CDM MINING & EQUIPMENT, LLC

MASSEYLINE MINE, P-3971

ALABAMA SURFACE MINING COMMISSION

SURFACE COAL MINING PERMIT APPLICATION

PART III

OPERATION PLAN

Prepared by:

TASK Engineering Management Inc.
P.O. Box 660548
Birmingham, Alabama 35266-0548
Telephone 205.978.5070
Email: jw-task@charter.net

PART III OPERATION PLAN

A. General Operation Information

1. Describe the type and method of coal mining procedures and major equipment to be used. (780.11)

See Attachment III-A-1

2	Backhoe Excavators	2	Drills
4	Loaders	2	Fuel and Service Trucks
3	Dozers	3	Rock Trucks
2	Coal Crushers (Portable)	2	Coal Tandems

2. Describe the sequence and timing of increments to be mined (as shown on permit map) over the total life of the permit. (780.11)

See Permit Map and Operations Map.

The timing of increments are as follows:

Increment	**Acres**	**Date**	
		From	**To**
1	100.0	Effective Date*	12 Months After
2	63.0	Inc 1 Completion	12 Months After
3	78.0	Inc 2 Completion	12 Months After
4	84.0	Inc 3 Completion	12 Months After
5	57.0	Inc 4 Completion	12 Months After
6	11.0	Life of Mine	n/a

* The Effective Date depends on the permit date of issuance.

The sequence of mining operations will be generally as follows:

1. Construction of Sediment Control Structures
2. Clearing and Grubbing
3. Topsoil Removal, if required
4. Overburden Drilling and Blasting
5. Overburden Removal
6. Coal Recovery
7. Grading
8. Revegetation

ATTACHMENT III-A-1

OPERATION PLAN

The surface mining method of area mining will be used at this mine site. Preparation will consist of removing timber, topsoil removal (if required), drilling and blasting of overburden, overburden removal, coal removal, regrading, topsoil replacement (if required), and revegetation. See Operations Map.

NOTES: Increment No. 1 and Increment No. 6 will be bonded concurrently prior to commencement of any mining operations. Primary Roads PR-01, PR-02 and PR-03 will be constructed to provide access to Increment No. 1 and a coal stockpile/staging area will be constructed to store, process and load trucks for shipment to markets.

Prior to any mining in Increment No. 1, Sedimentation Basins 001P and 003P designs will be submitted to the regulatory authority for approval. Upon approval of these basins, the embankment area of Basin 001P will be constructed and Basin 003P will be constructed and certified to the regulatory authority. Mining will then commence in the storage area of Sediment Basin 001 and all corresponding surface drainage will be pumped to Basin 003 for treatment prior to discharge to Gurley Creek. After mining has progressed out of the storage area of Basin 001, the storage area of Basin 001 will be constructed by lining the area with clay and compacting the material to provide a functional sedimentation basin. Sedimentation Basin 001AP will be constructed in the same manner as Basin 001. The embankment area of Basin 001AP will be constructed and mining will commence in the storage area of Sediment Basin 001A and all corresponding surface drainage will be pumped to Basin 001 through the existing box culverts under Bethel Road.

INCREMENT NO. 6

Increment No. 6 will be bonded initially and utilized as follows:

Increment No. 6 will initially consist of primary and ancillary roads and a coal stockpile and loading area. As mining and reclamation progress, sediment basins will be added by revision to this increment as the other mining incrments are reclaimed. Increment No. 6 will be bonded prior to the issuance of the permit and will remain active for the life of the mine to facilitate the mining of the other bonded increments.

ATTACHMENT III-A-1(cont.)

INCREMENT NO. 1

Increment No. 1 will be initially be bonded and mined as follows:

Mining will commence in Increment No. 1 in the area north of Bethel Road along a reclaimed pre-law highwall located in the NE/NW and the along the north line of the SE/NW of Section 25, Township 14 South, Range 2 West. Mining will advance due west with cuts generally aligned from the south to the north. Materials will be spoiled to the east off coal. Mining will then advance to the next cut and will continue in this manner to the west line of the NE/NW of Section 25, Township 14 South, Range 2 West. After operations have advanced to this point, mining will shift to the area south of Bethel Road along the un-reclaimed highwall located in the SE/NW and the NE/SW of Section 25, Township 14 South, Range 2 West. Mining will advance due west with cuts generally aligned from the south to the north up to the west boundary line of the said SE/NW and NE/SW of Section 25, Township 14 South, Range 2 West. Materials will be spoiled to the east off coal. Mining will then advance to the next cut and will continue in this manner to the west lines of the SW/NW and NE/SW of Section 25, Township 14 South, Range 2 West.

After mining has advanced to the western boundary of Increment No. 1, a temporary diversion will be established to convey drainage to Sedimentation Basins 001 and 001A to facilitate the mining of Incrment No. 2.

An Operations Map is submitted showing the alignment and direction of mining.

The Lick Creek, Jefferson and Black Creek seams will be mined in Increment No. 1.

INCREMENT NO. 2

Increment No. 2 will be bonded and mined as follows:

Increment No. 2 will be mined by continuing the mining sequence from Increment No. 1. Mining will advance to the west with cuts generally aligned from south to north and located in the SW/SW of Section 24, NW/NW, SW/NW, NW/SW and SW/SW of Section 25, Township 14 South, Range 2 West. Mining will continue in this manner in the bonded areas north and south of Bethel Road in Increment No. 2 with mined material spoiled due east into the previously mined open pit areas. Cut advance will continue in this manner until the limits of the increment area are reached and mining is complete in Increment No. 2.

An Operations Map is submitted showing the alignment and direction of mining.

The Lick Creek, Jefferson and Black Creek seams will be mined in Increment No. 2.

ATTACHMENT III-A-1(cont.)

INCREMENT NO. 3

Increment No. 3 will be initially be bonded and mined as follows:

Mining will commence along the existing open highwall in the NW/SE of Section 25, Township 14 South, Range 2 West. Mining will advance to the southwest with cuts generally aligned from the southeast to the northwest. Mined material will be spoiled to the northeast off coal onto old abandoned spoil areas for the initial cuts and then into previous cuts as mining advances to the southwest. Cut advance will continue in this manner until the limits of the increment area are reached and mining is completed in Increment No. 3.

An Operations Map is submitted showing the alignment and direction of mining.

The Lick Creek, Jefferson and Black Creek seams will be mined in Increment No. 3.

INCREMENT NO. 4

Increment No. 4 will be initially be bonded and mined as follows:

Mining will commence along the existing open highwall in the SW/SE and the SE/SE of Section 25 and in the NW/NE and the NE/NE of Section 36, Township 14 South, Range 2 West. Mining will advance due west with cuts generally aligned from the south to the north. Mined material will be spoiled to the north into previously mined cuts of Increment No. 3 and to the east off coal onto old abandoned spoil areas for the initial cuts and then into previous cuts as mining advances to the west. Cut advance will continue in this manner until the limits of the increment area are reached and mining is completed in Increment No. 4.

An Operations Map is submitted showing the alignment and direction of mining.

The Lick Creek, Jefferson and Black Creek seams will be mined in Increment No. 4.

ATTACHMENT III-A-1(cont.)

INCREMENT NO. 5

Increment No. 5 will be initially be bonded and mined as follows:

Increment No. 5 will be mined by continuing the mining sequence from Increment No.4. Cuts will be located from the south to the north in the SW/SE and the SE/SW of Section 25 and in the NW/NE and the NE/NW of Section 36, Township 14 South, Range 2 West. Mining will initially advance to the west with cuts generally aligned from south to north with advance to the west. As mining progresses the cuts will gradually be rotated to the northwest with cut alignment oriented from the southeast to the northwest. Cut advance will continure in this manner until the limits of the increment area are reached and mining is completed in Increment No. 5.

An Operations Map is submitted showing the alignment and direction of mining.

The Lick Creek, Jefferson and Black Creek seams will be mined in Increment No. 5.

3. Attach a narrative explaining the construction modification, use, maintenance, and removal of the following facilities: (780.11)

   (a) Coal removal, handling, storage, cleaning and transportation structures and facilities.

   See Attachment III-A-3, Part III-A-5 & Part III-B-5

   (b) Spoil, coal processing waste and non-coal waste removal, handling, storage, transportation and disposal structures and facilities.

   See Attachment III-A-3 & III-B-2-A, Part III-B-4 & Part III-B-5

   (c) Mine facilities; and

   See Attachment III-A-3

   (d) Water pollution control facilities

   See Attachment III-A-3 & III-B-2-A

4. Describe the means to be used to maximize the use and conservation of coal reserves in the permit area. (780.18, 816.59)

   Maximizing the use and conservation of coal reserves in the proposed permit area will be accomplished by:

   1.) Utilizing the most current and efficient mining practices for removal of coal reserves.

   2.) Maintaining the most efficient explosive breakage to maximize overburden removal efficiencies and minimizing the toe areas of highwalls.

   3.) Maintaining maximum efficient cut widths to minimize coal loss in the spoil toe.

   4.) Rehandling overburden where required to maximize coal recovery normally lost in the spoil toe.

   5.) Mining the deepest overburdens that are economically feasible.

   6.) Periodically sending coal waste materials to outside coal preparation facilities for extraction of salable coal when feasible.

   7.) Blending and processing coals to enhance marketability of lower quality seams.

5. Describe measures to be taken to ensure that all debris, acid forming and toxic-forming materials and materials constituting a fire hazard are disposed of (include contingency plans to prevent sustained combustion of material). (780.18)

Any acid and/or toxic forming materials encountered in the mining processes will be segregated by selectively placing these materials within the area of the mine excavations a minimum of ten (10') feet away from the highwall, a minimum of ten (10') feet above the pit floor and a minimum of fifty (50') feet from any major drainage courses. These acid and/or toxic forming materials will be covered with a minimum of four (4') feet of the best available non-acid, non-toxic and non-combustible materials.

A BMP (Best Management Plan) shall be instituted specifically for the site which will outline minimum housekeeping standards for any materials such as oil, grease, used rags, etc. that may present a fire hazard to be properly stored on site in appropriate temporary containers that will avoid spontaneous combustion and/or leakage and disposed of in a timely manner in an approved landfill.

Any non-coal waste generated at the mining site or in the process of mining operations will be disposed of in a timely manner at approved off-site landfills that meet all applicable local, state and federal requirements.

For areas outside the immediate pit excavation areas such as coal stockpiles, that may generate combustible, acid and/or toxic forming materials, the following measures will be performed: After all coal has be removed and the coal stockpile area will no longer be used for coal storage, the base material of the stockpile will be removed and placed within the pit excavation area, a minimum of ten (10') feet up from the pit floor, and a minimum of fifty (50') feet away from any major drainage courses. These acid and/or toxic forming materials will be covered with a minimum of four (4') feet of the best available non-acid, non-toxic and non-combustible materials.

ATTACHMENT III-A-3

COAL REMOVAL, HANDLING, STORAGE, CLEANING AND TRANSPORTATION STRUCTURES AND FACILITIES

Coal removal will occur in the sequence as described in the Operations Plan (Part III-A-1). Once uncovered, the coal will be broken by loader and transported to the coal stockpile area for both temporary storage and/or processing as deemed necessary. Any coal processing operations such as crushing and screening that might be required for market requirements will be accomplished utilizing portable plants transported via truck to the site of the coal stockpile area. While crushing and/or screening plants are portable, they generally will remain on site for extended periods and are stabilized by either wood cribbing, concrete blocks or concrete footings. When crushing and/or screening plants are set up, they should be located such that all drainage from the site is routed through an approved sediment basin prior to leaving the permit area where chemical treatment may be performed as necessary to meet State and Federal water discharge quality limits. In addition, a BMP (Best Management Practice) plan should be implemented to maintain good housekeeping and proper handling of oils and lubricants to prevent groundwater and/or surface water contamination. When these equipment units are removed from the site, all stabilizing appliances will be removed from the site to be reused or disposed of in an approved landfill.

The location for coal stockpiles will be carefully selected so as to minimize contact and contamination of local surface and groundwater at the site. To facilitate this, coal stockpiles will be constructed on hilltop and ridgetop sites to minimize surface drainage entering the stockpile area. When conditions prevent placement of coal stockpile areas on high ground, the coal stockpile will be sloped during construction to channel any sheet flow of surface water into diversions constructed to channel all surface drainage away from the coal stockpile area. Diversions will be constructed as outlined in Part III-3-B of this application. All surface runoff from stockpile areas will diverted to approved sediment basins where chemical treatment may be added as necessary to comply with State and Federal water quality parameters.

Stockpile construction will be accomplished by the following: The proposed area will be cleared and grubbed of all organic material, removing and protecting all topsoil that might be encountered in accordance with Rules 880-X-10C-.07 thru 880-X-10C-.11. The stockpile subgrade will be graded to a relatively level state (1% - 3% slope) to provide positive drainage and minimize surface infiltration. Upon completion of the subgrade, a relatively impervious pad and/or liner will be constructed to a minimum thickness of twelve (12") inches. The pad or liner will be laid above the finished subgrade and will be made of the best available on-site clay material with a permeability coefficient of 1 X 10-6 cm/sec or less and shall be placed in six (6") inch lifts and compacted to ninety-five (95%) percent of the standard proctor density. Upon final compaction and completion of the impervious clay pad, a top cap will be constructed made of compacted coal of necessary thickness to carry the weight of processing, loading and transportation equipment. Maintenance of stockpile areas shall be conducted as required to maintain proper drainage controls. Modifications to enlarge stockpile areas shall be handled in the same manner as outlined in initial construction.

ATTACHMENT III-A-3

**COAL REMOVAL, HANDLING, STORAGE, CLEANING
AND TRANSPORTATION STRUCTURES AND FACILITIES (cont'd)**

Coal will be loaded from the stockpile area into highway transport trucks for shipment to final markets. Gravel pads will be constructed to prevent tracking at any point where haul roads from coal stockpile and/or mine areas access state or county roads. These gravel pads shall be constructed of coarse aggregate of 2" to 3" in diameter with a minimum width of eighteen (18') feet, a minimum of six (6") inches in thickness and shall extend a minimum of 100 feet from the existing paved road.

Coal stockpiles, sediment basins and diversions needed for proper operation of coal stockpiles shall be maintained until removal. After all coal has been removed from a permitted site and the coal stockpile is no longer required, the base material will be removed and handled as toxic and acid forming material. The base material from the stockpile site will be removed until no additional carbonaceous material is present and disposed of in the pit area by selectively placing these materials within the area of the mine excavations a minimum of ten (10') feet away from the highwall, a minimum of ten (10') feet up from the pit floor, and a minimum of fifty (50') feet away from any major drainage courses. These acid and/or toxic forming materials will be covered with a minimum of four (4') feet of the best available non-acid, non-toxic and non-combustive materials. The stockpile area(s) will then be graded to match the existing approximate original site contours and all disturbed areas will be vegetated with appropriate combinations of grasses and legumes as stated in the reclamation plan. Disturbed areas will then be fertilized and mulched to ensure permanent diverse vegetative covers.

Any materials such as oil, grease, rags, etc. that may present a fire hazard will be properly disposed of in an approved landfill. Any non-coal waste will be disposed of at approved off-site landfills that meet all applicable local, state and federal requirements.

All transportation facilities such as haul roads, access roads, etc. will be constructed and maintained to meet minimum design criteria including but not limited to the following: Existing roads that meet minimum requirements and design criteria of the Regulatory Authority will be used if possible to eliminate additional disturbance. New roads will be located on ridges or on the most suitable slopes for stability. The minimum width for any proposed roads will be cleared, grubbed and all topsoil removed (if required) and stockpiled for protection. Road beds will be constructed by placing and compacting lifts of suitable material to form an adequate sub-grade. The road will then be capped with a minimum of four (4") inches of compacted base material such as gravel, crushed stone, rock, chert or other suitable material (as approved by the Regulatory Authority) sufficient for its intended use. Routine maintenance such as resurfacing, upgrading and maintenance of drainage controls may be required in the course of mining to keep the roadways in adequate condition. All roads, existing or created for use in this mining operation, will have adequate sediment control facilities, such as silt fences, hay bale berms and/or excavated sediment trap sumps constructed where necessary to effectively catch and control sediment from disturbed areas. All materials used in the construction of the transportation facilities will be non-toxic and non-combustible. Where required, drainage control devices will be installed such that they are placed below the sub-grade, using standard engineering practices to design and construct said structures.

ATTACHMENT III-A-3

**COAL REMOVAL, HANDLING, STORAGE, CLEANING
AND TRANSPORTATION STRUCTURES AND FACILITIES (cont'd)**

Drainage control will be accomplished by the use of drain pipes, ditches, cross drains and ditch relief drains. No sustained grades in excess of ten (10%) percent will be constructed unless prohibited by existing conditions, to which sediment control facilities such as silt fences, hay dams and rock check dams will be installed at strategic locations to prevent erosion and insure stability. Grades greater than fifteen (15%) percent will require ditch relief drains, cross over drains and road drainways installed at a minimum of three hundred fifty (350') feet apart. All disturbed areas adjacent to newly constructed roads will be revegetated in accordance with the approved Reclamation Plan (PartIV-C-5) immediately following construction. Routine vegetative maintenance will be administered when necessary to maintain a vegetative cover. Maintenance of drainage control facilities including: cleaning of road ditches, removal of sediment from structures and minor repairs may be required periodically. Road that are not to be left permanently, at the landowners request, will be removed in the following manner: The base material will be re-established by regrading and reshaping to blend with the immediate surrounding area. To prevent erosion and provide long term stability, terraces, cross drains, berms, etc. will be constructed where deemed necessary. Sediment control measures for all disturbed areas created or existing in the construction or use of proposed or existing haulroads will include but not be limited to the construction or installation of hay dams, silt fences, rock check dams, etc. and will be constructed in strategic locations as required.

Required sediment control facilities will be constructed or installed promptly following the construction of said haulroads, access roads, etc. Immediately following all construction activity, disturbed areas will be vegetated in accordance with the approved Reclamation Plan (Part IV-C-5).

Routine inspections and maintenance (such as regrading, resurfacing, maintenance of sediment control structures, spot revegetation and dust control) will be conducted regularly during the life of each road to ensure that each structure continually meets design and performance standards. Dust control will be achieved by the periodic application of water, chemical binders and/or dust suppressants. Any road damaged by a catastrophic event, such as a flood or earthquake, will be repaired as soon as practicable after the damage has occurred.

Routes of travel that are temporarily utilized within the mine area will be constructed to be compatible with its intended use. Temporary routes of travel will be maintained and routinely inspected to insure that they do not constitute a safety or environmental hazard. Dust control will be achieved by the periodic application of water, chemical binders and/or dust suppressants.

See Part III-B-5 for the primary and ancillary road layout, design, construction, maintenance requirements and specifications.

ATTACHMENT III-A-3

SPOIL, COAL MINE WASTE AND NON-COAL MINE WASTE REMOVAL, HANDLING, STORAGE, TRANSPORTATION AND DISPOSAL STRUCTURES AND FACILITIES

No coal mine waste will be present at this mining facility. No excess spoil disposal areas will be necessary at this mining facility. All non-coal mine waste will be transported by truck to the nearest applicable landfill.

MINE FACILITIES

Mine facilities will consist of one or more dry van type truck trailers for storage of spare parts, maintenance equipment and supplies, one or more equipment service trucks and fuel trucks with mounted storage tanks, one large bulk fuel tank (approximately 10,000 gallon capacity), one office trailer and two (2) Type 2 portable magazines for storing explosives. Bulk explosive tanks may be installed by outside contractors for storage of explosive materials to facilitate efficient blasting operations. All mine facilities will be located within the permit area and changes and/or maintenance such as enlargement and additions to these facilities may occur during the life of the mine as deemed necessary by mine management. All previously listed facilities are portable and will be transported onsite at the start of mining operations and will be transproted offsite after completion of operations. Equipment storage areas, which may consist of an equipment maintenance shop building, will be constructed as necessary for the operation. The purpose for these areas is to store equipment not in service or waiting for maintenance or repair. In the event a maintenance shop is deemed necessary, the shop building will be constructed of sheet metal covering a wooden frame built in such a manner as to facilitate quick and easy disassembly when no longer required at the site. Removal of shop facilities will be accomplished by systematically disassembling the structure and framing. If a concrete building slab has been utilized for the shop foundation, the slab shall be removed to an approved applicable landfill. Any contaminated soils will be removed and disposed in an approved landfill. All parts of the building structure that is reusable will be removed from the site and all disturbed areas will be graded to match the existing approximate original site contours and all disturbed areas will be vegetated with appropriate combinations of grasses and legumes as stated in the reclamation plan. Disturbed areas will then be fertilized and mulched to ensure permanent diverse vegetative covers.

When mine facilities are not further needed, the areas disturbed by these facilities will be regraded to the approximate original contour, scarified and revegetated in accordance with the approved Reclamation Plan (Part IV-C-5). Equipment storage areas, constructed within the permit area, will be graded to a mild grade. Runoff from these areas will be diverted to and controlled by sediment basins proposed under this permit. Modifications to these areas will consist of regrading as necessary to maintain adequate surface conditions and removal will be part of the reclamation process. The area will be scarified, fertilized, limed as necessary, seeded and mulched in accordance with the Reclamation Plan (Part IV-C-5) approved in the permit.

ATTACHMENT III-A-3

WATER POLLUTION CONTROL FACILITIES

Water pollution control facilities, sediment basins, berms, diversions and drainage ditches shall be constructed prior to mine operation disturbance in particular increments and according to approved plans. Sediment basins will be constructed, prior to any disturbance in its respective drainage area, to collect sediment from the disturbed areas and shall remain operational during all actual mining phases and during the reclamation and restabilization phases. Sediment basins will be constructed under the supervision of a qualified Registered Professional Engineer or by a qualified person under his direct supervision. All sediment basins will be certified to the Regulatory Authority upon completion of construction as having been constructed in accordance with the approved design plans.

Areas where sediment basin embankments are to be built will be cleared and grubbed with the topsoil removed and stockpiled (if required). The basins will be constructed by bringing in the best available soil material based on soil strength parameters and permeability and compacting it in lifts until the construction specifications are met. Drainage structures will be installed as per approved design plans with any necessary erosion control and/or stabilization procedures such as riprap, concrete, drop structures, energy dissipaters, etc. being implemented as deemed necessary by the project engineer. Upon completion of construction the entire disturbed area will be revegetated in accordance with the approved Reclamation Plan (Part IV-C-5).

MAINTENANCE

Sediment basins will be inspected semi-monthly for erosion, instability, proper operation, etc. until basin removal or until a Phase III Bond Release. Any minor instance of erosion, instability, improper operation, etc. will be repaired immediately. Routine maintenance of sediment basins shall include: spot seeding, fertilization and mulching to insure a good vegetative cover is maintained on the dam and areas around the basin, repair and stabilization of rills and gullies, regrading and repair of slope failures, repairs to discharge structures and erosion protection structures, cleaning and/or removing debris obstructing pipes and/or spillways to restore proper operation and the removal of stored sediment from the basins prior to it reaching the maximum level indicated on the approved plans. Any parameters observed during routine inspections that require major construction repairs and result in hazardous conditions will be reported to the Regulatory Authority for further consultation and/or instructions. All basins will be examined by a qualified person quarterly for weakness, instability, excessive erosion, etc. with regular routine maintenance performed as necessary. Formal inspections will be made annually with any reports or modifications being filed with the Regulatory Authority along with a certification from a Registered Professional Engineer that the basin has been maintained in accordance with the approved plans and 880-X-10C-.20[1(j)] of the Alabama Surface Mining Regulations.

ATTACHMENT III-A-3

REMOVAL

All sediment basins constructed during mining operations and not being left as permanent water impoundments shall, upon completion of mining, reclamation, restabilization and effluent standards compliance, be removed in the following manner: Upon written approval from the Regulatory Authority of the basin removal plans, the impoundment will be dewatered in a controlled manner by either pumping or siphoning. Upon successful dewatering, a determination will be made as to the level of retained sediment in the basin. Upon determining the retained sediment level, a permanent channel will be cut into the embankment down to the retained sediment level on the side of the embankment deemed most suitable to reach natural ground without encountering prohibiting rock. The embankment material removed from the newly constructed channel will be spread and compacted over the previous impoundment (wet area) to prevent erosion and insure restabilization. The newly constructed channel will be of adequate design (width, depth and grade) to cause all surface drainage to travel across this area as sheetflow with low flow velocities to minimize the possibility of erosion. Also, where deemed necessary, hay dams will be strategically located across the width of the channel to retain sediment and slow the water velocity down to a favorable rate. Where anticipated discharge velocities require further attention, energy dissipaters such as rock check dams, concrete flumes, sacrete bags, etc. will be installed or constructed at the exit section of the newly constructed permanent channel. Upon removal of the embankment section, the remaining embankment material will be graded to the approximate original contour. All disturbed areas will be graded in such a manner to insure slope stability, successful restabilization and to minimize erosion. All disturbed areas will be seeded, fertilized and mulched in accordance with the approved Reclamation Plan (Part IV-C-5). No slope existing or created in the removal of the basin will be left on a grade that may slip or slough.

6. Give a description, including appropriate cross-sections and maps, to measure to be used to seal or manage mine openings, bore holes, wells and other openings within the proposed permit area. (780.18, 816.13-816.15)

Mine openings within the permit area (other than blast holes) will be eliminated in the following methods:

1) Exploration Holes - Exploration holes will be backfilled with the drill cuttings and capped with two (2) feet of clay.

SEE ATTACHMENT III-A-6-1

2) Monitoring Wells - Groundwater monitoring wells will be cased using PVC pipe of equal diameter of the drilling bit used. This casing will extend a minimum depth equal to the depth necessary to reach competent rock material to prevent collapse of the well. The casing depth may vary depending upon the depth of the aquifer being targeted for monitoring and will be installed with an anchoring/stabilizing shale trap collar with a bentonite plug locked in the competent rock strata. Groundwater monitoring wells may be temporarily sealed using a PVC cap of equal diameter as casing requires.

SEE ATTACHMENT III-A-6-2

Groundwater monitoring wells will be sealed at the time of abandonment with a concrete cap (2.0'x2.0'x.5').

SEE ATTACHMENT III-A-6-2

3) Mine Openings - Old works (abandoned underground mines) which may be encountered during the mining operation will be eliminated by the following process:

Prior to the backfilling or shooting of the final highwall all mine openings will be sealed with a clay material having a permeability ranging between 0.00001 and 0.000001 cm/sec. This clay material will be compacted in six (6) inch lifts to ninety-five (95%) percent of the standard proctor density, a minimum of five (5) feet above the top of the opening.

SEE ATTACHMENT III-A-6-3

4) Gas & Oil Wells – There are no gas or oil wells within the proposed permit area.

7. Give a description of steps to be taken to comply with applicable water quality laws, regulations and health and safety standards. (780.18)

Water Quality Laws - Positive drainage measures will be taken to divert and/or route all surface drainage from the proposed mining areas through an approved sediment structure for monitoring and treatment purposes. Monitoring and Reporting will take place as set forth in the approved Monitoring Plan (Part III-D & Part III-E) and NPDES requirements. When necessary, drainage will be chemically treated for pH adjustment or Iron precipitation with hydrated lime or caustic soda. Other treatment such as floating silt fences or flocculation bricks may be administered for Total Suspended Solids. These measures will be taken to remain in compliance NPDES requirements.
Health & Safety Standards - Applicable approvals will be received prior to the construction of any sanitary absorption lines for bathhouse and offices. MSHA guidelines and regulations will be followed in all operations.

All dust, noise, and other required control testing will be current and performed by certified MSHA personnel as required.

Certification and training of all mine personnel will be current and updated by attending MSHA classes at the Walker Technology School, in Sumiton, Alabama.

All records will be maintained at the mine and available for inspection as required.

8. Is surface mining to be conducted within 500 feet of an underground mine? (780.27, 816.79)
( ) YES (X) No

If yes, describe measures to be used (816.79). Attach a map showing the location and extent known workings. (780.14(a) (13)) Attach a copy of MSHA approval.

Not Applicable