

To All Potential Applicant(s)

RE: Application Information Packet for Single and Multiple Hard Rock Mine Sites

Dear Applicant,

An operating permit from the Montana Department of Environmental Quality (DEQ) Hard Rock Mining Bureau (HRMB) is required for those that plan to mine and disturb more than five acres, as defined under the Montana Metal Mine Reclamation Act. Enclosed is an information packet.

Applications may be submitted to include multiple sites under one operating permit, but the following restrictions must be met:

- There would be no impact to any wetland, surface or groundwater;
- There would be no constructed impoundment or reservoirs used in the operation;
- There would be no potential to produce acid or other pollutive drainage from the pit;
- There would be in impact to threatened and endangered species; and
- There would be no impact to significant historic or archaeological features.

If these requirements cannot be met an individual operating permit would be required for each site.

The information packet includes:

1. Operating Permit Application form
2. Application process flow chart
3. Montana Hard Rock & Placer Mining Requirements
4. Guidelines for gathering and reporting baseline data
5. Additional permits or licenses that may be required
6. Operating permit summary

Please mail a signed original copy and an electronic copy of the Application form, plus a \$500 application fee (checks made payable to "MT DEQ-HRMB") to:

DEQ-HRMB
Attn: Operating Permit Supervisor
PO Box 200901
Helena, MT 59620-0901

The submittal needs to include a mine and reclamation plan as described in the attached information packet. If you have questions, please contact:

Herb Rolfes
Operating Permit Section Supervisor - HRMB
406-444-3841
hrolfes@mt.gov

Operating Permit Application

State of Montana
 DEPARTMENT OF ENVIRONMENTAL
 QUALITY
Hard Rock Mining 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

Following application submittal, the initial completeness review will be done within 90 days. Subsequent submittal reviews will be completed within 30 days.

<p>NAME AND ADDRESS OF OPERATOR (including email address and phone number)</p> <p>(Corporation or other business entity: Give names and addresses of principal officers, partners, agents, etc.)</p>	<p>LEGAL DESCRIPTION OF PROPOSED PERMIT SITE(S):</p>		
	<p>LATITUDE:</p>	<p>LONGITUDE:</p>	
<p>Mineral(s) to be mined:</p> <p>Distance to the nearest community for each site:</p> <p>Total acreage being proposed for the permit:</p> <p>Total acreage proposed for each site (disturbed and undisturbed):</p> <p>Acreage to be disturbed for each proposed site:</p> <p>Expected start and end dates of mining for each proposed site:</p> <p>Include the operating and reclamation plan for each site:</p>			
<p>THIS APPLICATION MUST BE ACCOMPANIED BY:</p> <ol style="list-style-type: none"> 1. Fee of \$500.00. 2. Map showing: Permit Area; specific area(s) 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; 	<p>Signature of Applicant</p> <p>Title:</p> <p>Date:</p>		
	<p>FEE RECEIVED</p>	<p>PERMIT ISSUED</p>	<p>Application Returned (Statement Attached)</p>

DEQ-HRMB
OPERATING PERMIT
APPLICATION PROCESS

DEQ Application Form, Map(s),
Environmental Baseline Info, Plan
of Operations/Reclamation with
Detailed Appendices, \$500 Fee

DEQ has 90 Days
Post Legal Notice
Determine Administrative
Completeness

If Application is Deficient
First Deficiency Letter Sent to
Applicant
DEQ Receives Applicant's
Response
DEQ has 30 Days to Review
Response

If Response is Found Deficient
2nd Deficiency Letter Sent to
Applicant
DEQ Receives Applicant's
Response to 2nd Letter
DEQ has 30 Days to Review
Response
This Cycle Continues Till
Application is Complete or
Withdrawn

If Application is Complete
DEQ begins the MEPA process

Technically Adequate Application EA or
EIS Process Begins

90 Days for EA Post Draft EA in Legal Notice After Comment Period DEQ Modifies and/or Finalizes EA Post Final EA Approved as submitted, or Denied, or Approved with Mitigations or Stipulations DEQ Calculates Bond Applicant Submits Bond DEQ Reviews & Approves Bond Permit is Signed & Issued	365 Days for EIS unless extended Post Draft EIS in Legal Notice After Comment Period DEQ Modifies and/or Finalizes EIS Post Final EIS Approved as submitted, or Denied, or Approved with Mitigations or Stipulations DEQ Calculates Bond Applicant Submits Bond DEQ Reviews & Approves Bond Permit is Signed & Issued
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MONTANA HARD ROCK & PLACER MINING REQUIREMENTS
Montana Department of Environmental Quality
Air, Energy, and Mining Division - Hard Rock Mining Bureau Post Office Box 200901
Helena, Montana 59620-0901
Telephone: (406) 444-4953 Fax: (406) 444-1499

[Revised: July 2019]

The Law: Montana Metal Mine Reclamation Act

Title 82, Chapter 4, Part 3, et seq., Montana Codes Annotated (MCA)

[Enacted in 1971 & subsequently amended]

https://leg.mt.gov/bills/mca/title_0820/chapter_0040/part_0030/sections_index.html

The Rules: Rules & Regulations Governing the Metal Mine Reclamation Act

Administrative Rules of Montana (ARM) Title 17, Chapter 24, Subchapter 1 et seq.

www.mtrules.org/gateway/ChapterHome.asp?Chapter=17%2E24

Authority: The Metal Mine Reclamation Act applies to all lands within Montana: federal, state, and private (except for Indian lands).

I. Combined Oversight

Where federal lands are involved, the applicant must also obtain approval from the appropriate federal agency before activities can begin (U.S. Forest Service or U.S. Bureau of Land Management). Check with the applicable federal office closest to the project area.

For state-owned (school trust) lands, the applicant must obtain a state mineral lease & approval from the Montana Department of Natural Resources & Conservation, Trust Land Management Division, Minerals Management Bureau - Telephone: (406) 444-2074.

II. State Oversight

The Department of Environmental Quality's Hard Rock Program oversees Small Miner Exclusion Statements (SMES), Exploration Licenses, and Operating Permits under the Metal Mine Reclamation Act (MMRA):

A. SMES

This is not actually a permit or license per se, but an "exclusion" from obtaining an operating (full-scale mining) permit as the name implies. It consists of a signed and notarized affidavit stating that an operator will stay within the requirements or conditions of the exclusion. An SMES basically excludes small operators from the stricter requirements of the MMRA if they meet several conditions. Those conditions are:

The operator will conduct an operation resulting in not more than 5 acres of surface disturbance (including roads, except that access roads may be bonded for reclamation at the operator's option, and thereby not counted against the 5 acres), or two operations which disturb and leave unreclaimed less

than 5 acres per operation if the respective mining properties are:

- The only operations engaged in by the person or company;
- At least one mile apart at their closest point;
- The operator cannot pollute or contaminate any stream.
- The operator provides appropriate protection for human and animal life at underground mine sites through the installation of bulkheads placed over safety collars, and the installation of doors on portals.
- The operator provides DEQ with an appropriate map of his/her operation, and files a renewal annually that describes what has been done in the past year, and what is proposed for the coming year.
- The operator must comply with the Noxious Weed Management Act. For more information about this Act, please contact the Montana DEQ's Hard Rock Program or your county Weed District office.

For Small Miner Exclusion Statements obtained after September 30, 1985, a small miner may not obtain or continue an exclusion unless he/she annually certifies in writing that:

- The small miner is a person or legal entity that:
- No business association or partnership of which he/she is a member or partner has a small miner exclusion; and
- (ii) No corporation of which he/she is an officer, director, or owner of record of 25% or more of any class of voting stock has a small miner exclusion; or
- If the small miner is a partnership or business association, that:
- None of the associates or partners holds a small miner exclusion; and
- (ii) none of the associates or partners is an officer, director, or owner of 25% or more of any class of voting stock of a corporation that has a small miner exclusion; or
- if the small miner is a corporation, that no officer, director, or owner of record of 25% or more of any class of voting stock of the corporation:
- holds a small miner exclusion; or
- is a member or partner in a business association or partnership that holds a small miner exclusion; or
- is an officer, director, or owner of record of 25% or more of any class of voting stock of another corporation that holds a small miner exclusion.

Placer Mining and the SMES: A reclamation bond, not to exceed \$10,000.00, is required for all small placer mining operations. Note that this bonding authority is only extended to small placer operations

which began after July 1, 1989, and does not apply to small hard rock operations (e.g., open pit, underground, etc.). The MMRA also allows DEQ to recover costs over and above the \$10,000.00 limit by filing for the additional amount in district court.

The Department will hold such a bond on private, state or some federal lands controlled by the Bureau of Land Management (since the BLM has limited bonding authority). On National Forest lands, the Forest Service would generally hold an adequate bond to cover all disturbances, regardless of the amount. If the placer operation occurred on both National Forest and private land, DEQ would bond the private land portion. Under this authority, reclamation of placer operations would have to commence within 6 months of cessation of mining. This does not include seasonal closures.

Cyanide or other metal leaching solvent use and the SMES: For mines starting operations after November 3, 1998, open pit mining for gold or silver using heap leaching or vat leaching with cyanide ore-processing reagents is prohibited.

Small miners who use cyanide or other metal leaching solvents must obtain an Operating Permit for only that portion of their operation where cyanide or other metal leaching solvents are used to process ore from underground mines or legacy sites. Section 82-4-305(7) MCA reads:

"A small miner who intends to use a cyanide or other metal leaching solvent ore-processing reagent [for vat or heap leaching] shall obtain an Operating Permit [mining permit] for that part of the small miner's operation in which the cyanide or other metal leaching solvent ore-processing reagent will be used or disposed of".

To obtain an Operating Permit (in this case, an SMES Leaching Permit), the applicant must submit an application that contains adequately-detailed information regarding environmental baseline, operating plans, and a reclamation plan.

That portion of the small miner's permit area where cyanide or other metal leaching solvent is used (i.e., the leach pads, ponds, Merrill-Crowe or carbon plant, leaching vats, LAD areas, detoxification system/circuit, etc.) will be bonded for full reclamation/water treatment costs by DEQ. The mining area (pit, adits, waste rock dumps) and associated roads, etc. will still fall under the SMES and its requirements and are not bonded by DEQ. The 5-acre limitation does not apply to those cyanide or other metal leaching solvent facilities that are fully permitted and bonded under the SMES Leaching Permit.

Exploration and the SMES:

A SMES is for small-scale mining only, and cannot be used for exploration. In the MMRA, "mining" is defined as the extraction of ores or minerals in commercial quantities for sale, beneficiation, refining, or other processing. "Exploration" is defined as all activities conducted on or beneath the surface of lands resulting in material disturbance of the surface for the purpose of determining the presence, location, extent, depth, grade, and economic viability of mineralization of those lands.

Obtaining a SMES: A SMES can be obtained by contacting the Hard Rock Program at DEQ's Main Office in Helena:

Montana DEQ – Air, Energy, and Mining Division
Hard Rock Mining Bureau
1520 East 6th Avenue
PO Box 200901

B. Exploration License (Hard Rock & Placer):

A State Exploration License is required for activities that fit the definition of exploration as follows:

Exploration means all activities that are conducted on or beneath the surface of lands that result in material disturbance of the surface for the purpose of determining the presence, location, extent, depth, grade, and economic viability of mineralization in those lands, if any, other than mining for production and economic exploitation; and all roads made for the purpose of facilitating exploration... (82-4-303(7) MCA)

An Exploration License is a statewide license, and only one is issued per individual or legal entity. However, an unlimited number of individual exploration projects can be permitted under a license. Each project proposed for coverage under an Exploration License must be individually approved and bonded by DEQ. To initially obtain an Exploration License, a specific project must be proposed. Any additional projects are considered amendments to the license. (For example, some of the larger companies may have several dozen projects statewide, all under one license. DEQ has permitted and bonded each individual project, keeps separate files on them, and keeps a general file that holds the license itself and tracks the bond for each project.) Hand sampling with a pick and shovel for geochemical purposes, geophysical surveys, or mapping does not require State licensing or approval. A good rule of thumb is, if the exploration is mechanized (drilling, dozing, backhoe, adit/shaft excavation, etc.), a license and bond are required.

DEQ does not have any standard (fill in the blanks) form for filing an exploration plan of operations as some federal agencies do, but basically requires (usually in letter form) the same level of information as is found in a U.S. Forest Service Plan of Operations. DEQ accepts photocopies of Forest Service operating plans, as long as adequate maps are provided.

The Process: When an exploration plan is submitted to DEQ, it is first checked to see if the level of information provided is adequate. If it is not, the applicant is notified of additional information required. If the proposed project is wholly or partially on federal land, the applicant is advised to also notify the appropriate U.S. Forest Service (USFS) Ranger District or U.S. Bureau of Land Management (BLM) office. If the project is wholly or partially on state-owned (school trust) land, the applicant is advised to also notify the appropriate Montana Department of Natural Resources & Conservation (DNRC) office. A site visit is then scheduled with the applicant and a representative of the USFS, BLM or DNRC (if applicable public lands are involved). Bond is usually calculated during the site visit. Once the bond is submitted, DEQ approval can be granted. (For those portions of operations proposed for public lands, the operator cannot legally begin until the appropriate state or federal land-management agency also grants approval.)

Bonding & Bond Release: DEQ is required by law to hold bond on all exploration projects. The amount of bond required is determined by calculating the amount of money it would take for DEQ to implement the operator's reclamation plan, using standard reclamation and construction techniques and rates. Bond release is generally (but not always) done in two stages. Once the operator has recontoured and seeded all of the disturbances, a partial bond-release inspection can be scheduled with applicable agency personnel. If the dirt work (recontouring) looks good and appears stable and well-seeded, a partial release would be granted (usually 50-65%). The remaining bond is then held to ensure adequate weed-

free vegetative growth and erosion-control, and is usually released after 1 or 2 growing seasons.

The USFS and some BLM offices also have bonding authority. On National Forest lands, DEQ and the USFS calculate a bond that is acceptable to both agencies. The bond is made out to both agencies and can be submitted to either agency. The bond cannot be released until both DEQ and the USFS approve of the reclamation. Bond release inspections are generally made jointly by DEQ/USFS personnel for projects on National Forest lands.

For projects on public lands administered by the BLM, a bond that is acceptable to both DEQ and BLM is calculated and DEQ usually holds the bond for both agencies. (BLM has limited bonding authority.) The bond cannot be released until both DEQ and the BLM approve of the reclamation. Bond release inspections are generally made jointly by DEQ/BLM personnel for projects on public lands administered by the BLM.

For state-owned (school trust) lands, the bonding procedure and conditions listed for the BLM (above) apply to the Montana DNRC, as that agency also has limited bonding authority.

Obtaining an Exploration License: An Exploration License can be obtained by contacting the Hard Rock Program at DEQ's Main Office in Helena:

Montana DEQ – Air, Energy, and Mining Division
Hard Rock Mining Bureau
1520 East 6th Avenue
PO Box 200901
Helena, Montana 59620-0901
(406) 444-4953 Telephone (406) 444-1499 Fax

C. Operating Permits (More than Five Acres of Disturbance at any One Time)

An individual or company is required to obtain an Operating Permit for mining if the conditions of an SMES cannot be met. The time required to obtain an Operating Permit can be quite variable, and depends upon many factors (i.e. the size and nature of the proposed project, the proposed project location, the number of agencies with jurisdiction, etc.). In general, relatively small projects with a low environmental impact potential can take 6 to 9 months; medium-sized, moderate-impact projects can take 9 to 12 months; large, high-impact potential projects can take 1 to 3+ years. Regardless of the size or impact potential of a proposed project, however, a potentially time-consuming unknown always exists: the public's perception of, or reaction to, a specific proposal. Generally, as public controversy surrounding a proposed project increases, so does the amount of time it takes to complete the required environmental analysis process.

For mines starting operations after November 3, 1998, open pit mining for gold or silver using heap leaching or vat leaching with cyanide ore-processing reagents is prohibited.

An application for an Operating Permit consists of three major parts:

1. Environmental Baseline information (hydrology, soils, vegetation, wildlife, cultural, etc. (i.e., what is there now); for some disciplines (such as hydrology and wildlife), at least one full year of baseline data is recommended. It is strongly recommended that potential applicants meet informally with DEQ's Hard Rock Program staff to discuss site-specific informational needs prior to initiating baseline

studies.

2. Operating Plan (type of mining/milling operation, reagents used, equipment used, tons/day, types of liners and installation procedures, location of all facilities, etc.);
3. Reclamation Plan (states reclamation objectives and how they would be implemented).

The Process: Once a plan is submitted, DEQ has 90 days to either determine if the application is complete and compliant (which doesn't mean the plan is approved, just that there is enough information to begin preparation of the appropriate environmental analysis document and make an informed permit decision), or incomplete. If the application is deemed incomplete (which is usually the case the first time around) a certified (or registered) "completeness review" (or "deficiency") letter is mailed on or before the 90th day. The letter "stops the clock," and contains additional informational requirements and questions to which the applicant must respond.

If the proposed project involves federal lands, the permitting and environmental analysis process become a joint state/federal action (i.e. DEQ and the USFS and/or BLM must permit the mining operation), and a joint completeness review letter is sent within that 90-day time period. The letter contains compiled questions and comments from both DEQ/USFS (and/or BLM) technical staff, and is signed by both the appropriate DEQ and federal officials. If the proposed project involves state-owned (school trust) lands, DEQ interacts similarly (as discussed above for the federal agencies) with the Montana DNRC.

The company can take as much time as it wants preparing a response. Once they respond, the clock starts again; this time, however, DEQ has only 30 days to review the resubmitted permit application. (DEQ has signed agreements with most of the other state and federal agencies in which those agencies and DEQ agree to work together). Following this 30-day review period, the application can either be called complete and compliant, or a second completeness review letter is issued. This process continues until the application is deemed complete and compliant. A Draft permit is issued once enough information (technical and otherwise) has been supplied by the applicant for the agencies to carry out the environmental analysis process (write an Environmental Assessment [EA] or Environmental Impact Statement [EIS] and make an informed permit decision.

Once the EA or EIS is complete, the Final permit is either:

- Approved as submitted;
- Denied*;
- Approved with conditional mitigations or stipulations.

If approved, a bond is then calculated based upon the applicant's reclamation plan which is approved by the agencies. Once the bond is submitted and approved, the Final permit is signed and activities can begin.

*A NOTE on Permit Denial: Under the Metal Mine Reclamation Act, a permit can only be denied for one or more of the following reasons:

- The proposed plan of operations would violate the Montana Water Quality Act; -OR-
- The plan would violate the Montana Air Quality Act; -OR-
- The reclamation plan is inadequate to meet standards; -OR-
- The applicant is presently in violation of the MMRA, or any Montana or federal law or rule pertaining to mined land reclamation, water quality or air quality and is not working towards correcting the violation.

If a permit is denied, the applicant may reapply with a new plan (Please see: 82-4-351, 82-4-335 (8) & (9), 82-4- 352 MCA).

D. Other Important Rules: Hard Rock/Placer Mining & Ore Processing

1. Custom Mill/Reprocessing Rules:

Adopted on May 21, 1990, these rules gave DEQ the authority to permit and bond custom hard rock and placer milling/processing operations and the remining and reprocessing of old waste rock and tailings. Prior to this date, DEQ only permitted and bonded ore- processing mills when they were associated with a particular mine (that was also being permitted and bonded), and had no authority over the remining of waste rock or tailings. Therefore, custom mill and remining operations that began prior to the effective date were excluded (grandfathered) from the new rules, and remain excluded until the operator proposes major changes.

2. Blasting Rules:

Adopted on September 30, 1990, these rules require DEQ to investigate formal complaints regarding safety and/or property damage as the result of the use of explosives by a mining operation. The rules outline a specific complaint procedure that must be followed. If the preponderance of evidence gathered by the Department indicates that a company or individual's blasting has damaged property and/or created a safety hazard off-site, DEQ will issue an appropriate order to mitigate the situation. If the order is ignored, DEQ must then implement noncompliance procedures. The rules do not give DEQ the authority to require compensation for any damage that has occurred. The Department's findings can, however, be used by the complainant to sue the operator for property damages.

3. SMES Placer and Dredge Mining Rules:

Adopted on February 18, 1991, these rules give DEQ a \$5,000 maximum bonding authority for placer mines first operated on July 1, 1989 or later. The maximum bond is \$10,000 for those mines first operated on July 1, 1997 or later. The rules also outline best management practices that are minimally necessary to avoid water quality degradation. These rules also describe standards for bond release and outline the procedure for bond forfeiture and SMES revocation.

4. SMES Leaching Permit Rules:

Adopted on February 18, 1991, these rules require that a small miner intending to operate a cyanide or other metal leaching solvent ore-processing facility obtain an Operating Permit and post an adequate reclamation bond for that part of the operation where cyanide or other metal leaching solvent is used (ponds, leach pads, leaching vats, Merrill-Crowe or carbon plant, LAD areas, detoxification facilities/circuits, etc.). The rules outline the types of information required in baseline study plans, operating plans, and reclamation plans. Bonding is required, and the amount of bond must cover the actual cost of reclamation if it had to be performed by DEQ.

NOTE: Copies of the Montana Metal Mine Reclamation Act, the Rules & Regulations Governing the Metal Mine Reclamation Act, and other pertinent informational material and forms are available free of charge by contacting DEQ at:

Montana DEQ – Air, Energy, and Mining Division Hard Rock Mining Bureau
1520 East 6th Avenue PO Box 200901
Helena, Montana 59620-0901
(406) 444-4953 Telephone (406) 444-1499 Fax

E. Other Permits/Certificates That May Be Required:

1. Surface Water Discharge Permit (MPDES):

This permit -- called a Montana Pollutant Discharge Elimination System permit, or MPDES permit -- is issued through the Montana DEQ's Air, Energy, and Mining Division, and is required for all point-source discharges to State surface waters, regardless of any permits that are issued by other programs or agencies. Substantial application and maintenance fees are required for an MPDES permit. For those proposed discharges that are directly related to a hard rock or placer mining or exploration project, Hard Rock Program hydrologists will assist the applicant in obtaining an MPDES from DEQ.

Requirements of the permit usually include pre-operational, operational, and post-operational water quality monitoring for specific parameters, depending on the specific site and proposed activity. For more information about surface water discharge permits, please contact the Montana DEQ at the address and phone/fax numbers found throughout this document.

2. Groundwater Discharge Permit (MGWPCS):

This permit -- called a Montana Groundwater Pollution Control System permit or MGWPCS - is issued through the Montana DEQ's Air, Energy, and Mining Division, and is for discharges directly to groundwater, such as through a percolation pond or land application discharge (LAD) system. It is also required when the possibility exists of a discharge to groundwater by a "sealed" impoundment, such as a tailing pond or a heap leach pad/pond system. Substantial application and maintenance fees are required for a MGWPCS permit.

An MGWPCS, or groundwater discharge permit, is required only if a hard rock or placer operator is proposing a discharge to groundwater and is operating entirely under a Small Miner Exclusion Statement (SMES). This separate permit is NOT required if the operator holds an Operating Permit (including an SMES Cyanide Permit) or an Exploration License. An Operating Permit or Exploration License supersedes the requirement for a groundwater discharge permit, because groundwater discharges permitted under an Operating Permit or Exploration License would be subject to the same level of review and monitoring as those permitted under a separate groundwater permit. Since an SMES is not actually a permit, but an exclusion from one, all SMES operations with actual or potential discharges to groundwater must have a groundwater permit. For more information on groundwater discharge permits, please contact the Montana DEQ at the address and phone/fax numbers found throughout this document.

3. Montana Streambed Preservation Act - 310 Permit:

A 310 Permit is issued by the County Conservation Districts, in cooperation with the Montana Department of Fish, Wildlife & Parks. It is only required for certain perennial streams, and is necessary when an applicant intends to ford a stream, install a culvert, or install a bridge. It is also required for stream alteration or diversion. For more information, please contact the Conservation District in the county where the operation is proposed.

4. Dredge/Fill - Federal Clean Water Act - Section 404 Permit:

A federal Section 404 Permit is issued by the U.S. Army Corps of Engineers. This permit is required

whenever an operator proposes to remove material from (dredge), or place material in (fill), waters of the United States. This is defined on land as the area between the ordinary high-water marks. This law also applies to wetlands. Some of the requirements of Section 404 permitting are redundant with the requirements of the 310 Permit (described in Subsection C, above). For more information, please contact the U.S. Army Corps of Engineers Montana Office in Helena at (406) 441-1375.

5. Air Quality Permit:

An Air Quality Permit is issued by the Montana DEQ's Air, Energy, and Mining Division under the authority of Montana Air Quality Act. It is required when emissions from a project are expected to exceed certain threshold values for various parameters. Generally, if emissions of any pollutant, including fugitive dust, exceed 25 tons/year, an Air Quality Permit is required. An annual fee, based upon a facilities total emission, is required. In most cases, an Air Quality Permit is only needed for larger developments (e.g., large open-pit mines, or mines with a sizeable tailings impoundment or onsite, large-scale ore refinement plants, etc.). They are rarely required for exploration operations. By virtue of their relatively small maximum allowable size and tonnage, small mines operating under an SMES are excluded. For more information, please contact the Montana DEQ's Permitting & Compliance Division at the address and phone/fax numbers found throughout this document.

6. Water Rights:

Operators always need to secure the necessary water rights/permits when using water in their processing or operation. One-shot-only users, such as drillers who may need a limited amount of water in a water truck or pipe diversion, can generally take the water as long as consideration is given to downstream water users and stream banks are not altered or a sedimentation problem created. It is strongly recommended that an operator contact a local landowner and inquire about water sources. For more information on specific requirements for water rights and usage, please contact the Montana Department of Natural Resources & Conservation (DNRC) - Water Resources Regional Office nearest to your project area:

Billings	(406) 247-4415
Bozeman	(406) 586-3136
Glasgow	(406) 228-2561
Havre	(406) 265-5516
Helena	(406) 444-6999
Kalispell	(406) 752-2288
Lewistown	(406) 538-7459
Missoula	(406) 721-4284

7. Montana Major Facility Siting Act (MFSA):

Although the Montana Major Facility Siting Act covers such things as power plants and pipelines, its primary application to the mining industry usually involves new power transmission lines for larger operations. It ONLY applies to new power transmission lines that exceed 69 kilovolts. Some of the larger mines require this power capacity, and along with the local power company, must obtain a Facility Siting Permit from the Montana DEQ. A change in this law now exempts construction of a power line between 69 and 115 kilovolts from this Act if the applicant has the support of at least 75%

of the landowners involved. For more information, please contact the Montana DEQ's MFSA staff at 406-444-2544.

8. Hard Rock Mining Impact Act:

According to sections 82-4-335 (5) & (6) [MCA] of the Metal Mine Reclamation Act (MMRA), prior to issuing an Operating Permit, DEQ must first certify that an applicant is in compliance with the various requirements of the Montana Hard Rock Impact Act (HRIA) (90-6-301 et seq. MCA). The Hard Rock Impact Act (HRIA) only applies to large-scale hard rock and placer mineral developers that would employ over 75 employees. It does NOT apply to exploration programs.

Basically, if an Operating Permit applicant is proposing an operation that would employ over 75 people, the applicant must enter into negotiations with a local committee (near the proposed mine area) made up of local officials and individuals. The negotiations center on the HRIA's requirements for the pre-payment of taxes by the applicant to mitigate socio-economic impacts to the local area caused by an influx of people to work at the mine. Socio-economic concerns usually include local school capacity, water & sewage infrastructure, road maintenance, and other related issues. This process is overseen by the Hard Rock Mining Impact Board, which is attached to the Montana Department of Commerce. For more information regarding the Hard Rock Mining Impact Act, please contact:

Montana Department of Commerce
Local Government Assistance Division
Hard Rock Mining Impact Board
301 S. Park Avenue PO Box 200523
Helena, Montana 59620-0523
Telephone: (406) 841-2770 (406) 841-2771 Fax

F. Mining Claims and Assessment Work on Federal Lands:

While the Montana Department of Environmental Quality has no authority in regards to mining claims and annual assessment work for unpatented and open federal lands (except for issuing permits for exploration and mining operations), this section was added due to the numerous inquiries received by DEQ every year regarding this subject. DEQ regulates surface disturbances related to mining or mineral exploration in Montana. It is up to the applicant to make sure he/she has the legal authority to access the property and claims where the work is to be performed. All questions regarding staking claims, claim ownership, annual assessment work, filing, etc. should be directed to the appropriate federal Bureau of Land Management (BLM) office listed below:

U.S. Department of the Interior
Bureau of Land Management
Montana State Office
5001 Southgate Dr.
P.O. Box 36800 P.O. Box 1160
Billings, Montana 59107
Telephone: (406) 896-5012

U.S. Department of the Interior
Bureau of Land Management

Lewistown District Office
920 Northeast Main
Lewistown, Montana 59457-1160
Telephone: (406) 538-1918

U.S. Department of the Interior
Bureau of Land Management
Butte District Office
106 N. Parkmont
Butte, Montana 59702
Telephone: (406) 533-7600

U.S. Department of the Interior
Bureau of Land Management
Miles City District Office
111 Garryowen Rd
P.O. Box 950
Miles City, Montana 59301-0950
Telephone: (406) 233-2827

G. Exploration & Mining on State-Owned (School Trust) Lands:

Prior to accessing Montana's state-owned (school trust) lands for the purposes of mineral reconnaissance, prospecting, exploration or mining, the operator must first secure a mineral lease and approval from the Montana Department of Natural Resources & Conservation (DNRC) - Trust Land Management Division. This requirement is in addition to specific exploration and mining permits that also must be obtained from the Montana DEQ. Think of DNRC as the agency charged (by the Montana Constitution) to manage the states surface and mineral resources for the School Trust Fund, to ensure a maximum return to the fund from these lands within legislative operational and environmental sideboards. The Montana DEQ issues permits under statutes related to mine reclamation, water quality, air quality, and other environmental resources; much of DEQ's authority in these areas encompasses all types of land (state, federal & private). When exploration or mining-related activities are proposed on state land, DEQ works closely with DNRC during the permit process.

For more information regarding mineral activities on state-owned lands, please contact:

Montana Department of Natural Resources & Conservation (DNRC)
Trust Land Management Division
Minerals Management Bureau
1539 Eleventh Avenue
PO Box 201601
Helena, Montana 59620-1601
(406) 444-2074 Telephone
(406) 444-2684 Fax

Guidelines for gathering and reporting baseline data

The operating permit application form may be used to permit multiple sites for rock products, if the following criteria can be met:

- 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.

Rock products are defined under 82-4-303(29), Montana Code Annotated (MCA) as “decorative rock, building stone, riprap, mineral aggregates, and other minerals produced by typical quarrying activities or collected from, or just below, the ground surface.”

If the criteria above cannot be met to combine multiple sites in one permit, then a separate operating permit application must be submitted for each proposed site that would fall under the Montana Metal Mine Reclamation Act.

In addition to the operating permit Application form, a complete mine plan, complete reclamation plan, and a \$500 application fee must be submitted to the Department of Environmental Quality (DEQ) as part of the permitting process.

When using this form, please 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 DEQ if you need additional information or assistance.

SECTION A - 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 mined 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 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 mined land reclamation:

SECTION B – BASELINE INFORMATION

1. **Location and Topography.** Provide a map showing the location of the proposed mine and describe the proposed access route. Include the specific area 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 Mining Disturbance.** Describe the present land use and any past mining 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:

The State web site for water wells can be accessed for potential water wells (<http://nris.state.mt.us/interactive.html>).

4. **Water Table.** Give the estimated seasonal high and low table depths for the area to be mined, and the maximum depth of mining. Specify whether mining 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 Best Mining Practices (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 that will have soil replaced at closure:

7. Vegetation. Describe the dominant vegetation within the permit and surrounding 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:

Please provide information for each site. Will the site create a pit or steep slopes that need to be graded at closure? Will crushing be needed on the site? Will blasting be used on the site?

10. Archaeological and Historical Values: Will important historic or archeological sites be found on the site? The Operator will need to access the State Historic Preservation Office (SHPO) website and request a file search for previously recorded archeological or historic sites in the permit area. Attach a copy of the SHPO response (see Attachment 1, SHPO File Search Request Form):

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

SECTION C - 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 re-soiling 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. Mining. Indicate the material to be mined and describe the method, showing location of proposed mining disturbance, stockpiles, roads, and other facilities on a map:

3. Loadout and Processing Sites. Indicate the material to be collected or processed, describe the collecting and processing method, on a map show the location of the proposed collection or loadout area, soil and waste rock stockpiles, roads, and other facilities:

4. Mine Dates: Provide the Expected Starting and End Date of Operations.

5. Road Construction. Describe the types of access and mine 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 a) the source, quantity, use, and discharge of any surface water or groundwater to be used in the mine operation, and b) any sediment control structure, water treatment system, drainage structure, or other water control system to be used. The location of structures such as ponds, sumps, and silt fencing should be shown on a map:

7. Water Protection. The operator will:

- a. Take appropriate measure to protect surface water and groundwater from deterioration of quality and quantity that could be caused by mining and reclamation activities:
- b. Provide a Storm Water Pollution Prevention Plan (SWPPP) and 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 DEQ at 406-444-0379:

- c. Keep all equipment, facilities, and disturbances at least 100 feet from the typical high water mark of drainage ways, except at approved crossings.

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

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

10. Solid Waste Disposal. The operator will prohibit on site disposal of wastes unless an appropriate solid waste management system license is obtained from DEQ:

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 on a seasonal basis. Describe the number or truckloads from the mine site per week or month:

SECTION D - RECLAMATION PLAN

1. Land Use After Mining. State the land use of the permit area after mining. Structures and roads must be removed and reclaimed unless they are appropriate for the post mine land use.

2. Grading. Describe the backfilling and grading plan, supported by maps and drawings if appropriate, including anticipated highwall, quarry floor, and waste rock dump slopes and contours, and any special reclamation features, water catchments, drainageways, ponds, and any portion of the mine to stay open. Describe grading of any mine disturbances that are below the level of adjacent ground. Describe what steps will be taken to ensure 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 the road, stockpile, work, and other compacted areas.

- b. Describe the methods and depths of soil replacement on facility areas and of overburden and soil replacement on other disturbance 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 of 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, and
- d. Obtain an approved County Weed Control plan.

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

- a. Roads are to be graded to blend with the natural contour.
- b. Roads surfaces are to be ripped, re-soiled, 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 mining operations as possible.
- b. Grade, re-soil, and seed or plant an area no longer needed for mine-related activities within 1 year of the cessation of such activities on that area.
- c. Complete final reclamation within two years, unless otherwise approved, or apply for a revision 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 E - OTHER

1. Archaeological and Historical Values: Operator will contact SHPO and request a file search for previously recorded archeological or historic sites in the permit area. Attach a copy of the SHPO response for each proposed mine site.

- a. Provide appropriate protection for archaeological and historical values found in the permit area.
- b. Route operations around a site of discovery, promptly notify SHPO (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.

Additional Permits or Licenses That May Be Required

Permits are required by state, federal, and local agencies to assure consideration of other resources, provide for reclamation, and protect water quality for downstream users. This list may not be all inclusive; however, it should get you started in the right direction.

- I. **State Level:** Montana Department of Environmental Quality (DEQ) issues two types of permits that typically apply to mining operations (1) hard rock mining permits/licenses/exclusion statements and 2) water quality permits):
- A. Permits to operate issued by DEQ's Hard Rock Mining Bureau (HRM)
Contact: **DEQ-HRM, Hard Rock Mining Bureau**, PO Box 200901, Helena, MT 59620-0901 (406) 444-4953
1. Exploration License: activity to assess the mineral viability of a site
 - a. Usually drill holes and trenches
 - b. No more than 10,000 short tons may be taken for testing
 - c. License is statewide and can be for multiple sites as long as each site has a Plan of Operations, a Clear Location Map, and a Bond in place for reclamation
 2. SMES (Small Miner Exclusion Statement) ≤ 5 acres of total surface disturbance at any given time per site; use of mechanized equipment/blasting, and > 100 sq. ft. of disturbance
 - a. No more than 2 sites at any given time
 - b. Each site must be at least 1 mile apart at their nearest points
 - c. DEQ can only bond "placer" operations under a SMES
 - d. Types of operations may be placer, open pit, quarry, rock picking, underground, etc.
 3. Operating Permit
 - a. > 5 acres of total surface disturbance at any given time
 - b. Types of operations may be placer, open pit, quarry/multiple quarry, rock picking, underground, etc.
- B. Permits that protect water quality issued by **Water Protection Bureau (WPB)**
Contact: DEQ-WPB, PO Box 200901, Helena, MT 59620-0901 (406) 444-3080
1. Montana Pollutant Discharge Elimination System (MPDES)
 - a. Applies to all water discharged to surface and ground water
 - b. Mining activity and road construction that disturbs significant acreage (*i.e.* > 5 acres)
 2. Storm Water Pollution Prevention Permit (SWPPP)
 - a. Required if any surface disturbance has the potential to contribute sediment or pollutants (*i.e.* fuel) to State waters during a storm event
 - b. There is no minimum acreage – it applies to all surface disturbance
 3. 3A Authorization: Necessary for short-term violation of water quality standards (turbidity)
 4. Suction Dredge Permit
 - a. Necessary for small scale (≤ 4 " intake) suction dredging operations
 - b. Permit is site specific and may have restrictions

II. Federal Level:

- A. **U.S. Forest Service (USFS)** for operations located on USFS land
Contact: (406) 629-3511 or www.fs.fed.us/r1/
1. Notice of Intent is required for operations that do not use mechanized equipment
 2. Plan of Operations is required for any operations using mechanized equipment
 3. Bonding is determined by proposed surface disturbance and government reclamation costs
- B. **Bureau of Land Management (BLM)** for operations located on BLM land
Contact: (406) 896-5000 or www.blm.gov/mt/st/en.html
1. Causal Use that causes negligible disturbance, no notification required
 2. Notice is required for all operations disturbing less than 5 acres per year
 3. Plan of Operations is required for disturbances larger than 5 acres
- C. **U.S. Army Corp of Engineers** requires a 404 Permit before placement of dredge or fill-material in water of the United States including wetlands.
Contact: (406) 441-1375 Helena, MT
- D. **Conservation Districts** require 310 Permit if activity alters, modifies, or affects the bed and banks of a perennial stream. A bond may be required.
Contact: (406) 443-5711 or www.macdnet.org/conservationdistrictdirectorycontact.htm
- E. **Department of Natural Resources and Conservation (DNRC)** Water Rights Bureau may require an application for water rights if you use water in your operation.
Contact DNRC at 1424 9th Ave, PO Box 201601, Helena, MT 59620-0601 (406) 444-6610

OPERATING PERMIT SUMMARY

Statute: 82-4-335 through 338, Montana Code Annotated (MCA)

Rule: Administrative Rules of Montana (ARM) 17.24.116

A. Type of Activity Regulated:

1. Large scale operations > 5 acres of total surface disturbance in anticipation of mining activities.
2. Mining activities include the following:
 - a. Mining ore, industrial minerals, or rock products
 - b. Ore Processing
 - c. Ore Reprocessing
 - d. Mill Construction

B. Application Requirements:

1. An applicant for an operating permit must submit an application for each mine complex, with the exception of mines for rock products at multiple sites which under certain conditions, may be authorized under one permit.
2. The application consists of several parts, including a description of the present condition of the area, i.e.
 - a. Hydrology
 - b. Soils
 - c. Vegetation
 - d. Cultural resource
 - e. Wildlife, etc.
3. An operating plan is required describing the type and size of the operation, equipment to be used, etc.
4. A reclamation plan is required stating the reclamation objectives and how they will be implemented.
5. A monitoring plan may be required.
6. Include a statement and basis for the right to mine (having a mineral lease), an approved County weed control plan, and a fire protection plan submitted to the State Fire Marshall.

7. Include a closure plan which may include water treatment as applicable.
8. Once the application is completed, the agency will evaluate the plans and will either approve or deny the permit, OR will approve the permit with conditional mitigations or stipulations.
9. If approved, a bond is calculated based on the applicant's reclamation plan. Once the bond is submitted, the permit is granted.

C. Permitting Procedure:

1. Once a plan is submitted, the Department of Environmental Quality (DEQ) has 90 days for an initial review and 30 days for any subsequent review of the application to determine if it is complete, i.e., if there is enough information to begin an environmental review and make an informed permit decision.
2. If incomplete, the applicant is sent a deficiency or completeness review letter. The letter informs the applicant as to what additional resource or plan information is required by DEQ. If it is a joint state/federal action (permits required by both DEQ and the U.S. Forest Service (USFS) or Bureau of Land Management (BLM)), a joint deficiency letter is sent that includes comments from both the state and federal agencies. During the application process, DEQ inspects the proposed site. If the site is not accessible because of extended adverse weather conditions, DEQ may extend the review period by not more than 180 days to allow for inspection of the site.
3. There are no constraints on the amount of time an applicant has to prepare a response. Once a response is submitted, DEQ has 30 days to review the new information. This process continues until the application is completed
4. Once the application is deemed complete, DEQ has up to 1 year to conduct an environmental review (see 82-4-337(1)(h)(iv), MCA). This time frame may be extended only through negotiations satisfactory to DEQ and the applicant.
5. A permit may be appealed within 90 days of issuance.
6. The operating permit must provide that the reclamation plan may be modified by DEQ after timely notice and an opportunity for a hearing. (Statute: 82-4-337 and 82-4-349, MCA)

7. An operating permit application may be denied if the plan (mining or reclamation) conflicts with the Montana Clean Air Act (75-2-101, et seq., MCA, p.32), the Montana Water Quality Act (75-5-101, et seq., MCA, p.185), the Public Water Supply Act (75-6-101, et seq., MCA, p. 171), or if the reclamation plan is insufficient to accomplish the proposed reclamation.
 8. Additional criteria apply if the applicant has outstanding enforcement or reclamation responsibilities. (Statute: 82-4-351, MCA)
 9. DEQ conducts annual inspections for a compliance assessment.
- D. Fees: The application fee for a hard rock operating permit is \$500. The annual renewal fee is \$100. (Statute: 82-4-335, MCA)