

ENVIRONMENTAL ASSESSMENT

Project Name: CFIP pit #1

Proposed Implementation Date: 7/15/97

Proponent: Columbia Falls Industrial Park

Type and Purpose of Action: The applicant proposes to mine, crush and haul 202,000 cubic yards of sand and gravel from a 15 acre pit located adjacent to the north end of the town of Columbia Falls. There will be 7 acres mined and 8 acres disturbed for facilities and roads. The estimated start-up date is July 15, 1997 and will result in a pit that is no deeper than 25 feet. The pit will be reclaimed to small wildlife and upland bird habitat after grading the back slopes to at least a 3:1, replacing all topsoil, and re-seeding to grasses.

Location: S½ SW¼ Section 4, T30N, R20W

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 there unusual geologic features? Are there special reclamation considerations?</p>	<p>[Y] The site is located in a flat-lying river terrace left by the Flathead River as it re-worked glacial debris left from the last retreating glacier around 10,000 years ago. The deposit consists of stratified layers of alluvium and glacial outwash sand, gravel and cobbles that cover the deeper Tertiary valley fill. The billion year old Precambrian rock of the Belt Series sandstone, mudstone and limestone rocks surround the deposit in towering walls sculpted by alpine glaciers that form an intermountain, fault block basin known as the Rocky Mountain Trench. The Whitefish Range to the northeast, the Swan Range to the southeast and the less dramatic Salish Range to the west surround this flat-lying valley.</p> <p>Up to 8 inches of fairly well drained, dark sandy loam topsoil overlies the glacial sands and gravels. Local terrace slopes demonstrate reasonable stability, and ripping after activities are complete should alleviate soil compaction. All soil material will be salvaged and stockpiled away from the affected land. Topsoil has been stripped in areas where previous log processing has occurred. Following mining, grading and ripping, the overburden (if any) and 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 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] There is one water well within 1000 feet of the site owned by the applicant which is 305' in depth with a static water level of 125 feet and yields 250 gallons per minute. Cedar Creek is located 1100 feet to the northeast. 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. The proponent may be required to obtain a Stormwater Discharge Permit from the Montana Department of Environmental Quality, to assure the protection of surface waters.</p> <p>The site will be mined to a depth of 25 feet which should be well above the surrounding groundwater. Near-surface groundwater is shallow in the area, and the sands and gravels display high permeability. Special precautions will be taken to minimize possible contamination of the groundwater. All fuel and bulk lubricants will be kept out of the pit. 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. 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, screens, dozers and trucking equipment typically cause dusty conditions in disturbed soil sites. Air quality will be degraded and there will be an increase in particulate matter.</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 species compatible with the proposed reclaimed use. Under ideal conditions, desirable native species from undisturbed, adjacent land will re-invade the site. 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.</p> <p>Vegetation consists of knapweed, wormwood and quackgrass which lie on a flat bench. Vegetation covers 20% of the ground and will be removed and planted with species compatible with the proposed reclaimed use. A literature search was done by the Montana National Heritage Program and no 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>[Y] The area is used primarily by small populations of deer, rodents, birds, insects and various other animal species. The mine site is frequented by those animals and they will be displaced as the mine expands. Human use of the area has intensified in the past three decades with the increase in residential and commercial activity. 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. A cultural survey was done and revealed no resources. 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. 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] The site is located in a scenic, but not unique area. 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 this existing sand and gravel pit and the previous logging facility. The site is visible by homes in the local area and to traffic along the nearby streets and roads. Floodlights from dark period operations would increase visibility and awareness of the operation.</p> <p>Noise will increase from present levels 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.</p> <p>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.</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] Heavy equipment and facilities including crushers, trucks, loaders, and screens will create hazards, but the operator must comply with all MSHA and OSHA regulations. The operator will employ proper precautions to avoid accidents. 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.</p>
<p>12. INDUSTRIAL, COMMERCIAL AND AGRICULTURAL ACTIVITIES AND PRODUCTION: Will the project add to or alter these activities?</p>	<p>[N] The acreage listed in the Type and purpose of Action will be taken out of small animal habitat and put into industrial/commercial use. Upon completion of mining, the land will be reclaimed to wildlife habitat.</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] To this date it has not been shown that the current operation has resulted in a reduction in taxable value of property and it is not anticipated that this mining proposal would alter past assessments. The presence of an industrial site in the midst of a residential area has the potential to reduce the desirability of surrounding land as a location to live, and therefore the marketability of improved and unimproved real estate may be diminished as some prospective buyers would not purchase these properties. The area proposed to be mined has been used as an industrial park with many light industrial activities including a gravel pit for many years however, so it could be assumed that because residential building has encroached around this site, those purchasers did not find the use objectionable.</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>

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 lies within an approved Industrial Park for the City of Columbia Falls. The use of this site as a gravel source is in holding with the theme of the park.
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] While the surrounding area has built up as residential, the Industrial Park has been in existence for many years.
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 already existing would continue.

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

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

State Historic Preservation Office, Montana Heritage Program, Flathead County Regional Development Office, Resident Notification to all residences within 1000 feet of the site.

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

Montana Department of Environmental Quality, Water Quality Division for Stormwater Discharge 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 environment in general because of the small amount of disturbance in comparison to that of the development in the area. However, the impacts may be more significant to those residences nearby.

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: Program Coordinator

Signature

Date