**Hard Rock Mining Rock Products**

**Operating and Reclamation Plan and Application**

*82-4-301 (29), MCA: (a) "Rock products" means decorative rock, building stone, riprap, mineral aggregates, and other minerals produced by typical quarrying activities or collected from or just below the ground surface that do not contain sulfides with the potential to produce acid, toxic, or otherwise pollutive solutions. (b) The term does not include talc, gypsum, limestone, metalliferous ores, gemstones, or materials extracted by underground mining.*

*A. Section 4. Operating permit -- rock products -- fees*

*(2) (a) A person mining rock products or a landowner allowing another person to mine rock products from the landowner's land may obtain an operating permit for a single site or multiple sites if the operation or operations cumulatively disturb no more than 100 acres of the earth’s surface and the single site or each of the multiple sites do not:*

*(i) operate within 100 feet of surface water or in ground water or impact any wetland, surface water, or ground water;*

*(ii) have any water impounding structures other than for storm water control;*

*(iii) adversely impact a member of or the critical habitat of a member of a wildlife species that is listed as threatened or endangered under the Endangered Species Act of 1973; or*

*(iv) impact significant historic or archaeological features.*

**Instructions** – How to submit a complete and accurate Plan and Application

1. Ensure that you meet all of the requirements for a rock product site listed above.
2. Fill in all blanks and provide a detailed answer for each question. Write “None” or “N/A” if that is the correct answer.
3. Hard Rock Mining Permits are “living” documents, meaning that whenever a permit is amended, the updated information replaces the outdated information. As a result, this form must be filled out completely for a New Permit or a Permit Amendment.
4. The Department of Environmental Quality (DEQ) strongly recommends completing this application form in electronic format. Doing so will make applying for a future amendment much easier. Operators should keep the original electronic files and backup copies. Maps should also be submitted in electronic format, although DEQ reserves the right to request paper copies when necessary.
5. The operator is required to submit all **Supporting Documents**, unless they are not required and that is indicated in the checklist. If the document is required, it must be submitted in order for the application to be accepted and considered complete.
6. Ensure all **Supporting Documents** submitted have the same figure or appendix name/number shown in the checklist.
7. Maps must be legible and drawn to scale, with a uniform base, a scale, and a north direction arrow. Please submit available boundary coordinates with the application in WGS 84 Decimal Degrees format or provide shapefiles for the permit boundary and permitted disturbance boundary.

|  |
| --- |
| **Supporting Documents** |
| **Required** | **Included?** | **Figure / Appendix #** | **Required Support Documents (*Form Section*)** |
| [ ]  **Yes** [ ]  **No** | [ ]  **Yes**[ ]  **N/A** | **N/A** | **$500 fee (New Permit or Major Amendment)** |
| [ ]  **Yes** | [ ]  **Yes**  | **N/A** | **Hard Rock Mining Operating Permit Form**  |
| [ ]  **Yes** | [ ]  **Yes**  | Click or tap here to enter text. | **Cover letter explaining requested permitting action** |
| [ ]  **Yes**  | [ ]  **Yes**  | Click or tap here to enter text. | **Area Map (Should show the nearest city and highways)** *(Section B-1)* |
| [ ]  **Yes**  | [ ]  **Yes**  | Click or tap here to enter text. | **Site Map (Permit boundary, Proposed Disturbance area, 5-year estimate of disturbance, phases for incremental disturbance and bonding, if applicable)** *(Section B-1)* |
| [ ]  **Yes**  | [ ]  **Yes**  | Click or tap here to enter text. | **Reclamation Map (showing post mining topography)** *(Section D)* |
| [ ]  **Yes** | [ ]  **Yes**  | Click or tap here to enter text. | **Weed Control Plan** *(Section D-6)* |
| [ ]  **Yes** | [ ]  **Yes**  | Click or tap here to enter text. | **Fire Plan** *(Section C-10)* |
| [ ]  **Yes**  | [ ]  **Yes**  | Click or tap here to enter text. | **Surface Landowner List** |
| [ ]  **Yes**  | [ ]  **Yes**  | Click or tap here to enter text. | **Right to Mine** *(Section A-6)* |
| [ ]  **Yes**  | [ ]  **Yes**  | Click or tap here to enter text. | **Spill Plan** *(Section C-6)* |
| [ ]  **Yes**  | [ ]  **Yes**  | Click or tap here to enter text. | **SHPO Consultation** *(Section B-10)* |
| [ ]  **Yes** | [ ]  **Yes**  | Click or tap here to enter text. | **Well Logs** *(Section B-4)* |
| [ ]  **Yes** | [ ]  **Yes**  | Click or tap here to enter text. | **Montana Natural Heritage Environmental Summary Report (wildlife and vegetation) or comparable Baseline Studies** *(Section B-9)* |
| [ ]  **Yes** [ ]  **No** | [ ]  **Yes**[ ]  **N/A** | Click or tap here to enter text. | **Storm Water Permit** *(Section C-6)* |
| [ ]  **Yes**[ ]  **No** | [ ]  **Yes**[ ]  **N/A** | Click or tap here to enter text. | **Consultation with DNRC on Sage Grouse** *(Section B-9)* |
| [ ]  **Yes**[ ]  **No** | [ ]  **Yes**[ ]  **N/A** | Click or tap here to enter text. | **Air Quality Permit** *(Section C-7)* |

**Montana Department of Environmental Quality**

**Hard Rock Mining Section**

**Rock Products Operating Permit- Operating and Reclamation Plan and Application**

**SECTION A – CORPORATE AND GENERAL INFORMATION**

1. Operator Information
	1. Applicant Name Click or tap here to enter text.
	2. Project or Quarry Name Click or tap here to enter text.
	3. Mailing Address Click or tap here to enter text.
	4. Phone Number(s) Click or tap here to enter text.
	5. Email Click or tap here to enter text.
2. Site Information
	1. Legal Description of Proposed Permit Area Click or tap here to enter text.
	2. Coordinates (latitude and longitude) of the main facility of or main entrance to the Proposed Permit Area Click or tap here to enter text.
	3. Proposed Permit Boundary Area (acres) Click or tap here to enter text.
	4. Proposed Disturbance (acres) Click or tap here to enter text.
* Is disturbance or mining activity proposed to occur in increments or phases within the proposed disturbance and permit boundaries, to facilitate incremental bonding?

☐​ Yes       ​☐​ No

Details:  **​**Click or tap here to enter text.**​**

Figure #:  **​**Click or tap here to enter text.**​**

* 1. Expected Start Date of Operations Click or tap here to enter text.
	2. Expected Duration of Operations Click or tap here to enter text.
	3. Minerals to be Mined

[ ] Field Stone [ ] Building Stone [ ] Mineral Aggregates [ ] Riprap

[ ] Mixtures including any of the above substances (i.e. borrow material)

Additional Information: Click or tap here to enter text.

1. If the applicant is a corporation or other business entity, attach 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.

Click or tap here to enter text.

1. Attach a list of 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.

Click or tap here to enter text.

1. 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.

Click or tap here to enter text.

1. Provide the source (statement from the landowner or documentation to this effect) of the applicant’s legal right to mine the mineral on the land affected by the permit.

Click or tap here to enter text.

1. Provide the cumulative proposed disturbance acreage for the permit, including proposed disturbance in all sites if operating under a multi-site permit.

Click or tap here to enter text.

1. Either:
	1. Certify that the applicant (including any partners, officers, directors, owners of 10% or more of any class of voting stock, and business association members) is (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,



[ ] Yes [ ] No Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

OR

* 1. Present a certification by the administering agency that the violation is in the process of being corrected to the agency’s satisfaction or is the subject of a bona fide administrative or judicial appeal.

[ ] Yes [ ] No Attachment #: Click or tap here to enter text.

**SECTION B – BASELINE INFORMATION**

1. Location
	1. Provide a map or maps showing the following information, including a uniform base, a scale, and a north directional arrow:

☐ the proposed permit area and area to be disturbed, including anticipated phases or increments of disturbance, if applicable

☐ the location of the proposed mine and facilities

☐ the location and identity of streams within one mile of the permit boundary and three miles down gradient, unless a lesser distance is justified and agreed to by the department

☐ existing and proposed roads

☐ other constructed features like railroad, oil and gas wells, pipelines and other utility lines in the immediate area

☐ residences and water wells within one mile of the permit area

Attached: [ ] Yes [ ] No Figure #: Click or tap here to enter text.

* 1. Provide a general description of how to access the site using the exhibits.

Click or tap here to enter text.

1. Topography Provide a map or maps showing the topography of the proposed permit area.

Attached: [ ] Yes [ ] No Figure #: Click or tap here to enter text.

1. Present Land Use and Past Mining Disturbance
	1. Indicate the present land uses within the proposed permit area.

[ ] Cropland/Hayland [ ] Forest/Timberland [ ] Industrial/Commercial [ ] Pasture/Rangeland [ ] Residential [ ] Road

[ ] Mining [ ] Other: Click or tap here to enter text.

* 1. Indicate the current land uses within 1000 feet of the proposed permit area.

[ ] Cropland/Hayland [ ] Forest/Timberland [ ] Industrial/Commercial [ ] Pasture/Rangeland [ ] Residential [ ] Road

[ ] Mining [ ] Other: Click or tap here to enter text.

* 1. Identify any manmade structures, facilities, or surface disturbances within the proposed permit area.

[ ] None [ ] Construction Project [ ] Farming [ ] Industrial/Commercial [ ] Oil/Gas Structures or Pipelines [ ] Overhead Power Lines or Facilities

[ ] Residential [ ] Roads [ ] Mining

[ ] Underground Utilities (specify: electrical, fiber optic, water, sewer, phone, other)

[ ] Other: Click or tap here to enter text.

1. Groundwater

The Montana Bureau of Mines and Geology Ground Water Information Center (GWIC) can be accessed for groundwater information at <https://mbmggwic.mtech.edu/>.

* 1. Attach results of any baseline groundwater studies performed at the site.

Attached: [ ] Yes [ ] N/A Attachment #: Click or tap here to enter text.

* 1. Indicate the maximum depth of mining (below ground surface):

Click or tap here to enter text.

* 1. Estimate the seasonal high- and low- water tables for the proposed active mining area.

High Water Table: Click or tap here to enter text.

Low Water Table: Click or tap here to enter text.

Attach the information sources used for the estimates (baseline studies, GWIC [e.g. well logs for water wells in and within 1,000 ft. of the proposed permit area], landowner communication, other).

Attached: [ ] Yes [ ] No Figure #: Click or tap here to enter text.

* 1. Include locations of wells within one mile of the permit boundary and three miles down gradient, unless a lesser distance is justified and agreed to by the department, on the area map or a separate well location map.

Attached: [ ] Yes [ ] No Figure #: Click or tap here to enter text.

1. Surface Water
	1. Attach results of any baseline surface water studies performed at the site.

Attached: [ ] Yes [ ] N/A Attachment #: Click or tap here to enter text.

* 1. Provide a description and use of any surface water in and within 100 feet of the permit boundary. Examples of what may be included are: any lakes, ponds, rivers, springs, irrigation ditches/canals, perennial streams/creeks, intermittent streams/creeks, ephemeral drainages, wetlands, impounding structures, or other surface water features. The United States Geological Survey Stream Stats can be accessed for surface water information at <https://streamstats.usgs.gov/ss/>. The United States Fish and Wildlife service Wetlands Mapper can be accessed for wetlands, riparian, deepwater and related aquatic habitats information at <https://www.fws.gov/program/national-wetlands-inventory/wetlands-mapper>.

Click or tap here to enter text.

Attached:  ​☐​ Yes       ​☐​ No     Attachment #:  **​**Click or tap here to enter text.**​**

* 1. Show the proposed permit area location on a map which identifies streams, springs, and seeps within one mile of the permit boundary and three miles down gradient, unless a lesser distance is justified and agreed to by the department.

Attached: [ ] Yes [ ] No Figure #: Click or tap here to enter text.

1. Soil Material
	1. Provide a soil survey for the proposed permit area. This can be accomplished with <https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm> or with test holes excavated within the proposed permit area. Test holes must be of sufficient depth to measure thickness of soil and overburden.

Attached: [ ] Yes [ ] No Attachment #: Click or tap here to enter text.

* 1. Provide a general description of the soil and overburden types and thickness in the area to be quarried and other proposed disturbance areas. Click or tap here to enter text.
	2. Provide an estimate of the total acreage of the disturbed area that will be salvaged and that will have soil replaced at closure. Click or tap here to enter text.
1. Geology
	1. Give a geologic description of the site. See the Montana Bureau of Mines and Geology website for site specific maps and information (<https://www.mbmg.mtech.edu/Information/StoryMaps/GeologicMaps.asp#gsc.tab=0>). Describe if there is any potential for the site 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, provide more information, including results of material sampling if necessary. Click or tap here to enter text.
	2. Characterize the geologic materials as to their hazard potential to release asbestos or other fibers. List any asbestiform minerals that might potentially be found in the permit area. Click or tap here to enter text.
2. Vegetation

An Environmental Summary from the Montana Natural Heritage Program (MTNHP) may be used to describe the dominant vegetation within the selected area. You must create an account with the Natural Heritage Map Viewer program at <http://mtnhp.org> to create an Environmental Summary. The area of interest must encompass the proposed permit area and surrounding areas within 1000 feet of the proposed permit area (1000 ft buffer). If MTNHP is not used, other suitable baseline information must be provided.

* 1. Attach the Environmental Summary from the MTNHP if used.

Attached: [ ] Yes [ ] No Attachment #: Click or tap here to enter text.

* 1. Describe the dominant vegetation within the proposed permit area and surrounding areas. Click or tap here to enter text.
	2. Note the occurrence of any noxious weeds within the proposed permit area and surrounding areas. Click or tap here to enter text.
1. Wildlife

An Environmental Summary from the MTNHP may be used to describe the wildlife within the selected area. You must create an account with the Natural Heritage Map Viewer program at http://mtnhp.org to create an Environmental Summary. The area of interest must encompass the proposed permit area and surrounding areas within 1000 feet of the proposed permit area (1000 ft buffer). If MTNHP is not used, other suitable baseline information must be provided.

* 1. Attach the Environmental Summary from the MTNHP if used.

Attached: [ ] Yes [ ] No Attachment #: Click or tap here to enter text.

* 1. Describe any significant seasonal or year-round use by wildlife in and within 1,000 feet of the permit area. Click or tap here to enter text.
	2. Describe any habitat for threatened or endangered species or species of concern found in or near the proposed permit area. Click or tap here to enter text.
	3. Consult with Montana Sage Grouse Habitat Conservation Program, which can be found at <https://sagegrouse.mt.gov> and indicate if the proposed permit area is or is not regulated by the Montana Sage Grouse Habitat Conservation Program. If the proposed permit area is regulated by the Montana Sage Grouse Habitat Conservation Program, then ensure the consultation letter from the Montana Sage Grouse Habitat Conservation Program is attached.

Attached: [ ] Yes [ ] No Attachment #: Click or tap here to enter text.

1. Archaeological and Historical Values

Access the State Historic Preservation Office (SHPO) website at <https://mhs.mt.gov/Shpo/CulturalRecords> to request a file search for previously recorded archeological or historic sites in the permit area.

* 1. Describe any important historic or archeological sites found in the proposed permit area. Click or tap here to enter text.
	2. Attach a copy of the SHPO file search and response.

Attached: [ ] Yes [ ] No Attachment #: Click or tap here to enter text.

1. Existing Site Conditions
	1. Indicate any existing disturbance present within the proposed permit area. These areas must also be shown on the site map.

[ ] Permitted under Operating Permit [ ] Historical SMES

[ ] Unpermitted [ ] Other:

* 1. If there is existing disturbance, indicate the volume of soil salvaged and stockpiled.

Click or tap here to enter text.

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

Click or tap here to enter text.

**SECTION C - OPERATING PLAN**

1. Soil Material Handling Complete the soil material handling commitments below, or separately include the planned soil material handling.
	1. At least 6 inches of soil and/or fines produced by shaping/cutting rock will be salvaged from level facility areas, including: [ ] mineral stockpile area, [ ] processing and staging area, [ ] other: Click or tap here to enter text..

[ ]  Yes, Click or tap here to enter text. (operator) commits to this.

[ ]  No, see alternate plan below

* 1. All soil and overburden will be salvaged from, and at least 10 feet ahead of, quarry areas and areas for waste rock disposal.

[ ]  Yes, Click or tap here to enter text. (operator) commits to this.

[ ]  No, see alternate plan below

* 1. Soil and overburden will be handled separately and hauled to areas prepared for re-soiling or will be stockpiled separately where they will not be disturbed, contaminated, or lost to erosion.

[ ]  Yes, Click or tap here to enter text. (operator) commits to this.

[ ]  No, see alternate plan below

* 1. Any soil or overburden stockpile that will remain undisturbed for more than 1 year will be shaped and seeded.

[ ]  Yes, Click or tap here to enter text. (operator) commits to this.

[ ]  No, see alternate plan below

* 1. All salvaged soil will be retained in an accessible location on site.

[ ]  Yes, Click or tap here to enter text. (operator) commits to this.

[ ]  No, see alternate plan below

* 1. Alternate soil material handling plan, if operator does not commit to parts (a)-(e) above: Click or tap here to enter text.
1. Mining
	1. Indicate the method of mining:

[ ]  Trenching [ ]  Open Pit Quarry [ ]  Surface Rock Harvesting

[ ]  Other: Click or tap here to enter text.

* 1. Describe predicted blasting activity: Click or tap here to enter text.
	2. Show the location of the permit boundary, permitted mining disturbance boundary, proposed 5-year disturbance, proposed life of mine disturbance, soil stockpiles, roads, and other facilities on a map. If applicable, indicate the increments or phases of disturbance within the proposed disturbance and permit boundaries, to facilitate incremental bonding.

Attached: [ ]  Yes [ ]  No Figure #: Click or tap here to enter text.

1. Loadout and Processing Sites
	1. Indicate the material to be collected or processed. Click or tap here to enter text.
	2. Describe the collecting and processing method. Click or tap here to enter text.
	3. On a map, show the location of the proposed collection or loadout area, soil and waste rock stockpiles, roads, and other facilities.

Attached: [ ]  Yes [ ]  No Figure #: Click or tap here to enter text.

1. Life of Mine Provide the expected starting and end date of operations.

 Click or tap here to enter text.

1. Road Construction
	1. Describe the types of access and mine related roads to be built. Include anticipated width and length of each road.

Click or tap here to enter text.

* 1. Specify which, if any, roads are to remain per written landowner request after mining is completed, their intended use, and the condition in which they will be left (i.e. same condition, reclaimed to light vehicle use, berms removed, etc.).

 Click or tap here to enter text.

1. Water Management/Protection
	1. Commit to not operating within 100 feet of surface water or in groundwater, or impacting any wetland, surface water, or groundwater. Describe any steps taken in the operation to meet this commitment.

[ ]  Yes Operating plan description: Click or tap here to enter text.

* 1. Describe the source, quantity, use, and discharge of any surface water or groundwater to be used in the mine operation, including for dust control purposes.

Click or tap here to enter text.

* 1. Is a Multi-Sector Industrial General Stormwater Authorization required for the proposed permit activities? If so, include communication from the DEQ Water Protection Bureau (<https://deq.mt.gov/water/assistance>) regarding the status of stormwater permitting for the proposed site.

[ ]  Yes: authorization included / status of permitting included

 Attachment #: Click or tap here to enter text.

[ ]  No

* 1. Include the site Storm Water Pollution Prevention Plan (SWPPP) if applicable.

Attached: [ ]  Yes [ ]  No Attachment #: Click or tap here to enter text.

* 1. Describe any sediment control structure, water treatment system, drainage structure, or other water control system to be used. For all sites with surface water close to the site, indicate Best Management Practices (BMPs) put in place to prevent impacts to surface water.

[ ]  Berms [ ]  Check Dams [ ]  Erosion Control Blankets [ ]  Silt Fence

[ ]  Straw Bales [ ]  Tracking of Slopes [ ]  Vegetated Buffer Strips

[ ] Straw Wattles

[ ]  Other: Click or tap here to enter text.

* 1. On a map, show the location of any sediment control structures.

Attached: [ ]  Yes [ ]  No Figure #: Click or tap here to enter text.

* 1. Rock product sites may not have any water impounding structures other than for stormwater control. Commit to this requirement.

[ ]  Yes, Click or tap here to enter text. (operator) commits to this.

* 1. Provide a toxic spill contingency plan including plans to 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. The toxic spill contingency plan must be certified as filed with the state fire marshal.

Attached: [ ]  Yes [ ]  No Attachment #: Click or tap here to enter text.

1. Air Quality Protection
	1. Describe any dust control measures to be used during site preparation, stripping, mining, processing, hauling, and reclamation. Click or tap here to enter text.
	2. Will the operation require an Air Quality Permit or registration under the Air Quality Program? If so, include communication from the DEQ Air Compliance Program (<https://deq.mt.gov/air/assistance>) regarding the status of air quality permitting for the proposed site.

[ ]  Yes: registration included / status of permitting included

 Attachment #: Click or tap here to enter text.

[ ]  No

* 1. Describe any other measures used to protect air quality in the proposed operation. Click or tap here to enter text.
1. Waste Rock and Overburden
	1. Describe the waste rock and overburden produced by the operation, if any, and how it will be stored during operation. Click or tap here to enter text.
	2. Describe the overburden produced by the operation, if any, and how it will be stored during operation. Click or tap here to enter text.
2. Power Needs Describe the power needs and sources, including fuel storage sites. Click or tap here to enter text.
3. Fire Protection Include a fire protection plan.

Attached: [ ]  Yes [ ]  No Figure #: Click or tap here to enter text.

1. Waste Disposal
	1. Describe the plans to manage solid waste generated from mining activities. On site disposal of wastes is prohibited unless an appropriate solid waste management system license is obtained from DEQ. Burning of wooden pallets is prohibited unless a burn permit is obtained from DEQ. Click or tap here to enter text.
	2. Describe the sewage treatment facilities (e.g. porta-potties, outhouse, plumbed facilities on septic system or city sewer) on site. Click or tap here to enter text.
2. Public Safety Describe provisions (e.g. signage, fencing) to secure hazardous features, such as highwalls, from public entry. Click or tap here to enter text.
3. Noise Describe the predicted noise levels by activities during construction and operation phases. Include the predicted noise level at the permit boundary adjacent to the nearest residence. Click or tap here to enter text.
4. Socioeconomics
	1. Indicate the number of employees that the operation would require each quarter: January – March Click or tap here to enter text.

April – June Click or tap here to enter text.

July – September Click or tap here to enter text.

October – December Click or tap here to enter text.

* 1. Describe the size and number of truckloads of product or ore to be removed from the mine site per week or month. Click or tap here to enter text.
1. Protection of Flora and Fauna
	1. Describe the protective measures designed to avoid foreseeable situations of unnecessary damage to flora and fauna in and adjacent to the permit area.

Click or tap here to enter text.

* 1. Rock product operations may not adversely impact a member of or the critical habitat of a member of a wildlife species that is listed as threatened or endangered under the Endangered Species Act of 1973. Commit to this requirement.

[ ]  Yes, Click or tap here to enter text. (operator) commits to this.

Operating plan description: Click or tap here to enter text.

1. Protection of Archeological Resources

Commit to the following protection of historical/cultural resources or provide an alternate plan:

* 1. The operator will not impact significant historic or archaeological features.

[ ]  Yes, Click or tap here to enter text. (operator) commits to this.

* 1. Appropriate protection will be provided for any known archaeological and historical values found in the permit area. If any historic or archaelogical resources are discovered during operations, the operator will immediately stop work within 100 feet of the area, contact SHPO (406-444-7715), and leave the site undisturbed until proper evaluation is made.

[ ]  Yes, Click or tap here to enter text. (operator) commits to this.

[ ]  No, Alternate Plan:

**SECTION D - RECLAMATION PLAN**

1. Final Reclamation Date Provide an estimate of the month and year by which final reclamation will be completed. Click or tap here to enter text.
2. Land Use After Mining
	1. State the post mining land use of the proposed permit area.

Click or tap here to enter text.

* 1. List any facilities, structures, or roads that will remain after reclamation of the site is completed. Facilities left post mining must be approved by the department.

Click or tap here to enter text.

* 1. Commit to return all disturbed areas to comparable utility and stability as that of adjacent areas. Click or tap here to enter text.
	2. Commit to providing for permanent landscaping and contouring to minimize the amount of precipitation that infiltrates into disturbed areas that are to be graded, covered, or vegetated, including waste rock dumps. Click or tap here to enter text.
1. Road Reclamation Describe how mine-related roads will be reclaimed.

Click or tap here to enter text.

1. Grading
	1. Describe the backfilling of any mine disturbances that are below the level of adjacent ground. Click or tap here to enter text.
	2. Describe the grading plan, including anticipated highwall, quarry floor, and waste rock dump slopes and contours, and any special reclamation features, water catchments, drainageways, and any portion of the mine to remain as a feature post mining. Click or tap here to enter text.
	3. Commit to grading with non-noxious, nonflammable, noncombustible solids, unless DEQ grants approval for a supervised sanitary fill. Click or tap here to enter text.
	4. Commit to and describe what steps will be taken to ensure that any remaining rock faces and open pits:

[ ]  N/A – No rock faces or open pits will remain.

* + 1. Will be stable and structurally competent to withstand geologic and climactic conditions without significant failure that would be a threat to public safety and the environment.

[ ]  Yes, Click or tap here to enter text. (operator) commits to this.

Reclamation plan description: Click or tap here to enter text.

* + 1. Will afford some utility to humans or the environment.

[ ]  Yes, Click or tap here to enter text. (operator) commits to this.

Reclamation plan description: Click or tap here to enter text.

* + 1. Will be reclaimed to mitigate post reclamation visual contrasts between reclamation lands and adjacent lands.

[ ]  Yes, Click or tap here to enter text. (operator) commits to this.

Reclamation plan description: Click or tap here to enter text.

* + 1. Will be reclaimed to mitigate or prevent undesirable offsite environmental impacts.

[ ]  Yes, Click or tap here to enter text. (operator) commits to this.

Reclamation plan description: Click or tap here to enter text.

* 1. Will an open pit exceeding two acres of surface area remain after reclamation and is the composition of the floor or walls of the pit likely to cause formation of acid, toxic, or otherwise pollutive solutions on exposure to moisture? If so, please commit to the following and describe how the commitment will be met:

[ ]  N/A – An open pit exceeding two acres of surface area will not remain after reclamation.

[ ]  N/A – An open pit exceeding two acres of surface area will remain, but there is not geologic composition likely to cause formation of acid, toxic, or otherwise pollutive solutions on exposure to moisture.

* + 1. The operator will insulate all faces from moisture or water contact by covering the faces with material or fill not susceptible itself to generation of objectionable effluents in order to mitigate the generation of objectionable effluents.

[ ]  Yes, Click or tap here to enter text. (operator) commits to this.

Reclamation plan description: Click or tap here to enter text.

* + 1. The operator will provide for absorption or evaporation of objectionable effluents in the open pit itself.

[ ]  Yes, Click or tap here to enter text. (operator) commits to this.

Reclamation plan description: Click or tap here to enter text.

* + 1. The operator will prevent entrance into the pit by persons or livestock lawfully upon adjacent lands by fencing, warning signs, and other devices that may reasonably be required by DEQ.

[ ]  Yes, Click or tap here to enter text. (operator) commits to this.

Reclamation plan description: Click or tap here to enter text.

* 1. Commit to grading and reclamation to avoid accumulation of stagnant water in the development area to the extent that is serves as a host or breeding ground for mosquitoes or other disease-bearing or noxious insect life. Describe how the reclamation plan will meet this commitment.

[ ]  Yes, Click or tap here to enter text. (operator) commits to this.

Reclamation plan description: Click or tap here to enter text.

1. Ripping, Soil Material Replacement and Revegetation
	1. Describe the methods and depths of ripping the road, stockpile, work, and other compacted areas. Click or tap here to enter text.
	2. Indicate how waste rock will be used or reclaimed, if applicable:

[ ]  Buried in quarry pit/trenches [ ]  Crushed and sold as aggregate

[ ]  Covered with soil and overburden and revegetated

[ ]  Other: Click or tap here to enter text.

* 1. Indicate how the overburden will be reclaimed, if applicable:

[ ]  Buried in quarry pit/trenches

[ ]  Capped with soil and revegetated

[ ]  Other: Click or tap here to enter text.

* 1. Describe the methods and depths of soil replacement on facility areas and of overburden and soil replacement on other disturbance areas.

Click or tap here to enter text.

* 1. Describe how vegetative cover will be provided if appropriate to the future use of the land specified. Click or tap here to enter text.
	2. Describe the methods of seedbed preparation, including incorporation of soil amendments and mulch, if any. Click or tap here to enter text.
	3. Describe the methods, rates, and season of seeding of planting.

Click or tap here to enter text.

* 1. Include the proposed seed mix with the lbs./pure live seed (PLS) of each species in the mix. The operator must ensure that all seed is weed free.

Click or tap here to enter text.

* 1. Commit to initiating reclamation activities related to the control of erosion simultaneously with the operation and, in any case, promptly after completion or abandonment of the operation on portions of the complex that will not be subject to further disturbance. Describe the reclamation activities used to meet this requirement.

[ ]  Yes, Click or tap here to enter text. (operator) commits to this.

Reclamation plan description: Click or tap here to enter text.

1. Weed Control
	1. Describe any planned weed control measures during operations and reclamation.

Click or tap here to enter text.

* 1. Obtain an approved County Weed Control plan. The operator must control noxious weeds as specified in the respective weed district management plan.

Attached: [ ]  Yes [ ]  No Attachment #: Click or tap here to enter text.

1. Site Protection and Management Describe how the operator will maintain adequate site protection on seeded areas for two complete growing seasons, or until reclamation is achieved, whichever is longer. The reestablished vegetative cover must meet county standards for noxious weed control. Click or tap here to enter text.
2. Concurrent and Final Reclamation Commit to the following:
	1. The operator will reclaim disturbance areas as concurrent with mining operations as possible.

[ ]  Yes, Click or tap here to enter text. (operator) commits to this.

* 1. The operator will grade, replace plant growth medium, 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.

[ ]  Yes, Click or tap here to enter text. (operator) commits to this.

* 1. The operator will complete final reclamation within two years, unless otherwise approved, or apply for a revision to complete reclamation by a later date.

[ ]  Yes, Click or tap here to enter text. (operator) commits to this.

* 1. The operator will not depart from the approved reclamation plan without previously obtaining from DEQ written approval for the proposed change in absence of emergency or suddenly threatening or existing catastrophe.

[ ]  Yes, Click or tap here to enter text. (operator) commits to this.

* 1. The operator will provide sufficient measures in the reclamation plan to ensure public safety and prevent the pollution of air or water and the degradation of adjacent lands. Describe the reclamation activities used to meet this requirement.

[ ]  Yes, Click or tap here to enter text. (operator) commits to this.

Reclamation plan description: Click or tap here to enter text.

* 1. The operator will provide measures in the reclamation plan to prevent objectionable postmining groundwater discharges. Describe the reclamation activities used to meet this requirement.

[ ]  Yes, Click or tap here to enter text. (operator) commits to this.

Reclamation plan description: Click or tap here to enter text.



\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: Click or tap to enter a date.

Signature

Signator Name and Title: Click or tap here to enter text.