

## 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:** Smith Contracting, Inc.

**SITE NAME:** Reed Pit

**LOCATION:** Section 24, T1S, R5E

**COUNTY:** Gallatin

**DATE:** March 2010

**PROPOSAL:** The 3.5 acre site is located off of McIlhattan Road in Bozeman, MT. Mining has already occurred at this site and reclamation activities will ensue upon receipt of an opencut mining permit. No more material will be removed and no processing equipment will be used onsite. A reclamation bond would be held by DEQ to ensure the final reclamation use of dry land hay and grain by October 2010 would be accomplished.

This application contains all items required by the Opencut Act and Rules. Proponent commits to properly conducting reclamation activities and would be legally bound by the permit.

### IMPACTS ON THE PHYSICAL ENVIRONMENT

RESOURCE	POTENTIAL IMPACTS AND MITIGATION MEASURES
<b>1. TOPOGRAPHY, GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE:</b>	<p>This site is located at the base of the Bridger Range north of Bozeman, and appears to be an alluvial fan/remnant stream terrace with colluvial material. This area has a mean annual precipitation of approximately 15 to 19 inches.</p> <p><i>Impacts:</i> An irreversible and irretrievable removal of gravel from the site has already occurred. A small impact to the quantity and quality of soils from salvaging, stockpiling, and resoiling activities has also occurred, but this does 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 the reclamation from being successful.</p>
<b>2. WATER QUALITY, QUANTITY AND DISTRIBUTION</b>	<p><i>Impacts:</i> The water table is located approximately 50 feet below the ground surface. The unpermitted mining activities have had a minimal effect on the quantity and quality of the surface and groundwater resources.</p> <p><i>Cumulative:</i> Cumulative impacts are negligible.</p>

<b>IMPACTS ON THE PHYSICAL ENVIRONMENT</b>	
<b>RESOURCE</b>	<b>POTENTIAL IMPACTS AND MITIGATION MEASURES</b>
<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 vegetation prior to disturbance was grain and hayland. There are currently weeds throughout the disturbed area.</p> <p><i>Impacts:</i> No long term detrimental impacts to the vegetation should occur as the site is proposed to be reclaimed by October 2010.</p>
<b>5. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:</b>	<p>Although the area was used primarily for grain and hayland, 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.</p> <p><i>Impacts:</i> The mining disturbance has likely temporarily displaced some individual species and it is likely that the site would be re-inhabited following reclamation to similar habitat.</p>
<b>6. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES:</b>	<p>The Montana Natural Heritage Program (MNHP) lists three species of concern in the vicinity of the site. These include Slender wedgrass (<i>Sphenopholis intermedia</i>), a stonefly (<i>Isocapnia crinita</i>), and Dwarf purple monkeyflower (<i>Mimulus nanus</i>).</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 is 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 that no sites have been discovered previously on this property. A pedestrian survey of the area by DEQ personnel was conducted after mining disturbances had occurred, and did not reveal any artifacts or signs of occupation.</p>
<b>8. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY</b>	<p><i>Impacts:</i> Negligible impacts to land, water, air, and energy have occurred.</p>

<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 site is zoned as Agricultural Suburban (A-S) and requires a Conditional Use Permit (CUP), which the operator has obtained. The operation complies with county zoning regulations.
<b>10. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING</b>	As seen on the aerial photo of the surrounding area, there is minimal population density. <i>Impact:</i> This pit was sited in this area because of the location of the resource, and to provide a gravel source for local construction jobs.
<b>11. AESTHETICS</b>	The site is tucked away into the draw of the hillside and is not highly visible from the road. There are a few nearby residents. Hours of operation for reclamation activities will be from 7am to 5pm, Monday through Friday. The site's aesthetics will improve once reclamation is completed.
<b>12. QUANTITY/ DISTRIBUTION OF EMPLOYMENT</b>	<i>Impacts:</i> This was a relatively small operation with limited new employment opportunities.
<b>13. INDUSTRIAL, COMMERCIAL, AGRICULTURAL ACTIVITIES AND PRODUCTION</b>	<i>Impacts:</i> Agricultural production has been reduced on the site since mining activities began. Once reclamation is complete, the post-mining land use will return to grain and hay land.
<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
<b>15. DEMAND FOR GOVERNMENT SERVICES</b>	Limited oversight by DEQ officials that are generally conducted in concert with other area activity would occur.
<b>16. HUMAN HEALTH AND SAFETY</b>	Any industrial activity will increase the opportunities for accidental injury. Other government agencies (e.g. MSHA, OSHA) require specific safety measures. As a result, 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> 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, and Gallatin Conservation District.



## PRIVATE PROPERTY ASSESSMENT ACT (PPAA) CHECKLIST

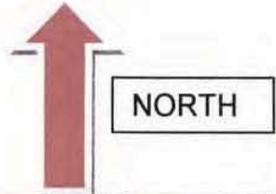
DOES THE PROPOSED AGENCY ACTION HAVE TAKINGS IMPLICATIONS UNDER THE PPAA?

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.

Operator - SMITH CONTACTING INC.  
 Legal description is T 1S, R5E, Section 24  
 Gallatin County  
 Site Name – Reed Pit  
 1" = 400' per Google Map



Site Map



Disturbance area is approximate 3.5 acres. No road improvements or new construction are needed on the farmer's dirt road that comes from McIlhattan Road. The proposed access road already exists and is approximately 1600 feet. The access road to disturbance is marked. The entire length of access road is shown on the area map.

Stockpiles of overburden (OB) and top soil (TS) labelled.

**Black Number 1 and 2** are approximate observation points for soil thickness

No Facility area since not mining

Map shows the Farmer's storage and borrowing area of approximately 3.5 acres.

Approximate Locational coordinates from Google map are:

Datum: 83				
January 18, 2010				
POINT	NAME	LATITUDE	LONGITUDE	ZONE
1.	CP1	45.7390	-111.0527	12
2.	CP2	45.7398	-111.0534	12
3.	CP3	45.7405	-111.0523	12
4.	CP4	45.7397	-111.0516	12
5.	C	45.7396	-111.0526	12

**RECEIVED**  
**FEB 17 2010**  
**DEQ/SEMB**