

ENVIRONMENTAL ASSESSMENT  
September 18, 2000

Project Name: Dutch Hill Site

Proposed Implementation Date: Operation ongoing

Proponent: Donaldson Bros. Ready Mix

Type and Purpose of Action: The applicant proposes to expand his existing mine from a 2 to a 13 acre site in order to extract, stockpile and transport an additional 500,000 cubic yards of sand from this pit located 4 miles northwest of the town of Hamilton. The site is already under permit, in operation and will result in a flat-lying residential site that will daylight out to the south. The site will have graded slopes of at least 4:1, be topsoiled and re-seeded back to grass.

Location: SW¼ SW¼ Section 36, T7N, R21W

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
<p>1. <b>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 proposed mine is a sandy ridge located in rolling foothills of the Bitterroot Mountains. The deposit consists of stratified layers of wind worked aeolian glacial sands that cover the deeper bedrock. The site is a wooded pasture area, which drains south and is adjacent to a local intermittent stream.</p> <p>Topsoil, which is thin and sandy, will be salvaged and stockpiled away from the pit and facility area. Following mining, grading and ripping, the soils will be replaced, disked and seeded back to grass.</p>
<p>2. <b>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>[Y] The nearest pre-mining surface water is a small tributary to Mill Creek which flows along the west side of the permit area. The tributary and creek will be unaffected by mining. A silt control structure will be installed along the west side to prevent runoff from entering the stream. The ridge will be flattened to a depth of 60 feet in the highest areas, and will not intercept groundwater.</p> <p>Special precautions will be taken to minimize possible contamination of the groundwater. All bulk fuel and lubricants will be kept outside the site. Portable equipment with fuel tanks such as loaders, trucks and dozers will be working in various places within the site. Any accidental spills or leaks from equipment will be excavated and disposed of. No waste or trash will be disposed of at the site. With these precautions, the quality and quantity of the groundwater should not be adversely impacted.</p>
<p>3. <b>AIR QUALITY:</b> 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 and there will be an increase in particulate matter. Dozers, loaders, and trucking equipment typically cause dusty conditions in disturbed soil sites. Dust will be controlled around the site by water truck or sprinklers.</p>
<p>4. <b>VEGETATION COVER, QUANTITY AND QUALITY:</b> Will vegetative communities be permanently altered? Are any rare plants or cover types present?</p>	<p>[N] There are no known rare or sensitive plants in the site area. Vegetation consists of Ponderosa pine, fescue and knapweed. Vegetation covers 60% of the ground and will be removed and planted with species compatible with the proposed reclaimed use.</p>
<p>5. <b>TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:</b> Is</p>	<p>[N] Although the area is used primarily for grazing and timber, it also supports populations of whitetail deer, waterfowl, rodents, song birds,</p>

<p>there substantial use of the area by important wildlife, birds or fish?</p>	<p>coyotes, foxes, raptors, insects and various other animal species. Population numbers for these species is not known.</p>
<p>6. <b>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>[N] The Natural Heritage Program and site evaluations have not revealed any endangered or threatened plant or animal species that would be directly affected. Bald eagles are known to range all along the nearby Bitterroot River Valley, but no nesting sites are known on or near the proposed permit area. No adverse effects are anticipated on the eagles as a result of this proposed action.</p>
<p>7. <b>HISTORICAL AND ARCHAEOLOGICAL SITES:</b> Are any historical, archaeological or paleontological resources present?</p>	<p>[N] Although there are 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 will give appropriate protection to any values or artifacts discovered in the affected area. If significant resources are found, the operation will 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. <b>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?</p>	<p>[Y] The site is located in a scenic, but not unique area. There will be a temporary deterioration of aesthetics while the operation is under way. However, reclamation will return the area to a visually acceptable landscape.</p> <p>The site is visible by traffic along the county road. Hours of operation for the site may be anytime 24 hours per day, 7 days per week. However, normal hours are 5 am to 10 pm.</p> <p>Noise levels generated by operating equipment at the pit 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. There is also noise from loaders and truck traffic hauling to various projects. These impacts are intermittent and of relatively short duration.</p>
<p>9. <b>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?</p>	<p>[N]</p>
<p>10. <b>IMPACTS ON OTHER ENVIRONMENTAL RESOURCES:</b> Are there other studies, plans or projects on this tract?</p>	<p>[N]</p>
<p><b>IMPACTS ON THE HUMAN POPULATION</b></p>	
<p><b>RESOURCE</b></p>	<p>[Y/N] <b>POTENTIAL IMPACTS AND MITIGATION MEASURES</b></p>
<p>11. <b>HUMAN HEALTH AND SAFETY:</b> Will this project add to health and safety risks in the area?</p>	<p>[Y] Heavy equipment and facilities including scrapers, trucks and loaders will create hazards, but the operator must comply with all MSHA and OSHA regulations. The operator must employ proper precautions to avoid accidents. Road signs in cooperation with the Ravalli County Road Department could reduce hazards entering to and from the county road.</p> <p>Excessive and prolonged noise and light could increase stress for nearby</p>

	residents and induce difficulty sleeping, but ongoing operations are not planned for nighttimes. Both of these effects may be considered harmful to human health if the activities are continuous. This proposed operation should not significantly affect human health.
12. <b>INDUSTRIAL, COMMERCIAL AND AGRICULTURAL ACTIVITIES AND PRODUCTION:</b> 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 agricultural/grazing and put into industrial/commercial use. Upon completion of mining, the land will be reclaimed to a homesite.
13. <b>QUANTITY AND DISTRIBUTION OF EMPLOYMENT:</b> Will the project create, move or eliminate jobs? If so, estimated number.	[N]
14. <b>LOCAL AND STATE TAX BASE AND TAX REVENUES:</b> Will the project create or eliminate tax revenue?	[N]
15. <b>DEMAND FOR GOVERNMENT SERVICES:</b> 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 until such time as the site is successfully reclaimed to the required post-mining use. However, these evaluations are usually performed in conjunction with other area operations.
16. <b>LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS:</b> Are there State, County, City, USFS, BLM, Tribal, etc. zoning or management plans in effect?	[Y] City/County zoning clearance has been obtained.
17. <b>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]
18. <b>DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING:</b> Will the project add to the population and require additional housing?	[N]
19. <b>SOCIAL STRUCTURES AND MORES:</b> Is some disruption of native or traditional lifestyles or communities possible?	[N] The site has been used for mining for many years.
20. <b>CULTURAL UNIQUENESS AND DIVERSITY:</b> Will the action cause a shift in some unique quality of the area?	[N]
21. <b>OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:</b>	[N]

**22. Alternatives Considered:**

- A. Denial: The pit would not be expanded and impacts from mining would not occur at this location. The owner of the sand resource would be denied full utilization of his property at this time.
- B. Approval of the application with mitigating conditions: The Plan of Operation has been written with mitigating conditions including water protection, soil salvage and full reclamation.

23. Public Involvement, Agencies, Groups or Individuals contacted: State Historic Preservation Office, Montana Heritage Program, Ravalli County Weed Control District, Ravalli County Planning for zoning.

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

25. Magnitude and Significance of Potential Impacts: Impacts are unlikely to be significant on the general environment because of the scope and location of the project, the lack of significant or threatened wildlife or habitat, and because of the mitigation measures placed in the Plan of Operations.

26. Regulatory impact on private property: The analysis conducted in response to the Private Property Assessment Act indicates no impact.

**Recommendation for Further Environmental Analysis:**

EIS     More Detailed EA     No Further Analysis

EA Checklist Prepared By: Rod Samdahl Reclamation Specialist  
Name Title

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

Signature

Date

Opencut

Revised, 2/25/92