

## ENVIRONMENTAL ASSESSMENT

**PROPONENT:** R and D Partners

**SITE NAME:** Mountain View Meadows

**LOCATION:** Sec 35, T10N, R3W and Sec 2, T9N, R3W

**COUNTY:** Lewis and Clark

**TYPE AND PURPOSE OF ACTION:** Proponent submitted an application to the Opencut Mining Program for a 20-acre permit to mine about 300,000 cubic yards of sand and gravel approximately 2 miles south of East Helena, Montana. The site would be located in an area that has been dedicated to become property of the East Helena School District. Much of the site and all roads leading to the site have been disturbed as part of development of a large subdivision. Reclamation of the permit area would be complete by January 2012. The post mine land use would be pasture. All application materials required under the Opencut Mining Act and the rules adopted there under have been submitted. The proponent commits to properly conducting opencut operations and reclaiming past and present disturbances to a postmining land use of grazing. The proponent will be legally bound by its permit to reclaim the site as well as site conditions and available resources allow.

A = significant unavoidable impacts. B = insignificant as a result of conditioned mitigation. C = insignificant as proposed.

	<b>POTENTIAL IMPACTS AND MITIGATIVE MEASURES</b>					
	A	B	C	LONG TERM	SHORT TERM	EXPLANATION
<b>PHYSICAL ENVIRONMENT</b>						
1. <u>TOPOGRAPHY</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The topography in the area consists of rolling terrain. Removal of gravel would alter the topography. No closed end depression would be left in the landscape but rather a large flat area where a low wide ridge existed pre-mine. All surfaces would be graded to 3:1 (h:v) or flatter.
2. <u>GEOLOGY</u> : stability	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Glacial material would be removed and used on roads within the subdivision with only a small amount being transported off-site. There is no active erosion in the proposed permit area. DEQ has determined that the site could be reclaimed to a condition that is at least as stable as pre-mine conditions.
3. <u>SOILS</u> : quality, distribution	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Soils are very thin and rocky: approximately ½" to 3" in thickness. All soil would be salvaged. Soil would be hauled onto the permit area if needed for reclamation.  A remedial investigation of the chemical and physical properties of surface soils (0 to 1 inch) around the ASARCO plant in East Helena was summarized in a May 1987 report by the Environmental Protection Agency (EPA), Hazardous Site Control Division (EPA Work Assignment No. 68-8L30.0): <i>Remedial Investigation of Soils, Vegetation and Livestock for East Helena Site (ASARCO)</i> . This study indicated lead contamination in the area. Lewis and Clark County required additional soil sampling in November 2004 prior to subdivision approval. The results of this sampling and all lab analysis were submitted to DEQ on May 11, 2007, as part of the sand and gravel mining application. Lead concentrations within the proposed permit area are well below the 500 mg/kg EPA threshold for remedial action.

4. <u>WATER</u> : quality, quantity; distribution	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	There are no wells within 1000' of the site. The site would not intersect the groundwater table. Use of water for dust control would have an insignificant impact on ground water levels. No significant impacts to the surface water or ground water would be expected as a result of mining, soil salvage or product stockpiles because of limited contact with water. All stockpiles are proposed to be located outside the floodplain.
5. <u>AIR</u> : quality	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	There would be some degradation of air quality while operations are in progress. The proponent must comply with state air quality regulations. Water would be used as needed to control dust.
6. <u>UNIQUE, ENDANGERED, FRAGILE, OR LIMITED ENVIRONMENTAL RESOURCES</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	None identified.
<b>BIOLOGICAL ENVIRONMENT</b>						
1. <u>TERRESTRIAL, AVIAN, AND AQUATIC SPECIES AND HABITATS</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	The Montana Natural Heritage Program reported the Agapetus Caddisfly as a species of concern in the area. The proposed site is upland habitat with dry land farming and not conducive to any species of caddisfly. Much better habitat for the caddisfly exists well outside the proposed site.
2. <u>VEGETATION</u> : quantity, quality, species	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	The Montana Natural Heritage Program reported the wedge-leaved saltbush, lesser rushy milvetch, and small yellow lady's slipper as species of special concern for the area. These plants were not identified in the permit area.
3. <u>AGRICULTURE</u> : grazing, crops, production	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	A small area of grassland would be taken out of production without significant impact to local agriculture.
<b>HUMAN ENVIRONMENT</b>						
1. <u>SOCIAL</u> : structures, mores	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2. <u>CULTURAL</u> : uniqueness, diversity	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3. <u>POPULATION</u> : quantity, diversity	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
4. <u>HOUSING</u> : quantity, distribution	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
5. <u>HUMAN HEALTH &amp; SAFETY</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
6. <u>COMMUNITY &amp; PERSONAL INCOME</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
7. <u>EMPLOYMENT</u> : quantity, distribution	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
8. <u>TAX BASE</u> : local, state tax revenue	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
9. <u>GOVERNMENT SERVICES</u> : demand	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
10. <u>INDUSTRIAL, COMMERCIAL, &amp; AGRICULTURAL ACTIVITIES</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
11. <u>HISTORICAL AND ARCHAEOLOGICAL</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	A walkover of the area did not reveal any artifacts or signs of occupation. If during operations resources were to be discovered, activities would be halted and moved to

						another area until SHPO was contacted and the importance of the site was determined.
12. <u>AESTHETICS</u> : noise, visual	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The proposed permit area can be seen from Highway 12 and 282. It would be hard to discern a difference between this site and the disturbance associated with construction of the subdivision's infrastructure.
13. <u>ENVIRONMENTAL PLANS AND GOALS</u> : local, regional	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	The proposed operation complies with county zoning regulations.
14. <u>DEMANDS ON ENVIRONMENTAL RESOURCES</u> : land, water, air, energy	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
15. <u>TRANSPORTATION</u> : networks, traffic flows	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Most of the gravel would be used within the subdivision and not be transported on any public roads.

**ALTERNATIVES CONSIDERED:** The Department would deny an incomplete application or one that does not comply with the Act and Rules. The proponent could then submit a modified application or submit an application for another site.

**PUBLIC INVOLVEMENT:** Agencies and individuals involved in the process included the Montana Natural Heritage Program, State Historic Preservation Office, local zoning authority, county weed control board, and landowner.

**OTHER GROUPS OR AGENCIES CONTACTED OR WHICH MAY HAVE OVERLAPPING JURISDICTION:** DEQ's Air Resources Management Bureau regarding air quality, DEQ's Water Protection Bureau regarding water discharge, DNRC's Water Rights Bureau regarding water rights, and MSHA and OSHA regarding mine safety.

**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.

**RECOMMENDATION FOR FURTHER ENVIRONMENTAL ANALYSIS:** NO FURTHER ANALYSIS

**INDIVIDUALS OR GROUPS CONTRIBUTING TO THIS EA:** NONE

Approved By: \_\_\_\_\_ Date: \_\_\_\_\_

(Signature)

Prepared by: Peter Mahrt