

ENVIRONMENTAL ASSESSMENT

On an Application for an OPENCUT MINING PERMIT

The Montana Department of Environmental Quality (DEQ) prepared this Environmental Assessment (EA) in accordance with requirements of 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 thereunder place operational guidance and limitations on a project during its lifetime, and provide 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 thereunder. The DEQ approval of this application would not relieve the operator from the obligation to comply with any other applicable federal, state, or county statutes, regulations, or ordinances. The operator is responsible for obtaining any other permits, licenses, approvals, etc. that are required for any part of the proposed operation.

APPLICANT: Nelcon, Inc.

COUNTY: Carbon

SITE NAME: Klamert

DATE: January 2015

LOCATION: Section 34 & 35, T3S, R23E

PROPOSAL: The applicant proposes to permit a new, long-term gravel pit to mine, screen, crush, stockpile and transport 300,000 cubic yards of gravel from a 17.8-acre site located 1/4 mile north of Rockvale. The town of Rockvale, power lines, irrigation ditches and US Highway 212 are located adjacent and south of the site. If any damage to existing features would occur, the Operator would repair and or replace the feature to the premine condition prior to the damage.

A reclamation bond would be held by DEQ to ensure that final reclamation of the site to rangeland/pasture would be completed by December, 2020. This application contains all items required by the Opencut Mining Act and its implementing rules. Proponent commits to properly conducting opencut operations and would be legally bound by the permit.

| IMPACTS ON THE PHYSICAL ENVIRONMENT | |
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| RESOURCE | POTENTIAL IMPACTS AND MITIGATION MEASURES |
| 1. TOPOGRAPHY, GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE: | <p>The site is a gently-sloping terrace above Rock Creek. Steep terrace breaks drop off to the east and south, and the head of ephemeral drainages are near the north site boundary.</p> <p>Alluvial gravel were deposited during the Pleistocene on terrace level 2; mostly cobbles and pebbles with sand and silt; clasts are mainly granitic igneous rocks, granitic gneiss, schist, and quartzite.</p> <p>The onsite soils consist of Harvey loam. The operator would replace 12 inches of soil and 18 inches of overburden.</p> <p>The site receives approximately 15 inches of precipitation per year.</p> <p><i>Impacts:</i> An irreversible and irretrievable removal of gravel from the site would occur. A small impact to the quantity and quality of soils from salvaging,</p> |

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| | <p>stockpiling, and resoiling activities also would occur, but this would not impair the capacity of the soils to support full reclamation. There are no unusual topographic, geologic, soil, or special reclamation considerations that would prevent reclamation success.</p> |
| 2. WATER QUALITY, QUANTITY AND DISTRIBUTION | <p>Two unnamed ephemeral drainages originate near the north boundary of the site. Free Silver Ditch is located approximately 250 feet south and east of the site. Smith Ditch is located approximately 500 feet south and east of the site. Water would be used on-site for dust control and would be obtained from an irrigation ditch less than 300 feet from the permit area. The Operator certifies that he has consulted with DNRC and understands the DNRC requirements regarding water rights related to this Opencut operation.</p> <p>There are three public water supply wells within 1,000 feet of the permit area. The DEQ Source Water Protection Section requirements would be incorporated into the permit.</p> <p><i>Impacts:</i> The proposed activities would have a minimal effect on the quantity and quality of the surface and groundwater resources.</p> <p><i>Cumulative:</i> Cumulative impacts on the proposed resources would be negligible.</p> |
| 3. AIR QUALITY | <p>Air quality standards are based upon the Clean Air Act of Montana and pursuant rules and are administered by the DEQ Air Resources Management Bureau (ARMB). Its program is approved by the Environmental Protection Agency (EPA). These rules and standards are designed to be protective of human health and the environment.</p> <p>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 is that which blows off the pit floor, stockpiles, gravel roads, farm fields, etc. It is considered to be a nuisance but not harmful to health.</p> <p><i>Impacts:</i> Air quality standards as set by the federal government and enforced by the ARMB would allow minimal detrimental air impacts.</p> |
| 4. VEGETATION COVER, QUANTITY AND QUALITY | <p>There are no known rare or sensitive plants or cover types present in the site area. Onsite vegetation consists of crested wheatgrass, bluebunch wheatgrass, prairie junegrass, sweet clover and assorted forbs, and provides approximately 80% cover. The vegetation would be removed as soil is stripped and the site would be replanted with plant species compatible with the proposed reclaimed use.</p> <p><i>Impacts:</i> No long term detrimental impacts to the vegetation would occur.</p> |
| 5. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS: | <p>Although the area is used primarily for pasture, it also supports 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> |

IMPACTS ON THE PHYSICAL ENVIRONMENT

| RESOURCE | POTENTIAL IMPACTS AND MITIGATION MEASURES |
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| <p>6. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES:</p> | <p>The Montana Natural Heritage Program (MNHP) lists the following 6 species of concern in the vicinity of the site:</p> <p>Bald eagle (<i>Haliaeetus leucocephalus</i>) is a bird of prey found in North America that is most recognizable as the national bird and symbol of the United States of America. This sea eagle has two known sub-species and forms a species pair with the white-tailed eagle. Its range includes most of Canada and Alaska, all of the contiguous United States and northern Mexico. It is found near large bodies of open water with an abundant food supply and old-growth trees for nesting.</p> <p>Greater sage-grouse (<i>Centrocercus urophasianus</i>) is the largest of Montana’s grouse. Both sexes have relatively long, pointed tails, feathered legs, and mottled gray-brown, buff, and black plumage. In Montana, it ranges primarily in the southwestern and eastern portions of the state. This species does not migrate. Sagebrush is its preferred habitat.</p> <p>Yellow-billed Cuckoo (<i>Coccyzus americanus</i>) is a slender bird with a long, distinctly patterned tail and white throat and breast. The back and head of the Yellow-billed Cuckoo are a plain grayish-brown. Consistent with its common name, the stout, somewhat curved bill is primarily yellow (the upper mandible is mostly black, with some yellow, while the lower mandible is yellow in its entirety). The boldly white and black patterned outer tail can generally be observed during perching and in flight. The bird is generally 26 to 30 cm in length and weighs an average 55 to 65 grams. No information is available specific to Montana, but in other parts of their range the main diet of the Yellow-billed Cuckoo is caterpillars. The western population of the Yellow-billed Cuckoo was listed as a threatened species on 11/2/2014, and critical habitat will be designated in 2015.</p> <p>Black-tailed prairie dog (<i>Cynomys ludovicianus</i>) is the largest of the prairie dog species. In Montana, its range includes the eastern and central portions of the state, plus some intermountain valleys. This species is not known to migrate. Prairie dog colonies are found on flat, open grasslands and shrub/grasslands with low, relatively sparse vegetation.</p> <p>Milksnake (<i>Lampropeltis triangulatum</i>) has whitish, black, and reddish to orange banding or rings around the body, an undivided anal scale, and smooth (unkeeled) dorsal scales which distinguish it from all other snakes native to Montana. Milksnakes have been reported in areas of open sagebrush-grassland habitat and ponderosa pine savannah with sandy soils, most often in or near areas of rocky outcrops and hillsides or badland scarps.</p> <p>Spiny Softshell Turtle (<i>Apalone spinifera</i>) is primarily a riverine species, occupying large rivers and river impoundments, but it also occurs in lakes, ponds along rivers, pools along intermittent streams, bayous, irrigation canals, and oxbows. It usually is found in areas with open sandy or mud banks, a soft bottom, and submerged brush and other debris. Adult females can reach 52 centimeters in carapace length, but much less in adult males (which average about 10 centimeters shorter). The shell of the spiny softshell is flattened (pancake-like), with flexible edges and covered with leathery skin; the snout is tubular; the tail is thick and long.</p> |

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| | <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. |
| 7. HISTORICAL AND ARCHAEOLOGICAL SITES | <p>The Montana State Historic Preservation Office (SHPO) was notified of the application. It reported that no have been previously recorded within the designated search locale. A pedestrian survey of the area by DEQ personnel did not reveal any artifacts or signs of occupation. SHPO feels that this project has the potential to impact cultural properties. SHPO recommends that a cultural resource inventory be conducted at this site in order to determine whether or not sites exist and if they would be impacted.</p> <p><i>Impacts:</i> If during operations resources were to be discovered, activities would be temporarily moved to another area or halted until SHPO was contacted and the importance of the resources was determined.</p> |
| 8. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY | <p>There are no unusual demands on land, water, air or energy anticipated as a result of this project.</p> <p><i>Impacts:</i> Negligible impacts to land, water, air, or energy would occur.</p> |

| IMPACTS ON THE HUMAN POPULATION | |
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| RESOURCE | POTENTIAL IMPACTS AND MITIGATION MEASURES |
| 9. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS | <p>Carbon County zoning clearance has been obtained.</p> <p>The site is not zoned.</p> |
| 10. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING | <p>As seen on the aerial photo of the surrounding area, there are nearby residences in the town of Rockvale.</p> <p><i>Impact:</i> This commercial pit is being sited in this area because of the location of the resource, and to provide resources for an MDT project.</p> |
| 11. AESTHETICS | <p>The site is located in a common pastureland area. There would be a temporary alteration of aesthetics while mining is under way. However, reclamation would return the area to a visually acceptable landscape. This project is considered to be long-term, i.e., planned to take 6 years to complete.</p> |
| 12. QUANTITY/ DISTRIBUTION OF EMPLOYMENT | <p>Existing employees would mainly be utilized for this operation. There is low potential that this project would create a significant number of new jobs.</p> <p><i>Impacts:</i> New employment opportunities would be limited.</p> |
| 13. INDUSTRIAL, COMMERCIAL, AGRICULTURAL ACTIVITIES AND PRODUCTION | <p>The acreage listed in the proposal would be taken out of grassland use. Upon completion of mining, the land would be reclaimed to rangeland/pasture.</p> <p><i>Impacts:</i> Pastureland production would be reduced as soil stripping and operations progress across the site. When the entire site is opened up for mining and mine-related activities, all pastureland activities would cease, but would be restored as the site is reclaimed.</p> |

| IMPACTS ON THE HUMAN POPULATION | |
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| 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. Following reclamation, it is assumed the tax base would revert to pre-mine levels. |
| 15. DEMAND FOR GOVERNMENT SERVICES | Limited oversight by DEQ Opencut Program personnel would be conducted in concert with other area activity when in the vicinity. |
| 16. HUMAN HEALTH AND SAFETY | Any industrial activity would increase the opportunities for accidental injury. There are agencies that require the Operator to implement specific safety measures. If followed there is no reason to believe that significant safety issues would be present. |
| 17. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES | This activity would not inhibit the use of the identified resources. |
| 18. NATIVE CULTURAL CONCERNS | <i>Impacts:</i> None identified. |

19. 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. Approval Alternative: The Department would approve an application that complies with the Act and Rules. Impacts of this application are addressed in the body of the EA.

20. Public Involvement, Agencies, Groups or Individuals contacted: Montana State Historic Preservation Office, Montana Natural Heritage Program, Carbon County Planning Department, Carbon County Weed District, DEQ Source Water Protection Section, DEQ Water Protection Bureau.

21. Other Governmental Agencies which May Have Overlapping or Sole Jurisdiction include, but may not be limited to: Carbon County Commission or County Planning Department (zoning), Carbon County Weed Control Board, MSHA and OSHA (worker safety), DEQ ARMB (air quality) and Water Protection Bureau (groundwater and surface water discharge; stormwater), DNRC (water rights), and MDT (road access).

22. Regulatory Impact on Private Property: The analysis done in response to the Private Property Assessment Act indicates no impact. The Department does not plan to deny the application or impose conditions that would restrict the use of private property so as to constitute a taking.

23. Magnitude and Significance of Potential Impacts: This proposal is not likely to create impacts of significance due to mitigation, restrictions, and oversight mandated by the Opencut Mining Act and pursuant rules and the Montana Clean Air Act.

24. Recommendation for Further Environmental Analysis: [] EIS [X] No Further Analysis



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