

ENVIRONMENTAL ASSESSMENT

PROPONENT: S&N Concrete Inc.
LOCATION: Section 8, T4N, R10W

SITE NAME: S&N Site
COUNTY: Deer Lodge

TYPE AND PURPOSE OF ACTION: Proponent has submitted an amendment application to the Opencut Mining Program for a 20-acre, 1.5 million cubic yard, gravel mine site amendment. The amendment application requires an Environmental Assessment due to the age of the permit, and the fact that no Environmental Assessment was done on the original permit (circa 1978). The amendment area is currently shrubland and mined gravel pit (field inspection 4/16/2008 J.Ludwig). Some vegetation is present on the proposed area, however the site is within the Superfund RDU#6-South Opportunity Uplands RAWP Area No. 1 ARWW&S Operable Unit, and therefore the surface soil (upper 1"-2") may be impacted by metals deposited aerially from the Anaconda Smelter. An existing irrigation ditch southeast of the proposed amendment will not be impacted due to a 50 foot buffer from the proposed permit boundary. The existing holding pond is fed from a separate irrigation ditch with water righted to the landowner/operator. No impacts to groundwater are anticipated by the current or proposed operation.

The proposed amendment would consist of 20 acres of pit area (7-acres to the west are presently mined area and 13-acres to the southeast are proposed mine area). Facility area is pre-law and therefore not permitted. All access roads are existing and no new roads will be created for the amendment area. Mining will begin in SE corner of existing pit and move south. Current ready mix concrete operation will continue using 10-wheel dump trucks. When mining activities are completed in an area, concurrent reclamation will reclaim the pit to grassland with a 3:1 slope. The operator will be responsible for replacing the amount of topsoil and overburden that are currently present on site. No topsoil presently on the property will be utilized for reclamation purposes at this time. All topsoil is being stored, watered or vegetated until such time that EPA/DEQ Superfund officials (Superfund) sample the stockpiled soil and determine metal concentration as well as required action level (if any). Should Superfund approve the topsoil, the operator will be allowed to utilize the soil for reclamation purposes. Should the topsoil be determined "impacted", the operator will instead use washed fines on site and truck in topsoil for reclamation. The estimated date for the completion of final mine site reclamation work is December 2023. The permit application contains all items required under the Opencut Mining Act and the Rules and Regulations thereunder, including adequate reclamation bond for both the existing and proposed site as well as the amount of imported, non-impacted topsoil (or soil amendments) necessary to facilitate use of washed fines for reclamation. 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 grassland.

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
PHYSICAL ENVIRONMENT						
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 in an agricultural valley. It appears that the original topography was fairly flat but has been altered due to Anaconda Smelter reclamation activities. Gravel removal to a maximum depth of 25-35 feet would alter/has altered the topography by lowering the surface and creating slopes. Upon completion of the operation, all surfaces would be blended into the surrounding topography.
2. <u>GEOLOGY</u> : stability	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The Department reviewed potential impacts due to the removal of mine material and determined that 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 thickness is 2 inches and the average overburden thickness is 2 inches. Soil and overburden has been/would be stripped from mine-level areas and stockpiled. Due to the potential for elevated metal concentrations, topsoil will remain stockpiled in existing areas and will be stockpiled for the amendment area. The topsoil will: 1) not be used for reclamation purposes and remain stockpiled or 2) be used for reclamation purposes in the event that Superfund approves said use based on soil analytical results.

						Regardless of the topsoil option utilized for reclamation, all available fines will be used within topsoil or applied beneath the topsoil layer.
4. <u>WATER</u> : quality, quantity; distribution	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Ground water is anticipated to occur at greater than 65' below grade and therefore does not appear to be a factor at this site. There are no outside surface water features or water wells in or near the site that could be or are being affected by this operation. There is a holding pond on site that is pre-law and is fed by water righted to the landowner/operator.
5. <u>AIR</u> : quality	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	There is/would be some degradation of air quality while operations are in progress. Due to potentially metal-impacted soils, all soil stockpiles will be watered and/or vegetated. Proponent must comply with state air quality regulations.
6. <u>UNIQUE, ENDANGERED, FRAGILE, OR LIMITED ENVIRONMENTAL RESOURCES</u>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	The site is within the designated Superfund RDU#6-South Opportunity Uplands RAWP Area No. 1 ARWW&S Operable Unit.
BIOLOGICAL ENVIRONMENT						
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 reports the occurrence of the Gray Wolf, a sensitive species of concern. The existing/proposed operation has/would have little effect as abundant similar habitat exists 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"/>	No species of special concern were reported by The Montana Natural Heritage Program. Spotted Knapweed is moderate on the site.
3. <u>AGRICULTURE</u> : grazing, crops, production	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	No agricultural impacts. Site will be reclaimed to grassland.
HUMAN ENVIRONMENT						
1. <u>SOCIAL</u> : structures, mores	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Minimal impacts occurring/anticipated.
2. <u>CULTURAL</u> : uniqueness, diversity	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Minimal impacts occurring/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 occurring/anticipated.
4. <u>HOUSING</u> : quantity, distribution	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Minimal impacts occurring/anticipated.
5. <u>HUMAN HEALTH & SAFETY</u>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Minimal impacts occurring/anticipated as the potentially impacted soil is currently being and will continue to be mitigated.
6. <u>COMMUNITY & PERSONAL INCOME</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Operation provides jobs and an economic benefit to the surrounding community.
7. <u>EMPLOYMENT</u> : quantity, distribution	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Site employs thirteen full time employees and provides indirect employment via trucking companies & individuals in the trucking business.
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"/>	Operation provides some tax base.
9. <u>GOVERNMENT SERVICES</u> : demand	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Minimal impacts occurring/anticipated.
10. <u>INDUSTRIAL, COMMERCIAL, & AGRICULTURAL ACTIVITIES</u>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Minimal impacts occurring/anticipated due to potentially impacted soil is/will be mitigated.
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 pre-mine inspection. In a letter dated April 28, 2008 the Montana Historical Society stated that there is a

						“low likelihood cultural properties will be impacted” and that “a cultural resource inventory is unwarranted at this time”. 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 type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	The site is surrounded by grassland and ARCO remediation land. As a result, the visual impact is/would be minimal.
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"/>	Minimal impacts occurring/anticipated.
15. <u>TRANSPORTATION</u> : networks, traffic flows	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	The operator uses/would use local roads to transport mine material to projects. This activity does not currently nor would it substantially affect local traffic.

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 Ludwig 04/08