

FINAL ENVIRONMENTAL ASSESSMENT

May 1, 2000

Project Name: Brunner pit

Proposed Implementation Date: May 1, 2000

Proponent: Vance Brash

Type and Purpose of Action: The applicant proposes to mine, stockpile, and transport 20,000 cubic yards of sand and gravel from a 4-acre site located 4 miles south of Columbia Falls. The site would be mined to a depth of 15 feet from the pasture floor. The reclaimed use would be pasture and pond. The site would be reclaimed by re-contouring, re-topsoiling around the pond, facility and stockpile area, and reseeding the site with grasses. The slopes of the pond would be reduced to at least 3:1 and will have some rock work done for aesthetic purposes. Reclamation would be completed in the fall of 2004.

Location: NE¼ NW¼, Sec. 25, T30N, R21W

County: Flathead

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 their unusual geologic features? Are there special reclamation considerations?</p>	<p>[N] The proposed operation is located on a river bench within a glacial alluvial valley, in sands and gravels of the Quaternary to Recent geologic age. The proponent would mine to a depth of 15 feet into the groundwater. The mine area will be stripped of all available topsoil. The soil is a black, silty loam. Soil microbes should re-colonize the soils when replaced. There are no fragile, compactible, or unstable soils present, unusual geologic features, or special reclamation considerations. The reclaimed slopes will be reduced to a 3:1 or flatter angle.</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] The Flathead River is located ¼ mile east of the pit site but no water will enter or leave the site. The site would be mined with a dozer, loader and an excavator. There would be no discharge from the pit area. There are two water wells within 1,000 feet. Both wells are shallow, drilled 20 to 40 feet deep. The mine will intercept potable water as it develops this pond, but it should not effect these two wells.</p> <p>There are 15 registered wells in Section 25 that average 60 feet in depth, stand at 16 feet in static water level with yields of 38 gallons per minute. Wells in the area tend to be shallow with good transmissivity and good water quality. Groundwater is expected to have a flow gradient from northwest to southeast and recharges rapidly.</p> <p>No bulk fuel storage will be located on site. The proponent will not need to obtain a Stormwater Discharge Permit from the Montana Department of Environmental Quality, but will implement best management practices to prevent any off site erosion or sedimentation. All spills must be excavated immediately and removed from the site. With these precautions, the quality and quantity of potable water in local water wells should be unaffected by this operation.</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 will be degraded, but the proponent must comply with air quality standards of the Montana Department of Environmental Quality.</p>
<p>4. VEGETATION COVER, QUANTITY AND QUALITY: Will vegetative communities be permanently altered? Are any rare plants or cover types present?</p>	<p>[N] Vegetation on the site of the proposed operation consists planted pasture grass including smooth brome, various wheatgrasses, quackgrass and roses, and covers 80% of the ground. A literature search was done by the Montana Natural Heritage Program and no threatened or endangered plants or animals or rare plants or cover types were identified and none were identified during a ground search.</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>[N] The site is utilized to some extent by deer, other small mammals, and various species of birds. It has been used most recently as pasture for domestic stock.</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>[Y] A ground search was conducted and no threatened or endangered species or identified habitats were found on the site. The literature search conducted by the Montana Natural Heritage Program identified the general Northern Continental Divide area (the area from Canada south to State Highway 200 and from the East Front to the Swan and Stillwater Rivers) as occupied habitat for grizzly bears. It is highly unlikely that this proposed operation would impact the bear due to the lack of suitable habitat on the site and the nearby presence of residences.</p> <p>There are rookeries of Great blue heron along the river valley but none were noticed at the site. Bald eagles, osprey, great horned owls and other raptors use the area but no nesting sites were noted in the field inspection.</p> <p>Plant species of special concern in the area include Spalding's Campion, Deer Indian Paintbrush, Small Yellow Lady's Slipper, Maidenhair Spleenwort, Red-foot Flatsedge, slender Cottongrass, Short-styled Thistle and the Latah Tule Pea. None of these species were noticed on site.</p>
<p>7. HISTORICAL AND ARCHAEOLOGICAL SITES: Are any historical, archaeological or paleontological resources present?</p>	<p>[N] A field inspection was conducted and no resources were found.</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] Much of the proposed operation is located down in a swale but it is visible from Brunner Road. Stockpiles and truck traffic are adjacent to the road and are very visible to local traffic and residences in the area. The project is not long termed with reclamation being planned for the year 2004. Noise and light should not be noticed outside normal working hours which are 7:00 A.M. and 5:00 P.M., Monday through Friday.</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>

IMPACTS ON THE HUMAN POPULATION	
RESOURCE	POTENTIAL IMPACTS AND MITIGATION MEASURES
<p>11. HUMAN HEALTH AND SAFETY: Will this project add to health and safety risks in the area?</p>	<p>[Y] There will be increased hazards because of the 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.</p>
<p>12. INDUSTRIAL, COMMERCIAL AND AGRICULTURAL ACTIVITIES AND PRODUCTION: Will the project add to or alter these activities?</p>	<p>[N]</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>

15. DEMAND FOR GOVERNMENT SERVICES: Will substantial traffic be added to existing roads? Will other services (fire protection, police, schools, etc) be needed?	[N] The site will require periodic site evaluations, but these will be done in conjunction with other operations in the area.
16. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS: Are there State, County, City, USFS, BLM, Tribal, etc. zoning or management plans in effect?	[N] County zoning clearance has been obtained.
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. Alternative # 1: Denial. The owner of the gravel resource would be denied full utilization of his property at this time.

Alternative # 2: Approval. The permit would be approved after having been reviewed and modified to mitigate impacts such as water quality, hours of operation, topsoil salvage and revegetation.

23. Public Involvement, Agencies, Groups or Individuals contacted: State Historic Preservation Office, Montana Heritage Program, Flathead County Commissioners and Weed Management Board. Residents in the area were notified and given one week in which to relate comments to the DEQ prior to the decision to issue this permit. Concerns received were in regard to water quality and the direction of mining. These issues are adequately covered by existing language in the Plan of Operations.

24. Other Governmental Agencies with Jurisdiction, List of Permits Needed: Mine Safety and Health Administration for safety permit.

25. Magnitude and Significance of Potential Impacts: Impacts are unlikely to be significant because of the proposed operation's location and the lack of critical wildlife or plant species or habitats.

Recommendation for Further Environmental Analysis:

EIS More Detailed EA No Further Analysis

EA Checklist Prepared By: Rod Samdahl Title: Opencut Mining Program Reclamation Specialist, IEMB

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

Signature

Date