



United States
Department of
Agriculture

Forest
Service

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Decision Notice and Finding of No Significant Impact

Mount Moriah Quarry Phase II

Humboldt-Toiyabe National Forest

Ely Ranger District
White Pine County, Nevada

T16N, R70E; Section 34, Mount Diablo Meridian
Sixteen miles north of Baker, Nevada

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<http://www.fs.fed.us/r4/htnf/projects>

Preface

The Ely Ranger District received a proposed plan of operations from Mount Moriah Stone Quarry to quarry building stone. The project is located in the Snake Mountain Range in Section 34, T16N, R70E, White Pine County, Nevada, and is about 16 miles north of the town of Baker, Nevada. The applicant currently operates a similar stone quarry (Phase I), about a quarter mile uphill from this proposal; that quarry is about five acres. See two attached maps.

This Decision Notice and Finding of No Significant Impact briefly presents the reasons why an action will not have a significant effect on the human environment, why an environmental impact statement will not be prepared, and how the decision was made.

We developed the *Mount Moriah Stone Quarry Project Phase II Environmental Assessment* to address the issues raised during scoping, to analyze alternatives and foreseeable impacts, and to identify mitigation measures.

The Decision

I have decided to select the Proposed Action with Mitigation Measures Alternative because since it allows for mineral development and minimizes effects to the resources. This alternative allows quarrying of quartzite material on fifty acres except as restricted by mitigation measures. The operator expects to produce about 600 tons of building stone with about 180 tons of waste per month. The operation will quarry stone for many years until the operator exhausts the product source or the market demand decreases. We will require reclamation measures, and require the operator to submit a new plan of operations every five years with an updated reclamation bond.

The following requirements are part of this decision:

Operations, soil erosion control, road maintenance, wildlife, waste rock, weeds, wildfires

- The operator shall notify the Ely District Office Minerals Administrator at least one week in advance when quarry operations under this permit will begin, temporarily shut down, and permanently shut down.
- The Forest Service may review and modify the plan of operations and bond calculation annually to address environmental concerns and changes in the project disturbance and economy.
- The operator shall obtain all required State and Federal permits prior to starting operations. The operator will provide a copy of all permits to the Ely Ranger District prior to the start of operations. The operator is responsible for keeping the Forest Service informed of changes in permits related to this project.
- The operator will maintain all roads. Roads will not exceed 8% grades, or 15% for short pitches.

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- The operator will maintain reasonable speed limits on roads to reduce the amount of dust generated by vehicular traffic and improve safety. If dust becomes a concern, the operator will implement dust abatement measures with the concurrence of the Forest Service.
- The operator will install signs according to Forest Service standards, and prior to hauling rock. Operator's signs will warn of truck hauling dangers and blasting, and will be installed at the beginning of the road and at the mouth of the canyon to the quarry.
- When the operator is blasting, he will post a flag person or a temporary closure sign in the middle of the road at the mouth of the canyon at a suitable turn around location to restrict forest visitors. He will remove the sign immediately after completing blasting.
- The operator will store all explosives and associated blasting items according to Nevada Mine Safety and Health regulations.
- The operator will perform road maintenance to protect surface resources and prevent erosion. He shall construct road drainage structures to control erosion on all roads. Where possible, the operator will route road drainage structures onto flat ground or existing topographic depressions. The operator shall mark structures on the ground and will acquire Forest Service approval of these locations prior to construction. He must construct drainage structures, including rolling dips or other similar structures prior to hauling rock. Forest Service specifications for structure intervals are as follows:

Road grade	Spacing
0-4%	none
4-6%	600 feet
6-8%	400 feet
8-10%	300 feet
10-12%	200 feet
above 12%	100 feet

- The operator will suspend operations when significant runoff may cause road surfaces to soften and be susceptible to rutting or during winter periods of snow accumulation.
- The operator will shut down between December 1 and March 31 every year. Upon request from the operator, the Forest Service (in consultation with the Nevada Department of Wildlife) will consider allowing operations during this period, and will base this decision on snow conditions and bighorn sheep activity.
- The operator will not operate when there is snow on the ground in the general project area. The operator is not allowed to plow snow.
- The operator will mark on the ground the quarry boundary, quarry floor boundary, access roads, reclamation stockpile area, waste rock stockpile area, pull outs, and water diversion structure locations and will acquire approval from the Forest Service prior to quarry activities.
- If the operator transports excess erosion or sediment, he will consult with the Forest Service to agree on a reasonable mitigation measure to resolve the issue.

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- If bighorn sheep are spotted within 1½ miles of the quarry, the operator will cease operations until the Forest Service formally approves blasting again.
- Upon the Forest Service or Nevada Department of Wildlife determination that there are adverse effects to bighorn sheep as a result of the operations, the operator will attempt mitigation efforts to resolve the disturbances. This may include temporary closure of quarry operations during lambing season or other appropriate times as determined by the Forest Service and Nevada Department of Wildlife.
- The operator will promptly clean up all hydrocarbon spills and will dispose of the spill in a Federally approved manner. He will inform the Forest Service Administrator within 24 hours when there is a spill in excess of fifty gallons.
- The operator will keep the site neat and clean at all times. He cannot store excess equipment or materials on-site without prior approval by the Forest Service.
- The operator shall clear all trees, other woody debris, and the top twelve inches of soil/rock from all disturbed areas where ground conditions allow, and stockpile the soil at a Forest Service approved location. The operator will flag this area prior to ground disturbance for the quarry operations. The operator will seed the stockpile to stabilize the soil. The Forest Service may waive this requirement if the material has a large component of rock that would stabilize the soils.
- No motorized vehicles or mechanical equipment is allowed in the Mt. Moriah Wilderness.
- The operator will have a spark arrestor or equivalent on site for fire fighting. The operator will immediately report all wildfires to the Ely Interagency Dispatch Center at 775-289-1925.
- If noxious or undesirable plants become established on the project site, the operator will control them as directed by the Forest Service.

Reclamation

- As soon as work has ceased in an area for at least one year, the operator will seed to control invasion of undesirable plants and stabilize soils.
- The operator will reclaim as the opportunity arises. He will submit to the Forest Service on an annual basis a report of reclamation opportunities and activities planned for interim and concurrent reclamation. His concurrent reclamation will follow final reclamation criteria.
- During reclamation, the operator will use the waste created during construction of the access roads and will push this material with a dozer into the quarry and backfill and recontour the quarry area.
- The operator will complete final reclamation at the end of the plan of operations permit. However, at the end of each five-year permit period, the operator may request to renew his permit.

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- **Final reclamation is as follows:**
- On all roads, the operator will leave erosion control structures in a fully functioning condition on all roads left unreclaimed. The operator will full recontour the road from the main draw up to the quarry (about 0.3 miles) and the quarry access roads with a hydraulic excavator to as near pre-road topography as possible and to blend in with the surrounding topography. If, after recontouring these roads, the surface is still compacted, the operator will rip the surface to a minimum depth of 24 inches as ground conditions permit on a maximum of two-foot spacing. The goal is to have a loosened ground that provides a favorable seed bed in which vegetation can establish. He will spread part of the stockpiled growth medium and woody debris over the quarry access road on the south side of the quarry to an average depth of 10-12 inches. The operator will broadcast seed all disturbed ground and will treat the ground to lightly cover (1/4 to 1/2 inch) the applied seed for optimum germination potential. He will remove all signs along the roads.
- In the quarry, the operator will use waste rock to backfill the quarry and recontour the benches, placing material to break up the benching and other abrupt breaks in slope and to blend in with the natural topography. The operator will ensure this recontoured backfill material has a slope no steeper than 2:1 (horizontal: vertical). He will spread the available growth medium and woody debris from the stockpile over the disturbed quarry area to 10-12 inches. He will then seed the quarry, and treat the ground to lightly cover (1/4 to 1/2 inch) the applied seed.
- The operator will remove all equipment. He will remove all garbage and waste, and dispose of properly.
- Prior to any seeding, the operator will consult with the Forest Service on all seed mixes. The seed mix will have at least eight species, including grasses, shrubs, and forbs in approved combinations. The seed application rate will be 80 to 100 seeds per square foot and he can use only certified weed-free and pure live seed. The Forest Service will select species that are native and have a good chance of success on the site, provide soil stability, and are a benefit to wildlife.
- The Forest Service will measure successful revegetation by how closely the revegetated area matches the perennial plant cover of adjacent vegetation communities. We will measure cover based on ocular estimate or according to State of Nevada reclamation regulations methods; we will not count plants on the Forest Service Regional noxious or undesirable plant lists as part of the ground cover determination. After the third growing season, we will evaluate ground cover for bond release.
- The Forest Service may release the reclamation bond after the operator has completed all identified work and meets the release criteria for the vegetation. As the operator accomplishes earthwork and other required reclamation, the Forest Service may release part of the bond.

Public involvement

We started public scoping on March 5, 2001, and consulted forty agencies, groups, and individuals. The interdisciplinary team reviewed five responses and then identified issues and concerns for the project. Responses are as follows:

- State of Nevada Historic Preservation Office dated March 30, 2001, stated SHPO has reviewed the scoping notice and reminded the Forest Service of Section 106 responsibilities.
- Nevada Division of Water Resources commented March 29, 2001, stating any water used for the project may be provided under State Engineer's Office permit system and that any change in existing water rights must be done pursuant to NRS Chapters 533 and 534. On June 19, 2001, the Division reiterated this concern during the pre-decisional EA comment period.
- Division of Minerals' letter, dated March 13, 2001, supports the "preferred alternative" that allows project to proceed and requested that hazardous openings be fenced off or secured.
- Nevada Department of Wildlife comments dated March 29, 2001, identified concerns for bighorn sheep and mule deer winter range; Bonneville cutthroat trout in Hendrys Creek east of the project, riparian habitat, appropriate reclamation measures, and topsoil salvage with revegetation using suitable seed mixes that favor existing wildlife.
- US Fish and Wildlife Service comments dated March 27, 2001 provided a list of species of concern, identified concerns for fragmentation, water quality, water quantity, noise, wetland and riparian communities, air quality, acid generation, cumulative impact analysis and suggested mitigations to minimize any potential effects.

The Interdisciplinary Team addressed the concerns above in the EA, as described below:

- There are no hazardous openings.
- The Bonneville cutthroat trout population in Hendrys Creek is above a human-made barrier up the drainage and away from the project.
- There is no disturbance proposed in the lower reaches of Hendrys Creek, the only riparian habitat in the vicinity of the project.
- The Team addressed reclamation measures, topsoil salvage, and seeding mixtures in the Proposed Action with Mitigation Measures.
- The previous District Biologist completed a Biological Evaluation assessing effects on threatened, endangered, and sensitive species, migratory birds, and game. The present Biologist has completed a recent BE, evaluating the proposal based on current listed species.
- There are no wells or drawing of water on site.
- This quartzite building stone quarry has no acid regeneration potential, there is no live water in the quarry area, and no material will be placed in Hendrys Creek.
- The quarry is in a remote area with few visitors; noise generated will be heard by few visitors.
- Impacts on air quality will be of short duration from blasting and hauling rock. In addition, the proposal will mine coarse rock with little fines.

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The Interdisciplinary Team identified two issues which differed among the alternatives, and which they therefore analyzed in detail in the EA:

- Concerns for successful reclamation, especially given the lack of soil depth and,
- Effects to bighorn sheep and mule deer habitat.

Issues considered and not analyzed further

The ID Team determined that the following issues did not differ among all three alternatives: threatened, endangered, and sensitive species, effects to wilderness values, Bonneville cutthroat trout, riparian habitat, neotropical migratory bird species, water quality, air quality, cultural resources, and public road safety.

Alternatives considered

The ID Team analyzed the No Action Alternative, the Proposed Action Alternative, and the Proposed Action with Mitigation Alternatives.

I did not choose the No Action alternative as it conflicts with the 1872 Mining Law, and I did not find the effects from the action alternatives to be onerous or unacceptable. I did not select the Proposed Action Alternative because it did not specifically address reclamation concerns and concerns for bighorn sheep and mule deer habitat. The Proposed Action with Mitigation Alternative resolves issues concerning bighorn sheep and mule deer habitats, and reclamation concerns.

How the decision was made

I made this decision because the proposed project allows commercial activities while ensuring minimal effects to resources. The decision is compatible with 1872 Mining Law.

The mitigation measures which are a part of this decision will:

- minimize effects to bighorn sheep with monitoring and with temporary shutdown of operations;
- minimize effects to mule deer habitat with appropriate reclamation and suitable seed mix;
- minimize effects from erosion and maintain soil stability with revegetation and drainage controls;
- implement engineering sign standards and speed controls for public safety;
- implement reclamation measures for timely recontouring and revegetation of disturbance;
- salvage as much top soil as possible for revegetation efforts and success;
- require approved weed-free native seed mixes, beneficial to wildlife;
- require inclement weather restrictions to prohibit operations during periods of snow; and
- require backfilling the pit with waste rock.

FONSI – Finding Of No Significant Impact

I have determined that these actions will not significantly affect the quality of the human environment. Therefore, an Environmental Impact Statement is not needed. I have based this determination on the effects analysis in the Mount Moriah Stone Quarry Project Phase II Environmental Assessment, in light of the following factors listed in 40 CFR 1508.27.

1. I have considered both beneficial and adverse effects; I have not used beneficial effects to offset or compensate potential adverse effects.
2. Public health and safety are improved over the long term by the installation of mine safety signs, adherence to Forest Service Road Engineering standards and maintenance standards with maintenance of roads by the operator.
3. There are no significant effects on unique characteristics. This decision will not affect Bonneville cutthroat trout since no dumping is allowed on the eastern side of the quarry and we require erosion and sediment control measures. The BCT population resides above a human made barrier upstream in Hendrys Creek away from the proposed quarry operation.
4. I do not consider the effects highly uncertain, and there is not substantial controversy over the potential for significant effects. The effects do not represent unique or unknown risks. This decision does not set a precedent for future decisions. Any future decisions must consider all current relevant scientific and site-specific information.
5. Based on the analysis in the Environmental Assessment, this action does not represent potential cumulative adverse impacts when considered in combination with other past or reasonably foreseeable actions. We require concurrent reclamation to lessen total net disturbance.
6. We have inventoried for cultural resources. SHPO concurred on August 14, 2000 that no historic or prehistoric properties will be affected. We will require additional cultural resource inventories prior to any new ground-disturbing activities.
7. The area contains no known threatened, endangered, or sensitive plants or animals. The former District Biologist completed the Biological Evaluation on May 16, 2000, addressing wildlife and flora concerns, and evaluating the proposal for big game and migratory birds. On October 2, 2006, the current District Biologist completed a new Biological Evaluation assessing the project based on the July 10, 2006 list of threatened, endangered, and sensitive species.
8. There are no significant irreversible resource commitments or irreversible loss of historic or cultural resources, parklands, prime rangelands, wetlands, floodplains, or wild and scenic rivers. This action does not violate any federal, state, or local environmental law.
9. The proposal is not in an Inventoried Roadless Area, a Research Natural Area, or a Congressionally designated area.

Findings required by other laws and regulations

This decision is consistent with the Humboldt National Forest Land and Resource Management Plan and the National Forest Management Act. It complies with the Endangered Species Act of 1973, Migratory Bird Treaty Act of 1918, Clean Water Act, and the National Historic Preservation Act of 1966 and 36 CFR 228 Subpart A.

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Administrative review or appeal opportunities and implementation of decision

I will implement the project immediately since the decision is not appealable as stated in 36 CFR 215.12(e)(1) because we received no substantive comments during the pre-decisional comment period.

Contact

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/s/ Patricia N. Irwin

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