

ENVIRONMENTAL ASSESSMENT

On an Application for an

OPENCUT MINING PERMIT or AMENDMENT

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 hereunder.

APPLICANT: Schellinger Construction Co., Inc.

SITE NAME: Wareing Pit

LOCATION: Section 28, T9N, R20W

COUNTY: Ravalli

DATE: September 2009

Type and Purpose of Action: The proponent proposes to obtain a permit for a 9.7-acre operation, including an asphalt plant, grizzly, crusher, and screen. The proponent proposes to mine, crush, screen, stockpile and transport 84,700 cubic yards of sand and gravel from the site for use within the local area. Once mining is complete the site would be reclaimed to grassland and a pond. An acceptable Plan of Operation has been submitted, and a reclamation bond would be held to ensure that reclamation is completed to meet state standards by September of 2012.

IMPACTS ON THE PHYSICAL ENVIRONMENT

RESOURCE	POTENTIAL IMPACTS AND MITIGATION MEASURES
1. TOPOGRAPHY, GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE:	<p>The site is located in a floodplain of the Bitterroot Valley on an alluvial terrace.</p> <p><i>Impacts:</i> An irreversible and irretrievable removal of gravel from the site would occur. There would be a small impact to the quantity and quality of soils from salvaging, stockpiling, and resoiling activities, but this would not impair the capacity of the soils to support full reclamation.</p> <p>There are no unusual topographic, geologic, soils, or special reclamation considerations that would lead to reclamation failure. The proposed operation is located in sands and gravels of an alluvial nature. The site is located on a terrace to the west of the Bitterroot River north of Hamilton and west of Stevensville. The soils are 10 to 22 inches deep and are of a sandy loam texture with intermixtures of sand and gravel, and there is up to 24 inches of overburden. The topsoil and overburden would be stripped and stockpiled separately.</p>

IMPACTS ON THE PHYSICAL ENVIRONMENT	
RESOURCE	POTENTIAL IMPACTS AND MITIGATION MEASURES
	<p>After regrading, 16 inches of topsoil and 6 inches of overburden would be evenly replaced. Microorganisms should reinvade the site.</p>
2. WATER QUALITY, QUANTITY AND DISTRIBUTION	<p>An un-named stream and the Bitterroot River lie to the east of the proposed mining site.</p> <p><i>Impacts:</i> The proposed activities may have an effect on the quality of the surface and groundwater resources, as the water table is within 5 to 7 feet of the ground surface. The site would be mined to a depth of 15 feet, which is well into the water table. There would be a mobile, single-walled fuel tank located onsite. The Fuel Storage Guideline would be followed. Silt fencing and other erosion controls would be put in place as necessary.</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 Department of Environmental Quality (DEQ) Air Resources Management Bureau. 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><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><i>Impacts:</i> All vegetation would be lost during soil salvage operations but would be re-established following mining. The operation would begin mining in the center of the site and proceed to the west. The mining is in an area of cheatgrass, wheatgrasses, smooth brome, and mullen. Ponderosa pines and cottonwoods are well established along the east and south edges of the permit boundary. A seed mixture following the Seed Mix Guideline would be seeded on the site after regrading and soiling have been completed. No rare plants or cover types were identified during a ground search.</p>
5. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:	<p>Although the area is used primarily for pasture, it also supports populations of deer, rodents, song birds, fish, toads, wolves, 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 RESOURCES:	<p>Species of concern identified by the Montana Natural Heritage Program that could possibly populate this area include the Bald Eagle, Western Toad, Westslope Cutthroat Trout, Bull Trout, Western Spotted Skunk & Gray Wolf.</p> <p><i>Impacts:</i> No observations of the listed species have been recorded by the Montana Natural Heritage Program on this site. Even if suitable habitat did exist on this site, the disturbance area would be small, and</p>

IMPACTS ON THE PHYSICAL ENVIRONMENT	
RESOURCE	POTENTIAL IMPACTS AND MITIGATION MEASURES
	large areas of similar or identical habitat surround the site.
7. HISTORICAL AND ARCHAEOLOGICAL SITES	<p>The Montana State Historic Preservation Office (SHPO) was supplied with the application materials and recommended a cultural resource inventory due to the lack of previously recorded historic or archaeological sites within the designated search locale. A walkover of the area by DEQ personnel did not reveal any artifacts or signs of occupation.</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><i>Impacts:</i> Relatively small impacts to land, water, air, or energy would occur. Water would be used for the asphalt plant, crushing operation and for dust control.</p>

IMPACTS ON THE HUMAN POPULATION	
RESOURCE	POTENTIAL IMPACTS AND MITIGATION MEASURES
9. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS	This area is not zoned or part of any long range growth plan. It is generally utilized for grazing cows and horses.
10. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING	<p>As seen on the aerial photo of the surrounding area this is a rural area mixed with residential and commercial developments.</p> <p><i>Impact:</i> This commercial pit is being sited in this area because of the location of the resource, and the need to supply local infrastructure needs (highway construction). There are several identified residences within 1,000 feet of this proposed pit.</p>
11. AESTHETICS	The site is located near residences and commercial businesses.
12. QUANTITY/ DISTRIBUTION OF EMPLOYMENT	<i>Impacts:</i> There would likely be temporary employment services generated from this operation. However, it is likely many of the employees could be transferred within the company from other sites.
13. INDUSTRIAL, COMMERCIAL, AGRICULTURAL ACTIVITIES AND PRODUCTION	<p><i>Impacts:</i> Agricultural production would be reduced on the site for the life of the permit. There would be a loss of grazing (partly temporary and partly permanent) on approximately 9.7 acres of land until the site is successfully reclaimed to a pond and pasture/rangeland.</p> <p>Reclamation of portions of the site may occur while mining is ongoing, which would reestablish some pasture/rangeland relatively quickly.</p>
14. LOCAL, STATE TAX BASE AND TAX REVENUES, PERSONAL AND COMMUNITY INCOME	Local, state and federal governments would be responsible for appraising the property, setting tax rates, collecting taxes, etc., from the companies, employees, or landowners benefiting from this operation.
15. DEMAND FOR GOVERNMENT SERVICES	Limited oversight by DEQ officials that are generally conducted in concert with other area activity would occur.
16. HUMAN HEALTH AND	Any industrial activity will increase the opportunities for accidental

IMPACTS ON THE HUMAN POPULATION	
RESOURCE	POTENTIAL IMPACTS AND MITIGATION MEASURES
SAFETY	injury. There are agencies that require specific safety measures are in place. If followed there is no reason to believe that significant safety issues would be present.
17. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES	This area does not inhibit the use of the identified resources. The mine site would not restrict access to public lands and should not affect the quality of recreational or wilderness activities due to distance from public land.

18. Alternatives Considered:

- A. Denial Alternative: The Department would deny an application that does not comply with the Act and Rules. No impacts to the natural or human environment would occur.
- B. Proposed Action Alternative

19. Public Involvement, Agencies, Groups or Individuals contacted: Montana State Historic Preservation Office, Montana Natural Heritage Program, Montana Department of Transportation.

20. Other Governmental Agencies Which May Have Overlapping or Sole Jurisdiction: Ravalli County Planning Department; Ravalli County Weed District; DEQ's Air Resources Management Bureau regarding air quality; DEQ's Water Protection Bureau regarding water discharge and/or stormwater; DNRC's Water Rights Bureau regarding water rights; Mine Safety & Health Administration and Occupational Safety & Health Administration regarding mine safety; and Montana Department of Labor & Industry, Bureau of Safety regarding mine safety.

21. 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.

22. Magnitude and Significance of Potential Impacts: This proposal is not likely to create impacts of significance.

23. Recommendation for Further Environmental Analysis: [] EIS [X] No Further Analysis

EA Prepared By: Kenley Stone Environmental Science Specialist
Name Title

EA Reviewed By: Neil Harrington Chief, Industrial and Energy Minerals Bureau
Name Title