

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)

TYPE AND METHOD OF COAL MINING PROCEDURES

*NO CHANGE FROM ORIGINAL PERMIT*

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)

Increment No.	Acres	Date From	To
4	12	Date of Issuance	60 Months
1	18	Date of Issuance	60 Months
3	40	Date of Issuance	60 Months

The sequence of mining operations will be generally as follows:

- 1) Construction of sediment control structures
- 2) Site Preparation
- 3) Development
- 4) Mining
- 5) Site Reclamation and Revegetation

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;

*NO CHANGE FROM ORIGINAL PERMIT*

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

[See Addendum to Attachment III-A-3](#)

(c) Mine facilities; and

[See Addendum to Attachment III-A-3](#)

(d) Water pollution control facilities.

[See Addendum to Attachment III-A-3](#)

3.b) SPOIL, COAL PROCESSING WASTE AND NON-COAL WASTE REMOVAL,  
HANDLING, STORAGE, TRANSPORTATION AND DISPOSAL STRUCTURES  
AND FACILITIES

*This addendum to Attachment III-A-3 addresses changes disposal of fine coal waste.*

Currently this mine proposes two (2) slurry ponds 001 and 002 for disposal of fine coal processing waste. Revision R-3 proposed to add underground slurry injection into the Bessie Mine. North Pratt Mining, LLC received approval of an Underground Injection Control Permit (UIC) from the Alabama Department of Environmental Management (ADEM) on November 17<sup>th</sup> ([see approval page](#)) to inject fine coal processing waste into the abandoned Bessie underground mines. This should provide a long term area for disposal of slurry. See [Facilities Location Map](#) for injection/withdrawal well sites.

North Pratt Mining, LLC is also pursuing approval from MSHA to inject slurry into abandoned sections of the Pratt No. 1 Mine. If MSHA approves the proposed seal and injection plan, a modification to the ADEM UIC permit will be submitted addressing injection into the Pratt No. 1 Mine. A subsequent ASMC revision will also be submitted addressing injection into the Pratt No. 1 Mine.

“Drisco” type polythene pipe will be used to pump fine coal wastes to the slurry ponds and the injection wells as well as withdrawal water from the Bessie Mine to the preparation plant. Preparation for the pipeline corridor will consist of the clearing and grubbing of the areas. Silt fencing will be used to control runoff from the construction areas which are not within the drainage area of approved sediment basins. Upon the installation of the pipelines, all disturbed areas will be fertilized, seeded with a seed mixture approved in the reclamation plan, and mulched to ensure a permanent diverse vegetative cover. Use and maintenance of the pipelines will consist of replacement of damaged or malfunctioning sections of pipeline, repair of leaks as they develop, and the addition of pipeline when needed. Upon the termination of pumping operations, the pipelines will be flushed to ensure that no fine coal wastes or sediment deposits are present in the pipelines and dismantled and removed from the site. All disturbed areas will be fertilized, seeded with a seed mixture approved in the reclamation plan, and mulched to ensure a permanent diverse vegetative cover. See attached [Spill Prevention Plan](#) to monitor slurry pipelines and withdrawal water pipelines.

Slurry Pond 002 Detailed Design Plans were approved under P-3768 and constructed with construction certification submitted previously.

Slurry Ponds 001 & 002 will be used to collect and store fine coal waste produced from the washing operations at this facility and will be inspected and maintained until reclamation of the area is complete. Impoundment construction and any subsequent modifications that may be required will be conducted under the general supervision of a qualified registered professional engineer and will be done in accordance with the approved design plans. The embankments will be constructed of the best available soil material based on soil strength parameters. The dam core wall will bear on unyielding, relatively impermeable consolidated rock and the balance of the dam structure on the prepared compacted natural soil material present at the site. The dam will be built in horizontal lifts beginning at the lowest point of the foundation with each lift being thoroughly compacted. The drainage structure will be installed as outlined on the detailed design plans and will be stabilized with respect to erosion using riprap, concrete paving, energy dissipaters, and vegetation or otherwise. After construction of the impoundment, the dam and all areas disturbed by construction will be limed, fertilized, and seeded

with an appropriate mixture of grasses and legumes approved in the reclamation plan, then mulched.

Routine maintenance of the slurry ponds will consist of spot seeding, fertilization and mulching to insure that a good vegetative cover is maintained on the dam and areas around the impoundment, repair and stabilization of any rills and gullies which may develop, and repairs to discharge structures and erosion protection structures as required. The slurry Ponds will be inspected two (2) times a month by the operator's personnel and annually by a registered professional engineer and any required maintenance will be completed at the earliest possible time by the operator.

Slurry Pond 001 is a proposed impoundment and Pond 002 is existing under P-3768. No modification plans are proposed or required for Slurry Pond 002. If during the term of the permit Slurry Ponds 001, or Slurry Pond 002 require modifications, modification plans will be submitted to the Regulatory Authority for approval prior to any modifications. Upon modifying the slurry impoundment, the slurry impoundment will be certified to the Regulatory Authority.

When the accumulated solids contained within Slurry Ponds 001 & 002 reaches the solids storage volume specified within the detailed design plans, the slurry ponds will be reclaimed in the following manner. The slurry ponds will be de-watered in an environmentally safe manner (such as siphoning, pumping, etc.). A diversion will be constructed around Slurry Ponds 001 and 002 to route upstream drainage around the reclaimed pond area. Native soils and sub-soils will be used to construct a working surface on the impoundment which will permit equipment travel for the placement of vegetative cover material and to provide for positive drainage. All fill slopes on the impoundment shall have a maximum and minimum grade of 5 percent and 1 percent, respectively. All soil fill shall be spread in one (1) foot maximum layers with a minimum compaction of 90 percent of its maximum dry density as determined by the standard proctor compaction test. The thickness of the soil and sub-soil will be no more than is necessary to support equipment which will be working upon the impoundment surface. Upon the completion of the above mentioned working surface, the graded impoundment surface will be covered with a minimum of four (4) feet of the best available non-acid and non-toxic forming and non-combustible material. All disturbed areas will be vegetated with an appropriate combination of grasses and legumes as stated in the reclamation plan, fertilized, and mulched to ensure a permanent diverse vegetative cover. Soil amendments, including lime and fertilizer, will be added and disced into the cover material in rates as recommended by laboratory analysis performed upon the cover material. These soil amendments will ensure a diverse effective vegetative growth upon the material.

6. Give a description, including appropriate cross-sections and maps, of measures 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)

The target injection and dewatering zone is the abandoned Bessie Underground Mine located within the Mary Lee coal seam. However, some proposed injection/dewatering wells are located in areas overlying an abandoned underground coal mine located within the Pratt coal seam.

Injection/dewatering wells located in areas where Pratt underground mining remains shall be constructed in areas of solid coal. i.e. pillar, barrier pillar or other unmined area of the Pratt seam so as to maintain the integrity of the well. Entry of a proposed well into or very near a Pratt underground working opening can be identified by the loss of return water during the drilling process. If loss of return water occurs during drilling, the hole will not be used and shall be sealed in accordance with Attachment III-A-6(2). Additionally, a significant increase above the amount of cement grout estimated to fill the annulus would also indicate leakage from the well borehole to the underground workings in the Pratt coal seam. Wells that cannot be properly constructed in accordance with the attached proposed UIC Injection Permit shall not be used and shall be sealed in accordance with [Attachment III-A-6\(2\)](#) of this ASMC permit.

See attached drawings for installation & grouting details for injection wells and withdrawal wells.

[Typical Injection Well Installation](#)

[Typical Anti-Spill System Installation](#)

[Typical Withdrawal Well Installation](#)

Slurry Injection wells and Dewatering wells will be sealed at the time of abandonment by filling the wells with concrete and capping the borehole with a concrete cap measuring 2'x2'x0.5'. The affected surface area will be graded, fertilized, seeded with a seed mixture approved in the reclamation plan and mulched to ensure a permanent diverse vegetative cover. See [Attachment III-A-6\(2\)](#) for illustration of typical methods to be used to seal and/or manage injection wells and dewatering wells.