

EXPANDED CHECKLIST ENVIRONMENTAL ASSESSMENT

COMPANY NAME: Shumaker Trucking & Excavating Contractors, Inc. PROJECT: Green Coulee Quarry
LOCATION: Section 32, T37N, R2E COUNTY: Toole
PROPERTY OWNERSHIP: [] Federal [] State [x] Private OPERATING PERMIT No.: 00179

TYPE AND PURPOSE OF ACTION: On May 11, 2015 Shumaker Trucking & Excavating Contractors, Inc. (Shumaker) submitted an application to the Montana Department of Environmental Quality (DEQ) for an amendment to operating permit 00179 to include the Green Coulee Quarry as well as a revision to the Fort Shaw site. The Green Coulee quarry is currently operated under a Small Miner Exclusion Statement (SMES) but cannot stay under five acres of disturbance, and therefore it has to be amended into the Shumaker operating permit. The quarry is located in Section 32, Township 37 North, Range 2 East, in Toole County, about 20 miles slightly northeast of Sunburst, MT. To access the site, drive about 17.5 miles east of Sunburst, and then about 2.6 miles further east on Coal Mine road. From Coal Mine road turn north onto the access road for about 1.1 miles.

The rock to be removed is talus consisting of igneous stock. The dominant rock is a diorite porphyry of Eocene age that has intruded into the Cretaceous Eagle Sandstone. The diorite porphyry is a hard rock that can be used in north central Montana for various road, railroad, and construction projects.

The application is for a permit area of 15 acres, with up to 15 acres to be disturbed over the life of the mine. The quarry life is estimated to be about fifty years with about 11.5 acres to be disturbed over the next five years. Historic mining has taken place at the site in the past, and since December of 2013 under a SMES.

Shumaker would typically use trucks, dozers, loaders, and excavators to remove the rock. A portable processing plant, crushers, a pug mill, and potentially an asphalt plant would be set up on site. Material would be taken directly from the exposed loose rock, crushed, and stockpiled for road surfacing material.

Asphalt production would be limited from 6 am to 7 pm to minimize disturbance to neighbors. Wind in the area would minimize impacts from asphalt production odors. Work at the quarry and hauling from the site would occur during daylight hours, usually from 6 am to 7 pm, Monday through Saturday during the spring, summer and fall. The number and type of trucks would vary, and may require eight to ten belly-dump trucks per day. The project would employ from six to eight people, not including truck drivers.

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.

The revision to the Fort Shaw site would reduce the disturbance boundary from 35.6 acres to 33.7 acres.

PROPOSED ACTION: The site has been mined historically, and since 2013 under a SMES. The operator cannot stay under the five acres of disturbance at any one time SMES limit and therefore must amend the site into Shumaker's existing 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 11.5 acres over the next five years and up to 15 acres over the life of the quarry.

The material from the quarry would be used for road construction. 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 from a source provided by the landowner.

On approval of this amendment a reclamation bond would need to be posted that would cover all disturbances; past, present, and proposed.

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 is talus consisting of igneous stock. The dominant rock is a diorite porphyry of Eocene age that has intruded into the Cretaceous Eagle Sandstone. The diorite porphyry is a hard rock that can be used in north central Montana for various road, railroad, and construction projects.</p> <p>Soils in the area range up to 60 inches deep. Historically soil was not salvaged until later years when operations took place under a SMES. Approximately 9,000 cubic yards of soil are expected to be salvaged during the first five years of the operating permit.</p> <p>The site is composed of three major soil types; the Perma gravelly loam, the Stemple, low elevation-Rubble land complex, and the Perma-Whitlash cobbly loams. The Perma gravelly loam is composed of two units based on slope with the 2 to 8% slope making up 37.5% of total soils, and the 8 to 25% slope making up 23.7% of total soils.</p> <p>The Stemple, low-elevation-Rubble land complex makes up 25.4% of the total soils and the Perma-Whitlash cobbly loams make up 13.3%.</p> <p>The operator would spread overburden and soil over disturbed acreage during reclamation to a depth of nine inches, excepting the facilities area which would be left for use by the landowner. Some product storage stockpiles would also be left for the landowner.</p>

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	<p>The access road to the quarry has been improved for access to the SMES site, from existing ranch roads, to a width of 24 feet. Upon closure the road would be reduced to a width of 20 feet to allow landowner access to the remaining product stockpiles.</p> <p>The talus slope would be reduced after each mining season to protect soils from erosion, to control weeds and for public safety. The talus slope would be reduced to a 2:1 slope at the completion of mining.</p> <p>The quarry floor would be left at least three feet above the seasonal high water table. Soil would be placed to a depth of at least 9 inches on the lower graded mine and facility areas, except for an area of about one acre where remaining stockpile(s) would be left for use of the landowner. Areas where soil has been placed would be seeded with an approved seed mix.</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. The closest surface water feature is a spring located about 1,450 feet south of the site. The proposed final depth of the quarry floor would be 20 feet below the native grassland surrounding the toe of the talus slope. The seasonal high water table in the permit area is greater than 50 feet below the ground surface.</p> <p>The operator would use Best Management Practices (BMPs), such as small settling basins and soil berms to control runoff from precipitation events. No stormwater would exit the quarry permit area.</p> <p>The nearest well is located over 1,000 feet away. A tanker truck would bring water to the site for road maintenance and dust control.</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] An air quality permit may be required for the asphalt plant and crushers. Asphalt plants and crushers normally have their own air quality permits. Dust control would consist of spraying water during mining, screening, and hauling operations.</p> <p>Fugitive dust control BMPs would reduce emissions associated with traffic on access roads in the project area.</p>
<p>4. VEGETATION COVER, QUANTITY AND QUALITY: Will vegetative communities be significantly impacted? Are any rare plants or cover types present?</p>	<p>[N] The existing native rangeland vegetation is dominated by western wheatgrass, needleandthread grass, blue grama, thickspike wheatgrass, and bluebunch wheatgrass, rough fescue, and dryland sedges. Swales and upland drainages support western snowberry and wild rose. Conifers include Douglas-fir and lodgepole pine.</p>

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	<p>No noxious weeds were found on the site. The operator has an approved Toole County Weed Control Plan.</p> <p>A seed mix has been provided by DEQ for revegetating the site. Fertilizer will be applied at the time of seeding at the rate of 40 pounds of nitrogen and 40 pounds of phosphorus, per acre.</p> <p>There are no known rare or sensitive plant species in the proposed disturbance area.</p>
<p>5. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS: Is there substantial use of the area by important wildlife, birds, or fish?</p>	<p>[N] The area is dominated by deer and elk habitat. Common species that utilize the area include mule and white-tailed deer, elk, pronghorn antelope, and sharp-tailed grouse. The quarry has been worked historically and for the last two years under a SMES. No impacts to terrestrial, avian, and aquatic life and habitats are expected.</p>
<p>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?</p>	<p>[N] The amendment would not cause impacts to any known threatened, endangered, or sensitive species or habitats. A review by the Montana Natural Heritage Program revealed three species of concern that exist in the general area.</p> <p>The species are: ferruginous hawk, golden eagle, and Clark's nutcracker.</p> <p>The only plant species that may occur in the area is the heart-leaved buttercup. None of these animals or plants has been reported at this location.</p> <p>The quarry has the potential to provide perching habitat for golden eagles. The habitat varies in the area from talus slopes and conifer forested rubble to open spaces and grassland</p>
<p>7. HISTORICAL AND ARCHAEOLOGICAL SITES: Are any historical, archaeological, or paleontological resources present?</p>	<p>[NY A records search by the State Historic Preservation Office (SHPO) indicated that there are no known cultural areas of concern in the proposed permit area.</p> <p>As noted in the application, the operator would provide protection for archaeological and historical sites if they are discovered and contact the SHPO and DEQ. A cultural report was submitted by the applicant for the site. No historic or archaeological sites were discovered in the proposed permit area.</p>
<p>8. AESTHETICS: Is the project on a prominent topographic feature? Will it be visible from populated or</p>	<p>[Y] The area is a historic quarry site, in a relatively remote area. The area has been quarried in the past, and since 2013 under a SMES. Disturbed areas would be regraded and seeded.</p>

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<p>scenic areas? Will there be excessive noise or light?</p>	<p>The facility and quarry areas are in a remote area on private land, located about one mile north of the nearest public road (Coal Mine Road). The site is not visible from the public road.</p> <p>During the working life of the mine those areas that are no longer needed for quarry operations would be graded, soiled, and seeded. The talus face would be reduced after each mining episode.</p> <p>Any remaining product stockpiles would be left for subsequent use by the landowner.</p> <p>A temporary asphalt batch plant may be set up on site for a particular contract. Asphalt production would be limited from 6 am to 7 pm to minimize disturbance to neighbors. All materials used to produce asphalt would be placed in containment areas to prevent loss of product. Wind in the area would minimize impacts from asphalt production odors through dispersion.</p> <p>Work at the quarry and hauling from the site would occur during daylight hours, normally from 6 am to 7 pm, Monday through Saturday, campaign style. The number and type of trucks would vary and may require eight to ten belly-dump trucks per day. The project would employ from six to eight people, not including truck drivers.</p> <p>Noise would be generated as material is removed, sized, and loaded into haul trucks. There are no landowners within one half mile of the proposed permit boundary.</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. Stock 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	
11. HUMAN HEALTH AND SAFETY: Will this project add to health and safety risks in the area?	[N] The project would use existing roads. The number and type of trucks would vary, and may require eight to ten belly-dump trucks per day. The project would employ from six to eight people, not including truck drivers. No additional impacts from what currently exist are expected with approval of this operating permit amendment.
12. INDUSTRIAL, COMMERCIAL AND AGRICULTURAL ACTIVITIES AND PRODUCTION: Will the project add to or alter these activities?	[N]
13. QUANTITY AND DISTRIBUTION OF EMPLOYMENT: Will the project create, move or eliminate jobs? If so, estimated number.	[N] The current number of employees ranges from six to eight people, which is not expected to increase with approval of this amendment.
14. LOCAL AND STATE TAX BASE AND TAX REVENUES: Will the project create or eliminate tax revenue?	[N] The project would allow employment for a small number of people to continue. This amendment would maintain or add to tax revenue.
15. DEMAND FOR GOVERNMENT SERVICES: Will substantial traffic be added to existing roads? Will other services (fire protection, police, schools, etc.) be needed?	[N] The Proposed Action would not impact government services.
16. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS: Are there State, County, City, USFS, BLM, Tribal, etc. zoning or management plans in effect?	[N]
17. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES: Are	[N] The Proposed Action would not impact any wilderness or recreational areas.

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wilderness or recreational areas nearby or accessed through this tract? Is there recreational potential within the tract?	
18. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING: Will the project add to the population and require additional housing?	[N] The Proposed Action would not cause impacts to the density and distribution of population and housing.
19. SOCIAL STRUCTURES AND MORES: Is some disruption of native or traditional lifestyles or communities possible?	[N] Approval of the operating permit amendment is not expected to cause impacts to social structures and mores.
20. CULTURAL UNIQUENESS AND DIVERSITY: Will the action cause a shift in some unique quality of the area?	[N] Approval of the operating permit amendment is not expected to cause impacts to cultural uniqueness and diversity.
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	[Y] The Proposed Action and Type and Purpose sections above identify the objectives of this environmental assessment.

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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.	
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 implementation of the proposed amendment. This would mean that the quarry could not expand beyond the five acres of disturbance that is allowed under the SMES.
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 being proposed.
28. PUBLIC INVOLVEMENT: Legal notices of the receipt of an application for an operating permit amendment were published in: Shelby: *Shelby Promoter*, Browning: *Glacier Reporter*, Cutbank: *Pioneer Press*, Billings: *The Billings Gazette*, and Great Falls: *The Great Falls Tribune* for three successive weeks.
- A public news release will be issued on the results of this EA. A legal notice concerning the application and 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 minimal impacts to soil and vegetation on the disturbed acres. The site, except the stockpile areas left for the use of the landowner, would be reclaimed at closure. Talus slopes would be regraded under the proposed action but not soiled and seeded to match pre-existing and existing talus slopes. Indirect impacts, such as truck traffic to Nine Mile Road and Coal Mine Road 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 and is the recommended alternative.

EIS More Detailed EA No Further Analysis.

The DEQ has selected the 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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