ENVIRONMENTAL ASSESSMENT

4/30/99

Project Name: Dobberstein Site **Proposed Implementation Date: 1/1/99**

Proponent: Ravalli County

Type and Purpose of Action: The applicant proposes to mine, crush and haul 100,000 cubic yards of sand and gravel over a 10-year period of time from a 6.5 acre pit located 3½ miles south of the town of Victor. There will be 6.5 acres mined and disturbed for facilities and roads. The estimated start-up date is January 1st, 1999 and will result in a pit that is level with the grade of the county road on the west side of the property and daylighted out toward the pasture to the south. The pit will be reclaimed to a pasture after grading the backslopes to at least a 3:1, replacing all topsoil, and re-seeding to grasses.

Location: SW¼ NW¼ Section 18, T7N, R20W **County: Ravalli**

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
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?	**[N] Up to eight inches of fairly well drained, silty 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. The overburden has exhibited the ability to support vegetative growth. Microbes are expected to re-colonize the soil.**
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?	**[Y] There are water wells in the area and no water is anticipated in the pit area. The nearest major surface water is the Bitterroot River located one mile to the east of the permit area. No potable water is expected to be adversely impacted.** **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.**
3. AIR QUALITY: Will pollutants or particulate be produced? Is the project influenced by air quality regulations or zones (Class I airshed)?	**[Y] Crushers, dozers and trucking equipment typically cause dusty conditions in disturbed soil sites. Water bars, road watering and other dust controls will be used as necessary. The site is not located within a Class 1 airshed.** **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.**
4. VEGETATION COVERS, QUANTITY AND QUALITY: Will vegetative communities be permanently altered? Are any rare plants or cover types present?	**[Y] Native vegetation will be removed during mining, and the ground will be re-planted with species compatible with the proposed reclaimed use. There is an existing infestation of knapweed in the mine area, but not greater than the surrounding area. 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.**
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 grazing, it also supports populations of large and small mammals, 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. Seed head gall flies**

	have been introduced to the tract to provide biological control of noxious weeds.
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. The operator may 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.**
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 may be a deterioration of aesthetics while the operation is under way. The site is visible by homes in the local area and to traffic along the county road. The site is located in a scenic, but not unique area. However, reclamation will return the area to a visually acceptable landscape.** **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 are in addition to the noise created by the increased truck traffic hauling to various projects.**
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 crushers, trucks, loaders, and screens may create hazards, but the operator must comply with all MSHA and OSHA regulations. The operator may employ proper precautions to avoid accidents, especially during typical operating hours for school busses. 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 grazing and put into industrial/commercial use. Upon completion of mining, the land will be reclaimed to residential property.**
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. The site will add further traffic to the county road during times of operation and may cause need for county road department and sheriff services.**
16. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS: Are there State, County, City, USFS, BLM, Tribal, etc. zoning or management plans in effect?	**[Y] This site was approved by the Ravalli County Planning Office.**
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]**
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 pit would not be permitted and impacts would be moved to a similar location elsewhere. The landowner would be deprived of income from his land at this time.

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

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

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

24. Other Governmental Agencies with Jurisdiction, List of Permits Needed:

Montana Department of Environmental Quality, Air Quality 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.

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 [X] No Further Analysis

EA Prepared By: Rod Samdahl Title: Reclamation Specialist

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

Signature Date