

## ENVIRONMENTAL ASSESSMENT

**Project Name:** TM      **Proposed Implementation Date:** Ongoing

**Proponent:** Montana Material Products

**Type and Purpose of Action:** The proponent proposes to amend their current Mined Land Reclamation Contract from 14.48 acres to 24.48 acres. This would allow the operator to mine, crush, sort, stockpile, and transport 300,000 cubic yards of sand and gravel to supply the local market. The site would be reclaimed by recontouring, respreading the topsoil and reseeding the site with grasses. The reclaimed use would be livestock grazing. Reclamation will be completed by fall of 2008.

**Location:** SE¼, Sec. 5, T7S, R4E    **County:** Gallatin

**N = Not present or No Impact will occur.**

**Y = Impacts may occur (explain under Potential Impacts).**

<b>IMPACTS ON THE PHYSICAL ENVIRONMENT</b>	
<b>RESOURCE</b>	<b>[Y/N] POTENTIAL IMPACTS AND MITIGATION MEASURES</b>
<p><b>1. 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 expansion is located in sands and gravels of alluvial/glacial origin and lies on a bench west of the Gallatin River. The topsoil is clay loam 12 inches plus or minus deep. They are further defined as Cryoboralfs-Cryoborolls and are undulating to rolling soils in valleys and on foothill glacial moraines. There is no overburden. Mining would continue in a northerly direction and would continue at a depth of approximately 20 feet. The topsoil would be stripped and stockpiled and after regrading would be evenly replaced. Microorganisms should invade the soil.</p>
<p><b>2. 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>[N] The nearest surface water sources are the Gallatin River, approximately 0.5 miles east and Michner Creek, approximately 700 feet northwest of the proposed expansion. Mining would continue at its current depth into the bench and no groundwater would be affected at this depth. The estimated depth to the water table is 10 to 20 feet below the elevation of the toe of the terrace. Fuel storage tanks would continue to be lined and bermed and be of sufficient size to contain any leaks or spills. The site upon reclamation would be daylighted to the east. The reclaimed pit floor will slope to the east. Silt fences would be installed if necessary to prevent any off site sedimentation or erosion. There are five water wells within 1,000 feet of the site, according to Montana Bureau of Mines and Geology Water Well Log Data. There should not be any impact to any ground or surface water.</p>

<p><b>3. 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 would be degraded. The proponent must comply with air quality standards and Air Quality Permits obtained from the Montana Dept. of Environmental Quality for the crusher. Noise is created by the crusher, but the proponent has previously placed topsoil berms to act as sound and visual barriers.</p>
<p><b>4. VEGETATION COVERS, QUANTITY AND QUALITY:</b> Will vegetative communities be permanently altered? Are any rare plants or cover types present?</p>	<p>[Y] The existing vegetation consists primarily of Kentucky bluegrass, rough fescue, big sagebrush, numerous forbs and phlox. A climax community at this location would be expected to support Idaho fescue, Columbia needlegrass, Richardson needlegrass, pinegrass, bearded wheatgrass, grouse whortleberry, elk sedge, blue wildrye, common beargrass, Saskatoon seroceberry, spike trisetum, subalpine fir, Douglas fir, Engelmann spruce, heartleaf arnica, blue and dwarf huckleberry, mallow ninebark, and Oregongrape. A combination of native and introduced species of grasses and a legume will be seeded onto the site upon recontouring and retopsoiling.</p>
<p><b>5. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:</b> Is there substantial use of the area by important wildlife, birds or fish?</p>	<p>[N] The area is highly impacted by commercial and residential development.</p>
<p><b>6. 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] A ground search was conducted and no threatened or endangered species or identified habitats were found on the site. No wetlands are present.</p>
<p><b>7. HISTORICAL AND ARCHAEOLOGICAL SITES:</b> Are any historical, archaeological or paleontological resources present?</p>	<p>[N] A cultural survey was conducted on the site and no cultural resources were found. If the operator of the proposed operation discovers any cultural resources the operation must be routed around the site of discovery for a reasonable amount of time until salvage can be made. The State Historical Preservation Office must be promptly notified.</p>
<p><b>8. 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 operation is in an area receiving a considerable amount of tourism. Highway 191 (a main route to Yellowstone National Park is immediately east of the proposed expansion), Big Sky resort and ski area, numerous residences, and several commercial developments which depend on tourism for their livelihood are located near the site. The proposed expansion should not have any additional affect on any surrounding activities.</p>

<p><b>9. 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>	[N]
<p><b>10. IMPACTS ON OTHER ENVIRONMENTAL RESOURCES:</b> Are there other studies, plans or projects on this tract?</p>	[N]

**IMPACTS ON THE HUMAN POPULATION**

<b>RESOURCE</b>	<b>POTENTIAL IMPACTS AND MITIGATION MEASURES</b>
<p><b>11. HUMAN HEALTH AND SAFETY:</b> Will this project add to health and safety risks in the area?</p>	[Y] There will be increased hazards because of 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><b>12. INDUSTRIAL, COMMERCIAL AND AGRICULTURAL ACTIVITIES AND PRODUCTION:</b> Will the project add to or alter these activities?</p>	[Y] Until the site is successfully reclaimed, 24.48 acres will be removed from livestock grazing.
<p><b>13. QUANTITY AND DISTRIBUTION OF EMPLOYMENT:</b> Will the project create, move or eliminate jobs? If so, estimated number.</p>	[N]
<p><b>14. LOCAL AND STATE TAX BASE AND TAX REVENUES:</b> Will the project create or eliminate tax revenue?</p>	[N]
<p><b>15. DEMAND FOR GOVERNMENT SERVICES:</b> Will substantial traffic be added to existing roads? Will other services (fire protection, police, schools, etc) be needed?</p>	[N] The site will require periodic site evaluations, but these will be done in conjunction with other operations in the area.
<p><b>16. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS:</b> Are there State, County, City, USFS, BLM, Tribal, etc. zoning or management plans in effect?</p>	[N] County Zoning clearance has been obtained.

<b>17. 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]
<b>18. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING:</b> Will the project add to the population and require additional housing?	[N]
<b>19. SOCIAL STRUCTURES AND MORES:</b> Is some disruption of native or traditional lifestyles or communities possible?	[N]
<b>20. CULTURAL UNIQUENESS AND DIVERSITY:</b> Will the action cause a shift in some unique quality of the area?	[N]
<b>21. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:</b>	[N]

**22. Alternatives Considered:**

Alternative # 1: Denial. The owner of the gravel resource would be denied full utilization of his property at this time.

**23. Public Involvement, Agencies, Groups or Individuals contacted:** Montana Natural Heritage Program & Gallatin County Planning Board & Weed Control District

**24. Other Governmental Agencies with Jurisdiction, List of Permits Needed:** Mine Safety & Health Administration for safety permit; Montana Department of Labor & Industry, Bureau of Safety for safety permit; Permitting and Compliance Division for crusher permit.

**25. Magnitude and Significance of Potential Impacts:** Impacts are unlikely to be significant on the general environment because of the small amount of disturbance and short duration of the project.

**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: Jerry Burke      Title: IEMB, Opencut Mining Program Supervisor

Approved By: Steve Welch      Title: Industrial and Energy Minerals Bureau Chief

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Signature

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Date