

ENVIRONMENTAL ASSESSMENT

Project Name: Emerson Junction Borrow

Proposed Implementation Date: June 1999

Proponent: Sletten Construction Companies

Type and Purpose of Action: The proponent proposes to mine and transport 34,000 cubic yards of sandy borrow from a 10.5-acre site for use on Interstate 15. The proponent would salvage soils, mine, recontour, resoil and reseed the site with grasses and grain. The reclaimed use would be grassland and farming (grain field). Final reclamation on the site would be completed in December 1999.

Location: SW¼, Sec32, T21N, R3W

County: Cascade

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 proposed site lays approximately 1.5 miles west of Great Falls and is situated at the southwestern toe of a sandstone bluff. The sands on the proposed site are of a loess nature deposited at the time of Glacial Lake Great Falls. Much of the site has been previously mined with no soil salvage or reclamation.</p> <p>The soil in the area not previously mined is a sandy loam approximately 12 inches deep and would be stripped and stockpiled for reclamation. Below the soil is a sand overburden which is 10 feet plus deep. This overburden would be mined as borrow. The area previously mined has no soil, but the sandy material supports some vegetation. Six inches of material would be stripped and salvaged from this area. The soils are not fragile, compactible or unstable. The 12 inches of soil and 6 inches of sandy material would be replaced after regrading the slopes to 3:1 or flatter. The site would be mined to a maximum depth of 30 feet. Microorganisms should reinvade the site.</p> <p>There are no unusual geologic features and 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 are no water wells within 1,000 feet of the proposed operation. The estimated depth to the water table is 100 plus feet. The site would be mined to a depth of 30 feet which is well above estimated depth to the water table.</p> <p>There would be no fuel stored onsite. Any spills of petroleum-based products would be immediately picked up and properly disposed of. Any storm water would be contained on site using earthen berms, straw bales, and/or silt fences. There is a coulee approximately 1,000 feet to the west. There is an existing culvert across this coulee and it would be extended. With the mining depth of 30 feet and Best Management Practices there should be no impact to ground or surface water resources.</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] There would be an increase in airborne particulates while the soil is being salvaged, the material hauled and soil replaced. The applicant would not need to secure an Air Quality Permit from the Montana Dept. of Environmental Quality since no processing facilities are involved no permits are required. Water would be sprayed on the haul road as necessary to control dust. The site is not within a Class I airshed.</p>

4. VEGETATION COVER, QUANTITY AND QUALITY: Are any rare plants or cover types present?	[N] The portion of the site in grain field has only stubble, the existing vegetation would be removed with the sandy material in the other portion. Some roots may remain viable in the sandy material stockpile and regenerate upon replacement. The applicant would seed all affected land to species compatible with the post mine land uses. The site currently contains both native and nonnative species. A literature search by the Montana Natural Heritage Program and a ground search found no threatened or endangered plants present.
5. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS: Is there substantial use of the area by important wildlife, birds or fish?	[N] The location does receive some use by small, medium and large mammals and various avian species.
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?	[N] The Montana Natural Heritage Program and a ground search did not identify any threatened or endangered plant or animal species present on this site. There are no wetlands or species of special concern present on the site.
7. HISTORICAL AND ARCHAEOLOGICAL SITES: Are any historical, archaeological or paleontological resources present?	[N] A cultural resource survey was not required as the site has been previously impacted by modern man and clearance has been obtained from Steve Platt, archaeologist for the Montana Dept. of Transportation. Should a significant archaeological or historical value be found, the operation would be routed around the site of discovery for a reasonable time until salvage can be made. The State Historic Preservation Office would be promptly notified.
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?	[N] The site would be visible from people traveling Interstate 15, but the proposed operation is of short duration.
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?	[N]
10. IMPACTS ON OTHER ENVIRONMENTAL RESOURCES: Are there other studies, plans or projects on this tract?	[N] Zoning clearance has been obtained.

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] The use of heavy mining and hauling equipment will increase the risk of accidents. However, the applicant must comply with OSHA and MSHA regulations and it is expected that safety considerations will be given the utmost attention.
12. INDUSTRIAL, COMMERCIAL AND AGRICULTURAL ACTIVITIES AND PRODUCTION: Will the project add to or alter these activities?	[N] 10.5 acres would be temporarily removed from agricultural production (grain production) and grassland until such time as the site is fully reclaimed.
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?	[N] The site would require periodic site evaluations by DEQ staff, however they would generally be conducted in conjunction with other regional sites.

