

## 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:** AM Welles, Inc.

**SITE NAME:** Compton Site

**LOCATION:** Section 29, T5N, R3W

**COUNTY:** Jefferson

**DATE:** April, 2010

**PROPOSAL:** The site is located approximately 7 miles southeast of Boulder, Montana. The proponent proposes to mine, crush, stockpile and transport 140,000 cubic yards of sand and gravel from a proposed 24.5 acre permit area. A reclamation bond would be held by DEQ to ensure the final reclamation use of rangeland by November 2012, would be accomplished.

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
<b>1. TOPOGRAPHY, GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE:</b>	<p>The proposed site is located on alluvial terrace deposit. It is a generally flat area that gently slopes to the southeast.</p> <p><i>Impacts:</i> An irreversible and irretrievable removal of sand and 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. 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>The site is not located near existing surface water bodies. No mining into groundwater would occur.</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> The proposed gravel pit is a short term project with an expected reclamation date of November 2012 and should have minimal cumulative effects.</p>

**IMPACTS ON THE PHYSICAL ENVIRONMENT**

<b>RESOURCE</b>	<b>POTENTIAL IMPACTS AND MITIGATION MEASURES</b>
<p><b>3. AIR QUALITY</b></p>	<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>
<p><b>4. VEGETATION COVER, QUANTITY AND QUALITY</b></p>	<p>Site vegetation consists of shortgrass prairie grasses and introduced hayland grasses. The site has good vegetative cover in most areas.</p> <p><i>Impacts:</i> No long term detrimental impacts to the vegetation would occur.</p>
<p><b>5. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:</b></p>	<p>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.</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>
<p><b>6. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES:</b></p>	<p>The Montana Natural Heritage Program (MNHP) lists the following three species of concern in the vicinity of the proposed site:</p> <p>Gray Wolf (Canis Lupus)  Wolverine (Gulo gulo)  Canada Lynx (Lynx Canadensis)</p> <p><i>Impacts:</i> This species has not 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>
<p><b>7. HISTORICAL AND ARCHAEOLOGICAL SITES</b></p>	<p>The Montana State Historic Preservation Office (SHPO) was notified of the application and recommended a cultural resource inventory due to two previously recorded historic sites in the area. The first site is a historic road which is also Highway 69. A rehabilitation project on this highway is the purpose of the gravel operation. The second site is a historic ditch which borders the proposed permit area along a small segment of the northwest corner. The proposed operation would not disturb this ditch.</p> <p>A pedestrian survey of the area by DEQ personnel did not reveal any artifacts or signs of occupation. No signs were evident at depth in any of the previously disturbed areas. The Montana Department of</p>

<b>IMPACTS ON THE PHYSICAL ENVIRONMENT</b>	
<b>RESOURCE</b>	<b>POTENTIAL IMPACTS AND MITIGATION MEASURES</b>
	<p>Transportation Archeologist surveyed the site on April 22, 2010 and determined that no cultural resources were endangered by the proposed operation.</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>
<b>8. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY</b>	<p><i>Impacts:</i> Negligible impacts to land, water, air, or energy would occur.</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>	<p>The site location is currently not zoned.</p>
<b>10. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING</b>	<p>The site is located in a rural location, with one home located within one-half mile of the site.</p> <p><i>Impact:</i> This commercial pit being sited in this area because of the location of the resource, and to provide a gravel source for an MDT highway construction job.</p>
<b>11. AESTHETICS</b>	<p>The site is located in a rural setting and, with the exception of one nearby house, away from residences and commercial businesses.</p>
<b>12. QUANTITY/ DISTRIBUTION OF EMPLOYMENT</b>	<p><i>Impacts:</i> New employment opportunities would be limited. The company will likely use existing employees. This is a relatively short term operation.</p>
<b>13. INDUSTRIAL, COMMERCIAL, AGRICULTURAL ACTIVITIES AND PRODUCTION</b>	<p><i>Impacts:</i> Agricultural production would be reduced on the site for the life of the permit. It would then be restored to rangeland by November, 2012.</p>
<b>14. LOCAL, STATE TAX BASE AND TAX REVENUES, PERSONAL AND COMMUNITY INCOME</b>	<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>
<b>15. DEMAND FOR GOVERNMENT SERVICES</b>	<p>Limited oversight by DEQ officials that are generally conducted in concert with other area activity would occur.</p>
<b>16. HUMAN HEALTH AND SAFETY</b>	<p>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.</p>
<b>17. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES</b>	<p>This activity would not inhibit the use of the identified resources.</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.