

# ENVIRONMENTAL ASSESSMENT

**Project Name:** Sordahl Site

**Proposed Implementation Date:** March, 1999

**Proponent:** Empire Sand & Gravel, Inc.

**Type and Purpose of Action:** The applicant proposes to mine, crush, stockpile and transport 11,000 cubic yards of sand and gravel and to batch hot asphalt from a 10.9 acre site located six miles north of Big Sandy. The excavation would leave a 10 foot deep depression reclaimed by contouring, spreading the topsoil and reseeding the with grasses. The reclaimed use would be grassland. There would be an asphalt plant located on site and the site would be reclaimed by the spring of 2000.

**Location:** NW¼, Sec. 20, T29N, R13E

**County:** Chouteau

**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 proposed operation is located on a glacial knob in rolling pasture and farmland. The topsoil is six inches of gravelly sandy loam with twelve inches of caliche-stained overburden. The topsoil and the overburden would be stripped and stockpiled separately, and after mining they would be replaced and graded. There are no fragile, compactible or unstable soils present and there are no unusual geologic features. Microorganisms should re-invade the soil.</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>[N] The depth to the water table is estimated to be greater than 20 feet. The seasonal high and low water tables are unknown. The proposed operation would be mined to a depth of approximately 10 feet. There are no water wells within 1,000 feet of the site. There will be no impact to the groundwater. The nearest surface water is Big Sandy Creek located ½ mile to the east. The proposed gravel pit would mine into a glacial knob, lowering the level of the ground down to that of the surrounding land to the south. Any accidental spills of petroleum-based products would be immediately cleaned up and the contaminated material properly disposed. Best management practices should prevent any impacts to surface water.</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>[Y] Air quality would be degraded. The proponent would need to obtain Air Quality Permits from the Montana Dept. of Environmental Quality as processing facilities and an asphalt plant are involved with the proposed operation. The site is not within a Class I Airshed. Dust will be suppressed by watering with a water truck as needed and by using spray bars on the crusher.</p>
<p><b>4. VEGETATION COVERS, QUANTITY AND QUALITY:</b> Will vegetative communities be permanently altered? Are any rare plants or cover types present?</p>	<p>[N] The site is currently native range with the grasses consisting of fescue, prairie junegrass, needleandthread and blue gramma. Vegetative cover varies from 80 to 90%. Grass species (native and nonnative) which would be compatible with the proposed land use of rangeland would be seeded on the site after re-contouring and re-topsoiling are completed. 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><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>[N] Various mammals, birds, and reptiles occasionally traverse the site. The literature search done by the Montana National Heritage Program did not indicate the presence of any species of special concern.</p>

<b>6. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES:</b> Are any federally listed threatened or an endangered species or identified habitat present? Any wetlands? Species of special concern?	<b>[N]</b> A ground search was conducted and no threatened or endangered species or identified habitats were found on the site. No wetlands are present. See Section 5.
<b>7. HISTORICAL AND ARCHAEOLOGICAL SITES:</b> Are any historical, archaeological or paleontological resources present?	<b>[N]</b> No historical, archaeological or paleontological resources were identified at the site. If the operator of the proposed operation discovers any cultural resources the operation must be routed around the site of discovery for a reasonable amount of time until salvage can be made. The State Historical Preservation Office must be promptly notified.
<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?	<b>[N]</b> The site is not visible to any but local farm traffic.
<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?	<b>[N]</b>
<b>10. IMPACTS ON OTHER ENVIRONMENTAL RESOURCES:</b> Are there other studies, plans or projects on this tract?	<b>[N]</b>

<b>IMPACTS ON THE HUMAN POPULATION</b>	
<b>RESOURCE</b>	<b>POTENTIAL IMPACTS AND MITIGATION MEASURES</b>
<b>11. HUMAN HEALTH AND SAFETY:</b> Will this project add to health and safety risks in the area?	<b>[Y]</b> There will be increased hazards because of equipment activity and hauling of the sand and gravel. The applicant must comply with OSHA and MSHA regulations however, proper precautions will be taken to avoid accidents.
<b>12. INDUSTRIAL, COMMERCIAL AND AGRICULTURAL ACTIVITIES AND PRODUCTION:</b> Will the project add to or alter these activities?	<b>[N]</b> 10.9 acres will be taken out of rangeland until such time as the site is successfully reclaimed.
<b>13. QUANTITY AND DISTRIBUTION OF EMPLOYMENT:</b> Will the project create, move or eliminate jobs? If so, estimated number.	<b>[N]</b>
<b>14. LOCAL AND STATE TAX BASE AND TAX REVENUES:</b> Will the project create or eliminate tax revenue?	<b>[N]</b>
<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?	<b>[N]</b> The site will require periodic site evaluations, but these will be done in conjunction with other operations in the area.
<b>16. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS:</b> Are there State, County, City, USFS, BLM, Tribal, etc. zoning or management plans in effect?	<b>[N]</b> County Zoning clearance has been obtained.
<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?	<b>[N]</b>
<b>18. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING:</b> Will the project add to the population and require additional housing?	<b>[N]</b>

