

ENVIRONMENTAL ASSESSMENT

4/29/99

Project Name: Hamer Site

Proposed Implementation Date: December 10, 1998

Proponent: Jensen Paving Company

Type and Purpose of Action: The applicant proposes to mine, crush and haul 50,000 cubic yards of sand and gravel from an 8.5 acre pit, and to batch hot asphalt from a site located ½ mile northwest of the town of Clinton. There will be 4.0 acres mined and 4.5 acres disturbed for facilities and roads. The hot asphalt plant will run 25 to 30 days batching asphalt during paving. Mining and processing will result in a smooth-bottomed site with gentle backslopes. The project is temporary and the pit will be reclaimed to havland after grading the backslopes to a 5:1, replacing all topsoil and re-seeding to alfalfa. Reclamation would be completed by December of 1999.

Location: SW¼ SE¼ Section 22, T12N, R17W

County: Missoula

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 mine is located in a glacial outwash terrace left from the last great release of water from the Glacial Lake Missoula around 12,000 years ago. The deposit consists of stratified layers of alluvium and glacial outwash sand, gravel and cobbles that cover the deeper Precambrian rocks.</p> <p>Up to 18 inches of fairly well drained, silty clay loam topsoil overlies the glacial sands and gravels. Local terrace slopes demonstrate reasonably good stability, and ripping after activities are complete should alleviate soil compaction. All soil material will be salvaged and stockpiled away from the affected land. Following mining, grading and ripping, the soils will be replaced, disked and seeded to stabilize the soil and prevent erosion. There are no fragile, compactible or unstable soils present, no unusual geologic features, or 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>[Y] Groundwater is known to be 30 to 40 feet below the floor of the finished mine area. No water is anticipated in the pit area. The nearest major surface water is the Clark Fork River located across the railroad tracks, ¼ mile to the southwest. The site will be graded and maintained with internal drainage to prevent stormwater from flowing off-site and into state waters.</p> <p>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] Crushers, hot plants, dozers and trucking equipment typically cause dusty conditions in disturbed soil sites and cause odors. Water bars, road watering and other dust controls will be used as necessary. The site is not located within a Class 1 airshed.</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 I(Asphalt & Concrete Plants) and Subpart OOO (Nonmetallic Mineral Processing Plants). Subpart I sets particulate and opacity limitations on emissions from the asphalt plant. The particulate limitation must be verified by performance (stack) testing. Subpart OOO</p>

	sets an opacity limitation on fugitive dust emissions from the gravel crushing and handling operations.
4. VEGETATION COVERS, QUANTITY AND QUALITY: Will vegetative communities be permanently altered? Are any rare plants or cover types present?	[Y] Vegetation consists of planted pasture grasses including quackgrass, bluegrass, timothy and alfalfa, which lie on a flat bench, and all will be stripped off. Vegetation covers 100% of the ground and will be removed and planted with species compatible with the proposed reclaimed use. There are no known rare or sensitive plants in the area. Weeds will be sprayed as required by the Missoula County Weed Board.
5. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS: Is there substantial use of the area by important wildlife, birds or fish?	[Y] Although the area is used primarily for hay cropping, residential and some grazing, it also supports populations of deer, coyotes, rodents, raptors, game and non-game birds, insects and various other animal species. Those animals frequent the mine site and they will be displaced as the mine expands. Human use of the area has intensified in the past two decades with the increase in residential and commercial activity. The proposed mine is not expected to significantly degrade wildlife populations.
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] 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.
7. HISTORICAL AND ARCHAEOLOGICAL SITES: Are any historical, archaeological or paleontological resources present?	[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.
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?	[Y] There will be a deterioration of aesthetics while the operation is under way. However, reclamation will 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, ranching, homesite development, Interstate construction and other man made modifiers. The site is visible by traffic along the county road and Interstate 90. Flood-lights from dark period operations would increase visibility and awareness of the operation. Negative influences of night lights to those living near the operation will be negligible due to the proximity to the Interstate. Noise will be perceptible to locals in the area when equipment is active. Noise levels are generally within the range of 60 to 90 decibels measured on-site, decreasing with distance. As a comparison, sound levels for ordinary activities such as close conversation at 60 decibels and music from a radio at 70 decibels are considered to be moderate. Levels above 90 decibels are severe, and prolonged exposure can lead to hearing loss. These impacts are intermittent and of relatively short duration, but can be quite noticeable at times, especially at night.
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]

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] Heavy equipment and facilities including trucks, loaders, crushers and plants will create hazards, but the operator must comply with all MSHA and OSHA regulations. Excessive and prolonged noise and light could increase stress and induce difficulty sleeping. Both of these effects may be considered harmful to human health if the activities are continuous. This proposed operation is expected to create these impacts sporadically and for short periods; it therefore should not significantly affect human health.
12. INDUSTRIAL, COMMERCIAL AND AGRICULTURAL ACTIVITIES AND PRODUCTION: Will the project add to or alter these activities?	[Y] The acreage listed in the Type and purpose of Action will be taken out of agriculture and limited wildlife habitat, and put into industrial/commercial use. Upon completion of mining, the land will be reclaimed to hayland.
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?	[Y] The operation will require periodic site evaluations by DEQ staff. However, these evaluations are usually performed in conjunction with other area operations.
16. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS: Are there State, County, City, USFS, BLM, Tribal, etc. zoning or management plans in effect?	[N] The Zoning Compliance Form signed by the Missoula County Office of Planning and Grants stated that the area is unzoned.
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?	[N]
18. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING: Will the project add to the population and require additional housing?	[N]
19. SOCIAL STRUCTURES AND MORES: Is some disruption of native or traditional lifestyles or communities possible?	[N] In order to soften impacts on local residents, the operator has agreed to restrict their hours of operation for the hot plant to 6:00 a.m. to 6:00 p.m., Monday through Saturday, leaving evenings and Sundays for a break.
20. CULTURAL UNIQUENESS AND DIVERSITY: Will the action cause a shift in some unique quality of the area?	[N]
21. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:	[N]

22. Alternatives Considered:

- No Action:** The permit would not be approved and the landowner would be deprived of income from his land at this time. Another site with similar requirements would be located nearby for this highway project.
- Approval of Application as submitted:** The pit would be permitted as applied for and regulated under existing laws.

23. Public Involvement, Agencies, Groups or Individuals contacted:

State Historic Preservation Office, Montana Heritage Program, Missoula County Planning Office.

24. Other Governmental Agencies with Jurisdiction, List of Permits Needed: Department of Environmental Quality, Permitting and Compliance Division, Air and Waste Management Bureau for air quality permit.

