

ENVIRONMENTAL ASSESSMENT

On an Application for an

OPENCUT MINING PERMIT or AMENDMENT

This Environmental Assessment (EA) is required under the Montana Environmental Policy Act (MEPA). An EA functions to identify, disclose, and analyze the impacts of a proposed action. This document may disclose impacts that have no legislatively required mitigation measures, or over which there is no regulatory authority.

The state law that regulates gravel mining operations in Montana is the Opencut Mining Act. This law and the rules adopted hereunder place operational guidance and limitations on a project during its lifetime, and provides for the reclamation of land affected by opencut mining operations.

Local governments and other state agencies may have authority over different resources and activities under their regulations. Approval or denial of this Opencut Application will be based on a determination of whether or not the proposed operation complies with the Opencut Mining Act and the Rules adopted hereunder.

APPLICANT: Mike and Esther Parker

SITE NAME: Parker

LOCATION: SE4NE4, Sec 2, T29N, R31W

COUNTY: Lincoln

DATE: August 2009

PROPOSAL: The proponent has submitted an application to conduct opencut mining operations for sand and gravel on 3 acres of land south of Libby on an area previously mined for the same materials. The application, if approved would allow mining of up to 40,000 cubic yards of material and production of various sized aggregate by screening, crushing and use of a grizzly.

As part of the permit application, the proponent has submitted a Plan of Operation that provides baseline information, operation plans and plans for reclamation that would return the affected lands to a post-mine use of grassland. Reclamation is required by the Opencut Mining Act and backed by a reclamation bond that allows the state to perform the work should the operator be unwilling or unable to do such.

IMPACTS ON THE PHYSICAL ENVIRONMENT	
RESOURCE	POTENTIAL IMPACTS AND MITIGATION MEASURES
1. TOPOGRAPHY, GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE:	<p>The area to be mined is located on a bench above and west of Libby Creek that was formed by glacial-fluvial actions. There are pockets of sand and gravel that are overlain by various depths of sandy soils. Much of the original soil layers have been progressively lost by mining and reclamation from previous mining entries.</p> <p><i>Impacts:</i> There would be an irreversible and irretrievable removal of gravel from the site and a small impact to the quantity and quality of soils from salvaging, stockpiling, and resoiling activities, but this would not impair the capacity of the soils to support full reclamation. Damage from soils loss has already occurred and should be reduced now that the landowner is in charge of the operation. There are no unusual topographic, geologic, soil, or special reclamation considerations that would lead to reclamation failure.</p>
2. WATER QUALITY, QUANTITY AND DISTRIBUTION	<p>There is no surface water on or near the site. An ephemeral drainage to the north would not be impacted, and Libby Creek to the west is over a ¼ mile away. Groundwater is greater than 100 feet and no fuels are</p>

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	<p>stored on site.</p> <p><i>Impacts:</i> The proposed activities would have a minimal if not negligible effect on the quantity and quality of the surface and groundwater resources.</p>
3. AIR QUALITY	<p>Air quality in this area is generally good, even though lower in the valley there are many winter days of poor air quality because of wood smoke and fine particulate matter. However, this site is higher and above those concentrations. Air quality permits would be required on the processing equipment before installment. Machinery, such as generators, crushers and asphalt plants, are individually permitted for allowable emissions. Best Available Control Technology (BACT) is the usual standard applied.</p> <p>Fugitive dust that blows off the pit floor, stockpiles, gravel roads etc could be present at times. It is considered to be a nuisance but not harmful to health and would be controlled by watering during periods of activity. Only crushers, screens and a grizzly are anticipated to be in use at this site, and then very infrequently.</p> <p><i>Impacts:</i> Air quality standards as set by the federal government and administered by the Air Resources Management Bureau of the DEQ would allow minimal detrimental air impacts.</p>
4. VEGETATION COVER, QUANTITY AND QUALITY	<p>Native vegetation is limited to sparse Ponderosa pine and various grass species adapted to sandy conditions. The area to be mined is even more sparsely populated because of previous disturbances and supports knapweed and needle and thread grass.</p> <p><i>Impacts:</i> All vegetation would be removed with soil salvage but some seed would remain viable in soil stockpiles. Following mining, the landowner would plant a diverse mixture of species that are well adapted to sandy soils. They should propagate successfully.</p>
5. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:	<p>Although the area had been used primarily for pasture prior to earlier mining, it also supported populations of deer, rodents, song birds, coyotes, foxes, raptors, insects and various other animal species. Population numbers for these species are not known.</p> <p><i>Impacts:</i> The proposed mine is expected to temporarily displace some individual species and it is likely that the site would be re-inhabited following reclamation to similar habitat.</p>
6. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES:	<p>The Montana Natural Heritage Program has identified Grizzly Bear, Lynx and Townsend's Big Ear Bat as species of concern in the region.</p> <p><i>Impacts:</i> None of the listed species have been found on this site. Even if suitable habitat did exist on this site, the disturbance area would be small and large areas of similar or identical habitat surrounds the site. The possible impact to these species would be minimal.</p>
7. HISTORICAL AND ARCHAEOLOGICAL SITES	<p>The Montana State Historic Preservation Office (SHPO) does not have records of any sites that have been discovered previously on this property. A walkover of the area by DEQ personnel did not reveal any artifacts or signs of occupation. No signs were evident at depth in the previously disturbed area and this parcel has been heavily disturbed.</p> <p><i>Impacts:</i> If during operations resources were to be discovered,</p>

IMPACTS ON THE PHYSICAL ENVIRONMENT	
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	activities would be temporarily moved to another area or halted until SHPO was contacted and the importance of the resources was determined.
8. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY	Energy in the form of diesel fuel would be expended by trucks, loaders and dozers. Water may occasionally be used if required for dust control. This is a small operation and demands for these resources are minimal.

IMPACTS ON THE HUMAN POPULATION	
RESOURCE	POTENTIAL IMPACTS AND MITIGATION MEASURES
9. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS	The area is not zoned.
10. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING	No impact from this operation.
11. AESTHETICS	This site is shielded by trees and topographic features.
12. QUANTITY/ DISTRIBUTION OF EMPLOYMENT	None.
13. INDUSTRIAL, COMMERCIAL, AGRICULTURAL ACTIVITIES AND PRODUCTION	Although this small area was previously used for marginal horse pasture, the temporary removal of that use is insignificant and would return once the mining has ceased. <i>Impacts:</i> Agricultural production would be reduced on the site for the life of the permit and then return following reclamation.
14. LOCAL, STATE TAX BASE AND TAX REVENUES, PERSONAL AND COMMUNITY INCOME	Local, state and federal governments would be responsible for appraising the property, setting tax rates, collecting taxes, etc., from the companies, employees, or landowners benefitting from this operation.
15. DEMAND FOR GOVERNMENT SERVICES	Limited oversight by DEQ, MSHA and OSHA.
16. HUMAN HEALTH AND SAFETY	Industrial activities are inherently more dangerous than pasturing horses, but if the operators abide by MSHA and OSHA regulations, the opportunity for accidents would be minimized.
17. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES	Private property does not provide an access to either of these resources.

18. Alternatives Considered:

- A. Denial Alternative: The Department would deny an application that does not comply with the Act and Rules. No impacts to the natural or human environment would occur.
- B. Proposed Action Alternative

19. Public Involvement, Agencies, Groups or Individuals contacted: The Montana State Historic Preservation Office, Montana Natural Heritage Program, and the Lincoln County Planning Department.

