

## ENVIRONMENTAL ASSESSMENT

**Project Name:** Aadland

**Proposed Implementation Date:** February 1, 2000

**Proponent:** Fisher Sand & Gravel

**Type and Purpose of Action:** The company proposes to mine and crush 10,000 cubic yards of gravel from a 3.1 acre site. A screen and or asphalt plant also may be used. A part of the site was previously mined and reclaimed. The product would be used for local projects. The site would be reclaimed by September, 2003 as pasture.

**Location:** NW ¼ Sec 24 T4S R18E

**County:** Stillwater

**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><b>1. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE:</b> Are fragile, compactible or unstable soils present? Are there unusual geologic features? Are there special reclamation considerations?</p>	<p>[ N ] The site is located on a glacial outwash, alluvial bench 400 feet west of East Rosebud Creek. The soils are of the "Turner" series, and consist of 2 feet of clay loam overlying sandy gravel. Annual precipitation is 15 inches to 19 inches. Areas immediately adjacent to this site mined and reclaimed in 1994 and 1996 are looking good.</p> <p>The major constraint to reclamation would be if mining were to go too deep and approach the water table.</p>
<p><b>2. WATER QUALITY, QUANTITY AND DISTRIBUTION:</b> 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 ] East Rosebud Creek, located 400 to 800 feet east of the site, is used for irrigation, recreation, and wildlife habitat. Previous mining and reclamation occurred within the last 6 years adjacent to this proposed site. During those operations a berm was constructed and vegetated that screens the operation from the creek and its floodplain.</p> <p>This small operation would have no impact on surface waters. Test hole data and previous mining experience at this site confirms that groundwater is 21 feet deep. Mining would proceed to a depth of about 18 feet, or three feet above the groundwater level.</p> <p>Irrigation water from the alfalfa field to the west tends to collect in the north portion or facilities area of the site. During previous mining and reclamation the landowner requested that a french drain be installed to help collect and remove the excess irrigation water. This system works fairly well but the area can get soggy at times.</p> <p>The 2 feet of soil that would be replaced at reclamation should alleviate the irrigation water problems and mining would stop 3 feet above the natural groundwater level, so no adverse groundwater impacts are anticipated from this project.</p> <p>An asphalt plant may be used but no man-made wastes would be buried on-site.</p>
<p><b>3. AIR QUALITY:</b> Will pollutants or particulate be produced? Is the project influenced by air quality regulations or zones (Class I airshed)?</p>	<p>[ N ] The Absarokee/Beartooth Wilderness Area located about 10 miles south of the project is a Class II airshed. Crusher emissions are regulated by the Air and Waste Management Bureau of DEQ. The crusher is equipped with spray nozzles to suppress dust, and a water truck would be available for dust control on-site and on the haul road. No impacts would occur to the Class II airshed.</p>
<p><b>4. VEGETATION COVER, QUANTITY AND QUALITY:</b> Will vegetative communities be permanently altered? Are any rare plants or cover types present?</p>	<p>[ N ] The site is presently used as irrigated pasture, and has been farmed and planted to domestic forage plants. No rare species or cover types were found during a field inspection.</p>

<p><b>5. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:</b> Is there substantial use of the area by important wildlife, birds or fish?</p>	<p>[ Y ] The 3-acre site is adjacent to the East Rosebud Creek floodplain. The site is not used much by wildlife but the East Rosebud is. Many species of wildlife utilize the floodplain habitat. The vegetated berm constructed during previous mining has created a sight and sound barrier that insulates the wildlife from mining operations. Thus, very little impact is expected.</p>
<p><b>6. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES:</b> Are any federally listed threatened or endangered species or identified habitat present? Any wetlands? Species of special concern?</p>	<p>[ Y ] The Montana Natural Heritage Program lists an abandoned bald eagle nest is located within 1 mile of the site. No other indications of wetlands or species of special concern are present. Since the nest is abandoned, no impact would occur.</p>
<p><b>7. HISTORICAL AND ARCHAEOLOGICAL SITES:</b> Are any historical, archaeological or paleontological resources present?</p>	<p>[ N ] The State Historical Preservation Office has no listings for this area. A field inspection showed that the site has been heavily disturbed. No resources or artifacts were found either on the surface, or in ditches or other disturbed areas.</p>
<p><b>8. AESTHETICS:</b> 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 ] The site lies about a half mile from the paved county road 419, which gets a lot of use from residents, recreationists and mine traffic. The berm would partially screen the site from both sight and sound.</p>
<p><b>9. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY:</b> 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><b>10. IMPACTS ON OTHER ENVIRONMENTAL RESOURCES:</b> Are there other studies, plans or projects on this tract?</p>	<p>[ N ]</p>

**IMPACTS ON THE HUMAN POPULATION**

<b>RESOURCE</b>	<b>POTENTIAL IMPACTS AND MITIGATION MEASURES</b>
<p><b>11. HUMAN HEALTH AND SAFETY:</b> Will this project add to health and safety risks in the area?</p>	<p>[ N ]</p>
<p><b>12. INDUSTRIAL, COMMERCIAL AND AGRICULTURAL ACTIVITIES AND PRODUCTION:</b> Will the project add to or alter these activities?</p>	<p>[ N ] About 3 acres of hay land production would be lost for the 3 year life of this project.</p>
<p><b>13. QUANTITY AND DISTRIBUTION OF EMPLOYMENT:</b> Will the project create, move or eliminate jobs? If so, estimated number.</p>	<p>[ N ]</p>
<p><b>14. LOCAL AND STATE TAX BASE AND TAX REVENUES:</b> Will the project create or eliminate tax revenue?</p>	<p>[ N ]</p>
<p><b>15. DEMAND FOR GOVERNMENT SERVICES:</b> Will substantial traffic be added to existing roads? Will other services (fire protection, police, schools, etc) be needed?</p>	<p>[ N ] Truck traffic generated by this project would be totally insignificant.</p>
<p><b>16. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS:</b> Are there State, County, City, USFS, BLM, Tribal, etc. zoning or management plans in effect?</p>	<p>[ N ]</p>
<p><b>17. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES:</b> Are wilderness or recreational areas nearby or accessed through this tract? Is there recreational potential within the tract?</p>	<p>[ N ] The Absarokee/Beartooth Wilderness Area is located about 10 miles to the south. Numerous routes exist to access the wilderness but none of them traverse this site. The site might have value as a residential lot since it is adjacent to the creek and fairly close to the county road.</p>

