

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: Wickens Construction Inc.

COUNTY: Garfield

SITE NAME: Big Dry Creek

DATE: September 2012

LOCATION: Section 9, T18N, R40E

PROPOSAL: The applicant proposes to permit a new, short-term gravel pit to mine 20,000 cubic yards of clay from 4.0-acre site located 3.5 miles west of East Little Dry Road on Highway 200. The site is approximately ¼-mile east of Big Dry Creek on the north side of Highway 200.

A reclamation bond would be held by DEQ to ensure that final reclamation of the site to Pasture/Rangeland would be completed by October, 2017. This 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>The permit area is a hill with some small cliffs on the northwest side (less than 10 feet tall). The permit area is bordered by Highway 200 on the south and pasture land on all other sides. Big Dry Creek is roughly 750 feet to the west of the permit. A small ephemeral drainage runs down the middle of the permit area, which would be used as the separation between the bonded/non-bonded areas.</p> <p>This site is located within the Tullock member of the Fort Union formation, and contains planar beds of sandstone, siltstone, and shale deposited during the Tertiary period. The onsite soils consist of loams and clay loams. The operator would replace 13 inches of soil and 0 inches of overburden, as there is little to no overburden present onsite. The site receives approximately 13.4 inches of precipitation per year.</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,</p>

IMPACTS ON THE PHYSICAL ENVIRONMENT	
RESOURCE	POTENTIAL IMPACTS AND MITIGATION MEASURES
	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.
2. WATER QUALITY, QUANTITY AND DISTRIBUTION	<p>An ephemeral drainage runs north of the site, and Big Dry Creek is located approximately 750 feet to the east. A small ephemeral drainage runs N/S across the site. Water would be used on-site for dust control. The water would be taken from an adjacent landowner per an agreement between the landowner and Wickens construction, Inc. Perimeter buffers and straw wattles would be used to control erosion, and protect water quality.</p> <p><i>Impacts:</i> The proposed activities would have a minimal effect on the quantity and quality of the surface and groundwater resources.</p> <p><i>Cumulative:</i> Cumulative impacts should be negligible.</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>There are no known rare or sensitive plants or cover types present in the site area. Onsite vegetation consists of western wheatgrass, blue gamma, crested wheatgrass, yucca, and sagebrush; and provides approximately 70% cover. The vegetation would be removed as soil is stripped and the site would be replanted with plant species compatible with the proposed reclaimed use.</p> <p><i>Impacts:</i> No long term detrimental impacts to the vegetation would occur.</p>
5. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:	<p>Although the area is used primarily for pasture, it also, most likely, supports populations of deer, antelope, small mammals, various avian species, insects and various other animal species. 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 1 species of concern in the vicinity of the site:</p> <p>Greater sage-grouse (<i>Centrocercus urophasianus</i>) is the largest of Montana's grouse. In Montana, it ranges primarily in the southwestern and eastern portions of the state. This species does not migrate. Sagebrush is its preferred habitat</p>

IMPACTS ON THE PHYSICAL ENVIRONMENT	
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	<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 would be small and large areas of similar or identical habitat surrounds the site. The possible impact to these species would be minimal.
7. HISTORICAL AND ARCHAEOLOGICAL SITES	<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 did not reveal any artifacts or signs of occupation. SHPO recommends that a cultural resource inventory be conducted at this site in order to determine whether or not sites exist and if they would be impacted.</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, water, air, or energy would occur.</p>

IMPACTS ON THE HUMAN POPULATION	
RESOURCE	POTENTIAL IMPACTS AND MITIGATION MEASURES
9. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS	As the Operator would be mining clay, county zoning clearance is not required.
10. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING	<p>As seen on the aerial photo of the area, there are no nearby residences.</p> <p><i>Impact:</i> This commercial pit is being sited in this area to service the landowner and to provide resources for an MDT project.</p>
11. AESTHETICS	The site is located in a common pastureland area. There would be a temporary alteration of aesthetics while mining is under way. However, reclamation would return the area to a visually acceptable landscape. This project is considered to be short term, i.e., planned to take less than five years to complete.
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 pastureland use. Upon completion of mining, the land would be reclaimed to pastureland.</p> <p><i>Impacts:</i> Pastureland production would be reduced as soil stripping and operations progress across the site. When the entire site is opened up for mining and mine-related activities, all pastureland activities would cease, but would be restored as the site is reclaimed.</p>
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.

IMPACTS ON THE HUMAN POPULATION	
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15. DEMAND FOR GOVERNMENT SERVICES	Limited oversight by DEQ Opencut Program personnel would be conducted in concert with other area activity when in the vicinity.
16. HUMAN HEALTH AND SAFETY	Any industrial activity would increase the opportunities for accidental injury. There are agencies that require specific safety measures are in place. If followed there is no reason to believe that significant safety issues would be present.
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, county commissioners, local planning department, and local citizens.

21. Other Governmental Agencies which May Have Overlapping or Sole Jurisdiction include, but may not be limited to: Garfield County Commission or County Planning Department (zoning), Garfield 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 [X] No Further Analysis

EA Prepared By: Kimberly Corcoran Opencut Mining Program Environmental Specialist
Name Title

EA Reviewed By: Chris Cronin Opencut Mining Program Supervisor
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.

Wickens Construction Inc.
 Big Dry Creek – S09, T18 N, R40 E
 Drafted Monday, August 20, 2012



Map Legend	
S1, S2, S3, S4 – soil test locations	Overhead power line
Soil stockpile locations	Underground fiber line
Buffer zone	Straw wattles (inside perimeter)
Bonded permit boundary	
Non-bonded permit boundary	
Ditch section	