

EXPANDED CHECKLIST ENVIRONMENTAL ASSESSMENT

COMPANY NAME: Noble Excavating Inc.
LOCATION: 2.5 miles northwest of Libby, MT
PROPERTY OWNERSHIP: [] Federal [] State [x] Private
00182

PROJECT: Nickelback Quarry
COUNTY: Lincoln
OPERATING PERMIT No. Pending

TYPE AND PURPOSE OF ACTION: On January 13, 2012 Noble Excavating Inc. (Noble) submitted an application to the Montana Department of Environmental Quality (DEQ) for an operating permit for the Nickelback Quarry. The quarry is currently operated under a Small Miner Exclusion Statement (SMES) but cannot stay under five acres of disturbance, and therefore an operating permit is required. The quarry is located in Section 30, Township 31 North, Range 31 West, in Lincoln County, about 2.5 miles northwest of Libby, MT.

The quarry rock is a metamorphosed sedimentary rock in the Belt Supergroup with some glacial gravel, used as gravel, and for asphalt, fill, riprap, and other uses. The application is for a permit area of about 172 acres, with 151 acres to be disturbed over the life of the mine, which is estimated to be about eighty years. Quarrying has taken place at the site for the last two years under a SMES. The total disturbance, including what has already been disturbed, would be about 34 acres over the first five years and about 85 acres over the next twenty years.

Equipment used to quarry the rock would likely consist of loaders, dozers, articulated trucks, and excavators. There would also be conveyors, a portable screen/crushing plant, and possibly a portable asphalt plant. Removal of the material would require blasting. This would be performed about twice a year by a contract certified blaster.

Work at the quarry would provide about 100,000 tons per season. The rock is screened and crushed on site by several subcontractors. About 7,000 truckloads per operating season are delivered. The quarry would be mined to an elevation of 2,400 feet, about 150 feet below its current level, creating in essence an amphitheatre with an entrance from the north side.

DEQ must review the application, evaluate the potential impacts, and decide if it complies with the Montana Metal Mine Reclamation Act (MMRA) requirements, and the Administrative Rules of Montana 17.24.119.

PROPOSED ACTION: The site has been mined for the last two years under a SMES. The operator cannot stay under five acres of disturbance at any one time and therefore must obtain an operating permit. The operating permit would allow the quarry to continue to be worked, with total disturbance, including what has already been disturbed, of about 85 acres over the next twenty years and up to 151 acres over the life of the quarry.

The material from the quarry would be used for aggregate, rip rap, and other uses. The processing plant would consist of screening and crushing equipment, and may include an asphalt plant. The on-going operations would continue as before, but under an operating permit as the site would be expanded. There would be an area set aside for screening and processing rock, a turn-around for trucks, soil and growth medium stockpiles, and product stockpiles. Water for dust control would be brought in. Storm water would be contained on site. On issuance of an operating permit a reclamation bond would need to be posted that would cover all disturbances; past, present, and proposed.

The project would employ up to 65 people, both at the quarry and office in Libby, and including subcontractors. The quarry would normally operate from 7:00 AM to 7:00 PM, but work may occur during off hours and weekends to meet demand.

CHECKLIST ENVIRONMENTAL ASSESSMENT

Environmental Assessment (EA) Legend:

N = Not present or No Impact will occur.

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

NA = Not Applicable

IMPACTS ON THE PHYSICAL ENVIRONMENT	
RESOURCE	[Y/N] POTENTIAL IMPACTS AND MITIGATION MEASURES
<p>1. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE: Are soils present which are fragile, erosive, susceptible to compaction, or unstable? Are there unusual or unstable geologic features? Are there special reclamation considerations?</p>	<p>[N] The rock to be removed consists of both gravel and metamorphosed sedimentary rock. The site geology is Precambrian Libby Formation of the Missoula Group, which in turn is of the Belt Supergroup, mostly composed of metamorphic mudstone (argillite) with thin layers of metamorphic sandstone. The rock in the quarry area is dominated by amorphous silica with relatively low crystalline silica content. The rock is not acid-producing and does not contain asbestiform minerals.</p> <p>Soil in the area formed from compact glacial till and is underlain by dense, brittle, glacial till. The soils have a surface layer of loess and volcanic ash. The surface layer is 7 to 14 inches thick and is medium textured (very gravelly, very fine sandy loam). The content of rounded rock fragments in the subsoil ranges from 20 to 50 percent. The parent material of the subsoil is largely derived from meta-sedimentary rocks, glacial drift, alluvium, and lacustrine deposits.</p> <p>The site is composed almost entirely of one soil type found on glaciated mountain slopes, and composing about 95 percent of the soils found in the proposed permit area. This soil has a parent material of loamy till over dense basal till. Slopes range from 20 to 60 percent. The depth is at least 80 inches and is well drained. The soil ranges from a gravelly silt loam in the upper eight inches to a very gravelly, very fine, sandy loam below that depth.</p> <p>Two other minor soil types cover about five percent of the proposed permit area. The parent material of one of the minor types is a loamy till over dense basal till, found on slopes of 5 to 35 percent. The depth of soil is at least 80 inches. The soil is well-drained and ranges from a</p>

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	<p>gravelly silt loam in the upper eight inches to a very gravelly, very fine sandy loam below that depth.</p> <p>The parent material of the other minor soil type is a silty, lacustrine deposit, found on slopes of 0 to 10 percent. The soil is poorly-drained. The soil ranges from a silt loam to silt.</p> <p>Noble would salvage and replace enough soil to match what exists in the area today. Soils with rounded rock fragments would be salvaged and stockpiled separately and placed on reclaimed slopes less than 3:1. Soils with angular rock fragments would be salvaged and stockpiled separately and used to reclaim steep slopes from 3:1 to 2:1. Soil would be salvaged ten feet ahead of any disturbance and stockpiled. Suitable soil salvage would average one foot over the proposed permit area. One foot of overburden would be replaced on all facility areas, followed by one foot of soil. All mine areas would receive a minimum of 12 inches of soil.</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>[N] There are no surface or groundwater resources present on the site that would be disturbed. Best Management Practices (BMPs), such as ditches, riprap, and slash filters are being used to control runoff from the access road. Stormwater is not expected to exit the quarry disturbance area. The nearest surface water is the Kootenai River, which is 1,000 feet from the access road, and 3,000 feet from the quarry site.</p> <p>Most wells are more than 1,000 feet from the proposed permit boundary, and hundreds of feet below the proposed final depth of the quarry. The closest well is 1,280 feet away from the proposed permit area and 320 feet below the proposed quarry bottom. There would be minimal potential for nitrate residues from blasting to reach the water table.</p> <p>A tanker truck would bring water to the site for road maintenance and dust control.</p> <p>The estimated depth of mining would be up to 150 feet below the existing quarry floor. The estimated high water table is below this depth.</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>[N] The asphalt plant and crusher would have their own air quality permits. Dust control would consist of spraying water or water mixtures containing dust abatement compounds during quarrying, screening, and hauling operations.</p>

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4. VEGETATION COVER, QUANTITY AND QUALITY: Will vegetative communities be significantly impacted? Are any rare plants or cover types present?

[N] The proposed permit area has been logged over the last thirty years. A portion of the area is in a clear-cut condition, while the remainder has some degree of understory. The lower slopes contain cedar/hemlock with Douglas-fir and larch mixed in. The upper elevations contain Douglas-fir with lodge pole and ponderosa pine.

USFS land exists on the eastern and western borders of the proposed permit area, which are still heavily timbered and provide wildlife habitat.

Knapweed was identified in various locations throughout the proposed permit area, including roadbeds and old logging landings. In addition, thistle was found along the main road. There is the potential due to their presence throughout the area for yellow and orange hawkweed, oxeye daisy, absinthe wormwood, and St. Johnswort to spread. The operator has an approved Lincoln County Weed Control Plan

The 30-foot wide access road would be left post-mine to allow future timber harvest. All facility and other road areas would be ripped prior to reclamation seeding or planting to reduce compaction and then soiled. Reclaimed areas would be tracked with dozer or excavator tracks and seeded with the approved seed mix. Seeding would include broadcast seeding in the spring or fall. The seed mix consists of 25 pounds per acre of pure live native seed.

There are no known rare or sensitive plant species in the proposed disturbance area.

5. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS: Is there substantial use of the area by important wildlife, birds, or fish?

[N] Deer, elk and moose are found in the proposed permit area. Coyote tracks were also identified.

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?

[N] Species of special concern noted by the Montana Natural Heritage Program in the vicinity are: Coeur d'Alene salamander, harlequin duck, bald eagle, pileated woodpecker, Clark's nutcracker, Cassin's finch, torrent sculpin, west slope cutthroat trout, Columbia redband trout, bull trout, grizzly bear, fisher, wolverine, sheathed slug, and Geyer's biscuit root.

The only species that has suitable habitat in the proposed permit area is the grizzly bear. The project area is in Bear Management Unit 1 of the Cabinet Yaak recovery area. The proposed permit area is identified as Management Situation 3 lands. These lands include private lands, campgrounds, etc., and high use trails. Management of these lands is to

IMPACTS ON THE PHYSICAL ENVIRONMENT

not encourage bear use as that could result in potential conflict.

The Coeur d'Alene salamander habitat consists of springs and seeps. While this habitat is not known to have existed premining in the proposed permit area, a seep now exists on a rock face and may provide suitable habitat in the future.

7. HISTORICAL AND ARCHAEOLOGICAL SITES: Are any historical, archaeological, or paleontological resources present?

[N] A records search by the State Historic Preservation Office indicated that there are no known cultural areas of concern in the proposed permit area. As noted in the application, the operator would provide protection for archaeological and historical sites if they are discovered.

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?

[Y] The area in and around the proposed permit boundary has been logged during the last thirty years. The access roads to the mine were constructed to support the past timber harvesting operation. MSHA berms would be removed at the end of mine life, leaving a 30 foot wide road for future access.

Disturbed areas would be regraded and seeded. A reclaimed highwall would be left up to 150 feet in height. Benches would be reduced through blasting and regrading to a maximum 2:1 horizontal to vertical slope. All slopes would be covered with a minimum of 12 inches of soil and then revegetated.

Any rock stockpiles remaining at the end of mine life would be graded to contour and then seeded.

A temporary asphalt batch plant may be set up on site for a particular contract.

Noise would be generated as material is removed, sized, and loaded into haul trucks. About 7,000 truckloads per operating season would leave the quarry. During 2011, the mine averaged 85 truckloads per day. Up to 250 truckloads per day could be expected during the peak season (May – October). Normal operating hours would be from 7:00 AM to 7:00 PM; however, work may occur during off hours and weekends to meet demand.

Noise would also come from the use of Jake-brakes on haul trucks as they descend the access road and approach Highway 2.

The mine site is in a forest basin, about 500 feet above and 2,000 feet away from Highway 2, or any homes. The site has extremely limited visibility from the valley below. Mountain ridges on both the east and

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	<p>west side shield the mine from the town of Libby and to the west.</p> <p>Lights would be used for early morning and late afternoon operations when necessary in March/April or September/October.</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] Water would need to be brought to the site for dust control. Water would be hauled by a tanker truck to the site.</p> <p>There are no other active mining sites nearby.</p>
<p>10. IMPACTS ON OTHER ENVIRONMENTAL RESOURCES: Are there other activities nearby that will affect the project?</p>	<p>[N] There are no other activities in the area that would affect this project.</p>

IMPACTS ON THE HUMAN POPULATION	
<p>11. HUMAN HEALTH AND SAFETY: Will this project add to health and safety risks in the area?</p>	<p>[N] The project would mainly use existing roads that were originally constructed to support a timber harvesting operation. Some portions of the existing road were rerouted to reduce the overall slope. The road would be left post-mining to provide access to the area for future use.</p> <p>The access road turns onto Highway 2. During 2011, the mine averaged 85 truckloads per day. Up to 250 truckloads per day could be expected during the peak season (May – October). A concern has been expressed that haul trucks trail dirt and mud onto Highway 2 as they leave the access road. Concern was also expressed about access road dust.</p>
<p>12. INDUSTRIAL, COMMERCIAL AND AGRICULTURAL ACTIVITIES AND PRODUCTION: Will the project add to or alter these activities?</p>	<p>[N]</p>
<p>13. QUANTITY AND DISTRIBUTION OF EMPLOYMENT: Will the project create, move or eliminate jobs? If so, estimated number.</p>	<p>[N] Up to 65 full time and seasonal employees will be employed at the Nickelback quarry. There are ten additional contract employees for the crushing operations.</p>

IMPACTS ON THE HUMAN POPULATION

<p>14. LOCAL AND STATE TAX BASE AND TAX REVENUES: Will the project create or eliminate tax revenue?</p>	<p>[N] The project would allow employment for the existing people to continue. This amendment would maintain or add to tax revenue.</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>[N] The Proposed Action would not impact government services.</p>
<p>16. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS: Are there State, County, City, USFS, BLM, Tribal, etc. zoning or management plans in effect?</p>	<p>[N]</p>
<p>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?</p>	<p>[N] The Proposed Action would not impact any wilderness or recreational areas.</p>
<p>18. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING: Will the project add to the population and require additional housing?</p>	<p>[N] The Proposed Action would not cause impacts to the density and distribution of population and housing.</p>
<p>19. SOCIAL STRUCTURES AND MORES: Is some disruption of native or traditional lifestyles or communities possible?</p>	<p>[N] Approval of the operating permit is not expected to cause impacts to social structures and mores.</p>
<p>20. CULTURAL UNIQUENESS AND DIVERSITY: Will the action cause a shift in some unique quality of the area?</p>	<p>[N] Approval of the operating permit is not expected to cause impacts to cultural uniqueness and diversity.</p>

IMPACTS ON THE HUMAN POPULATION	
21. PRIVATE PROPERTY IMPACTS: Are we regulating the use of private property under a regulatory statute adopted pursuant to the police power of the state? (Property management, grants of financial assistance, and the exercise of the power of eminent domain are not within this category.) If not, no further analysis is required.	[N] The Proposed Action would not impact private property use.
22. PRIVATE PROPERTY IMPACTS: Does the proposed regulatory action restrict the use of the regulated person's private property? If not, no further analysis is required.	[N] The Proposed Action and Type and Purpose sections above identify the objectives of this environmental assessment.
23. PRIVATE PROPERTY IMPACTS: Does the agency have legal discretion to impose or not impose the proposed restriction or discretion as to how the restriction will be imposed? If not, no further analysis is required. If so, the agency must determine if there are alternatives that would reduce, minimize or eliminate the restriction on the use of private property, and analyze such alternatives.	[Y] The Proposed Action and Type and Purpose sections above identify the objectives of this environmental assessment. See item 22 above.
24. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:	[N]

25. ALTERNATIVES CONSIDERED: NO-ACTION ALTERNATIVE (DENY THE APPLICANT'S PROPOSED ACTION): The No-Action Alternative would not allow expansion of the disturbance area. This would mean that the quarry could not expand beyond the five acres of disturbance that is allowed under the SMES. Noble would have to reclaim the site to less than five acres.
26. APPROVE THE APPLICANT'S PROPOSED ACTION: The Proposed Action would allow additional disturbance over the five acre disturbed and unreclaimed limit imposed by the SMES as the quarry is

expanded.

27. APPROVE THE AGENCY MODIFIED PLAN: No mitigations are proposed.
28. PUBLIC INVOLVEMENT:
Legal notices of the receipt of an application for an operating permit were published in the *Libby Western News*, *Kalispell Daily Inter Lake*, *Great Falls Tribune*, *Missoula Missoulian*, and *Helena Independent Record*, as well as a public news release.
- No written comments have been received. Two calls were received concerning dust, noise, and road issues. The concern is that dust is blowing off the site and impacting nearby homes (see Air Quality). The noise issue resulted from the use of Jake-brakes as haul trucks descend the access road and approach Highway 2 (see Aesthetics). The road issue resulted from dirt and mud being trailed onto Highway 2 from the haul trucks and access road dust (see Human Health and Safety).
- A public news release will be issued on the results of this EA. A legal notice concerning the availability of this EA will be published, and a public comment period provided.
29. OTHER GOVERNMENTAL AGENCIES WITH JURISDICTION: None.
30. MAGNITUDE AND SIGNIFICANCE OF POTENTIAL IMPACTS: There would be no significant environmental impacts associated with this proposal. As noted, there would be impacts to soil and vegetation on the disturbed acres. These acres would be reclaimed at closure. Indirect impacts, such as dust, noise, and truck traffic to Montana Highway 2, would continue.
31. CUMULATIVE EFFECTS: There are no other proposals in the area that would add to the cumulative effects from this proposal.

RECOMMENDATION FOR FURTHER ENVIRONMENTAL ANALYSIS: The agencies have concluded that impacts from the proposed action would be minimal.

EIS More Detailed EA No Further Analysis.

The DEQ has selected the Approve the Applicant's Proposed Action as the preferred alternative.

EA Checklist Prepared By:

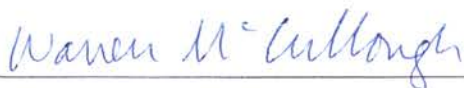
Herb Rolfes, DEQ Operating Permits Section Supervisor

This EA was reviewed by:

Patrick Plantenberg, DEQ Reclamation Specialist

Warren McCullough, DEQ, Environmental Management Bureau, Chief

Approved By:





Signature

Date

Warren D. McCullough, Chief, Environmental Management Bureau, DEQ

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