

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: JMAC Resources, Inc.

COUNTY: Dawson

SITE NAME: Bacon 35 Pit

DATE: October 2013

LOCATION: Section 35, T15N, R58E

PROPOSAL: The applicant proposes to permit a new, long-term scoria pit to mine, crush, screen, stockpile, and transport 500,000 cubic yards of gravel from a 59.6-acre site located 7 miles west of Wibaux, Montana.

A reclamation bond would be held by DEQ to ensure that final reclamation of the site to rangeland/pasture would be completed by December 2019.

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 site consists of rolling topography with scoria outcrops along ridges and valleys. A north-flowing ephemeral stream just west of the proposed main permit area drains the site.</p> <p>The geology consists of pink, orange, black, and yellow, resistant heat-metamorphosed sandstone, siltstone, and shale of the Fort Union Formation. The bedrock was baked by the natural burning of an underlying coal bed.</p> <p>The onsite soils consist primarily of Twilight fine sandy loam, 2 to 8 percent slopes and Lambert-Dimyaw complex, 15 to 65 percent slopes. The operator would replace 10 inches of soil and 8 inches of overburden.</p> <p>The site receives approximately 11 to 14 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, stockpiling, and resoiling activities also would occur, but this would not impair</p>

IMPACTS ON THE PHYSICAL ENVIRONMENT	
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	<p>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.</p>
2. WATER QUALITY, QUANTITY AND DISTRIBUTION	<p>The site contains several small ephemeral drainages/draws draining westerly. An ephemeral stream flowing south to north just west of the proposed main permit area drains the site and was observed to have flowing water during the March 28, 2013 site inspection.</p> <p>Water would be used onsite for dust control and would be obtained from a source greater than 1,000 feet from the proposed permit boundary.</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 on the resources as warranted by the proposed action would 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 smooth brome, bluebunch wheatgrass, crested wheatgrass, cheatgrass, sagebrush, creeping juniper, yucca, curly cup gumweed, yellow sweet clover, and other various rangeland grasses and forbs; and provides approximately 90% 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 supports populations of deer, antelope, 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 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	<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. Both sexes have relatively long, pointed tails, feathered legs, and</p>

IMPACTS ON THE PHYSICAL ENVIRONMENT	
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RESOURCES:	<p>mottled gray-brown, buff, and black plumage. 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> <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 would be small and large areas of similar or identical habitat surrounds the site. The possible impact to these species would be minimal.</p>
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 within the designated search locale. 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	<p>Dawson County zoning clearance has not been obtained.</p> <p>No zoning clearance required for scoria operations.</p>
10. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING	<p>As seen on the aerial photo of the surrounding area, there are no nearby residences.</p> <p><i>Impact:</i> This commercial pit is being sited in this area because of the location of the resource, and to service oil field projects and development.</p>
11. AESTHETICS	<p>The site is located in a common grassland 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 long-term, i.e., planned to take 6 years to complete.</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 grassland use. Upon completion of mining, the land would be reclaimed to Rangeland/Pasture.</p> <p><i>Impacts:</i> Grassland 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 grassland activities would cease, but would be restored as the site is reclaimed.</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.

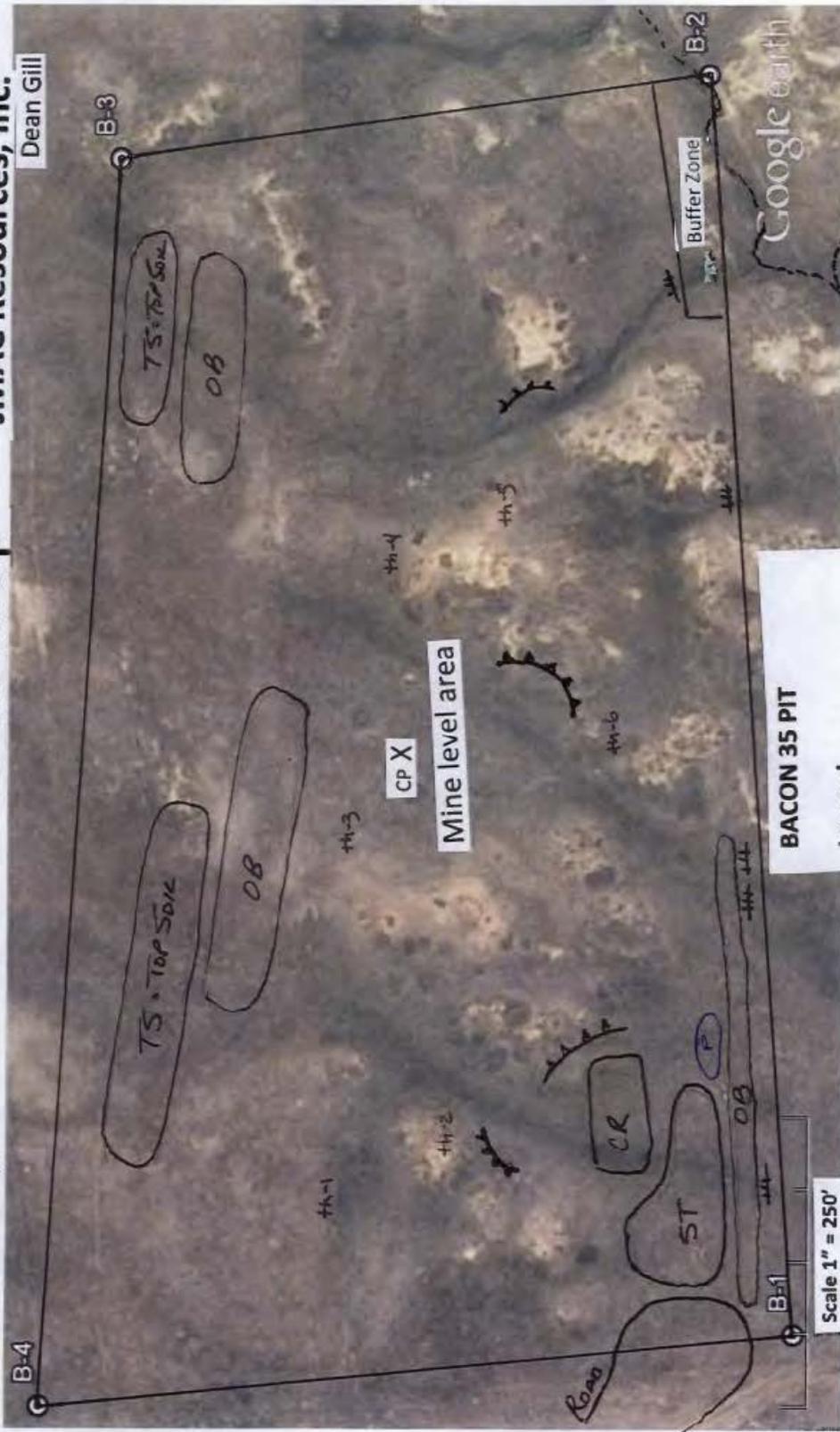
If taking or damaging implications exist, the agency must comply with § 5 of the Private Property Assessment Act, to include the preparation of a taking or damaging impact assessment. Normally, the preparation of an impact assessment will require consultation with agency legal staff.

Site Map

T. 15N R. 58E S. 35

JMAC Resources, Inc.

Dean Gill



BACON 35 PIT

Scale 1" = 250'

Legend

- OB Over Burden
- ST Stockpile
- CR Crusher
- ## Wattles
- CP CENTRAL POINT
- MINE FACE
- PARENTS + EQUIPMENT AREA

main South to North
concentric drainage



RECEIVED BY OPENCUT 9/18/2013