

ENVIRONMENTAL ASSESSMENT
October 4, 1999

Project Name: Marion site
Proponent: Eric Woodring

Proposed Implementation Date: October 10, 1999

Type and Purpose of Action: The proponent has applied for a permit that, if approved, would result in the approval of a new gravel pit. The permit would provide for the removal of approximately 8,000 cubic yards of sand and gravel or related products and would result in a flat bottomed building site for a residence with 3:1 topsoiled slopes seeded to grass. The proposed site is located 1 mile northeast of Marion. The site is scheduled to be completed and reclaimed in the fall of 2009.

Location: SE¼ SE¼ Section 22 of T27N, R24W

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, compactable or unstable soils present? Are there unusual geologic features? Are there special reclamation considerations?</p>	<p>[N] Topsoil consists of a three to four inch layer of forest duff underlain by six to eight inches of very fine clayey silty loam which would be stripped and stockpiled. The topsoil stockpiles will be seeded with grasses using the approved seed mixture and rate. Following mining and re-grading, topsoil would be replaced, disked and seeded to pasture grass.</p> <p>There are no fragile, compactable or unstable soils or unusual geologic features. The soils may be susceptible to wind erosion at times. Topsoil stockpiles will be seeded to prevent erosion and water dust control will be used to reduce blowing dust. The reclamation of the site poses no special reclamation considerations.</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] There is no water within a mile of the site.</p> <p>The site will be mined to a maximum depth of 20 feet, but will stay above the groundwater, estimated to be 30 feet below the surface in the proposed pit area.</p> <p>Special precautions would be taken to minimize possible contamination of groundwater. All bulk fuel and lubricants would be brought in daily to the site. If plans for fuel storage in the pit change in the future, a proper fuel containment structure would be engineered and plans submitted to the DEQ for approval, in advance of installation. Portable equipment with fuel tanks such as loaders, trucks, crusher and screen would be operating in various places within the facility. Any accidental spills or leaks from equipment would be excavated and disposed of. No waste or trash would be buried at the site. With these precautions, the quality and quantity of the ground and surface water should not 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] The site is not located within a Class I Airshed. Air quality may be degraded and there may be an increase in particulate matter and odor generated from the site but the operator must obtain air quality permits and abide by federal air quality regulations. Dozers, loaders, crushers and trucking equipment typically cause dusty conditions in disturbed soil sites and operating equipment typically emits odors that may be offensive to some people. Water will be supplied by truck within the site as needed. Dust on the haul road will be controlled with a water truck.</p>

<p>4. VEGETATION COVER, QUANTITY AND QUALITY: Will vegetative communities be permanently altered? Are any rare plants or cover types present?</p>	<p>[N] There are no known rare or sensitive plants in the site area. Vegetation covers nearly 80% of the ground and consists mainly of pine trees, pinegrass, kinnikinick, oregon grape, etc. A ground survey and literature search by the Montana Natural Heritage Program did not reveal any rare plants or cover types.</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 timber, it also supports populations of large and small mammals, game and song birds, raptors, insects and various other animal species. Population numbers for these species is not known. The proposed mine is not expected to significantly degrade wildlife populations. Site evaluations and a literature search did not revealed any other 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] The Natural Heritage Program and site evaluations have not revealed any endangered or threatened plant or animal species that would be directly affected. There are no wetlands or species of special concern identified on the site or by the Natural Heritage Program.</p>
<p>7. HISTORICAL AND ARCHAEOLOGICAL SITES: Are any historical, archaeological or paleontological resources present?</p>	<p>[N] Although there are cultural values in the general area, much of this site has been previously disturbed by modern man, thus destroying the integrity of resources that may have existed. The operator will give appropriate protection to any values or artifacts discovered in the affected area. If significant resources were found, the operation would be routed around the site of discovery for a reasonable time until salvage 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 is a temporary effect on aesthetics while the operation is under way. However, reclamation will return the area to a visually acceptable landscape. The site is not visible by homes in the local area and to traffic along the state highway.</p> <p>On-site noise levels generated by operating equipment at the pit are generally within the range of 60 to 90 decibels, but decrease with distance. As a comparison, sound levels for ordinary activities such as close conversation and music from a radio are 60 decibels and 70 decibels and are considered moderate. Levels above 90 decibels are severe, and prolonged exposure can lead to hearing loss. There is also noise from loaders and 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>
<p>IMPACTS ON THE HUMAN POPULATION</p>	
<p>RESOURCE</p>	<p>[Y/N] POTENTIAL IMPACTS AND MITIGATION MEASURES</p>
<p>11. HUMAN HEALTH AND SAFETY: Will this project add to health and safety risks in the area?</p>	<p>[Y] Heavy equipment and operating facilities including scrapers, trucks, loaders and crushers create hazards, but the operator must comply with all MSHA and OSHA regulations. The operator must employ proper precautions to avoid accidents.</p>

12. INDUSTRIAL, COMMERCIAL AND AGRICULTURAL ACTIVITIES AND PRODUCTION: Will the project add to or alter these activities?	[N] The 5 acres listed in the Type and purpose of Action will be gradually taken out of forest regeneration as the mine expands. When significant portions of the site are no longer needed for mining or related activities, it will be reclaimed to homesites.
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 would require periodic site evaluations by DEQ staff until such time as the site is successfully reclaimed to the required post-mining use. 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?	[Y] City/County zoning clearance has been obtained from Flathead County
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:** Denial. Impacts would not occur at this location but, however, the proponent could apply to mine another area and similar impacts may be expected.

23. **Public Involvement, Agencies, Groups or Individuals contacted:** State Historic Preservation Office, Montana Natural Heritage Program, County Weed Control District, County Commissioners for zoning.

24. **Other Governmental Agencies with Jurisdiction, List of Permits Needed:** Montana Department of Environmental Quality for Air Quality (crusher plants) Permit; Mine Safety and Health Administration for safety permit.

25. **Magnitude and Significance of Potential Impacts:** Impacts are unlikely to be significant on the general environment because of the lack of significant or threatened wildlife or habitat, and because of the measures in the Plan of Operations and conditions placed on the proponent by DEQ. Impacts to groundwater quantity, quality and distribution would be negligible because mining would not intercept the groundwater and any spills would be excavated and removed. If plans are changed and they wish to store onsite, all fuel and lubricants would be kept within a sealed storage area that must comply with

applicable state and federal regulations. Visual impacts and dust levels may increase as a result of this expansion, but dust levels must keep within state air quality guidelines.

26. Regulatory impact on private property: The analysis conducted in response to the Private Property Assessment Act indicates no impact.

Recommendation for Further Environmental Analysis:

EIS More Detailed EA No Further Analysis

EA Checklist prepared By:	<u>Rod Samdahl</u>	<u>Reclamation Specialist</u>
	Name	Title
	<u>Jerry Burke</u>	<u>Supervisor, Opencut Mining Program, IEMB</u>
	Name	Title

Signature

Date