

ENVIRONMENTAL ASSESSMENT

7/13/99

Project Name: Hetland Site

Proposed Implementation Date: 8/1/99

Proponent: Schellinger Construction Co.

Type and Purpose of Action: The applicant proposes to mine, crush, stockpile and haul 350,000 cubic yards of sand and gravel from a 10 acre site located 10 miles south of the town of Kalispell. There will be 7 acres mined and 3 acres disturbed for facilities, stockpiles and roads. The estimated start-up date is August 1, 1999 and will result in a pit that is level with the grade of the existing pasture west of the pit area. The pit will be reclaimed to grassland after grading the backslopes to at least a 3:1, replacing all topsoil, and re-seeding grasses. Reclamation would be completed by December 31, 2002.

Location: SE¼ SW¼ Section 4, T27N, R21W

County: Flathead

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] Up to 8 inches of fairly well drained, silty clay loam 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. The overburden has exhibited the ability to support vegetative growth. 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>[Y] There are at least 15 water wells in the area that average 206 feet in depth with static water levels of 39 feet and yield an average of 55 gallons per minute (see attached water well summary from the MBMG). Groundwater is anticipated to be at least three feet deeper than the floor of the finished mine area. The nearest surface water is Patrick Creek located just 100 feet to the west.</p> <p>Special precautions will be taken to minimize possible contamination of the ground and surface water. All fuel and bulk lubricants will be kept out of the site. Any accidental spills or leaks from equipment will be excavated and disposed of. No waste or trash will be disposed of at the site. Storm water will be controlled with gravel berms, straw bales or a silt fence. With these precautions, the quality and quantity of the surface and groundwater should not be adversely impacted.</p> <p>The proponent may be required to obtain a Stormwater Discharge Permit from the Department of Environmental Quality, to assure the protection of surface waters.</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] Crushers, dozers, loaders and trucking equipment typically cause dusty conditions in disturbed soil sites. Water bars, road watering and other dust controls will be used as necessary. The site is not located within a Class 1 airshed. Air quality may be degraded and there may be an increase in particulate matter but the operator must abide by air quality regulations in general.</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 is currently pasture with native pinegrass, kinnikinick and planted grasses with some Douglas fir and larch trees, which will be removed during mining, and the ground will be re-planted with species compatible with the proposed reclaimed use. All topsoil will be stripped off and kept on-site. There are no known rare or sensitive plants in the</p>

	<p>area. No mining will be done within 100 feet of any live stream, riparian or isolated wetland habitat areas. A literature search was done by the Montana National Heritage Program and 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>[N] Although the area is used primarily for agriculture, grazing, and rural/residential it also supports populations of deer, rodents, songbirds, insects and various other animal species. The mine site is frequented by those animals and they may be displaced as the mine expands. Human use of the area has intensified in the past two decades with the increase in residential and commercial activity. The proposed mine is not expected to significantly degrade wildlife populations. The Natural Heritage Program literature search and site evaluations have not revealed any other endangered or threatened plant or animal species on site that would be significantly impacted.</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] There are not expected to be any impacts on those species from the proposed mining operation. Wetlands are nearby but will not be affected by this operation.</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. The operator must give appropriate protection to any values or artifacts discovered in the affected area. If significant resources are found, the operation may be routed around the site of discovery for a reasonable time until salvage or recordation can be conducted.</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 may be a deterioration of aesthetics while the operation is under way. However, reclamation should 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 this existing gravel pit and other man made modifiers such as roads, ditches, homesites, power lines, etc. The site is visible by homes in the local area and to traffic along the country road. Floodlights from dark period operations would increase visibility and awareness of the operation. Negative influences of night-lights to those living nearby could be substantial although they are temporary.</p> <p>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
11. HUMAN HEALTH AND SAFETY: Will this project add to health and safety risks in the area?	[Y] Heavy equipment such as crushers, trucks, loaders, and scrapers may create hazards, but the operator must comply with all MSHA and OSHA regulations. The operator must employ proper precautions to avoid accidents, especially during typical operating hours for school busses. Excessive and prolonged noise and light could increase stress and induce difficulty sleeping. Both of these effects may be considered harmful to human health if the activities are continuous. This proposed operation is expected to create these impacts sporadically and for short periods; it therefore should not significantly affect human health.
12. INDUSTRIAL, COMMERCIAL AND AGRICULTURAL ACTIVITIES AND PRODUCTION: Will the project add to or alter these activities?	[Y] The acreage listed in the Type and purpose of Action will be taken out of grazing and put into industrial/commercial use. Upon completion of mining, the land will be reclaimed to grassland.
13. QUANTITY AND DISTRIBUTION OF EMPLOYMENT: Will the project create, move or eliminate jobs? If so, estimated number.	[N]
14. LOCAL AND STATE TAX BASE AND TAX REVENUES: Will the project create or eliminate tax revenue?	[N]
15. DEMAND FOR GOVERNMENT SERVICES: Will substantial traffic be added to existing roads? Will other services (fire protection, police, schools, etc) be needed?	[Y] The operation will require periodic site evaluations by DEQ staff. However, these evaluations are usually performed in conjunction with other area operations.
16. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS: Are there State, County, City, USFS, BLM, Tribal, etc. zoning or management plans in effect?	[N]
17. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES: Are wilderness or recreational areas nearby or accessed through this tract? Is there recreational potential within the tract?	[N]
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]
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 would not be permitted at this location and the landowner would be deprived of income from his land at this time. The material would still have to come from somewhere, so the impacts would only be displaced a short distance away and increase the cost of the project. The existing pit is being operated without a permit and the corresponding environmental controls that would accompany a permit.

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

23. Public Involvement, Agencies, Groups or Individuals contacted:

State Historic Preservation Office, Montana Heritage Program, & Flathead County Planning Office.

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

Montana Department of Environmental Quality, Water Protection Bureau for Stormwater Discharge Permit.

