

ENVIRONMENTAL ASSESSMENT

Project Name: Brinkman Pit

Proposed Implementation Date: in progress

Proponent: Schellinger Construction Co., Inc.

Type and Purpose of Action: The applicant proposes to amend his approved permit to increase his acreage from 4 to 12 , to change the volume mined from 15,000 to 156.000 cubic yards, and to increase the depth of mining from 15 to 18 feet. The pit is located 1 mile south of the town of East Glacier. The site is already under operation and the expansion has already occurred. Mining and restoration will result in a pit that is graded to the surrounding topography. The pit will be reclaimed for grazing after grading the backslopes to at least a 3:1, replacing all topsoil and reseeded. Date of final reclamation would by December 15, 1999. .

Location: NE¹/₄ SE¹/₄ Section 19, T31N, R12W

County: Glacier

N = Not present or No Impact will occur.

Y = Impacts may occur (explain under Potential Impacts).

IMPACTS ON THE PHYSICAL ENVIRONMENT	
RESOURCE	[Y/N] POTENTIAL IMPACTS AND MITIGATION MEASURES
<p>1. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE: Are fragile, compactible or unstable soils present? Are there unusual geologic features? Are there special reclamation considerations?</p>	<p>[N] The site is located in a scenic but otherwise un-spectacular area. The proposed mine is located on a hummocky glacial outwash plain left from the last retreating glacier around 10,000 years ago. The deposit consists of stratified layers of alluvium and glacial outwash sand, gravel and cobbles that cover the deeper Cretaceous mudstones and sandstones. The billion year old Precambrian rock of the Belt Series sandstone, mudstone and limestone rocks face the deposit to the west in towering walls sculpted by alpine glaciers. The Sawtooth Range to the west forms glacier National Park and the vast expanse to the east begins the Great Plains.</p> <p>Up to 10 inches of fairly well drained, clayey silt loam topsoil overlies the glacial sands and gravels. Local terrace slopes demonstrate reasonably good stability, and ripping after activities are complete should alleviate soil compaction. All soil material will be salvaged and stockpiled away from the affected land. Following mining, grading and ripping, the soils will be replaced, disked and seeded to stabilize the soil and prevent erosion. Microbes are expected to re-colonize the soil.</p>

<p>2. WATER QUALITY, QUANTITY AND DISTRIBUTION: Are important surface or groundwater resources present? Is there potential for violation of ambient water quality standards, drinking water maximum contaminant levels, or degradation of water quality?</p>	<p>[N] Midvale Creek is located ¼ mile northeast of the site but will not be affected by the mine.</p> <p>Any accidental spills or major leaks from equipment operating in the pit will immediately be excavated and removed from the site. Therefore, the potable water is not expected to be adversely impacted.</p>
<p>3. AIR QUALITY: Will pollutants or particulate be produced? Is the project influenced by air quality regulations or zones (Class I airshed)?</p>	<p>[Y] Air quality will not be degraded further under this amendment than the existing plan already allows, and there will be no further increase in particulate matter. Crushers, asphalt plants, dozers, loaders and trucking equipment typically cause dusty conditions in disturbed soil sites. Crusher production degrades the air quality but the operator must obtain air quality permits and abide by state air quality regulations. The site is not located within a Class 1 airshed.</p> <p>Applicable federal regulations for air quality which are implemented by the state are the Standards of Performance for New Stationary Sources, 40 CFR Part 60, Subpart OOO (Nonmetallic Mineral Processing Plants). Subpart OOO sets an opacity limitation on fugitive dust emissions from the gravel crushing and handling operations.</p>
<p>4. VEGETATION COVERS, QUANTITY AND QUALITY: Will vegetative communities be permanently altered? Are any rare plants or cover types present?</p>	<p>[Y] Vegetation consists entirely of planted pasture and all will be removed during mining. The ground will be re-planted with grasses capable of being grazed when reclaimed. No rare plants or cover types were identified and none were identified during a ground search.</p>
<p>5. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS: Is there substantial use of the area by important wildlife, birds or fish?</p>	<p>[Y] Although the area is used primarily for grazing, it also supports populations of deer, rodents, birds, insects and various other animal species. The mine site is frequented by those animals and they will be displaced as the mine expands. The proposed mine is not expected to significantly degrade wildlife populations.</p>
<p>6. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES: Are any federally listed threatened or endangered species or identified habitat present? Any wetlands? Species of special concern?</p>	<p>[N] Site evaluations have not revealed any other endangered or threatened plant or animal species on site that would be significantly impacted.</p>

<p>7. HISTORICAL AND ARCHAEOLOGICAL SITES: Are any historical, archaeological or paleontological resources present?</p>	<p>[N] Although there are important cultural values in the general area, this site has been previously disturbed by modern man, thus destroying the integrity of resources that may have existed. A surface reconnaissance did not discover any cultural, historical or archeological resources. If significant resources are found, the operation will be routed around the site of discovery for a reasonable time until salvage can be conducted. The State Historical Preservation Office will be promptly notified.</p>
<p>8. AESTHETICS: Is the project on a prominent topographic feature? Will it be visible from populated or scenic areas? Will there be excessive noise or light?</p>	<p>[Y] There will be a deterioration of aesthetics while the operation is under way. However, reclamation will leave the site in a landscape condition that is compatible with the surrounding area. There is and has been an alteration of the viewshed as a result of the existing sand and gravel mine. However, the viewshed has been extensively altered by other man made modifiers. The site is visible by traffic along State Highway 2. Floodlights from dark period operations would increase visibility and awareness of the operation.</p> <p>Noise and light will not increase from present levels when equipment is active. Noise levels are generally within the range of 60 to 90 decibels measured on-site, decreasing with distance. As a comparison, sound levels for ordinary activities such as close conversation at 60 decibels and music from a radio at 70 decibels are considered to be moderate. Levels above 90 decibels are severe, and prolonged exposure can lead to hearing loss.</p> <p>These impacts are intermittent and of relatively short duration but are in addition to the noise created by the increased truck traffic hauling to various projects.</p>
<p>9. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY: Will the project use resources that are limited in the area? Are there other activities nearby that will affect the project?</p>	<p>[N]</p>
<p>10. IMPACTS ON OTHER ENVIRONMENTAL RESOURCES: Are there other studies, plans or projects on this tract?</p>	<p>[N]</p>

IMPACTS ON THE HUMAN POPULATION

RESOURCE	POTENTIAL IMPACTS AND MITIGATION MEASURES
<p>11. HUMAN HEALTH AND SAFETY: Will this project add to health and safety risks in the area?</p>	<p>[Y] Heavy equipment and facilities including crushers, asphalt plants, trucks and loaders will create hazards, but the operator must comply with all MSHA and OSHA regulations. The operator will employ proper precautions to avoid. Signage and flaggers would reduce traffic dangers during times of heavy truck traffic entering and leaving the site.</p>
<p>12. INDUSTRIAL, COMMERCIAL AND AGRICULTURAL ACTIVITIES AND PRODUCTION: Will the project add to or alter these activities?</p>	<p>[Y] The acreage listed in the Type and purpose of Action will be taken out of ranching and put into industrial/commercial use. Upon completion of mining, the land will be reclaimed to its prior use.</p>
<p>13. QUANTITY AND DISTRIBUTION OF EMPLOYMENT: Will the project create, move or eliminate jobs? If so, estimated number.</p>	<p>[N]</p>
<p>14. LOCAL AND STATE TAX BASE AND TAX REVENUES: Will the project create or eliminate tax revenue?</p>	<p>[N]</p>
<p>15. DEMAND FOR GOVERNMENT SERVICES: Will substantial traffic be added to existing roads? Will other services (fire protection, police, schools, etc) be needed?</p>	<p>[Y] The operation will require periodic site evaluations by DEQ staff. However, these evaluations are usually performed in conjunction with other area operations. The site is typically used for highway projects and traffic during those times could temporarily add substantial traffic to the Highway.</p>
<p>16. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS: Are there State, County, City, USFS, BLM, Tribal, etc. zoning or management plans in effect?</p>	<p>[N]</p>
<p>17. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES: Are wilderness or recreational areas nearby or accessed through this tract?</p>	<p>[N]</p>

18. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING: Will the project add to the population and require additional housing?	[N]
19. SOCIAL STRUCTURES AND MORES: Is some disruption of native or traditional lifestyles or communities possible?	[N] This is a very old gravel pit and has been in service off and on for many years.
20. CULTURAL UNIQUENESS AND DIVERSITY: Will the action cause a shift in some unique quality of the area?	[N]
21. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:	[N]

22. Alternatives Considered:

No Action: The pit has already been expanded. If the amendment is not granted, there will be no legal oversight or regulation of reclamation on the site.

Approval of Application as submitted: The pit would be reclaimed as requested.

23. Public Involvement, Agencies, Groups or Individuals contacted: None

24. Other Governmental Agencies with Jurisdiction, List of Permits Needed:

Montana Department of Environmental Quality, Air Quality Bureau for crusher permit; Mine Safety and Health Administration for safety permit; Montana Department of Labor & Industry, Bureau of Safety for safety permit.

25. Magnitude and Significance of Potential Impacts:

Impacts of this amendment are unlikely to be significant on the environment because mining impacts have already occurred.

26. Regulatory impact on private property: The analysis conducted in response to the Private Property Assessment Act indicates no impact since this Plan of Operations would not require "Special Stipulations" in order to comply with the Opencut Mining Act.

Recommendation for Further Environmental Analysis:

EIS More Detailed EA No Further Analysis

EA Prepared By: Rod Samdahl Title: Reclamation Specialist

Approved By: Jerry Burke Title: Supervisor, Opencut Minin Program. IEMB

Signature

Date