday.
9. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY:	There are no unusual demands on land, water, air or energy anticipated as a result of this permit.
10. IMPACTS ON OTHER ENVIRONMENTAL RESOURCES:	There are no other studies, plans or projects planned for this site.

IMPACTS ON THE HUMAN POPULATION	
RESOURCE	POTENTIAL IMPACTS AND MITIGATION MEASURES
11. HUMAN HEALTH AND SAFETY:	Heavy equipment and facilities including trucks and loaders would create hazards, but the operator must comply with all MSHA and OSHA regulations. The operator must employ proper precautions to avoid accidents.
12. INDUSTRIAL, COMMERCIAL AND AGRICULTURAL ACTIVITIES AND PRODUCTION:	The acreage listed in the Type and Purpose of Action would be taken out of agricultural use and put into industrial/commercial use. Upon completion of mining, the land would be reclaimed to pasture.
13. QUANTITY AND DISTRIBUTION OF EMPLOYMENT:	Existing employees would mainly be utilized for this operation. There is low potential that this project would create any new jobs.
14. LOCAL AND STATE TAX BASE AND TAX REVENUES:	Additional taxes may be generated for the county and state in the form of income to the landowner and fuel and highway taxes paid by hauling equipment.
15. DEMAND FOR GOVERNMENT SERVICES:	The operation would require periodic site evaluations by DEQ staff until such time as the site is successfully reclaimed to the required post-mining use. However, these evaluations are usually performed in conjunction with other area operations.

16. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS:	The proposed action complies with county zoning regulations. The Ravalli County Planning Director signed the DEQ Zoning Form in March 2007.
17. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES:	No wilderness or recreational areas are nearby or accessed through this tract.
18. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING:	The project would not likely affect population numbers or distribution in the area.
19. SOCIAL STRUCTURES AND MORES:	This permit would have little affect on social structures or mores. The area has generally undergone some homesite development in the recent past, but remains very rural. Traditional land use has been ranching and agricultural, but the area is also underlain by a conveniently located deposit of sand and gravel that lies very close to the county road.
20. CULTURAL UNIQUENESS AND DIVERSITY:	This area remains agricultural with light commercial and residential use.
21. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:	None.

Alternatives Considered:

- A. Denial:** The pit would not be permitted and the owner of the gravel resource would be denied full utilization of his property at this time. However, another application could be submitted to revise the existing plan, or an application could be submitted for another site.
- B. Approval of the application:** The Plan of Operation has been written with mitigating conditions including water protection, soil salvage, hours of operation, and full reclamation.

Public Involvement, Agencies, Groups, or Individuals contacted:

Ravalli County Planning for zoning. This EA was distributed to an email list of interested parties on February 24, 2009, requesting comments on its content. Comments were received prior to the closing date March 13, 2009 from two individuals, both of whom were concerned about use of the access road and potential effects on nearby property values.

Other Governmental Agencies with Jurisdiction, List of Permits Needed:

Ravalli County Weed Control Board, Montana State Historic Preservation Office, Montana Natural Heritage Program.

Magnitude and Significance of Potential Impacts:

Impacts are unlikely to be significant on the general environment because of the scope and location of the project, the lack of significant or threatened wildlife or habitat, and because of the mitigation measures placed in the Plan of Operation.

Regulatory Impact on Private Property:

The analysis conducted in response to the Private Property Assessment Act (PPAA) indicates no impact is expected on the use of private property. 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. See attachment for PPAA checklist assessment.

RECOMMENDATION FOR FURTHER ENVIRONMENTAL ANALYSIS:

EIS

MORE DETAILED EA

NO FURTHER ANALYSIS

EA Prepared By: Rod Samdahl, Environmental Science Specialist, Opencut Mining Program

Review and/or Contributions by: Tracey Smith, Administrative Assistant, Opencut Mining Program

Approved by: Neil Harrington, Chief, Industrial & Energy Minerals Bureau DATE

FIGURE 1 – SITE MAP



PRIVATE PROPERTY ASSESSMENT ACT (PPAA) CHECKLIST

PROPERTY DESCRIPTION: NE¼NW¼, Section 10, T10N, R19W, Ravalli County

COMPANY NAME: Roger Mikesell, Granite Creek Site

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.