

**Montana Department of Environmental Quality
Air, Energy, & Mining Division
Hard Rock Mining Bureau**

ENVIRONMENTAL ASSESSMENT

COMPANY NAME: Paul Overman (Ibex Quarry)

OPERATING PERMIT: #00195

LOCATION: T28N, R33W, Sec 17 **COUNTY:** Sanders

PROPERTY OWNERSHIP: FEDERAL ___ STATE _ PRIVATE _ X _

TYPE AND PURPOSE OF PROPOSED ACTION:

Background:

In 2017, Department of Environmental Quality (DEQ) staff inspected the Ibex Quarry to determine if it should be placed under a Small Miner Exclusion Statement (SMES) or would need to be permitted under an operating permit. Current disturbance at the site was determined to be 12.5 acres: (10.3 acres for the quarry and reject rock storage area, 1.2 acres for haul roads, and 1 acre for the laydown area). Because SMES sites are limited in size to 5 acres or less, Paul Overman was required to obtain an operating permit for the Ibex Quarry or commence shut down and reclamation. Paul Overman has chosen to apply for an operating permit (Operating Permit #00195) to allow continued operation. The proposed permit boundary would encompass approximately 20 acres: (17.9 acres permitted for disturbance with a 25-foot buffer zone surrounding the disturbance area).

Paul Overman is applying for an operating permit to cover the mining operations conducted at his site because the disturbance area has grown beyond 5 acres--the size limitation for operating under a SMES. If issued, the operating permit would cover the Paul Overman operation, including landings and roadways. The option of applying for an operating permit was a corrective action identified in a September 26, 2017, DEQ violation letter. The violation letter was issued by DEQ to Paul Overman for having disturbance at the site that exceeded the 5-acre SMES limitation. A similar violation letter was issued to Paul Overman on November 22, 2016. Paul Overman has operated at this location since at least 2011.

Analysis Area:

The site is located in Sanders County, Township 28 North, Range 33 West, Section 17. The site is approximately 1.5 miles southwest of Bull Lake. The quarry is on private land owned by Paul Overman.

The quarry consists of talus slopes with little to no pre-mining soils and/or vegetative cover. Quarrying activities are conducted on the talus features that are approximately 100 to 200 feet high.

To date, no groundwater has been encountered. Surface runoff in the form of rain and/or snow melt flows for only a short distance, before infiltrating into the ground.

Other than logging by the property owner, there are no other surface disturbances adjacent to the site. No other mining is taking place in the area, nor are there residences or other human high-use areas within 800 feet of the proposed permit boundary.

The site is not within designated Sage Grouse habitat.

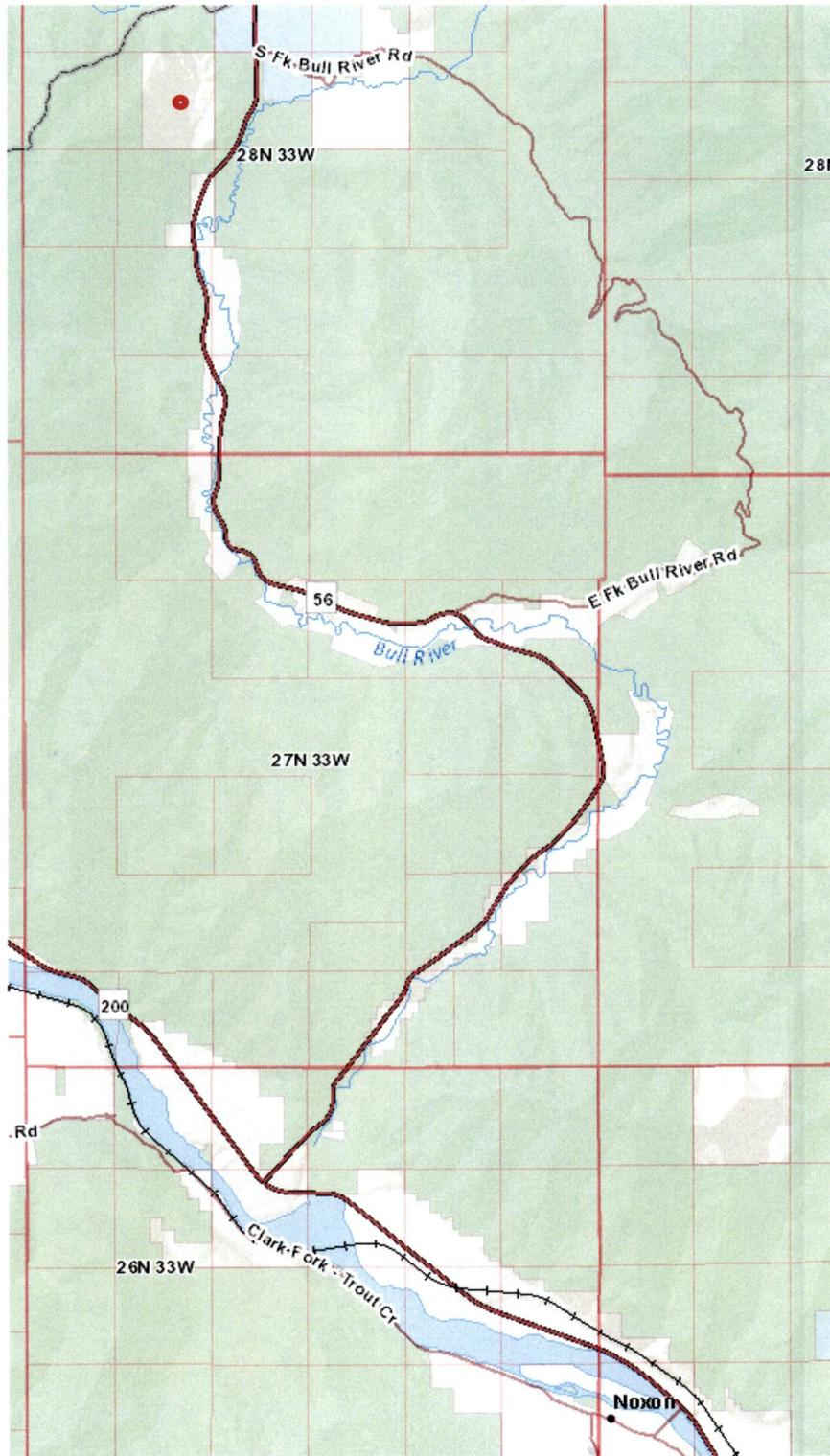


Figure 1. Approximate site location (red circle) as referenced to the town of Noxon.



- Property Boundary ID 62619 - 39.7 Acres
- Proposed Permit Boundary - 20.1 Acres
- US Forest Service
- Proposed Disturbance Area - 17.9 Acres

Proposed Disturbance
Overman Property
Sanders County, Montana
FIGURE 2

Figure 2: Site map and proposed disturbance

Scope of Activity:

The quarry contains talus slopes, with little to no pre-existing soils and/or vegetative cover. Activities at the site would primarily consist of continuance of current mining practices. For the quarrying activities, Paul Overman would use an excavator to remove rock from talus slopes. The slopes are approximately 100 to 200 feet high. Blasting may occur and would be overseen by a blasting contractor. The excavated rock would be hauled to the existing reject rock storage area where it would be laid out, sorted, and shipped off site. Approximately 1,250 tons of rock material would be excavated annually. There would be no pits or underground workings created by the operation.

Other equipment that may be used by Paul Overman would include an excavator, dump truck, loader, and a forklift. Diesel fuel would be stored on-site, with the corresponding storage tank located in an un-lined but bermed containment to contain any leaks or spills. Operating hours would be weather dependent, but generally from 8 am to 5 pm Monday through Friday. The seasonal operation would typically be in operation from June through October. The work force would consist of six to eight employees.

There would be no connections to the local electrical power grid, public water systems, or other public utilities. Water would be provided by truck from an off-site private source. Sanitation would be maintained by an outside contractor on a weekly basis. Garbage generated on site would be taken to an approved landfill. Diesel engines and one small diesel generator would be used to run the equipment, an air compressor, and microwave. The operation of the generator would be occasional.

To date, no groundwater has been encountered and no groundwater would be expected to be encountered with the operation. Surface runoff, in the form of rain and/or snow melt, would flow for only a short distance before infiltrating into the ground.

Aside from occasional logging west of the quarry, there are no surface disturbances adjacent to the site. No other mining is taking place in the area, nor are there residences or other human high-use areas within 800 feet of the proposed permit boundary.

Duration of Activity:

Depending on weather conditions, operations would mainly occur from June through October. Operations would last from 8 am to 5 pm Monday through Friday. Projected life of the operation would be ten years or less.

Personnel and Equipment:

Operations would employ between 6 and 8 employees. The number of employees would be the same as that used for the SMES operation and would likely be the same staff. Equipment on site would consist of an excavator, dump truck, loader, and forklift. There would be no crushing on site. Any required blasting would be done by an outside contractor.

RECLAMATION PLAN:

Pre-mining conditions consisted of talus slopes with very limited to no soils and/or vegetation. No growth media is available for recovery on the talus slopes associated with the historic quarry. Quarrying activities would cease if any underlying soils were encountered as this would indicate that further excavation would be taking place below the talus slope and into bedrock. Seeding would occur on slopes where mining activities expose underlying growth media. A local timber

seed mix would be used. Due to the steep terrain, hand seeding would likely be required.

Per the owner's request, roads would not be reclaimed at end of mine life as there is a post mine use for continued access to the area. The reject rock storage area would be graded for a future home site.

SUMMARY OF POTENTIAL PHYSICAL AND BIOLOGICAL EFFECTS:

The following environmental assessment has been prepared by the Department of Environmental Quality (DEQ).

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?

SOILS

The overall topography of the area consists of talus slopes with forest cover consisting of Douglas-fir and Ponderosa Pine. Pre-mining conditions had limited to no soils and/or vegetation. The US Department of Agriculture classified the area with map unit symbol 201 (rock outcrop-lithic) (<https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>).



Figure 3: Soil Survey

<https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>

Map Unit Symbol	Map Unit Name:
201	Rock Outcrop-Lithic
352	Glaciated mountain slopes
355	Glaciated mountain slopes (rock outcrop complex)

Direct Impacts:

Pre-mining conditions consisted of 100 to 200-foot high talus slopes with very limited to no soils and/or vegetation. No direct impacts to geology and soil quality, stability, and moisture would be expected from this operation. As there are limited to no soils present, weed infestation would be minimal. The talus slopes may continue to ravel, maintaining a slope at an angle of repose. Paul Overman has a signed weed control plan with Sanders County, which, when implemented, would further minimize impacts on weed growth.

Secondary Impacts:

The site contains talus slopes with very limited to no soils to salvage. There would be no secondary impacts on geology and soil quality, stability, and moisture beyond the current conditions -- rock would continue to ravel down the steep slopes.

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?

There are no water sources at the quarry. The site contains talus slopes mainly located on a western facing ridge. There is a wetland located about 1,300 feet southeast of the site. Hilly topography and surface flow paths are such that no runoff would enter the wetland. Water needed on the site for dust suppression would be delivered to the site from off-site sources. The operator would have a total of 8,500 gallons of water on site for dust control.

Diesel fuel would be stored in an on-site storage tank placed in an unlined bermed containment structure. The containment structure would be capable of containing 150% of the total tank capacity. The applicant has submitted a spill contingency plan. Spills of 25 gallons or more would be reported to DEQ and the National Response Center. Containment measures would be implemented according to the submitted spill response plan.

Direct Impacts:

Due to the absence of surface and groundwater in the project area, direct impacts to these resources would not occur.

Secondary Impacts:

Due to the absence of water resources in the project area, there would be no secondary impacts to water quality, quantity, and distribution.

3. AIR QUALITY:

Would pollutants or particulate be produced? Is the operation influenced by air quality regulations or zones (Class I airshed)?

The site is near, but not in, the Cabinet Mountains Class 1 airshed.

On-site internal combustion equipment would produce exhaust fumes, such as oxides of nitrogen and carbon monoxide. Particulates would be produced and become airborne during operations. There is a small on-site generator that is used on a part time basis. As the emissions output from the generator and other combustion sources on the site would be less than 15 tons per year for an individual pollutant an air permit is not needed. The level of gaseous emissions from the site would be minimal due to the small size of the generator. Overall air quality impacts would be minimal. Rock would not be crushed on the site, so dust would not be produced from crushing. The operator would be expected to maintain compliance with Montana's law regarding the need to take reasonable precautions to control airborne particulate matter according to the Administrative Rules of Montana (ARM) 17.8.308.

Direct Impacts:

Direct impacts would be minimal. Some exhaust fumes and dust would be produced by on-site equipment and quarrying activities. Dust control and equipment maintenance to meet emission

requirements would be the responsibility of the operator. Water and/or dust suppressant would be applied, as necessary, to meet the reasonable precautions limitations.

Secondary Impacts:

Due to the limited scope of the proposed operation, no secondary impacts to air quality are anticipated.

4. VEGETATION COVER, QUANTITY AND QUALITY:

Would vegetative communities be significantly impacted? Are any rare plants or cover types present?

The pre-quarrying conditions consisted of talus slopes that contained little to no soils and/or vegetation. Surrounding area vegetation is a dry, mixed forest of Douglas-fir and Ponderosa Pine with an understory dominated by shrubs. The US Department of Agriculture classifies the area as map unit symbol of 201 (rock outcrop-lithic)

(<https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>).

Direct Impacts:

Similar to the pre-quarrying condition of the site, there is little to no soils and/or vegetation at the site. The proposed operation would have minimal direct impact to vegetative communities because the operation is relatively small and because vegetative communities have not recently existed at the site. There are no rare plants or cover types known to be present. Similarly, the vegetation quantity and distribution of the site would be minimally impacted, if impacted at all.

Secondary Impacts:

Due to the lack of vegetative cover, quantity, and quality in the project area, no secondary impacts are anticipated.

5. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:

Is there substantial use of the area by important wildlife, birds or fish?

The majority of the site consists of talus slopes, with surrounding vegetation consisting of forested scree. The quarry is near the Kootenai National Forest and wildlife have been noted in the area. Identified Species of Concern in the area are: Bull and Westslope cutthroat trout, Townsend's big-eared bat, fisher, evening grosbeak, Coeur d' Alene salamander, grizzly bear, wolverine, little brown myotis, hoary bat, fringed myotis and the great blue heron.

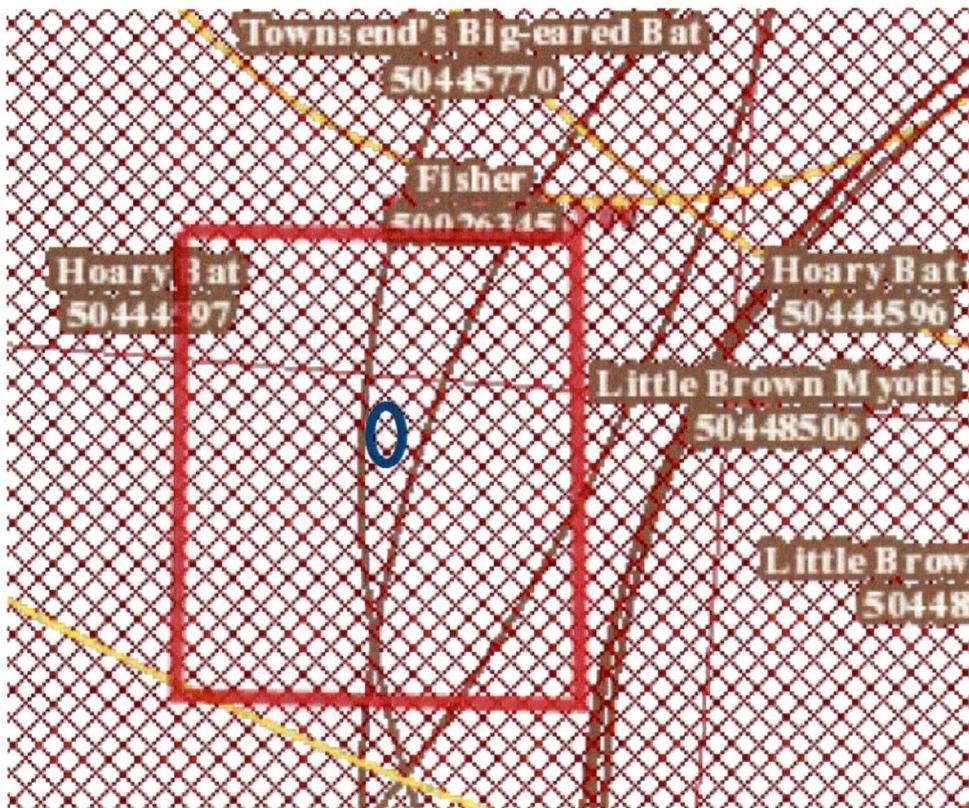


Figure 4: Species of special concern. The blue oval shows the approximate location of the Ibx Quarry (<http://mtnhp.org/mapviewer>). The red line shows the area of that received critical review, approximately half a mile from the proposed permit boundary.

Direct Impacts:

Direct impacts to terrestrial, avian, and aquatic life would be minimal. The surrounding areas have been logged in the past and the quarry has been active since 2011. To date, no impacts to area wildlife from the quarry operations have been noted. The proposed activities are in an area previously disturbed. Impacts to habitat for species of concern would be minimal because of the relatively small size of the operation, the lack of habitat within the operating permit boundary, and the previous mining and logging activities that have regularly occurred in the area in the past.

Secondary Impacts:

Due to the limited scope of the proposed operation and the past use of the project area, no secondary impacts on terrestrial, avian, and aquatic life and habitat are anticipated.

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?

The quarry primarily consists of a talus slope with limited to no pre-existing vegetation, soils, or critical habitat. The surrounding area has been quarried and logged. A search of the Natural Heritage web site showed no unique, endangered, or fragile species in the project area.

Species of special concern found in the area include: bull trout, west slope cutthroat trout,

Townsend's big-eared bat, little brown myotis, hoary bat, fringed myotis, fisher, evening grosbeak, Coeur d' Alene salamander, grizzly bear, wolverine, and great blue heron.

The site does not have a water resource so there would be no direct impacts to bull trout or westslope cutthroat trout.

Townsend's big-eared bats (*Corynorhinus townsendii*) are widely distributed in western North America and are commonly identified in forested habitat. These mammals use caves and abandoned mines as maternity roosts. Eighty-seven percent of Montana is considered breeding range for this species. Due to the relatively small area being proposed for disturbance, the previous industrial disturbance in the area (mining, logging), and the relatively small operation proposed by Paul Overman, the impacts to this species should be minimal, if any.

Little Brown Myotis (*Myotis lucifugus*) is the most common bat species in Montana. These bats are residents of Montana year-round and are found in a variety of habitats across a large elevation gradient. They commonly forage over water. Known maternity roosts in Montana are primarily buildings. Impacts to this species should be minimal due to the relatively small area being proposed for disturbance, the previous industrial disturbance in the area (mining, logging), and the relatively small operation proposed by Paul Overman.

During the summer months, Hoary Bats occupy forested areas. They are often found foraging over water sources embedded within forested terrain, both conifer and hardwood, as well as along riparian corridors. They are reported in Montana over a broad elevation range (1,900 to 9,100 feet) and are found most commonly throughout summer at lower elevations. Due to the lack of water resources in the proposed permit area, the widespread habitat available across the region for the bats, the relatively small area being proposed for disturbance, the previous industrial disturbance in the area (mining, logging), and the relatively small operation proposed by Paul Overman, impacts to this species should be minimal, if any.

Fringed myotis records indicate that the habitats used by these bats in Montana are similar to other regions in the interior West. They have been captured in ponderosa pine and Douglas-fir forests while foraging over willow/cottonwood areas along creeks and over pools, as well as in caves. Habitat information gathered from range-wide studies indicate that fringed myotis is found primarily in desert shrublands, sagebrush-grassland, and woodland habitats (ponderosa pine forest, oak and pine habitats, Douglas-fir). These bats roost in caves, mines, rock crevices, buildings, and other protective sites. Nursery colonies occur in caves, mines, and sometimes buildings. In riparian areas, they tend to be more active over intermittent streams with wider channels. Due to the lack of water resources in the proposed permit area, the widespread habitat available for the bats across the region, the relatively small area being proposed for disturbance, the previous industrial disturbance in the area (mining, logging), and the relatively small operation proposed by Paul Overman, impacts to this species should be minimal, if any.

Fishers occupy primarily dense coniferous or mixed forests, including early successional forests with a dense overhead cover. Optimal conditions for fishers are forest tracts of 245 acres or more, interconnected with other large areas of suitable habitat. Fishers are managed in Montana as a furbearer. Impacts to this species should be minimal due to habitat constraints, the relatively small area being proposed for disturbance, the previous industrial disturbance in the area (mining, logging), and the relatively small operation proposed by Paul Overman.

The evening grosbeak breeds in mixed coniferous and spruce-fir forests of western Montana. Winter habitat is much more varied, including coniferous forest as well as urban and suburban areas statewide. Due to the wide habitat available in the proposed permit area, the relatively small area being proposed for disturbance, the previous industrial disturbance in the area (mining, logging), and the relatively small operation proposed by Paul Overman, impacts to this species should be minimal, if any.

The Coeur d' Alene Salamander's habitat in Montana includes the three major habitat categories of springs /seeps, waterfall spray zones, and stream edges. More specifically, primary habitats are seepages and streamside talus slopes; although they also inhabit talus slopes far from free water.

Coeur d'Alene salamanders are highly dependent on thermal and hydrologic stability provided by wet habitats in otherwise inhospitable surroundings. For this reason, Coeur d'Alene salamanders are closely tied to water and are considered among the most aquatic plethodontids. Known populations occur in association with sharply fractured rock formations. The species is found in conjunction with both persistent and intermittent surface water. Thus, it is possible to locate Coeur d'Alene salamanders at a wet site in the spring, yet be unable to find any animals at the same site later in the summer when the site is dry on the surface. Due to the relatively small area being proposed for disturbance and lack of water resources in the proposed permit area, impacts should be minimal, if any.

Grizzly bears primarily use meadows, seeps, riparian zones, mixed shrub fields, closed timber, open timber, side hill parks, snow chutes, alpine, and rock habitats. Habitat use is highly variable between areas, seasons, local populations, and individuals. Historically, grizzly bears were primarily a plains species occurring in higher densities throughout most of eastern Montana. Due to the relatively small area being proposed for disturbance, the previous industrial disturbance in the area (mining, logging), and the relatively small operation proposed by Paul Overman, impacts should be minimal, if any.

Wolverine are limited to alpine tundra, and boreal and mountain forests (primarily coniferous) in the western mountains, especially large wilderness areas. However, dispersing individuals have been found far outside of usual habitats. They are usually found in areas with snow on the ground in winter. Riparian areas may be important winter habitat. Wolverines occupy dens in caves, rock crevices, under fallen trees, in thickets, or similar sites. Wolverines are primarily terrestrial but may climb trees. In Montana, Hornocker and Hash (1981) found most wolverine habitat to be in scattered timber, while areas of dense, young timber were used least. Wolverines avoided clearcuts and burns, crossing them rapidly and directly when they were entered at all. Habitat requirements are reported to be large, isolated tracts of wilderness supporting a diverse prey base, rather than specific plant associations or topography. Most habitat descriptions in the literature note use of large, mountainous, and essentially roadless areas." Due to the relatively small area being proposed for disturbance, the previous industrial disturbance in the area (mining, logging), and the relatively small operation proposed by Paul Overman, impacts should be minimal.

Great blue herons are equally at home in urban wetlands and wilderness settings. Most Montana nesting colonies are in cottonwoods along major rivers and lakes; a smaller number occur in riparian ponderosa pines and on islands in prairie wetlands. Nesting trees selected by Great Blue herons are typically the largest available trees in an area. The number of nests in the colony typically corresponds to the distance from the colony to nearby roads. Due to the relatively small area being proposed for disturbance, the lack of water resources in the project area, the previous industrial disturbance in the area (mining, logging), and the relatively small operation proposed by Paul Overman, impacts should be minimal, if any.

Direct Impacts:

There are no threatened or endangered species within the proposed permit area. Species of special concern may pass through the area from time to time, but would likely not frequent the area. Due to the limited scope of the proposed operation, the relatively small area being proposed for disturbance, the previous industrial disturbance in the area (mining, logging), and the relatively small operation proposed by Paul Overman, there would be little to no direct impacts to species of special concern.

Secondary Impacts:

No secondary impacts are anticipated.

7. HISTORICAL AND ARCHAEOLOGICAL SITES:

Are any historical, archaeological or paleontological resources present?

The surrounding area is a forested timber area with the quarry located on talus slopes. A search of the State Historic Preservation Office (SHPO) records did not identify any historical features. To date, no known historical or archaeological sites have been identified.

Direct Impacts:

To date, no historical, archaeological, or other cultural sites have been identified. Considering the relatively small area being proposed for disturbance, the previous industrial disturbance in the area (mining, logging), and the relatively small operation proposed by Paul Overman, no direct impacts to historical or archaeological sites are anticipated.

Secondary Impacts:

No indirect impacts on historical or archaeological sites are anticipated because such sites do not exist at the proposed project area.

8. AESTHETICS:

Is the proposed operation on a prominent topographic feature? Would it be visible from populated or scenic areas? Would there be excessive noise or light?

The site is located mainly on a west facing steep talus slope surrounded by forest. The site characteristics are relatively common to the area. The closest residence is located over 800 feet to the south-southeast, with small ridges and forested lands between the residence and the quarry. The site is not visible from area roads or from the residence.

Direct Impacts:

There would be minor direct impacts on aesthetics. The quarry location is isolated and hidden from

view. Impacts from noise and light would be minimal due to the remote location, the relatively small area being proposed for disturbance, the previous industrial disturbance in the area (mining, logging), and the relatively small operation proposed by Paul Overman. The quarry has been in operation since 2011 with no known complaints from area neighbors about aesthetic impacts.

Secondary Impacts:

There would be no secondary impacts on aesthetics.

9. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY:

Would the proposed operation use resources that are limited in the area? Are there other activities nearby that would affect the expansion?

There are currently no external power lines to the site, no public water supply lines to the site, or public sewage discharge lines from the site. None of these services would be required or utilized for this project. The operation would be powered by on-site equipment with internal combustion engines. In addition, there would be a small (15 horsepower) on-site generator for small operational needs. Water would be supplied from an off-site private source and would be hauled by truck to the site.

Direct Impacts:

The Paul Overman operation is not connected to the grid and would not be connected to the grid as part of this project. This existing site configuration would not change for the proposed action. Any water needed for dust suppression would be brought in to the site by truck. The demands on environmental resources of land, water, air, or energy would be minor because the proposed operations would be similar to those demands that are currently taking place, the relatively small area being proposed for disturbance, and the relatively small operation proposed by Paul Overman.

Secondary Impacts:

There would be no secondary impacts due to the relatively small scale of the operation and the location of the quarry.

10. IMPACTS ON OTHER ENVIRONMENTAL RESOURCES:

Are there other activities nearby that would affect the proposed operation?

Aside from intermittent logging on the owner's property, there are no other mining or industrial activities in the area that would affect the operation.

Direct Impacts:

There would be no direct impacts on other environmental resources as there are no other activities nearby that would affect the proposed operation. The operation would create be no disturbance outside of the proposed footprint.

Secondary Impacts:

Due to the limited scope of the operation and no nearby activities, no secondary impacts are anticipated.

11. HUMAN HEALTH AND SAFETY:

Would this proposed operation add to health and safety risks in the area?

The proposed operation would be required to adhere to all applicable state and federal laws. The operation would be located on private land. Vehicle access would be limited to the landowner/operator and employees.

Direct Impacts:

Impacts to human health and safety would be minor. Mining operations inherently include activities and equipment that pose some risk. The relatively small area being proposed for disturbance and the relatively small operation proposed by Paul Overman would help to minimize the risk. The proposed quarry would be located on private land, with no general public access. The closest residence would be located approximately 800 feet to the south-southwest. Paul Overman has operated, under a SMES, at the site since approximately 2011. The proposed operation would be similar to the operation of Paul Overman since 2011.

Secondary Impacts:

Due to the limited scope of the operation, no secondary impacts on human health and safety are anticipated.

12. INDUSTRIAL, COMMERCIAL AND AGRICULTURAL ACTIVITIES AND PRODUCTION:

Would the proposed operation add to or alter these activities?

As there are no other industrial, commercial or agricultural activities noted in the area, adverse impacts would not be expected. DEQ searched for other projects occurring, or under concurrent consideration near the proposed operation and none were found. A Google map search of the area also did not result in finding any operations that would be affected.

Direct Impacts:

There would be no direct impacts on industrial, commercial, and agricultural activities and production in the area because no such activities are present in the immediate area. The operation would be located on land owned by the quarry owner.

Secondary Impacts:

No secondary impacts on industrial, commercial, and agricultural activities and production are anticipated.

13. QUANTITY AND DISTRIBUTION OF EMPLOYMENT:

Would the proposed operation create, move or eliminate jobs? If so, what is the estimated number?

The site would maintain the current workforce of 6-8 employees. No new positions would be created or eliminated.

Direct Impacts:

There would be little to no direct impacts on employment in the area from this project if approved. The same number of employees that have worked at the SMES site would likely continue to work under the proposed operating permit. However, if the project were not approved, Paul Overman

would not be able to continue mining as recently done and impacts to quantity and distribution of impacts would be minor. Some of the 6-8 people employees would likely not be needed at the site if the proposed project were not approved.

Secondary Impacts:

No secondary impacts on quantity and distribution of employment are anticipated.

14. LOCAL AND STATE TAX BASE AND TAX REVENUES:

Would the proposed operation create or eliminate tax revenue?

The Paul Overman operation pays taxes in Sanders County on revenues generated by stone.

Direct Impacts:

There would be little to no direct impacts on local and state tax base and tax revenues if the project is approved. Roughly the same amount of product would be mined and roughly the same number of people would be employed as compared to recent years of operation by Paul Overman. The corresponding local and state tax base and tax revenue from this project would be similar to past years, if approved. The local and state tax base and tax revenue would experience minor impacts if the project were not approved because the mined product and the number of employees would likely be reduced.

Secondary Impacts:

No secondary impacts to local and state tax base and tax revenues are anticipated due to the on-going and limited scope of the proposed operation.

15. DEMAND FOR GOVERNMENT SERVICES:

Would substantial traffic be added to existing roads? Would other services (fire protection, police, schools, etc.) be needed?

Paul Overman has been operating at the site under a SMES since approximately 2011. Existing roads would be used for the proposed operation.

Direct Impacts:

No additional demands for governmental services would result from the proposed project. The relatively small area being proposed for disturbance and the relatively small operation proposed by Paul Overman would not warrant demands for such services. There would be no direct impacts beyond those that currently exist. No additional employees would be hired.

Secondary Impacts:

No secondary impacts are anticipated due to the on-going and limited scope of the proposed operation.

16. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS:

Are there State, County, City, USFS, BLM, Tribal, etc. zoning or management plans in effect?

The location of the site is on private land owned by the operator. There are no known zoning or other restrictions in place.

Direct Impacts:

There would be no direct impacts on locally adopted environmental plans and goals as there are

no known locally adopted plans and zoning in effect.

Secondary Impacts:

There would be no secondary impacts on locally adopted environmental plans and goals. No such locally adopted plans and goals exist in the area.

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?

The project site consists primarily of talus slopes. Aside from quarrying and logging, there are no other known uses of the area. The area immediately west of the quarry is owned by the quarry owner. That land is occasionally logged. No wilderness or recreational activities are located within or near the area of this proposed operation. USFS administers land around the site, but a review of Google Maps does not indicate any nearby road access.

Direct Impacts:

There would be no direct impacts on access to and quality of recreational and wilderness activities. The site is located on private property, with no vehicle access routes beyond the site. The on-site road is a private road that does not access wilderness or recreational areas. Those people using the access road would consist of the operator/land owner, employees, and possible decorative stone customers.

Secondary Impacts:

There would be no secondary impacts on access to and quality of recreational and wilderness activities. The proposed operation is not near, nor does it access, recreational or wilderness areas.

18. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING:

Would the proposed operation add to the population and require additional housing?

All on-site activities would be conducted by the owner and existing employees. The employees would likely be local and would likely be the same employees that have worked at this mine in the past.

Direct Impacts:

As there would be no increase in the work force from this project, there would be no direct impacts on population or housing in the area.

Secondary Impacts:

Due to the limited scope of the operation, no secondary impacts on density and distribution of population and housing are anticipated.

19. SOCIAL STRUCTURES AND MORES:

Is some disruption of native or traditional lifestyles or communities possible?

The area around the project has a low population density and is remote.

Direct Impacts:

Approval of this project would result in continued operations at the Paul Overman site. To date,

no impacts/disruption of native or traditional lifestyles or communities has been reported or noted. The relatively small area being proposed for disturbance and the relatively small operation proposed by Paul Overman would no impact native or traditional lifestyles or communities.

Secondary Impacts:

Due to the remoteness and limited scope of the operation, no secondary impacts to native or traditional lifestyles are anticipated.

20. CULTURAL UNIQUENESS AND DIVERSITY:

Would the action cause a shift in some unique quality of the area?

There are no unique qualities in the area. The site consists of talus slopes, common to the area. The area to the west is owned by the quarry owner and is intermittently logged. Areas to the south and east are owned by private individuals with US forest service lands to the north.

Direct Impacts:

The relatively small area being proposed for disturbance and the relatively small operation proposed by Paul Overman would result in no direct impacts on cultural uniqueness and diversity. Approval of the Paul Overman project would result in similar ongoing operations to what has occurred at this site in recent years.

Secondary Impacts:

Due to the limited scope of the operation, no secondary impacts on cultural uniqueness and diversity are anticipated.

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. Does the proposed regulatory action restrict the use of the regulated person's private property? If not, no further analysis is required. Does the agency have legal discretion to impose or not impose the proposed restriction or discretion as to how the restriction would 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.

The operation is on private land. Other than the requirements of the State of Montana Metal Mine Reclamation Act with regards to quarry operations and reclamation, no impacts or restrictions would be placed on said land.

22. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:

Due to the nature and limited scope of the proposed activities, no other direct or secondary impacts would be anticipated from this proposed operation.

ALTERNATIVES CONSIDERED:

In addition to the proposed action, DEQ also considered the "no action" alternative. The "no action" alternative would result in the denial of the proposed operating permit. The operator would lack the authority to continue to quarry rock on the property unless the site was reclaimed to five

acres or less. Any potential impacts associated with the proposed operating permit application would not occur due to: 1) reduction to five acres or less, or 2) final reclamation of the site. DEQ does not consider the “no action” alternative to be appropriate because Paul Overman has demonstrated a willingness to comply with all applicable rules and regulations in the submitted proposal as required for permit issuance. The no action alternative forms the baseline from which the impacts of the proposed action can be measured.

PUBLIC INVOLVEMENT:

Scoping for this proposed action consisted of internal and external efforts to identify substantive issues and/or concerns related to the proposed operation. Internal scoping consisted of internal review of the environmental assessment document by DEQ staff. External efforts included queries to the following websites/databases/personnel:

- Montana Cadastral Mapping Program
- USDA NRCS Soil Survey
- Montana Natural Heritage Program
- Montana State Historical Society
- Google Maps

OTHER GOVERNMENTAL AGENCIES WITH JURISDICTION:

None.

CUMULATIVE EFFECTS:

This environmental review considered the proposed operation as submitted by Paul Overman. The proposed operation would be located on private land owned by Paul Overman. Impacts from this operation would be minimal and the site would be reclaimed as soon as possible after the conclusion of operations in quarried out areas. The proposed operation would not contribute to any negative effects in the area. DEQ searched, but did not find information regarding any other federal, state, or private operations within the recent past or proposed for the near future that would add to the cumulative effects of impacts related to this operation.

NEED FOR FURTHER ANALYSIS AND SIGNIFICANCE OF POTENTIAL IMPACTS

When determining whether the preparation of an environmental impact statement is needed, DEQ is required to consider the significance criteria set forth in the Administrative Rules of Montana (ARM) 17.4.608, which are as follows:

1. The severity, duration, geographic extent, and frequency of the occurrence of the impact;
2. The probability that the impact would occur if the proposed action occurs; or conversely, reasonable assurance in keeping with the potential severity of an impact that the impact would not occur;
3. Growth-inducing or growth-inhibiting aspects of the impact, including the relationship or contribution of the impact to cumulative impacts;
4. The quantity and quality of each environmental resource or value that would be affected, including the uniqueness and fragility of those resources and values;
5. The importance to the state and to society of each environmental resource or value that would be affected;
6. Any precedent that would be set because of an impact of the proposed action that would commit the department to future actions with significant impacts or a decision in principle about such future actions; and

7. Potential conflict with local, state, or federal laws, requirements, or formal plans.

Paul Overman is proposing to continue quarrying talus slopes that are 100 to 200 feet high. Pre-quarrying conditions did not contain any salvageable soils and/or vegetation.

The severity, duration, geographic extent and frequency of any impacts associated with the proposed activities would be limited. Paul Overman is proposing to continue operating an existing rock quarry located on private property.

DEQ does not believe that the proposed activities by Paul Overman would have any growth-inducing or growth-inhibiting aspects or conflict with any local, state, or federal laws, requirements, or formal plans.

The land proposed to be disturbed does not contain unique, endangered, fragile, or limited environmental resources. The proposed activities may temporarily displace individual animals. This impact however, would be during actual operations. There are no federally listed threatened or endangered species or habitats identified within the greater proposed permit area. To date, no adverse effects have been noted.

As discussed in the Environmental Assessment, DEQ has not identified any long-term or significant impacts associated with the proposed activities on any environmental resource.

Issuance of an approval to Paul Overman does not set any precedent that commits DEQ to future actions with significant impacts or a decision in principle about such future actions. If Paul Overman submits an application to conduct mining outside the proposed permit boundary, or another operating permit application, DEQ is not committed to issuing those authorizations. DEQ would conduct an environmental review for any subsequent authorizations sought by Paul Overman that would require such a review. DEQ would make a permitting decision based on the criteria set forth in the Metal Mine Reclamation Act. Issuance of an approval to Paul Overman does not set a precedent for DEQ's review of other applications, including the level of environmental review. The level of environmental review decision is made based on a case-specific consideration of the criteria set forth in ARM 17.4.608.

Based on the criteria set forth in ARM 17.4.608, the proposed operation is not predicted to significantly impact the quality of the human or natural environment. Therefore, preparation of an environmental assessment is the appropriate level of environmental review under the Montana Environmental Protection Act.

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Approved By:

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07/29/19

Signature

Date

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