February 1, 2004

RE: Supplemental EA for General Quarry Permit

Dear Reader,

Attached is a copy of a supplemental programmatic Environmental Assessment (SEA) for a proposed general quarry permit for standardized plans of operations for small multiple-site quarry and rock collecting operations. The Montana Department of Environmental Quality (department) published a draft and final programmatic Environmental Assessment (EA) for a proposed general quarry permit for standardized plans of operations for small multiple-site quarry and rock collecting operations on October 26, 1999 and January 12, 2000.

The department is herein proposing a revision of the language which refers to allowable disturbance under the general quarry permit, to comport with language found in the Metal Mine Reclamation Act (MMRA) regarding disturbance under the Small Miners Exclusion Statement (SMES). In addition, several changes have been made to improve precision and provide clarification. The draft SEA includes a draft application for operations qualifying for this proposed permit.

The General Quarry Permit was developed to address the need to regulate the expanding number of small quarries and rock collecting sites in Montana. Such sites traditionally have been regulated under a Small Miners Exclusion Statement (SMES). Many operators, however, have more than the maximum of two sites allowed under a SMES, but do not cause the level of environmental impacts appropriate for a full Operating Permit. The proposed language change would allow any individual small quarry to maintain a working disturbance of up to 5 acres. Total disturbance during the life of an individual operation could exceed 5 acres, but concurrent reclamation would be required to keep the disturbance at any one time to 5 acres or less. This language is consistent with that found in the MMRA with regard to mines that operate under the SMES.

The General Quarry Permit plan of operations would be accepted where there is no potential for impact to surface or groundwater, where the geochemical changes resulting from excavation of rock will not result in acid rock drainage, and where no water impounding structures other than for storm water control are constructed. In addition, the plan of operations would be accepted for sites where there are no cultural resources, wetlands, or threatened and endangered plant or animal species. Sites may occur on federal, private, or state lands.

A new supplemental information form would be used for these operations. This form provides an outline specifying information needed regarding the plan of operations, baseline conditions, the reclamation plan, and the applicants. If the department concludes that an application meets the criteria for this permit, no further Montana Environmental Policy Act analysis would be required.

The draft SEA discusses two alternatives: No-Action and the Agency Proposal. The Preferred Alternative in the draft SEA is the Agency Proposal.

A 30-day comment period on the draft SEA will begin on February 5, 2004 and end on March 5, 2004. Any comments, suggestions, or questions will be welcome during that period. Written comments may be sent to Patrick Plantenberg, Environmental Management Bureau, Permitting and Compliance Division, DEQ, P.O. Box 200901, Helena, MT 59620-0901. Letters must be postmarked by March 5, 2004. Comments can also be sent by e-mail to pplantenberg@state.mt.us.

For more information on the draft SEA or to request a copy of the draft SEA call Patrick Plantenberg at (406) 444-4960 or Pete Strazdas at (406) 444-4962. The draft SEA is also available on the DEQ web page at *http://www.deq.state.mt.us/ea.htm*.

Sincerely,

Warren McCullough, Chief
Environmental Management Bureau

Enclosure w/2 appendices

DEPARTMENT OF ENVIRONMENTAL QUALITY
PERMITTING AND COMPLIANCE DIVISION

PROGRAMMATIC ANALYSIS
FOR
GENERAL QUARRY PERMIT
DRAFT SUPPLEMENTAL ENVIRONMENTAL ANALYSIS

Environmental Management Bureau - Hard Rock Program

APPLICATION FOR OPERATING PERMIT

Introduction

Name of Project:_____ General Quarry Permit _____

Type of Project:_____Rock _____

Location of Project(s):_____Variable_____

County:_____Variable_____

Description of Project (Summary of Proposed Action)

The department published draft and final programmatic Environmental Assessments (EAs) for a proposed general quarry permit for standardized plans of operations for small multiple-site quarry and rock collecting operations on October 26, 1999 and January 12, 2000. "Quarry" as used in this SEA may mean either a quarry or a rock collecting site. The department is herein proposing a revision of the language which refers to allowable disturbance under the general quarry permit, to comport with language found in the Metal Mine Reclamation Act (MMRA) regarding disturbance under the Small Miners Exclusion Statement (SMES). In addition, several other changes have been made to improve precision and provide clarification. Additions to the SEA are shown in italics. Deletions are shown as ~~strike outs.~~

The department is consolidating, in one programmatic review, an analysis of a proposed plan of operations for small multiple-site quarry and rock collecting operations. *The General Quarry Permit was developed to address the need to regulate the expanding number of small quarries and rock collecting sites in Montana. Such sites traditionally have been regulated under a Small Miners Exclusion Statement (SMES). Many operators, however, have more than the maximum of two sites allowed under a SMES, but do not cause the level of environmental impacts appropriate for a full Operating Permit. The proposed language change would allow any individual small quarry to maintain a working disturbance of up to 5 acres. Total disturbance during the life of an individual operation could exceed 5 acres, but concurrent reclamation would be required to keep the disturbance at any one time to 5 acres or less*. The plan of operations would ~~apply only to sites where each individual site would disturb no more than 5 acres,~~ *be accepted* where there is no potential for impact to surface or groundwater~~s~~, where the geochemical changes resulting from excavation of rock ~~do~~ *will* not result in acid rock drainage, and *where* no water impounding structures other than for storm water control are constructed. In addition, the plan of operations would ~~apply only to~~ *be accepted for* sites where there are no

cultural resources, wetlands, or threatened and endangered plant or animal species. ~~Such s~~ Sites may occur on federal, private, or state lands.

A new supplemental information form would be used ~~for~~ *in conjunction with* these small quarry and rock collecting operations and is included in Appendix A. This form provides an outline specifying information needed regarding the plan of operations, baseline conditions, the reclamation plan, and information about the applicants. If this programmatic review is approved and the department concludes *that* an application meets the criteria set out below, then no further *Montana Environmental Policy Act (* MEPA*)* analysis would be required.

Each permit approved through this process may be modified by the department or the applicant in accordance with provisions of *Section* 82-4-337(3), MCA at any time that the above conditions are not met.

Purpose and Need

The department has proposed a standardized plan of operations for activities undertaken at certain sites by companies and individuals supplying rock for landscaping and construction. Demand for this type of rock is increasing. Thus, the department's workload in this area is increasing. The department has developed this standardized plan to maximize the efficiency of permitting and the decision-making process for such companies and individuals.

These kinds of disturbances ~~are~~ *have* typically *been* covered under the *SMES* ~~Small Miner's Exclusion Statement~~; the need *by many applicants* for more than two sites precludes this option. This documentation provides a categorical exclusion from the more detailed, ~~standardized~~ *operating permit* application process and environmental impact analysis currently required *for sites not eligible for a SMES*.

Pubic Involvement

The department published a notice to solicit public input in *news*papers across the state. Only two newspapers chose to publish the notice, the Mineral Independent of Superior, and the Meagher County News of White Sulphur Springs, both in April 1999. *The department published the notice for the supplemental environmental analysis in January 2004.*

The department further solicited comments from 117 contractors, quarrymen, public agencies, elected officials, and citizens groups. Letters were mailed on May 10, 1999. The department received letters from two commentors in response. None of the comments were substantive.

Agency Roles and Responsibilities

The department is responsible for ensuring *that* activities proposed under the ~~Metal Mine Reclamation Act~~ *MMRA* are in compliance with the Act and with air and water regulations. Permits issued pursuant to these regulations do not confer any property rights to a permittee. In preparing the draft EA, the department solicited input from the Department of Natural Resources and Conservation and federal land managing agencies. No comments were received from these agencies. However, each applicant would be responsible for obtaining any special use permits or complying with agency-specific restrictions ~~when~~ *if* the proposed ~~mine~~ *quarry* ~~was~~ *is* located on state or federal lands.

Alternatives

Alternatives would be developed based on the complexity of the existing process and a desire to tailor the process to meet the specific needs of a group of permittees conducting activities on small areas with minimal impact and no potential for significant impacts. Public comment was solicited to develop additional criteria for consideration as a part of the proposed action and to develop additional alternatives. No additional concerns were identified; therefore, there are no additional alternatives considered in this EA other than the No-Action Alternative required under MEPA.

No Action *Alternative*

Under the No-Action Alternative, the department would require each potential permittee to apply using the ~~standard~~ operating permit application process. This existing process is minimally standardized because of the large degree of variability between sites proposed for large industrial or even small metal mines. Thus it is difficult for the small operator who has minimal familiarity with, and limited resources to commit to the permitting process *and* to secure an operating permit. Appendix B contains a copy of the existing application form. Supplemental material describing the environmental baseline, the operating plan, and the reclamation plan is typically submitted in three-ring binders. The amount of supplemental information varies with the size and complexity of the site.

Proposed Plan of Operations *Alternative*

Under this alternative, the department would utilize a standardized, more structured process to work with ~~the~~ individuals and small firms proposing to collect landscaping rock or building stone on a small-scale *or* intermittent basis. Appendix A contains the proposed form outlining and defining the supplemental information needed regarding the plan of operations, baseline conditions, the reclamation plan, and applicants, and would be appended to the existing Application for Operating Permit form found in Appendix B. The proposed form condenses the information that typically fills three-ring binders under the existing standardized permitting process and would facilitate permitting multiple small quarry and rock collecting operations that meet the criteria described below.

~~This plan would apply to multiple sites that do not meet the criteria for a Small Miner's Exclusion Statement because the same operator would disturb more than two sites.~~ *The General Quarry Permit was developed to address the need to regulate the expanding number of small quarries and rock collecting sites in Montana. Such sites traditionally have been regulated under a Small Miners Exclusion Statement (SMES). Many operators, however, have more than the maximum of two sites allowed under a SMES, but do not cause the level of environmental impacts appropriate for a full Operating Permit. The proposed language change would allow any individual small quarry to maintain a working disturbance of up to 5 acres. Total disturbance during the life of an individual operation could exceed 5 acres, but concurrent reclamation would be required to keep the disturbance at any one time to 5 acres or less.* ~~Individually, operators would not be allowed to have more than 5 acres at each site~~~~,~~ *A*~~a~~ccess roads would not be counted against the allowable 5 acres under this permit *if bonded for reclamation. Access roads would be bonded for reclamation if the landowner did not want the road left for uses after quarrying.* The permitted sites are prohibited from being adjacent to each other so as to create a continuous disturbance or unreclaimed sites greater than 5 acres. This permit would cover two kinds of disturbances: quarry type operations (at new or existing sites) and rock ~~or stone~~ collecting sites.

Quarry operations. **A new quarry would be opened or an existing site reopened by removing vegetation, stripping and stockpiling soil for future reclamation use, and removing overburden or waste rock to access the desired rock materials. Depending on the product being produced, rock may be removed by drilling and blasting followed by excavation and hauling, ripping with a bulldozer or excavator followed by removal, or by drilling and sawing blocks with diamond saws followed by removal. If blasting were to be used, the operator would comply with provisions of *S*~~s~~ection 82-4-356, MCA, and ARM 17.24.157-159.**

Quarries would be reclaimed by scaling back highwalls, if necessary for stability and safety. If quarrying results in upslope raveling of scree or loose rock, that destabilized slope would be revegetated or otherwise stabilized. The quarry floor would be graded, covered with soil material and revegetated. If quarrying results in a pit below the level of adjacent ground, that pit would be backfilled ~~to the level of adjacent ground~~ *with the remaining waste rock and/or graded to blend with the surrounding topography and revegetated using the cover material that is available.*

Other areas disturbed but not ~~mined~~ *quarried* would also be revegetated. Overburden and waste rock, if present, would be graded to conform to natural topography, against the pit highwall or as a mound or slope. Coarse rock would not be revegetated but would remain as a rubble or scree feature. Overburden that could support vegetation, or rock that could be covered with salvaged soil, would be revegetated.

Rock Collection Sites. **A rock or stone collection site would be worked by workers with hand bars or other hand tools, or with loaders, backhoes, or other similar equipment that would lift rock and stones from the ground surface, or from under thin soil layers, and stockpile or pallet them for removal. These kinds of operations would *generally occur on ridges or across rolling prairie and would* not generally cause continuous areas of disturbed soil nor create open pits or highwalls, but would only disturb the ground *from which* the rock had been removed. In most rock collection sites, soil would not be salvaged, because site disturbance would be minimal, however, loss of soil by gully erosion of tracks or other careless activities would not be permitted.**

Reclamation needs at rock collection sites would be evaluated on a site-specific basis. Reclamation may consist primarily of smoothing disrupted ground surfaces, replacing any topsoil that had been removed and stockpiled, seeding sites where rock has been removed, clearing rock from roads and trails to remain after mining, and grading excessive ruts on roads or fields that may have been caused by the operator.

General Requirements. **There would be no permanent structures on site, unless these structures conformed to the approved ~~post mine~~ land use *after quarrying*. Temporary camp/office trailers may be used. All equipment and buildings brought onto the site and trash would be removed at ~~mine~~ *quarry* closure.**

Access would typically be from established trails or roads. However, if an access road were proposed, it would typically be a relatively low grade, temporary road. The operator would need to have approval from the landowner or a special use permit from a government agency prior to constructing the road and all necessary measures would be taken to control erosion including using standard best management practices *(BMPs)* and revegetating all disturbed areas along the road. Roads would be bonded for reclamation, unless required ~~post mine~~ by the landowner *after quarry closure*.

Rock may be sorted, stockpiled, and collected on sites, prior to removal. Occasionally, some ~~wood~~ splitting/breaking may be done and rock crushing for decorative uses may occur. An air quality permit may be required for crushing operations and would be applied for on a site-specific basis.

In those instances when substantial site disturbance would be required, soils would be salvaged and stockpiled. Long-term soil stockpiles would be revegetated with an interim seed mix to minimize dust and weed establishment. Best management practices for erosion and storm water controls would be utilized, including diversion of run-on water from undisturbed ground away from the rock collection or quarry site and collection of storm water from within the disturbed areas into ponds without discharge to surface waters.

The proposed ~~post-mining~~ land use *after quarrying* would typically return the site to its *prequarrying~~mining~~* use, ~~typically~~ *such as* wildlife habitat, forest, or grazing land. Plant species used for revegetation would be compatible with and appropriate for the ~~post-mining~~ land use *after quarrying*, and approved by the department. Any alternative ~~post-mining~~ land use *after quarrying*

proposed by the operator, such as a building site, may be appropriate if it is feasible, compatible with any local or regional zoning regulations, and consistent with the landowners' long-term plans for the site. Any land use changes outside these parameters would need to be evaluated in a separate EA.

Noxious weed control would be consistent with the County's weed control plan. Liability for weed control or eradication would be based on species identified in a site-specific pre*quarrying*~~-mining~~ weed inventory. Operators would be responsible to eradicate noxious weed*s* on ground that was free of noxious weeds prior to *quarrying* ~~mining~~. Conversely, if the site was infested before operations began, the operator would not be responsible for returning the land to a weed-free state, but would be required to return the land to a condition no worse than what existed prior to operations and similar to that of surrounding lands. Operators may be required to establish competitive vegetation, if appropriate.

Bonding would be determined in accordance with the approved site-specific plan of operations as defined in *Section* 82-4-338 MCA.

Affected Environment

The site conditions required for a plan to be approved under this operating permit are described below.

Geology

Rock ~~mined~~ *quarried* under this plan would consist of various rock types and mineralogies. The rock may be found at or near the surface, such as talus, or in-place, such as bedded sandstone, shale, limestone, basalt, rhyolite, travertine, or marble. It may be covered by overburden, or exposed as outcrops or scattered rock laying on the earth's surface. The rock or resulting waste would have no potential for causing acid rock drainage. *Sites with a potential for acid rock drainage would not be eligible for permitting under this SEA.*

Hydrology

For rock recovery under a general quarry permit, the rock must be obtained from a dry site. Surface waters ~~would~~ *must* be 100 feet or more from the site and the water table ~~would~~ *must* not be intercepted by any surface activities. Similarly, no riparian areas or wetlands ~~would~~ *may* be disturbed as a result of rock quarrying under the general quarry permit.

Soils

Soil development may be highly variable but may be expected to be shallow over rock. Extent of soil development would not be a criterion of permit approval.

Biological Diversity

Vegetation on quarry sites consists of meadows, rangelands, forests, or agricultural crops, *typically supporting an array* of wildlife species including small and large mammals, reptiles, and birds. Sites supporting threatened *and* endangered ~~or sensitive~~ plant species would not be *permittable*~~ed~~ under this general permit. Some sites may contain a high concentration of ~~and~~ noxious weeds ~~plants~~ prior to site disturbances. Due to the *required* distance from water, no fisheries would be present and the probability for the occurrence of any amphibians would be limited.

Land Use

Existing land uses would include ~~mining~~ *quarrying*, agriculture, recreation, and forestry. If any historic or prehistoric cultural activities are known to have occurred at the proposed site, the site would not be *permittable~~ed~~* under the general quarry permit. The site would not affect any existing transportation or utility corridors, or wilderness lands.

Social-Economic Conditions

Most rock collecting is done by individuals and small companies. The quarrying and rock collecting activities are distributed statewide. The operators tend to be concentrated near population centers and in areas experiencing growth, to satisfy the demand for decorative rock and building stone.

Impacts of the Proposed Project

N = Not present or No Impact will occur.

Y = Impacts may occur (explain under Potential Impacts).
Include frequency, duration (long or short term) magnitude and context for any impacts identified. Identify reasonable feasible mitigation measures where appropriate.

NA= Not applicable

IMPACTS ON THE PHYSICAL ENVIRONMENT	
RESOURCE	**[Y/N] POTENTIAL IMPACTS AND MITIGATION MEASURES**
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?	**[Y] Removal of rock or building stone would irreversibly remove the material from the site. A pit and/or highwall may result from quarrying. Soils would be salvaged and replaced at sites proposed for substantial surface disturbance.** **Additional protective measures would be required on steep slopes and erodible soils to minimize erosion.**
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?	**[N] The stipulated 100-foot distance from surface waters and prohibition of interception of water tables would prevent impacts to surface and ground waters.**
3. AIR QUALITY: Will pollutants or particulate be produced? Is the project influenced by air quality regulations or zones (Class I airshed)?	**[N] There is some potential for dust created by crushing operations that may need to be covered by an air quality permit.**
4. VEGETATION COVER, QUANTITY AND QUALITY: Will vegetative communities be significantly impacted? Are any rare plants or cover types present?	**[Y] Vegetation could be impacted for the short-term by clearing and soil removal at some sites. This would be mitigated by replacing soil and revegetating the site at closure. The potential exists for increasing the spread of noxious weeds but would be minimized through implementation of a county approved noxious weed control plan *and aggressive control measures*.**
5. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS: Is there substantial use of the area by important wildlife, birds or fish?	**[Y] There is a potential for minor impacts to wildlife and birds at sites with greater surface disturbance, and where heavy equipment or blasting would be used. This would be a short term and very local impact, and would ~~be removed~~ *cease* when *quarrying or rock collecting* ~~mining~~ ~~ceased~~ *ends*. Sites with critical habitats for threatened *and* ~~or~~ endangered species would not be permitted under this process.**

IMPACTS ON THE PHYSICAL ENVIRONMENT	
6. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES: Are any federally listed threatened ~~or~~ *and* endangered species or identified habitat present? Any wetlands? Species of special concern?	**[N] Sites with these features would not be permitted through this proposed permit process.**
7. HISTORICAL AND ARCHAEOLOGICAL SITES: Are any historical, archaeological or paleontological resources present?	**[N] Sites with these features would not be permitted through this proposed permit process.**
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] Activities at existing quarries or development of new quarries may be visible from populated areas or from recreational sites, but the small size of these operations and site reclamation *concurrently and* at closure would mitigate any long-term impacts *to* below the level of significance.**
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?	**[N]**
10. IMPACTS ON OTHER ENVIRONMENTAL RESOURCES: Are there other environmental resources that would be affected by the project?	**[N]**

IMPACTS ON THE HUMAN POPULATION	
11. HUMAN HEALTH AND SAFETY: Will this project add to health and safety risks in the area?	**[Y] Creation of ~~new~~ highwalls at quarry sites would create a safety risk. Fencing and posting of highwalls during operations and reclamation after mining would minimize the short- and long-term risks.**
12. INDUSTRIAL, COMMERCIAL AND AGRICULTURAL ACTIVITIES AND PRODUCTION: Will the project add to or alter these activities?	**[Y] Development of ~~new~~ sites would result in the development of an industrial operation that could be noticeable in areas with few similar activities nearby. Reclamation of the sites after ~~mining~~ *quarrying and rock collecting* ceases would mitigate this impact. Expansion of existing quarries and sites would have less impact.**

IMPACTS ON THE HUMAN POPULATION	
13. QUANTITY AND DISTRIBUTION OF EMPLOYMENT: Will the project create, move or eliminate jobs? If so, estimated number.	**[Y] The number of jobs created by these operations is highly variable, from one person per operation, to companies employing several tens of fulltime workers.**
14. LOCAL AND STATE TAX BASE AND TAX REVENUES: Will the project create or eliminate tax revenue?	**[Y] Addition to tax base would be ~~insignificant~~ *substantial in some counties in Montana.***
15. DEMAND FOR GOVERNMENT SERVICES: Will substantial traffic be added to existing roads? Will other services (fire, police, schools, etc.) be needed?	**[Y] There may be some increase in traffic on roads to some sites, but the increase would not be substantial and would return to ~~premine~~ *prequarry* levels after the ~~mine~~ *quarry* closed and the site was reclaimed.**
16. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS: Are there State, County, City, USFS, BLM, Tribal, etc. zoning or management plans in effect?	**[Y] Special use permits and agency specific restrictions may be required on federal or state lands.**
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?	**[Y] ~~Mining~~ *Quarrying* could not occur within designated wilderness areas, but development of new, or expansion of existing sites could affect recreational activities on and around the sites. The small size of each site and reclamation of potential sites at ~~mine~~ *quarry* closure would minimize this potential impact below the level of significance.**
18. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING: Will the project add to the population and require additional housing?	**[N]**
19. SOCIAL STRUCTURES AND MORES: Is some disruption of native or traditional lifestyles or communities possible?	**[N]**
20. CULTURAL UNIQUENESS AND DIVERSITY: Will the action cause a shift in some unique quality of the area?	**[N]**
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	**[Y] This activity is regulated by the ~~-~~*MMRA* ~~Montana Metal Mine Reclamation Act~~, *S*~~s~~ection 82-4-301 MCA*, et seq*. No permit conditions are proposed outside the scope of this statute.**

IMPACTS ON THE HUMAN POPULATION	
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.	
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.	[Y] The mitigations described above are necessary to comply with reclamation, water quality, and air quality laws and regulations, and would vary to some degree from site to site, depending on conditions and type of operations.
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. The agency must disclose the potential costs of identified restrictions.	[N] The only discretion available to the agency would be in selecting mitigations appropriate for each site that would achieve the desired result of complying with the laws and regulations. The requirements imposed in the plan of operations are the minimum requirements necessary to comply with the ~~Metal Mine Reclamation Act~~ *MMRA* and rules.
24. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:	[N/A]

25. Description of and Impacts of Other Alternatives Considered:

No-Action*:* The No-Action alternative would leave the permitting requirements for small quarrying and rock collection operations unchanged. Those operators who utilize more than the two sites allowable under the SMES would be obliged to submit ~~*more*~~ rigorous baseline, operating, and reclamation plans. The department would be obliged to conduct public scoping, prepare an environmental assessment, and solicit and respond to public comments for each site.

Approval with Modification*:* No modifications were proposed.

26. Summary of Magnitude and Significance of Potential Impacts: Impacts would be minimal. *The General Quarry Permit was developed to address the need to regulate the expanding number of small quarries and rock collecting sites in Montana. Such sites traditionally have been regulated under a Small Miners Exclusion Statement (SMES). Many operators, however, have more than the maximum of two sites allowed under a SMES, but do not cause the level of environmental impacts appropriate for a full Operating Permit. The proposed language change would allow any individual small quarry to maintain a working disturbance of up to 5 acres. Total disturbance during the life of an individual operation could exceed 5 acres, but concurrent reclamation would be required*

to keep the disturbance at any one time to 5 acres or less. ~~Each permit would be no larger than 5 acres, which is the scale of disturbance determined in the MMRA to be non-significant.~~ Further, there would be no impact to surface or groundwater, archeological or cultural resources, or ~~rare~~ *threatened* ~~or~~ *and* endangered plant or animal species. Each site would be reclaimed immediately following ~~mine~~ closure.

27. Cumulative Effects: Cumulative effects would depend on what other activities are ongoing in each of the quarry/rock collection areas. Operations under the general quarry permit would provide minimal additional disturbance in any area. If cumulative effects from other activities in the area and a quarry or rock-picking site were identified, then this categorical exclusion would not apply.

28. Preferred Alternative: The department's preferred alternative is to adopt the general quarry permit as described in this *supplemental* environmental assessment without modifications.

29. Recommendation for Further Environmental Analysis:

[ ] EIS [ ] More Detailed EA [X] No Further Analysis

Rationale for Recommendation: This permitting process for multiple small quarries or rock collection sites would be a more efficient and simpler way for applicants to apply for permits and the agency to review them than the standard process that is currently required for multiple sites due to the small miner's restrictions in the ~~Montana Metal Mines Reclamation Act~~ *MMRA*. There would be minimal or no impacts to the existing environment during operation at sites approved under this general permit and there would be no potential for acid rock drainage. No impacts of any kind would be allowed to affect surface or ground water, wetlands, archeological or cultural resources, or ~~rare,~~ threatened, ~~or~~ *and* endangered plant or animal species during operation, because the general quarry permit would not be used in those instances. Soil would be salvaged and/or protected to prevent erosion and facilitate reclamation. Storm water controls would be required *to* preventing erosion and possible sedimentation of nearby streams outside the 100-foot buffer zone. Each site would be reclaimed *concurrently and/or* immediately following ~~mine~~ closure.

*30. S*EA Checklist Prepared By:

Pete Strazdas
Small Miner Program Supervisor

Patrick Plantenberg
Operating Permit Section Supervisor

Approved By:

_____ _____

Warren McCullough
Environmental Management Bureau Chief

Date

APPENDIX A

GENERAL QUARRY
PLAN OF OPERATIONS

This Plan of Operations application form may be used to permit a rock or stone quarry or collection area if:

- **Any individual small quarry maintains a working disturbance of up to 5 acres. Total disturbance during the life of an individual operation could exceed 5 acres, but concurrent reclamation would be required to keep the disturbance at any one time to 5 acres or less. Access roads would not be included in the disturbed total, but the operator would submit a reclamation bond for roads that do not have an appropriate use after quarrying. Roads appropriate for the land use after quarrying and access or haulage roads which are required by a local, state, or federal agency having jurisdiction over that road would not have to be bonded;**
- **There would be no impact to any wetland, surface or ground water;**
- **There would be no constructed impoundments or reservoirs used in the operation;**
- **There would be no potential to produce any acid or other pollutive drainage from the pit;**
- **There would be no impact to threatened and endangered species; and**
- **There would be no impact to significant historic or archeological features.**

This form offers a simplified way to write a complete plan and must be submitted together with the *Application for Operating Permit* form and $500 application fee.

When using this form: 1) give a complete response to the information requested; 2) provide necessary additional information; and 3) write N/A if the request for information is not applicable.

Supplemental information can be found in the Plan of Operations Guidelines and other Operating Permit packet materials. Please contact the department if you need additional information or assistance.

SECTION I - CORPORATE INFORMATION
(All information requested in this part must be provided)

1. **If the applicant is a corporation or other business entity, list the name and address of officers, directors, owners of 10% or more of any class of**

voting stock, partners, and the like and its registered agent for service of process:

2. **List the names and addresses of the owners of record and any purchasers under contract for deed of the surface of the land within the permit area and the owners of record and any purchasers for deed of all land within one half mile of any part of the permit area:**

3. **List the names and addresses of the present owners of record and any purchasers under contracts for deed of all minerals in the land within the permit area:**

4. **Provide the source of the applicant's legal right to quarry the mineral on the land affected by the permit:**

5. **Certify that the applicant is not currently in violation in this state of any law, rule, or regulation of this state or of the United States pertaining to air quality, water quality, or quarried land reclamation:**

Or if the applicant is a partnership, corporation, or other business association, certify that any partners, officers, directors, owners of 10% or more of any class of voting stock, and business association members, are not correctly in violation in this state of any law, rule, or regulation of this state or of the United States pertaining to air quality, water quality, or quarried land reclamation:

SECTION II - PREQUARRY BASELINE

1. Location and Topography. **Provide a map showing the location of the proposed quarry and describe the proposed access route. Include the specific area to be quarried and the boundaries of land that will be disturbed, sufficient topographic detail to show the topography of the site, the location and names of streams, roads, railroads, and utility lines on or immediately adjacent to the area, and the location of proposed access roads and conceptual spur roads to be built. Provide a general description of how to access the site using the Exhibits:**

2. Present Land Use and Past Quarrying Disturbance**. Describe the present land use and any past quarrying disturbance within and near the proposed permit area:**

3. Water Wells**. Give the location, total depth, and use of any water well in and within 1,000' of the permit area:**

4. Water Table**. Give the estimated seasonal high and low table depths for the area to be quarried, and the maximum depth of quarrying. Specify whether quarrying activities will intercept the water table at any time of the year. If the water table is close to the surface, please dig a test pit and document the presence or absence of evidence of seasonally high water tables:**

5. Surface Water**. Show the location on a map and provide a description, and use of**
any surface water in and within 100 feet of the permit area. Specifically state how far it is from the permit area to surface water. Specifically state whether there is any surface water within 100 feet of the quarry or the new access road. For all sites with surface water close to the site, the operator will describe additional BMP's put in place to prevent impacts to surface water:

6. Soil Material**. Provide a general description of the soil and overburden types and thickness in the area to be quarried. Provide a general description of the soil in the proposed disturbance areas. Provide an estimate of the total acreage of the disturbed area that will be salvaged and have soil replaced at closure:**

7. Vegetation**. Describe the dominant vegetation within the permit area and note the occurrence of any noxious weeds:**

8. Wildlife**. Describe any significant seasonal or year round use by wildlife in and within 1,000 feet of the permit area. Does the site have any habitat for threatened and endangered species?**

9. Geology. **Give a geologic description of the site and describe the potential for the rock to produce acid or other pollutive drainage. Specify whether there are any visible sulfides, iron staining or other effects of chemical weathering on the rocks. If so, then provide more information and sample the material and provide the results if necessary:**

Quarry or Rock Picking Activities: Please provide information for each site on the products being removed from each site. Will the site be used for surface rock picking only? Will the site create a quarry pit that needs to be graded at closure? Will crushing be needed on the site? Will blasting be used on the site?

10. Additional Information**. Describe any characteristics or circumstances unique to the site:**

SECTION III - OPERATING PLAN

1. Soil Material Handling**. Operator will:**

a. **Salvage at least 6" of soil from level facility areas, if available: (level facility areas include mineral stockpile, processing and staging area, except palleting areas receiving minimal disturbance):**

b. **Salvage all soil and overburden from, and at least 10' ahead of, quarry areas: (quarry areas include areas to be quarried as well as areas for waste rock disposal):**

c. **Handle soil and overburden separately and haul these materials to areas prepared for resoiling or stockpile them separately where they will not be disturbed, contaminated, or lost to erosion:**

d. **Shape and seed any soil or overburden stockpile that will remain undisturbed for more than 1 year:**

e. **In the case of reclamation to a use that will not require a vegetative cover, retain all soil on site in an accessible location until the alternate reclamation is assured:**

2. Quarrying. **Indicate the material to be quarried and describe the quarrying method, showing location of the proposed quarry, stockpiles, roads, and other facilities on a map:**

3. Rock Collecting Sites. **Indicate the material to be collected and describe the collecting method, showing location of the proposed collection area, soil or waste rock stockpiles, roads, and other facilities on a map:**

4. Expected Starting Date of Operations**.**

5. Road Construction**. Describe the types of access and quarry related roads to be built, and specify which if any road is to remain per landowner request after quarrying is completed, their intended use, and the condition in which they will be left:**

6. Water Management**. Describe 1) the source, quantity, use, and discharge of any surface water or groundwater to be used in the quarrying operation, and 2) any sediment control structure, water treatment system, drainage structure, or other water control system to be used:**

7. Water Protection. **Operator will:**

a. **Take appropriate measure to protect surface water and groundwater from deterioration of quality and quantity that could be caused by quarrying and reclamation activities:**

b. **Inspect and maintain all fuel storage tanks parked or set on site to prevent spillage, immediately retrieve and properly dispose of any spilled fuel or contaminated materials, and report any spill that reaches state waters or that is greater than 25 gallons to the Department at 406-444-0379:**

c. **Keep all equipment, facilities, and disturbances at least 100 feet from typical high water marks of drainage ways, except at approved crossings:**

8. Dust Management**. Describe any dust control measures to be used during site preparation, stripping, quarrying, processing, hauling, and reclamation:**

9. Rock Stockpiles**. Operator will consolidate excess rock products into stockpiles in an accessible location near an access point or incorporate them into the reclamation plan:**

10. Waste Disposal. **Operator will prohibit on site disposal of wastes unless an appropriate solid waste management system license is obtained from the Department:**

11. Public Safety**. Describe provisions to secure hazardous features, such as highwalls, from public entry:**

12. Socioeconomics. **Describe the number of employees that the operation would require at least on a seasonal basis. Describe the number or truckloads from the quarry site per week or month:**

SECTION IV - RECLAMATION PLAN

1. Land Use After Quarrying**. State the land use of the permit area after quarrying. Structures and roads must be removed and reclaimed unless they are appropriate for the land use after quarrying:**

2. Grading. **Describe the backfilling and grading plan, supported by sketch maps and drawings if appropriate, including anticipated highwall, quarry floor, and waste rock dump slopes and contours, and any special reclamation features, water catchments, drainage ways, ponds, and any portion of the quarry to stay open. Describe grading of any quarries that are below the level of adjacent ground. Describe what steps will be taken to insure that the rock face will be stable and will not present a hazard to people or animals:**

3. Ripping, Soil Material Replacement and Revegetation**. Operator will establish a vegetative cover capable of supporting the land use after quarrying:**

a. **Describe the methods and depths of deep ripping road, stockpile, work, and other compacted areas.**

b. **Describe the methods and depths of soil replacement on level facility areas and of overburden and soil replacement on level quarry areas.**

c. **Describe the methods of seedbed preparation, including incorporation of soil amendments and mulch, if any.**

d. **Describe the methods, species and rates, and season of seeding or planting.**

4. Weed Control**. Operator will:**

a. **Ensure that all seed is weed free.**

b. **Control noxious weeds as specified in the respective weed district management plan.**

c**. Describe any planned weed control measures:**

5. Road Reclamation. **After road surface materials have been retrieved and properly handled, operator will downsize or completely reclaim quarry-related roads as follows:**

a. **Roads are to be graded to blend with the natural contour.**

b. **Roads surfaces are to be ripped, resoiled, and seeded.**

6. Site Protection and Management**. Operator will maintain adequate site protection on seeded areas for two complete growing seasons, or until reclamation is achieved, whichever is longer.**

7. Concurrent and Final Reclamation. **Operator will:**

a. **Keep reclamation as concurrent with quarrying operations as possible.**

b. **Grade, resoil, and seed or plant an area no longer needed for quarry-related activities within 1 year of the cessation of such activities on that area.**

c. **Complete final reclamation by the date given below or apply for an amendment to complete reclamation by a later date.**

d. **Give a reasonable estimate of the month and year by which final reclamation will be completed:**

SECTION V - OTHER

1. Archaeological and Historical Values**: Operator will:**

a. **Provide appropriate protection for archaeological and historical values found in the permit area.**

b. **Route operations around a site of discovery, promptly notify the State Historic Preservation Office (406-444-7715), and leave the site undisturbed until proper evaluation is made.**

2. Personnel Informed. **Operator will inform all necessary on site personnel, including subcontractors, of the commitments made herein.**

3. Additional Information**. Describe any other conditions that pertain to this permit that would alter the conditions or commitments above.**

I certify that the statements and information given apply to the _____ site, and that this plan will be followed unless modified by revision or amendment as provided for in 82-4-337, MCA.

_____

Signature **Date**

Revised 02/01/04

APPENDIX B

APPLICATION FOR OPERATING PERMIT

State of Montana
DEPARTMENT OF ENVIRONMENTAL QUALITY
Environmental Management Bureau
PO Box 200901
Helena, Montana 59620-0901
Phone: (406) 444-4953

Pursuant to the Montana Metal Mine Reclamation Act
(Title 82, Chapter 4, Part 3 MCA)
INSTRUCTIONS: See Operating Permit Rules and Regulations and General Quarry Plan of Operations

Following application submittal, the initial completeness review will be done within 60 days. Subsequent reviews will be completed within 30 days. If this application is consistent with the General Quarry Supplemental EA, no furhter environmental analyses will be performed.

NAME AND ADDRESS OF OPERATOR (Corporation or other business entity: Give names and addresses of principal officers, partners, agents, etc.)	SIZE AND LEGAL DESCIPTION OF PERMITTED AREA Location:		
	Section	T __ N Range __ E __ S __ W	County
Telephone:	Miles	Direction From	Nearest Community

Minerals to be Mined	Proposed Acreage to be Permitted	Proposed Acreage to be Disturbed	Expected Dates of: Starting	Completion

In the following sections, refer to maps and photos. Use attachments if necessary. (Please contact Department on questions concerning application requirements.)

DESCRIBE ACCESS ROADS TO BE BUILT AND MANNER OF RECLAMATION UPON ABANDONMENT.

RECLAMATION PLAN FOR ACRES TO BE DISTURBED COVERED BY THIS APPLICATION FOR PERMIT.

DESCRIBE PLAN OF QUARRYING, PROVIDING FOR COMPLETION OF QUARRYING AND ASSOCIATED LAND DISTURBANCES.

THIS APPLICATION MUST BE ACCOMPANIED BY: 1. Fee of $500.00. 2. Map showing: Permit Area; specific area to be quarried; boundaries of land which will be disturbed; topographic detail; location and names of all lakes, streams, roads, railroads, and utility lines on or immediately adjacent to the area;	Signature of Applicant Title Date		
	FEE RECEIVED	PERMIT ISSUED	Application Returned (Statement Attached)