

# ENVIRONMENTAL ASSESSMENT

**Project Name:** Gerdrum

**Proposed Implementation Date:** Spring 2000

**Proponent:** Centuries Companies, Inc.

**Type and Purpose of Action:** The proponent proposes to mine, crush, stockpile and transport 30,000 cubic yards of sand and gravel from a 5.0 acre site for use in overlaying a stretch of Highway 200 with asphalt. The site would be reclaimed by recontouring, respreading the topsoil and reseeding the site with grasses. The reclaimed use would be grazing. The proposed operation is 3 miles east of Grass Range. There would be an asphalt plant located on site and the site would be reclaimed by May of 2000.

**Location:** SE¼, Sec. 15, T15N, R23E

**County:** Fergus

**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><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><b>[N]</b> The proposed operation is located on a bench approximately 1,500 feet south McDonald Creek, across Highway 200. In 1997 three acres of the proposed operation was mined and reclaimed by Bill Dengel Construction, the three acres mined and reclaimed by Bill Dengel Construction included one acre mined in the 1950's and left unreclaimed. The facility and stockpiles will be located in the area mined and reclaimed in 1997. The proponent will expand the reclaimed pit to the south and west. The topsoil is a gravelly clay loam, approximately 6 inches deep. Some of the proposed mine area has up to 18 inches of overburden. The topsoil and the overburden would be stripped and stockpiled separately and after regrading the overburden and then the topsoil would be evenly replaced. Microorganisms should reinvade 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><b>[N]</b> The depth to the water table is estimated to be greater than 60 feet below the current pit floor. The seasonal high and low water tables are unknown. The proposed operation would be mined starting at the foot of the existing southwest reclaimed pit slope and progress into the slope to the height of the top of the bench which is approximately 10 feet above the pit floor. There are no water wells within 2,000 feet of the site. There will be no impact to the groundwater. There is no surface water within 1,000 feet. Any accidental spills of petroleum-based products would be immediately cleaned up and the contaminated material properly disposed of. The site upon reclamation would be daylighted and gently slope to the north and east into the existing pit and the slopes in the other directions would be regraded to 3:1 or flatter. There would be no 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><b>[Y]</b> Air quality would be degraded. The proponent will need to get Air Quality Permits from the Montana Dept. of Environmental Quality as processing facilities and an asphalt plant are involved with the proposed operation.</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><b>[N]</b> The vegetation on the site is alfalfa and crested wheatgrass. The landowner has requested crested wheatgrass and alfalfa be seeded on the site upon recontouring and retopsoiling. 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>

<b>5. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:</b> Is there substantial use of the area by important wildlife, birds or fish?	[N] Various mammals, birds, and reptiles occasionally traverse the site.
<b>6. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES:</b> Are any federally listed threatened or an endangered species or identified habitat present? Any wetlands? Species of special concern?	[N] Ground and literature searches were conducted and no threatened or endangered a species or identified habitats were found on the site. No wetlands are present.
<b>7. HISTORICAL AND ARCHAEOLOGICAL SITES:</b> Are any historical, archaeological or paleontological resources present?	[N] Due to the amount of previous disturbance the Montana Department of Transportation did not require a cultural survey on the site. 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.
<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?	[N] The site is visible from a state highway, but it is a short term operation and will be reclaimed by the spring of 2001.
<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?	[N]
<b>10. IMPACTS ON OTHER ENVIRONMENTAL RESOURCES:</b> Are there other studies, plans or projects on this tract?	[N]

<b>IMPACTS ON THE HUMAN POPULATION</b>	
<b>RESOURCE</b>	<b>POTENTIAL IMPACTS AND MITIGATION MEASURES</b>
<b>11. HUMAN HEALTH AND SAFETY:</b> Will this project add to health and safety risks in the area?	[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.
<b>12. INDUSTRIAL, COMMERCIAL AND AGRICULTURAL ACTIVITIES AND PRODUCTION:</b> Will the project add to or alter these activities?	[N] 5.0 acres will be taken out of grazing until such time as the site is successfully reclaimed.
<b>13. QUANTITY AND DISTRIBUTION OF EMPLOYMENT:</b> Will the project create, move or eliminate jobs? If so, estimated number.	[N]
<b>14. LOCAL AND STATE TAX BASE AND TAX REVENUES:</b> Will the project create or eliminate tax revenue?	[N]
<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?	[N] The site will require periodic site evaluations, but these will be done in conjunction with other operations in the area.
<b>16. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS:</b> Are there State, County, City, USFS, BLM, Tribal, etc. zoning or management plans in effect?	[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, State Historic Preservation Office, & Fergus County Commissioners & 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:

**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: Supervisor, Opencut Mining Program, IEMB

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

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Signature

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Date