

# ENVIRONMENTAL ASSESSMENT

**Project Name:** Brown

**Proposed Implementation Date:** August 15, 2000

**Proponent:** Custer County

**Type and Purpose of Action:** The county proposes to mine 18,000 cubic yards of pit run gravel for use on local roads and other projects in the county. The action would disturb 5 acres of pasture at the edge of a bench a mile from the Powder River. Reclamation would be completed by November, 2005, and would return the land to pasture.

**Location:** N½ of the SE¼ Sec 30 T7N R52E

**County:** Custer

**N = Not present or No Impact will occur.**

**Y = Impacts may occur (explain under Potential Impacts).**

| IMPACTS ON THE PHYSICAL ENVIRONMENT   |  |
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| 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 at the edge of an alluvial terrace about a mile from the Powder River. The site occupies several finger ridges that slope off the south, and part of the main bench. Side slopes of the finger ridges are fairly steep, about a 2:1 and are 50 to 75 feet high.</p> <p>The loamy topsoil is 4 to 5 inches thick overlying 10 feet of good gravel. Precipitation ranges from 10 to 14 inches.</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 Powder River is a mile to the west and is about 400 feet in elevation below the site. A large gully lies to the south and carries water only during snowmelt and major rainfall events.</p> <p>The two-track road would be stripped with the topsoil rolled to one side and subsoil to the opposite side. It is not anticipated that the road would be graveled. As traffic pulverizes the surface, the dust, etc. would be rolled to the subsoil side to augment a very sparse resource. At reclamation, the road bed would be ripped, the subsoil's rolled back, and the topsoil replaced last.</p> <p>Mining would probably begin at the west end of the site and would proceed to various depths on the finger ridges. The swales in between would be left undisturbed. The flat on top would only be mined to about 10 feet deep.</p> <p>The finger ridges would be reclaimed as mining proceeded to the east. The overall slope to the south would be 3:1 or flatter. Because of the small size of the "mini-pits," the undisturbed vegetation in the neighboring swales, and concurrent reclamation, no impact to surface water is expected.</p> <p>Mining would not contact any groundwater. No fuel, asphalt, or other chemicals would be stored on site. No impact to groundwater is anticipated.</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 site would be used for pit run. A water truck would be used for dust abatement, if necessary, both on site and on the haul road.</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 pasture. The vegetation is typical rangeland in fair condition. Some sage and yucca grow on the slope of the terrace, and the flats supports a good stand of broom snakeweed. No noxious weeds were present. 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 ] Occasionally deer and antelope wander through the site. 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 has no listings in the vicinity. The site does not fit the criteria for wetlands. No species of special concern are present.</p>   |

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| <b>7. HISTORICAL AND ARCHAEOLOGICAL SITES:</b> Are any historical, archaeological or paleontological resources present?   | [ N] The State Historical Preservation Office has no listings for this area. A field inspection showed that no resources or artifacts were found either on the surface, or other disturbed areas along the road and hay yard. However, if a resource were to be discovered, operations would be curtailed for a reasonable time to allow for assessment of the find. |
| <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?                                       | [ N] The site lies miles from the any town about a quarter mile from the nearest county road.  |
| <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?  | [ N]   |
| <b>10. IMPACTS ON OTHER ENVIRONMENTAL RESOURCES:</b> Are there other studies, plans or projects on this tract?  | [ N]   |
| <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?   | [ N] The gravel would be used to maintain and upgrade the county road. This would promote safer travel and better year-round access for the local residents.   |
| <b>12. INDUSTRIAL, COMMERCIAL AND AGRICULTURAL ACTIVITIES AND PRODUCTION:</b> Will the project add to or alter these activities?  | [ N] About 5 acres of pastureland production would be lost for a few years. The plan calls for concurrent reclamation of the finger ridges. Final reclamation would be completed by 2004.  |
| <b>13. QUANTITY AND DISTRIBUTION OF EMPLOYMENT:</b> Will the project create, move or eliminate jobs? If so, estimated number.   | [ N]   |
| <b>14. LOCAL AND STATE TAX BASE AND TAX REVENUES:</b> Will the project create or eliminate tax revenue?   | [ N]   |
| <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?                                    | [ N] Truck traffic generated by this project would be totally insignificant.   |
| <b>16. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS:</b> Are there State, County, City, USFS, BLM, Tribal, etc. zoning or management plans in effect?  | [ N]   |
| <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? | [ N]   |
| <b>18. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING:</b> Will the project add to the population and require additional housing?   | [ N]   |
| <b>19. SOCIAL STRUCTURES AND MORES:</b> Is some disruption of native or traditional lifestyles or communities possible?   | [ N]   |
| <b>20. CULTURAL UNIQUENESS AND DIVERSITY:</b> Will the action cause a shift in some unique quality of the area?   | [ N]   |
| <b>21. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:</b>   | [ N]   |

