

# SUPPLEMENTAL ENVIRONMENTAL ASSESSMENT

**PROPONENT:** Riverside Contracting Inc.  
**LOCATION:** Section 22, T13N, R11W

**SITE NAME:** Geary Site  
**COUNTY:** Powell

**TYPE AND PURPOSE OF ACTION:** This supplemental Environmental Assessment updates an assessment done by Jerry Burke during July 2003 for the original permit issued to Bullock Contracting for 4 acres of disturbance. Riverside Contracting Inc. is requesting to be assigned the permit and amend the permit to a total of 58.4-acres and 94,000 cubic yards. The amendment is being requested to support upgrades to Secondary Highway S-271. As proposed, the Opencut operation would consist of 35.0-acres of mine-level area, 8.4-acres of facility-level area, and 15-acres of undisturbed area (for future use if needed). In the event the 15-acres would be used, an increase in bonding would be necessary. No access roads will be added as Riverside will continue to use the county road to access the site. Operating hours would be Monday through Friday 6:00 a.m. to 10:00 p.m.

As proposed, mining will begin on the north and west edges of the existing pit area and continue to the north and west using front end loaders, a dozer, and belly dumps. If the material in the mine level area (35-acres) is insufficient to complete the job, the northern "undisturbed" portion (15-acres) will be utilized using the method described above. As described in the Plan of Operation, the estimated depth of mining will be 7 feet and the seasonal high water table is approximately 5 feet below grade. The water table level would be lowered by excavating a drain ditch to the north. The operator proposes to mine to 1 foot above the water level and backfill with crusher fines to raise the pit floor upon completion. Water protection measures will include silt fences and/or straw wattles.

A crusher and asphalt plant will be located between the existing gravel pit and the county road, as will a double-wall 10,000 gallon fuel storage tank on a skid. Mining activities are estimated to be completed by November 15, 2010 at which time the pit would be closed and reclaimed to pastureland with a 3:1 slope and a water source pond in the existing 4-acre permit area. The operator would be responsible for replacing the amount of topsoil and overburden that are currently present on site. The permit application contains all items required under the Opencut Mining Act and the Rules and Regulations thereunder, including adequate reclamation bond. Proponent commits to properly conducting opencut operations and would be legally bound by their permit to reclaim the site to a postmining land use of pastureland and water source pond.

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

	POTENTIAL IMPACTS AND MITIGATIVE MEASURES					
	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 site is located on a glacial plain. Topography would be slightly altered with a maximum depth of mining from ground surface of 7 feet. Upon removal of borrow material, minimal slopes would be created. At the time of completion of the operation, all surfaces are proposed to be blended into the surrounding topography.
2. <u>GEOLOGY</u> : stability	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	The Department reviewed potential impacts due to removal of mine material and determined the site can be reclaimed to a stable condition.
3. <u>SOILS</u> : quality, distribution	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	The average soil and overburden thickness are both 6 inches. The operator would strip soil and overburden from all mine-level areas and place on areas prepared for resoiling, or stockpile for later reclamation use. Stripped soil would be evenly replaced on the original source areas.
4. <u>WATER</u> : quality, quantity; distribution	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Ground water will be encountered. The seasonal high water table in the area is approximately 5 feet below grade and the maximum depth of mining is estimated at 7 feet. The operator proposes to dig a drainage ditch to the north to lower the water level. The operator proposes to mine to 1 foot above the water level and backfill with crusher fines to raise the pit floor upon completion. The operator has proposed silt fences and/or straw wattles for stormwater control to mitigate any potential impact.
5. <u>AIR</u> : quality	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	There is potential for some degradation of air quality while operations are in progress due to

						generation of dust and equipment exhaust. Dust mitigation measures would consist of spray bars and a water truck. Proponent must comply with state air quality regulations, including having air permits for the crusher and asphalt plant. The town of Helmsville and a grade school are approximately 2,200 feet east of the site. Opencut operations will be conducted while school is in session. The local fairgrounds is located immediately west of the proposed facility area.
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"/>	The Montana Natural Heritage Program reports the occurrence of various species with unique status, please see below for an explanation.
<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"/>	As per a 2003 Montana Natural Heritage Program report, various species of concern are listed in the area. These include: Westslope Cutthroat Trout ( <i>Oncorhynchus clarkia lewisi</i> ) and Lynx ( <i>Felis lynx</i> ). In regards to the trout, the proposed pit is expected to have no impact on the stream that houses the species. The proposed operation would have minimal effect on the Lynx due to abundant similar habitat in the area.
2. <u>VEGETATION</u> : quantity, quality, species	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Large patches of knapweed were observed during a bond release site inspection (4/25/2008 by J. Dafoe). The existing vegetation consists of various pasture grasses and has approx. 20-40% cover (minus the existing mine area). The operator would be required to control weeds in the permit area, in accordance with the plan approved by the county weed coordinator.
3. <u>AGRICULTURE</u> : grazing, crops, production	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Pastureland would be temporarily out of production. This would not substantially impact local agriculture. The site would be reclaimed to use for pastureland.
<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"/>	The majority of the workforce is current employees of Riverside; therefore, minimal impacts are anticipated. Spending by workers may benefit the local economy.
2. <u>CULTURAL</u> : uniqueness, diversity	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Short-term; minimal impacts anticipated.
3. <u>POPULATION</u> : quantity, diversity	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Minimal impacts are anticipated due to this short-term project.
4. <u>HOUSING</u> : quantity, distribution	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	The majority of the workforce is current employees of Riverside; minimal impacts are anticipated due to this short-term project.
5. <u>HUMAN HEALTH &amp; SAFETY</u>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Residents and school children in the town of Helmsville may notice noise and dust from the operation. As mitigated, the potential impact to health and human safety should be minimal and short-term. The project the operation is supporting (Highway 271 repair) has the potential to improve health and human safety.
6. <u>COMMUNITY &amp; PERSONAL INCOME</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Short-term impacts could be positive as Riverside employees would spend money in the Helmsville area.
7. <u>EMPLOYMENT</u> : quantity, distribution	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	The majority of the workforce is current

						employees of Riverside; minimal impacts are anticipated due to this short-term project. Spending by workers may benefit the economy.
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"/>	Short-term site; minimal impacts anticipated.
9. <u>GOVERNMENT SERVICES</u> : demand	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Short-term site; minimal impacts anticipated.
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"/>	Minimal impacts anticipated, although repair of Highway 271 could benefit local commerce.
11. <u>HISTORICAL AND ARCHAEOLOGICAL</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	No resources were identified during the premine inspection. In a July 27, 2005 letter, the Montana Historical Society stated "...that there is a low likelihood cultural properties will be impacted." Should any cultural materials be discovered in the course of the proposed operation, the operator would follow state and federal guidelines.
12. <u>AESTHETICS</u> : noise, visual	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	The site is approximately 2,200 feet from the town of Helmville. The town has a population density of 243 people with 181 housing units (84 of which were vacant during the 2000 U.S. Census). There is one school (pre-school-8 <sup>th</sup> ), one bar, a community center, three churches, two outdoor parks, and a post office. The potential for noise and visual impact is present due to the proximity of the town, the relatively shallow depth of mining (7 feet) and the aboveground location of the crusher and asphalt plant. The operating hours would be Monday through Friday, 6:00 a.m. to 10:00 p.m.
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"/>	Short-term site; minimal impacts anticipated.
15. <u>TRANSPORTATION</u> : networks, traffic flows	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	The operator would use local roads to transport mine material to projects. During the operation of the proposed pit, the highway would be under construction. As a result, the traffic flow in the area will already be impacted and the site additions to those impacts would be minimal in relation to construction activities.

**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 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: Jamie Dafoe 07/08