

ENVIRONMENTAL ASSESSMENT

1/20/98

Project Name: Hastings Site

Proposed Implementation Date: 11/15/97

Proponent: Konitz Contracting, Inc.

Type and Purpose of Action: The applicant proposes to mine, crush and haul 25,000 tons of sand and gravel from a pit located 15 miles southeast of the town of Conrad. There will be 2.2 acres mined and 2.5 acres disturbed for facilities and roads. The estimated start-up date is November 15, 1996 and will result in a pit that is no deeper than 10 feet. The pit will be reclaimed to farmland after grading the backslopes to at least a 5:1, replacing all topsoil and re-seeding to crops.

Location: NE¹/₄ NE¹/₄ Section 31, T28N, R1E

County: Pondera

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>[Y] The proposed mine is located in the glacial debris transported eastward from the mountains during Tertiary time. The deposit consists of stratified layers of alluvium sand, gravel and cobbles that cover the deeper 60 million year old Cretaceous marine sediments. The high plains of the stable craton extend from the overthrust Rocky Mountains eastward across Montana and were carved by eastward flowing streams over the past few million years. On a clear day the majestic alpine glaciated landscape of the Paleozoic sedimentary front range rocks that make up the Sawtooth Mountains can be seen to the west. The igneous intrusive rocks of the Sweetgrass Hills and the far off Bears Paw Mountains can be seen thrusting up through flat-lying sedimentary rocks to the north and east.</p> <p>Up to 12 inches of fairly well drained, sandy loam overlies the glacial sands and gravels. The subsoil is clayey silt and varies from 12 to 36 inches. Local terrace slopes demonstrate reasonably good stability, and ripping after activities are complete should alleviate soil compaction. All soil and subsoil material will be salvaged and stockpiled away from the affected land. Following mining, grading and ripping, the overburden and soils will be replaced, disked and seeded to stabilize the soil and prevent erosion. Microbes are expected to re-colonize the soil due to the relatively short time that soils will be in stockpiles.</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>[Y] Groundwater is 15 to 20 feet below the surface of the ground. The nearest surface water is the intermittent stream located 1100 feet to the south of the permit area. No potable water is expected to be adversely impacted.</p> <p>All fuel, lubricants and chemicals will be kept out of the permit area, and any accidental spills or major leaks from equipment operating in the pit will immediately be excavated and removed from the site. Therefore, the quality and quantity of the groundwater should not be 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] Air quality may be degraded and there may be an increase in particulate matter. Crushers, screens and trucking equipment typically cause dusty conditions in disturbed soil sites.</p> <p>Applicable federal regulations for air quality which are implemented by the state are the Standards of Performance for New Stationary Sources, 40 CFR Part 60, Subpart OOO (Nonmetallic Mineral Processing Plants). Subpart OOO sets an opacity limitation on fugitive dust emissions from the gravel crushing and handling operations.</p>
<p>4. VEGETATION COVERS, QUANTITY AND QUALITY: Will vegetative communities be permanently altered? Are any rare plants or cover types present?</p>	<p>[Y] Vegetation will be removed during mining, and the ground will be re-planted with crop species compatible with the proposed reclaimed use.</p> <p>There are no known rare or sensitive plants in the area. No mining will be done within 100 feet of any live stream, riparian or isolated wetland habitat areas. Current vegetation consists of summer fallow which lies on a flat slope. Vegetation covers 0% of the ground but will be planted with species compatible with the proposed reclaimed use. Because of the short timeframes, plant seeds and roots may remain viable in the soils.</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>[Y] Although the area is used primarily for farming, it also supports populations of deer, rodents, birds, insects and various other animal species. The mine site is frequented by those animals and they may be displaced as the mine expands. The proposed mine is not expected to significantly degrade wildlife populations.</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] There are not expected to be any impacts on those species from the proposed mining operation. The Natural Heritage Program literature search and site evaluations have not revealed any other endangered or threatened plant or animal species on site that would be significantly impacted.</p>

<p>7. HISTORICAL AND ARCHAEOLOGICAL SITES: Are any historical, archaeological or paleontological resources present?</p>	<p>[N] Although there are important cultural values in the general area, this site has been previously disturbed by modern man, thus destroying the integrity of resources that may have existed. A surface reconnaissance did not discover any cultural, historical or archeological resources. The operator must give appropriate protection to any values or artifacts discovered in the affected area. If significant resources are found, the operation may be routed around the site of discovery for a reasonable time until salvage can be conducted. The State Historical Preservation Office will be promptly notified.</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 may be a deterioration of aesthetics while the operation is under way. However, reclamation should leave the site in a landscape condition that is compatible with the surrounding area. There is and has been an alteration of the viewshed as a result of farming. The site is not visible by homes in the local area or to traffic along the county road.</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 align="center">IMPACTS ON THE HUMAN POPULATION</p>	
<p align="center">RESOURCE</p>	<p align="center">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 facilities including trucks, loaders, and screens may create hazards, but the operator must comply with all MSHA and OSHA regulations</p>
<p>12. INDUSTRIAL, COMMERCIAL AND AGRICULTURAL ACTIVITIES AND PRODUCTION: Will the project add to or alter these activities?</p>	<p>[Y] The acreage listed in the Type and purpose of Action will be taken out of farming and put into industrial/commercial use. Upon completion of mining, the land will be reclaimed to farming.</p>

<p>13. QUANTITY AND DISTRIBUTION OF EMPLOYMENT: Will the project create, move or eliminate jobs? If so, estimated number.</p>	<p>[N]</p>
<p>14. LOCAL AND STATE TAX BASE AND TAX REVENUES: Will the project create or eliminate tax revenue?</p>	<p>[N]</p>
<p>15. DEMAND FOR GOVERNMENT SERVICES: Will substantial traffic be added to existing roads? Will other services (fire protection, police, schools, etc) be needed?</p>	<p>[Y] The operation will require periodic site evaluations by DEQ staff. However, these evaluations are usually performed in conjunction with other area operations.</p>
<p>16. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS: Are there State, County, City, USFS, BLM, Tribal, etc. zoning or management plans in effect?</p>	<p>[Y]</p>
<p>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?</p>	<p>[N]</p>
<p>18. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING: Will the project add to the population and require additional housing?</p>	<p>[N]</p>
<p>19. SOCIAL STRUCTURES AND MORES: Is some disruption of native or traditional lifestyles or communities possible?</p>	<p>[N]</p>
<p>20. CULTURAL UNIQUENESS AND DIVERSITY: Will the action cause a shift in some unique quality of the area?</p>	<p>[N]</p>
<p>21. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:</p>	<p>[N]</p>

22. Alternatives Considered:

No Action: The pit would not be permitted at this location, but a similar site in close proximity would

be opened up for a source of material.

Approval of Application as submitted: The pit would be permitted and be reclaimed as requested.

23. Public Involvement, Agencies, Groups or Individuals contacted: State Historic Preservation Office, Montana Heritage Program, Pondera County Commissioners.

24. Other Governmental Agencies with Jurisdiction, List of Permits Needed: Montana Department of Environmental Quality, Air Quality for a crusher Permit; Mine Safety and Health Administration for safety permit; Montana Department of Labor & Industry, Bureau of Safety for safety permit.

25. Magnitude and Significance of Potential Impacts: Impacts are unlikely to be significant on the general environment because of the size and location of the project, and the lack of human population or significant wildlife species or habitat.

26. Regulatory impact on private property: The analysis conducted in response to the Private Property Assessment Act indicates no impact since this Plan of Operations would not require "Special Stipulations" in order to comply with the Opencut Mining Act.

Recommendation for Further Environmental Analysis:

EIS More Detailed EA No Further Analysis

EA Prepared By: Rod Samdahl Title: Reclamation Specialist

Approved By: Jerry Burke Title: Supervisor, IEMB, Opencut Mining Program

Signature

Date