

Applicant: _____
Mine Name: _____
Permit Number: P- _____

STATE OF ALABAMA SURFACE MINING COMMISSION

- () Permit Application for a Surface Coal Mine
- () Permit Application for an Underground Coal Mine
- () Permit Application for a Preparation Facility

PART I A. IDENTIFICATION

1. PERMIT APPLICANT

Name: _____
Street Address: _____
City: _____ State: _____ Zip: _____
Mailing Address: _____
City: _____ State: _____ Zip: _____
Telephone Number: (____) ____ - _____
Social Security Number (Voluntary): ____ - ____ - ____
Employer Identification Number: _____
ASMC License#: _____

2. ENTITY OR PERSON RESPONSIBLE FOR PAYING ABANDONED MINE LAND RECLAMATION FEES

Name: _____
Street Address: _____
City: _____ State: _____ Zip: _____
Mailing Address: _____
City: _____ State: _____ Zip: _____
Telephone Number: (____) ____ - _____
Social Security Number (Voluntary): ____ - ____ - ____
Employer Identification Number: _____
ASMC License#: _____

3. IDENTIFY THE OPERATOR FOR THIS MINE IF DIFFERENT FROM THE PERMITTEE

Name: _____
Street Address: _____
City: _____ State: _____ Zip: _____
Mailing Address: _____
City: _____ State: _____ Zip: _____
Telephone Number: (____) ____ - _____
Social Security Number (Voluntary): ____ - ____ - ____
Employer Identification Number: _____
ASMC License#: _____

4. CONTACT PERSON FOR PERMIT REVIEW ISSUES AND CORRESPONDENCE

Name: _____
Mailing Address: _____
City: _____ State: _____ Zip: _____
Telephone Number: (____) ____ - _____

Applicant: _____ Mine Name: _____ Permit Number: P- _____
--

PART I B. OWNERSHIP AND CONTROL

1. PERMIT APPLICANT OWNERSHIP AND CONTROL. At the time of filing of this application provide an update of all information contained in the applicant's license file or certify that the information contained in the license is accurate and complete. The updated information shall be submitted on Part I A through Part I F of the License application form. Check one of the following:

- A license update is included
- Information contained in the license file is accurate and complete at the time of filing of this application. No update is included.

Following notification that the permit appears eligible for issuance, the applicant must certify that all information in this application and the license file pertaining to ownership and control, surface mining history and violation history is still valid or the applicant must submit the appropriate update information.

2. OPERATOR OWNERSHIP AND CONTROL. If someone other than the permittee has been identified as the operator under this permit, an update of the ownership and control information contained in the operator's license file must be provided or certify that the information contained in the license file is accurate and complete. The updated information shall be submitted on Part I A through Part I F of the License application form. Check one of the following:

- A license update is included
- Information contained in the license file is accurate and complete at the time of filing of this application. No update is included.

Following notification that the permit appears eligible for issuance, the applicant must certify that all information in this application and the license file pertaining to ownership and control, surface mining history and violation history is still valid or the applicant must submit the appropriate update information.

3. CONTROL OF MINING OPERATION THROUGH CONTROL OF COAL TO BE MINED. Provide the information below for any person or entity who owns or controls the coal to be mined under this permit and who, by lease, sublease, or other contract:

- A. has the right to receive the coal after mining, or,
- B. has the authority to determine the manner in which the operator or permittee conducts surface coal mining operations.

(USE ADDITIONAL SHEETS IN THE FORMAT BELOW IF NECESSARY)

Name: _____
Street Address: _____
City: _____ State: _____ Zip: _____
Mailing Address: _____
City: _____ State: _____ Zip: _____
Telephone Number: (____) - ____ - _____
Social Security Number: ____ - ____ - _____ (Voluntary)
Employer Identification Number: _____
ASMC License#: _____

Applicant: _____ Mine Name: _____ Permit Number: P- _____
--

PART I C. PROPERTY OWNERSHIP, INTERESTS AND RIGHTS

1. OWNERSHIP OF PROPERTY TO BE MINED AND RIGHT OF ENTRY.

INSTRUCTIONS: Show the property ownership boundaries of each parcel of land in the permit area on the permit map or an overlay of the same scale as the permit map. If the surface estate is severed from the mineral estate, show and describe the ownership of each estate separately. In the spaces below, identify:

1. Every current legal or equitable owner(s) of record (as found in a standard search of title) of the property;
2. The holders of record of any leasehold interest in the property; and,
3. Any purchaser of record under a real estate contract of the property.

Describe the basis of the applicant's legal right to enter and mine on all properties contained in the permit application. If the mineral estate has been severed from the surface estate, describe the basis of the legal right to enter and mine both the surface and mineral separately. Give the nature of such right (i.e. lease, deed, contract, etc.), where recorded, describe from whom, to whom, and the date executed, and whether that right is the subject of pending litigation.

USE ADDITIONAL SHEETS IN THE FORMAT BELOW AS NECESSARY

Legal description of property or permit map symbol: _____

Surface/Mineral/or Fee Simple (both): _____

Legal owner(s) of record: _____

Address: _____ City: _____ State: __ Zip: _____

Holders of leasehold interest: _____

Address: _____ City: _____ State: __ Zip: _____

Purchasers under a real estate contract: _____

Address: _____ City: _____ State: __ Zip: _____

Description of right to enter or mine:

Describe the type of document or conveyance which grants the right of entry, disturbance or mining.

Indicate from whom the right was acquired and to whom the right was granted. If the grantor of the right is not the owner(s) of property, identify all grantors and grantees of the right beginning with the owner(s) and ending with the permit applicant.

Describe Right of Entry (If deed indicate where recorded) :	Granted From:	Granted To:	Date Granted:	Litigation Pending? (Yes or No) If yes, explain.

Applicant: _____ Mine Name: _____ Permit Number: P- _____
--

PART I C 1. (CONTINUED) Page __ of __

Legal description of property or permit map symbol: _____

Surface/Mineral/or Fee Simple (both): _____

Legal owner(s) of record: _____

Address: _____ City: _____ State: __ Zip: _____

Holders of leasehold interest: _____

Address: _____ City: _____ State: __ Zip: _____

Purchasers under a real estate contract: _____

Address: _____ City: _____ State: __ Zip: _____

Description of right to enter or mine:

Describe the type of document or conveyance which grants the right of entry, disturbance or mining.

Indicate from whom the right was acquired and to whom the right was granted. If the grantor of the right is not the owner(s) of property, identify all grantors and grantees of the right beginning with the owner(s) and ending with the permit applicant.

Describe Right of Entry (If deed indicate where recorded) :	Granted From:	Granted To:	Date Granted:	Litigation Pending? (Yes or No) If yes, explain.

Legal description of property or permit map symbol: _____

Surface/Mineral/or Fee Simple (both): _____

Legal owner(s) of record: _____

Address: _____ City: _____ State: __ Zip: _____

Holders of leasehold interest: _____

Address: _____ City: _____ State: __ Zip: _____

Purchasers under a real estate contract: _____

Address: _____ City: _____ State: __ Zip: _____

Description of right to enter or mine:

Describe the type of document or conveyance which grants the right of entry, disturbance or mining.

Indicate from whom the right was acquired and to whom the right was granted. If the grantor of the right is not the owner(s) of property, identify all grantors and grantees of the right beginning with the owner(s) and ending with the permit applicant.

Describe Right of Entry (If deed indicate where recorded) :	Granted From:	Granted To:	Date Granted:	Litigation Pending? (Yes or No) If yes, explain.

--	--	--	--	--

Applicant: _____ Mine Name: _____ Permit Number: P- _____
--

PART I C. (CONTINUED)

2. OWNERSHIP OF SURFACE AND MINERAL LANDS CONTIGUOUS TO THE AREA TO BE MINED.
INSTRUCTIONS: Provide the information below for the owners of record of all surface and mineral properties contiguous to any part of the proposed permit area.

USE ADDITIONAL SHEETS AS NECESSARY IN THE FORMAT BELOW

Name: _____
Address: _____
City: _____ State: _____ Zip: _____
Interest owned (Surface, Coal or Fee Simple): _____
Type of Interest (Owner, Lease, or Other): _____

Name: _____
Address: _____
City: _____ State: _____ Zip: _____
Interest owned (Surface, Coal, or Fee Simple) _____
Type of Interest (Owner, Lease, or Other): _____

Name: _____
Address: _____
City: _____ State: _____ Zip: _____
Interest owned (Surface, Coal, or Fee Simple): _____
Type of Interest (Owner, Lease, or Other): _____

Name: _____
Address: _____
City: _____ State: _____ Zip: _____
Interest owned (Surface, Coal or Fee Simple): _____
Type of Interest (Owner, Lease, or Other): _____

Name: _____
Address: _____
City: _____ State: _____ Zip: _____
Interest owned (Surface, Coal, or Fee Simple) _____
Type of Interest (Owner, Lease, or Other): _____

Name: _____
Address: _____
City: _____ State: _____ Zip: _____
Interest owned (Surface, Coal, or Fee Simple): _____
Type of Interest (Owner, Lease, or Other): _____

Name: _____
Address: _____
City: _____ State: _____ Zip: _____
Interest owned (Surface, Coal, or Fee Simple): _____
Type of Interest (Owner, Lease, or Other): _____

Name: _____
Address: _____
City: _____ State: _____ Zip: _____
Interest owned (Surface, Coal, or Fee Simple): _____
Type of Interest (Owner, Lease, or Other): _____

Name: _____
Address: _____
City: _____ State: _____ Zip: _____

Interest owned (Surface, Coal, or Fee Simple): _____
Type of Interest (Owner, Lease, or Other): _____

Applicant: _____
Mine Name: _____
Permit Number: P- _____

PART I C 2 (CONTINUED)

Part I C 2 PAGE ___ OF ___

Name: _____
Address: _____
City: _____ State: _____ Zip: _____
Interest owned (Surface, Coal or Fee Simple): _____
Type of Interest (Owner, Lease, or Other): _____

Name: _____
Address: _____
City: _____ State: _____ Zip: _____
Interest owned (Surface, Coal, or Fee Simple) _____
Type of Interest (Owner, Lease, or Other): _____

Name: _____
Address: _____
City: _____ State: _____ Zip: _____
Interest owned (Surface, Coal, or Fee Simple): _____
Type of Interest (Owner, Lease, or Other): _____

Name: _____
Address: _____
City: _____ State: _____ Zip: _____
Interest owned (Surface, Coal or Fee Simple): _____
Type of Interest (Owner, Lease, or Other): _____

Name: _____
Address: _____
City: _____ State: _____ Zip: _____
Interest owned (Surface, Coal, or Fee Simple) _____
Type of Interest (Owner, Lease, or Other): _____

Name: _____
Address: _____
City: _____ State: _____ Zip: _____
Interest owned (Surface, Coal, or Fee Simple): _____
Type of Interest (Owner, Lease, or Other): _____

Name: _____
Address: _____
City: _____ State: _____ Zip: _____
Interest owned (Surface, Coal, or Fee Simple): _____
Type of Interest (Owner, Lease, or Other): _____

Name: _____
Address: _____
City: _____ State: _____ Zip: _____
Interest owned (Surface, Coal, or Fee Simple): _____
Type of Interest (Owner, Lease, or Other): _____

Name: _____
Address: _____
City: _____ State: _____ Zip: _____
Interest owned (Surface, Coal, or Fee Simple): _____
Type of Interest (Owner, Lease, or Other): _____

Applicant: _____
Mine Name: _____
Permit Number: P- _____

PART I C. (CONTINUED)

3. INTERESTS OR PENDING INTERESTS IN LANDS CONTIGUOUS TO THE PERMIT AREA.

INSTRUCTIONS: Give the legal description of all lands contiguous to the permit area for which the permit applicant:

- 1. Holds an interest,
- 2. Holds an option, or
- 3. Has made a bid for ownership, lease or other interest.

USE ADDITIONAL SHEETS IN THE FORMAT BELOW IF NECESSARY

Legal description: _____
Describe the nature of the interest: _____

Legal description: _____
Describe the nature of the interest: _____

Legal description: _____
Describe the nature of the interest: _____

Legal description: _____
Describe the nature of the interest: _____

Legal description: _____
Describe the nature of the interest: _____

Legal description: _____
Describe the nature of the interest: _____

Applicant: _____
Mine Name: _____
Permit Number: P- _____

PART I C 3 (CONTINUED)

Part I C 3 PAGE ___ OF ___

Legal description: _____

Describe the nature of the interest: _____

Legal description: _____

Describe the nature of the interest: _____

Legal description: _____

Describe the nature of the interest: _____

Legal description: _____

Describe the nature of the interest: _____

Legal description: _____

Describe the nature of the interest: _____

Legal description: _____

Describe the nature of the interest: _____

minimum distance disturbance will be allowed by the owner.

Applicant: _____ Mine Name: _____ Permit Number: P- _____
--

PART I D. (CONTINUED)

6. Is disturbance proposed within 100 feet of a public road right-of-way or will a public road be closed or relocated? ()YES ()NO.

If YES, enclose a copy of the approval granted by the government entity which has jurisdiction over the road. The approval must state the minimum distance disturbance will be allowed to the road or road right-of-way.

7. List all other licenses and permits required to conduct mining operations including, but not limited to, MSHA I.D. and NPDES. Give the identification or permit number, the name and address of the issuing authority, and the status or date of approval or issuance of each:

Permit	ID or Permit Number	Issuing Authority	Address	Status or date of issuance
<u>MSHA ID</u>	_____	_____	_____	_____
<u>NPDES</u>	_____	_____	_____	_____
_____	_____	_____	_____	_____

8. Is the property in the permit covered by zoning or other land use restrictions? ()YES ()NO.

If yes, indicate the jurisdictional authority and zoning or land use restriction for the entire permit area. If more than one zoning classification exists for the permit area, identify the boundaries of each on the permit map.

Jurisdictional Authority	Zoning Classification	Allows mining? Yes or No
_____	_____	_____
_____	_____	_____
_____	_____	_____

9. Describe access to the proposed mine from a known point on the nearest public highway: _____

10. Did the applicant receive assistance from the Small Operator Assistance Program in preparing this application? ()YES ()NO

If YES, list SOAP I.D. Number: _____

11. Submit a certificate of proof of Liability Insurance with this application.

PART I E. PUBLIC NOTICE AND AVAILABILITY FOR INSPECTION

12. Give the name of the approved public office in which a copy of this application will be filed for public inspection following notification of completeness: _____

13. Enclose a copy of the notice of filing of this application which will appear in a newspaper of general circulation in the vicinity of the mine and identify the name of the newspaper: _____

PART VII - FINAL VERIFICATION OF PERMIT APPLICATION P-_____

I, the undersigned applicant and holder of an A.S.M.C. license do hereby certify that:

- The information in the license file regarding ownership and control and violation information is accurate and complete as of this date.
- The information in the license file regarding ownership and control and violation information is not accurate and complete as of this date. The necessary update is attached.

This verification is submitted in conformance with the rules and regulations of the Commission and it is agreed that any operations pursuant to the permit will be conducted in accordance with those rules and regulations. I further certify that I will keep the Commission advised of any change of facts as may pertain to the license or this permit information.

Licensee: _____
License No: _____
By: _____
Date: _____

STATE OF ALABAMA)

_____ COUNTY)

Before me, the undersigned authority, personally appeared _____ who being duly sworn upon oath, deposed and said, that he has read the foregoing application, that he is the responsible official of the applicant who executed the application, that the facts and matters contained therein are true and correct to the best of his information and belief, and that he executed the same for the purposes therein expressed.

Sworn to and subscribed before me, this ___ day of _____ 20__.

NOTARY PUBLIC

Commission Expires

PART II - ENVIRONMENTAL RESOURCES INFORMATION

A. Fish, Wildlife and Related Environmental Values

- (1) Describe the measures to be taken, using the best technology currently available to minimize disturbances and adverse impacts to fish and wildlife and achieve enhancement of this resource where practicable within the proposed permit area.

- (2) Describe in detail the measures to be taken to restore or enhance, or steps to be taken to avoid disturbance of habitats of unusually high value for fish and wildlife located within the proposed permit area.

- (3) Are there any wetland areas such as streams, lakes, marshes, etc., located in or adjacent to the proposed permit area which will be disturbed by the mining activities?

Yes No

If yes, briefly describe the feature(s), its location and the extent of the proposed disturbance. Describe in detail measures to be taken to restore the area.

If a stream channel diversion is proposed, describe in detail (including maps, diagrams or cross sections, if necessary) how the provisions will be met. Include a copy of all other necessary State or Federal approvals.

- (4) Is fish and wildlife habitat to be primary or secondary post-mining land use?

Yes No

If yes, describe in detail the post-mining measures to be taken to attain this land use including the target specie(s) of wildlife, plant species to be used and a map delineating the proposed arrangement of plant groupings and water sources on the permit area following reclamation.

- (5) If the pre-mining land use is fish and wildlife habitat and the proposed post-mining land use is cropland, describe the post-mining provisions to be made for wildlife. Attach a map showing the location of trees, hedges, or fence rows to be used to diversify habitat if appropriate.

- (6) If the post-mining land use is to be residential, commercial or industrial, describe the post-mining provisions to be made for wildlife such as greenbelts, trees or hedgerows composed of plant species useful for wildlife.

- (7) If any exceptions are proposed, describe in detail the proposed, describe in detail the proposed practice including target species of wildlife, plant species to be used, planting rate and/or stocking density, planting pattern with appropriate map and anticipated results of the proposed practice.

Provide the name, address and position of officials of each private or academic research organization or governmental agency consulted in preparation of the application for information on land uses, soils, geology, vegetation, fish and wildlife, water quantity and quality, and archeological, cultural, and historic resources.

(8) Fish and Wildlife Enhancement and Protection Plan
880-X-8F-.18 (880-X-8I-.18)

(1) Areas of Special Concern
(a) Wetlands:

1. List any wetlands, ponds, lakes, streams, rivers, etc. that have been identified by the DCNR or USFWS as areas of special concern.
2. Identify any direct or indirect impacts which could occur as a result of the proposed mine operation.
3. List the measures to be taken to avoid, protect, or minimize impacts, including, but not limited to: buffer

zones, treatment facilities, exclusion from the permit area, etc.

4. If direct or indirect impacts are unavoidable, describe in detail the measures to be used to restore the area to pre-disturbance conditions and to enhance it. This must include design plans for the physical reconstruction of the wetland/pond/stream as well as revegetation of riparian species.
5. Any disturbance of a wetland area requires the approval of the U. S. Army Corps of Engineers. We will assist in the coordination with the Corps of Engineers as well as the USFWS and DCNR, but any permit required from the Corps is the responsibility of the operator.

(b) Endangered/Threatened Species and Critical Habitats

1. Identify any endangered or threatened plant or animal species or their critical habitat which may be directly or indirectly impacted by the proposed mining operation.
2. Describe the potential impact
3. Describe in detail the measures which will be taken to prevent any adverse impact to the species or its habitat. Include design plans or specifications for any structures or facilities which are necessary to prevent such impacts.

(c) Other Areas of Special Concern

1. Identify the area of special concern
2. Describe the potential impact
3. Describe in detail the measures which will be taken to prevent any adverse impact to the species or its habitat. Include design plans or specifications for any structures or facilities which are necessary to prevent such impacts.

(2) General Provision for Enhancement and Protection of Fish and Wildlife

- (a) Describe those measures which will be taken during the active mining phase of the operation to minimize or prevent impacts to fish and wildlife, i.e., treatment facilities, buffer zones, etc.
- (b) Describe the measures to be implemented during the reclamation process to enhance fish and wildlife. The following measures have been determined to be practicable by the Surface Mining Commission in consultation with USFWS and DCNR unless the permittee can demonstrate otherwise:

1. Creation of wetland areas on the regraded areas by

leaving small water-holding depressions or permanent water impoundments

2. Planting of species of herbaceous vegetation commonly known to provide food and cover to wildlife in addition to the normal reclamation seed mix
3. "Breaking up" of any areas greater than 50 acres in size to provide maximum variation in the resulting vegetation types on a reclaimed area. For example, areas to be reclaimed to forest land should be interspersed with areas such as firelanes planted with low growing herbaceous vegetation only. Grazing land or pasture land should be interspersed with plantings of trees and shrubs in optimum locations to increase diversity of food and cover.

All permits should, at a minimum, incorporate these provisions unless the operator demonstrates that it is not practicable. The plan must identify the plant species to be used, planting or stocking rates, and the general size and location of areas to be planted. Plans for the retention of permanent water impoundments or depressions should be included in the appropriate parts of the permit application and referenced in the fish and wildlife enhancement and protection plan.

B. Cultural, Historical and Archaeological Resources

- (1) Describe and identify any cultural or historical resources located in or adjacent to the proposed permit area which are listed on the National Register of Historic Places. Delineate the location of the resources on the permit map. Describe in detail the measures to be taken to minimize or prevent adverse impacts on the resource(s).
- (2) Describe and identify any known significant archaeological sites located in or adjacent to the proposed permit area. The description shall be based on all available information including, but not limited to, data of State and local archaeological agencies. Delineate the site(s) on the permit map.

Provide the name, address and position of officials of each private or academic research organization or governmental agency consulted in preparation of the application for information on land uses, soils, geology, vegetation, fish and wildlife, water quantity and quality, and archeological, cultural and historic resources.

C. Threatened and Endangered Species

Identify any threatened or endangered species of plants or animals or critical habitats of such species located in or adjacent to the proposed permit area. Delineate the location of the specie(s) or habitat(s) on the permit map.

Provide the name, address and position of officials of each private or academic research organization or governmental agency consulted in preparation of the application for information on land uses, soils, geology, vegetation, fish and wildlife, water quantity and quality, and archeological, cultural and historic resources.

D. Lands Unsuitable for Mining

- (1) Are there any areas located in or adjacent to the proposed permit area which have been designated unsuitable for mining or are under study for such designation in an administrative proceeding? () Yes () No

If yes, give the name(s) of the area(s) if known. Delineate the area(s) on the permit area(s) on the permit map.

- (2) Describe in detail the measures to be taken to minimize or prevent adverse impacts on any public park.

- (3) Are requests for waivers included in this application?
() Yes () No

- (4) Do you claim exemption to this part based upon:

- (a) Operations existing on the proposed permit area on August 3, 1977; or
- (b) Operations subject to valid existing rights on August 3, 1977; or
- (c) Substantial legal and financial commitments made prior to January 4, 1977?

If Yes, give reason(s) for claim with appropriate documentation.

Provide the name, address and position of officials of each private or academic research organization or governmental agency consulted in preparation of the application for information on land uses, soils, geology, vegetation, fish and wildlife, water quantity and quality, and archeological, cultural, and historic resources.

E. Geology

The following shall be provided for all Technical Data submitted in answer to these parts:

- (a) The names of persons or organizations who collected and analyzed the data.
 - (b) The dates of collection and analysis.
 - (c) A description of the methodology used to collect and analyze the data.
- (1) Give a description of the geology within the proposed permit area including, but not limited to, the logs of drill holes, or a description of a highwall, with thickness of the overburden and coal down to the first aquifer to be affected below the lowest coal seam to be mined to identify acid forming or toxic forming zones.
 - (2) Chemical analysis conducted to identify acid forming or toxic forming zones shall be made on a representative number of samples of the overburden within the permit area. Sampling of the overburden may be collected at 5 ft. intervals from a lithologic unit or from the entire thickness if the unit is less than 5 ft. thick, when the lithology is below the oxidized zone; from the oxidized zone one composite sample shall be collected and analyzed. Samples may be taken from drill holes or from channel samples from a highwall.
 - (3) Analysis of each overburden sample shall be run for total sulfur. If the sulfur content is one percent or greater it is recommended that additional analysis be run for pyritic sulfur. From a composite sample of each drill hole or channel sample of the highwall, neutralization potential analysis shall be run and the acid-base account calculated using the average of the sulfur content for the sampling location. Results shall be included in the permit application.
 - (4) Total sulfur analysis of the coal seam(s) to be mined shall be run and reported with the permit application.
 - (5) The name, depth, thickness, strike and dip of the coal seam(s) to be mined shall be included in the permit application.
 - (6) Location of the coal crop line(s) within the proposed permit area are to be shown on an appropriate map.
 - (7) All necessary maps and cross sections needed to support the geologic description shall conform with the requirements.
 - (8) When used to collect information for the permit application, elevations and locations of test borings, core samples or other sample sites shall be provided (topographic map accuracy is adequate).

F. Groundwater Hydrology

The following shall be provided for all Technical Data submitted in answer to these parts:

- (a) The names of persons or organizations who collected and analyzed the data.
- (b) The dates of collection and analysis.
- (c) A description of the methodology used to collect and analyze the data.

The permit application shall contain a description of the groundwater hydrology within the proposed permit area and potentially impacted off-site areas. In obtaining the necessary base line or pre-mining information the applicant should be guided in conducting the studies by the availability and usage of groundwater in the potentially impacted off-site areas with particular emphasis being placed on those locations where present or potential future usage of the groundwater is of local importance. The description should be based on a comprehensive survey of existing water wells and springs that may be affected by the proposed mining operations or from wells drilled by the applicant. Information addressed in the survey shall include:

- (1) State elevation of the groundwater.
- (2) Elevation and depth below the surface of any aquifer(s) or water table encountered.
- (3) The lithologic description and thickness of any aquifer(s) encountered.
- (4) Results of aquifer test(s), if conducted, shall be reported identifying the transmissivity, draw down, recovery rates, and specific capacity.
- (5) Known uses of the groundwater such as light industrial, agricultural, domestic, etc. estimating the approximate amount of water used per day.
- (6) Quality of the groundwater should be determined using sampling and laboratory techniques or equally reliable methods to determine at a minimum:
 - (i) pH
 - (ii) Total iron, mg/l
 - (iii) Total manganese; mg/l
 - (iv) Total dissolved solids or specific conductance at 25° C if the latter can be shown as a direct relationship with total dissolved solids.
- (7) Describe any geological structures including their orientation that will have an affect on the movement of the groundwater in the aquifer such as:
 - (i) Joint systems
 - (ii) Faults or fault zones
 - (iii) Folds
 - (iv) Cleats in the coal and
 - (v) Bedding plants
- (8) Appropriate maps and cross sections needed to supplement the description of the groundwater hydrology shall conform with the requirements.

G. Surface Water Hydrology

The following shall be provided for all Technical Data submitted in answer to these parts:

- (a) The names of persons or organizations who collected and analyzed the data
- (b) The dates of collection and analysis
- (c) A description of the methodology used to collect and analyze the data.

The permit application shall contain information and a description of the surface water that will flow into or from the proposed permit area in a form and to a degree that will describe seasonal variations in both quantity and quality of the surface water within the proposed permit area and potentially impacted off-site areas. The pre-mine or base-line study should be designed to a level that takes into consideration water availability and present and potential future usage of the surface water. The period of time for which such a survey should be conducted is flexible, but should be adequate to properly evaluate low flow and high flow conditions based on either site specific studies, or where available, from existing data files which are reasonable and statistically representative of the proposed permit and potentially impacted off-site areas. At a minimum the submitted information on the surface water hydrology shall include:

- (1) Name of the water shed(s) which will receive discharge from the proposed permit area.
- (2) The location of any surface water bodies such as streams, lakes, important impoundments or springs that may be adversely affected by the proposed mining operations.
- (3) Known use of the surface water leaving the proposed permit area (or that will receive discharges from it), if any.
- (4) Water quality data shall be submitted to identify seasonal flow characteristics of, at a minimum:
 - (i) pH
 - (ii) Total iron, mg/l
 - (iii) Total manganese, mg/l
 - (iv) Total suspended solids
 - (v) Total dissolved solids or specific conductance at 25° C if the latter can be shown to have a direct relationship with the total dissolved solids;
 - (vi) Base-line acidity information shall be provided if the need for acid-neutralization is anticipated for the proposed mining operation or if required by the regulatory authority.
- (5) Water sampling and analytical methods listed in the references or their equivalent should be used.
- (6) When modeling or other simulation methods are employed to evaluate the affects of mining on the hydrologic regime both on and off the proposed permit area, representative seasonal precipitation data shall be reported.
- (7) The location of monitoring stations used to collect data for the permit application should be shown on a map which conforms to the standards.

H. Determination of the Probable Hydrologic Consequences

The following shall be provided for all Technical Data submitted in answer to these parts:

- (a) The names of persons or organizations who collected and analyzed the data
- (b) The dates of collection and analysis
- (c) A description of the methodology used to collect and analyze the data

The permit application shall contain a determination of the probable hydrologic consequences (PHC). The probable hydrologic consequence (PHC) is a prediction of possible adverse affects of the proposed surface mining and reclamation activities upon the quantity and quality of surface and groundwater systems both on and off the proposed permit area and is based upon the results and findings of the base line or pre-mining geologic and hydrologic studies. The assessment may be based upon site specific studies or from representative data that can be transferred or can be made to simulate the condition at the proposed permit and off-site areas.

- (1) Specifically, the PHC prediction shall include an estimate of the impact of the mining and reclamation operations upon the dissolved and suspended solids, total iron, total manganese and pH of surface and ground water.
- (2) In the event it is determined that off-site water quantity and quality cannot be protected from adverse affects of the proposed surface mining operations, the applicant shall identify an alternative source of water supply of at least equal quality and quantity that can be developed to replace the existing one.

Provide the name, address and position of officials of each private or academic research organization or governmental agency consulted in preparation of the application for information on land uses, soils, geology, vegetation, fish and wildlife, water quantity and quality, and archeological, cultural, and historic resources.

I. Land Use Information

(1) Describe in detail the land use(s) existing at the time of the application. Give the number of acres and describe sufficiently so the areas can be identified on a map. If necessary, include a map showing land use units.

(2) Give the applicable land use classification under local law, if any.

(3) Is any of the area prime farmland? () YES () NO

If yes, submit the information required.

If no, show or state how the determination was made.

(4) Has the land use of any area on the proposed permit changed within the last 5 years?
() YES () NO

If yes, identify those areas and describe their historic use.

(5) Has any area within the proposed permit been previously mined?
() YES () NO

If yes, complete the following:

(a) Describe the area or show on a map.

- (b) Was the area reclaimed? () YES () NO
If yes, under what law? () 1969, () 1975, () Interim Law
- (c) Describe the land use of the area prior to any mining, or if this cannot be determined, describe the land use(s) of surrounding unmined land.
- (6) Describe in detail, land uses of areas adjacent to the proposed permit area.
- (7) Discuss the capability of the lands within the permit area to support a variety of land uses other than the current use.
- (8) Give the pre-mining productivity of the proposed permit area based on actual yield data or estimates based on data from similar sites. (If estimates, give sources of data used).

Provide the name, address and position of officials of each private or academic research organization or governmental agency consulted in preparation of the application for information on land uses, soils, geology, vegetation, fish and wildlife, water quantity and quality, and archeological, cultural, and historic resources.

J. Vegetation Information:

Delineate on a map, or describe in detail, the existing plant communities within the proposed permit area (and adjacent if required). List the predominant overstory, understory, and ground cover species (use common name only). Give approximate acreage covered by each plant community and approximate age of timber stands.

Provide the name, address and position of officials of each private or academic research organization or governmental agency consulted in preparation of the application for information on land uses, soils, geology, vegetation, fish and wildlife, water quality, and archeological, cultural, and historic resources.

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.

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

8. Is surface mining to be conducted within 500 feet of an underground mine?
 YES NO

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

B. Engineering Plans

All cross sections, maps and plans related to operations, reclamation and structures must comply. Plans, appropriate calculations and conclusions shall be presented in a clear and logical sequence and shall take into account all applicable factors necessary to evaluate the proposed plan or design.

1. Existing Structures.

- (a) Describe each existing structure to be used, its location, current condition, approximate dates of construction and evidence (including relevant monitoring data) showing whether or not the structure meets the performance standards and demonstrate whether or not the use of existing structures will pose a significant harm to the environment or public health or safety.

- (b) If an existing structure requires modification or reconstruction to meet the performance standards, attach a compliance plan which includes design specifications, construction schedule, monitoring procedures, and evidence that the risk of harm to the environment or public health or safety is not significant during modification or reconstruction.

2. Ponds, impoundments, banks, dams and embankments.

- (a) Submit a general plan for each proposed sedimentation pond, water impoundment, and coal processing waste bank, dam or embankment to be located within the proposed permit area.
- (b) Submit detailed design plans for each sedimentation pond to be constructed on the increment you currently propose to mine. If the sediment pond is to remain as a permanent water impoundment, design plans shall also comply.
- (c) Submit detailed design plans which comply for each temporary or permanent water impoundment to be constructed on the increment you currently propose to mine.
- (d) Submit detailed design plans, which comply for each coal processing waste bank to be constructed on the increment you currently propose to mine.
- (e) Submit detailed design plans which comply for each coal processing waste dam and embankment to be constructed on the increment which you currently propose to mine.

3. Diversions

Are diversions of overland flow or stream channel diversions proposed?

YES NO

If yes, complete the following:

- (a) Is the diversion to be permanent? YES NO
- (b) Describe in detail the proposed diversion and include plans, maps and cross-sections.

(c) If diversions are temporary, enclose plans for removal including a timetable and plans for restoration of vegetation, channel characteristics, etc.

(d) Enclose approvals of other governmental agencies where required.

4. Disposal of excess spoil.

Are excess spoil fills proposed?

() YES () NO

If yes, complete the following:

(a) Show on a map the location of all proposed fills and provide cross-sections of the proposed site and the design of the disposal structures.

(b) Include the results of the geotechnical investigation showing:

(1) A description of physical characteristics of bedrock and geologic conditions in the disposal area; and

(2) A determination of possible adverse affects from subsidence due to past, present or future underground mining.

(3) Location of springs, seeps or other ground water observed or anticipated in the disposal area;

(4) A technical description of the rock to be used in construction of rock chimney cores or rock drainage blankets, if applicable;

(5) Results of stability analysis including strength parameters, pore pressures and long term seepage conditions; and

(6) Engineering design assumptions, calculations, and any alternatives considered.

(c) Describe the construction, operation, maintenance and removal (if applicable) of the structure.

(d) Include a surface water drainage and control plan for the fill.

(e) Are rock-toe buttresses or keyway cuts to be used?

() YES () NO

If yes, describe or show:

(1) The number, location and depth of test borings or test pits used in describing subsurface conditions; and

(2) Engineering specifications used in the design.

5. Transportation Facilities

(a) Describe the measures to be taken to ensure the interest of the public and landowners affected are protected if disturbance within 100 feet of the right-of-way or relocation of a public road is proposed.

(b) Describe any unique design, feature, or structure which is necessary for the road to meet the performance standards using any necessary maps, plans or cross-sections.

(c) Describe, in detail, the measures to be taken during construction, maintenance and use of the transportation facilities to prevent damage to fish and wildlife and their habitat; public and private property; and erosion, siltation, and pollution of water.

III. C. BLASTING PLAN

1. Ground Vibration and airblast control

(a) Check which of the following procedures will be used to limit ground vibration.

Maximum Peak Particle Velocity

Distance from shot to site Max. Peak Velocity

0 - 300 feet 1.25 Inches/Sec.

301-5,000 feet 1.00 Inches/Sec.

5001-beyond 0.75 Inches/Sec.

All shots must be seismographed.

Scaled Distance Factor

Distance from Shot to Site * SD Factors

0 - 300 Feet 50

301-5001 Feet 55

5001 - beyond 65

Seismograph Monitoring is not required.

Modified Scaled Distance Factor, approval from the Commission is required before this method can be used.

Blasting-level chart, approval from the Commission is required before this method can be used.

* Identify the structure used for measuring the scale distance.

(b) Check which of the following maximum levels and corresponding microphone lower frequency limitations will be used.

105 dB peak - c-weighted - slow response *

129 dB peak - 6 Hz or lower

133 dB peak - 2 Hz or lower

134 dB peak - 0.1 Hz or lower *

2. Describe what variations will be made in the blasting operations to control and correct adverse effects due to blasting.

3. Blast Monitoring

(a) Describe the blast monitoring equipment to be used (make and model, and sensitivity). Will it monitor ground vibrations, air blasts, or both?

(b) How will monitoring equipment be installed and activated?

(c) Show the location of blast monitoring stations on the permit map or on a separate map with a scale of 1:24000 or smaller.

* Only with approval of the Commission.

4. Is blasting proposed to be conducted within 500 feet of an active underground mine?

() YES () NO

If yes, concurrence from MSHA is required.

5. Will blasting be conducted within 500 feet of an abandoned underground mine or within 1,000 feet of an occupied dwelling, church, school, community or institutional building?

() YES () NO

If yes, provide the following information, either as a part of the permit application or at a later date, but before reaching the distance given above.

- (a) A sketch showing the drill patterns to be used;
- (b) Critical dimensions, i.e., burden, spacing, stemming, drill hole diameter, etc.
- (c) Delay periods;
- (d) Amount of decking;
- (e) Type and amount of explosives to be used, including the loading weight (lbs. per foot of drill hole);
- (f) Location and general description of the structures to be protected;
- (g) Discuss the measures to be used in the blasting operations to protect the public from the adverse effects of blasting;
- (h) The plans are to be prepared and signed by a Certified Blaster.

6. At what times will blasting operations be conducted?

7. Will blasting operations be conducted within 300' of an occupied dwelling, church, school, community or institutional building?

() YES () NO

FOR E THROUGH J (SEE ATTACHED SHEETS)

E. HYDROLOGIC MONITORING PLAN

1. Attach the plan for the monitoring of surface water including those parameters and sampling frequencies required to meet the specifications of the NPDES permit. If a perennial or intermittent stream flows through the proposed permit or potentially impacted off-site areas, develop and attach monitoring plans which logically relates base-line or pre-mine quantity conditions with those to be monitored during surface mining and reclamation operations.

At a minimum, the plan shall include:

- (i) Sample frequency
- (ii) Site locations
- (iii) Parameters to be monitored; and
- (iv) Appropriate maps which comply with requirements

If the predictive evaluation of the groundwater indicates that adverse on-site or off-site impacts may occur to an aquifer, the applicant shall develop a groundwater monitoring plan which logically relates the analysis of base line or pre-mining conditions to approved post-mining land uses. The plan shall list:

- (i) Parameters to be monitored, including water levels;
- (ii) Sample frequency
- (iii) Site locations; and
- (iv) Appropriate maps and cross sections which comply with requirements.

If according to the results of the PHC it is determined that groundwater monitoring may not be necessary, the applicant shall submit with the permit application sufficient documentation, including geologic and hydrologic relations, to enable the commission to make a decision regarding a waiver of the monitoring of the groundwater.

F. Surface and Groundwater Drainage Control Plan.

The permit application shall contain plan describing how the applicant intends to control surface and groundwater drainage into, through and from the proposed permit area in accordance with the required plans.

G. Surface Water Treatment Plan.

When the PHC determination indicates the need for the treatment of surface water leaving the proposed permitted area, the applicant shall submit a plan for such treatment with the permit application which describes how such treatment will be accomplished to meet applicable State and Federal effluent limitation standards.

H. Restoration of Recharge Plan.

Attach the plan describing how the approximate recharge capacity of the disturbed area will be restored according to the requirements.

I. Plans for Recording and Reporting Data.

Describe how surface and groundwater quantity and quality data will be collected, recorded, and reported to the regulatory authority.

J. Permanent Entry Seals and Down Slope Barriers.

Describe in detail, with appropriate maps, plans, and cross sections, permanent entry seals and down slope barriers used to ensure hydraulic stability after mining has ceased.

HYDROLOGIC MONITORING PLAN

COMPANY NAME _____ PERMIT NO.: _____

MINE NAME _____ COUNTY _____

* A MAP SHOWING ALL MONITORING POINTS MUST ACCOMPANY THIS PLAN

I. Surface Water Monitoring Program: (Discharge Points)

List each discharge point to be monitored and indicate type or source of discharge	List parameters to be sampled for each discharge point	List frequency of sampling for each discharge point	Duration of Monitoring
			* Until joint approval by ASMC and ADEM, but in no case sooner than Phase II bond release

HYDROLOGIC MONITORING PLAN (continued)

A. Reporting and Recording Specifications

(a) NPDES outfalls:

Reporting as required for NPDES permit to Alabama Department of Environmental Management plus a simultaneous Notice of Filing to ASMC containing the following:

1. Name of Company
2. Name of Mine
3. ASMC permit number
4. NPDES number
5. Sampling period covered by report
6. List of the discharge points sampled
7. Date the report was filed with ADEM

(b) Other:

B. Non-Compliant Discharge Reporting:

Reporting as required by the NPDES permit to Alabama Department of Environmental Management plus simultaneous copy (indicating ASMC permit number) to ASMC.

HYDROLOGIC MONITORING PLAN (continued)

II. Other Surface Water Monitoring. Bodies of water receiving discharges from the mine.

List Monitoring Points and indicate type or describe location	List Parameters to be sampled	Frequency	Duration of monitoring

HYDROLOGIC MONITORING PLAN (continued)

A. Reporting and Recording Specifications:

- 1) Frequency of Reporting: Quarterly
- 2) Contents of Report: name of company, mine name, ASMC permit number and for all monitoring locations, the dates samples were taken and sample results for each parameter.

III. Monitoring Requirements for removal of sediment ponds and other treatment facilities:

Monthly for 6 months prior to application for approval to remove facility. Monitoring data will be submitted to ASMC with application to remove the facility. Monitoring sites shall be located to sample water entering the facility (i.e., untreated drainage). Show proposed locations on the monitoring location map. Parameters to be sampled shall be those required by the NPDES permit.

IV. A. Monitoring Requirements for Phase II bond release:

List Monitoring Sites	Parameters	Sample Frequency	Duration of Monitoring
Inflow into the following basins:	NPDES parameters	Monthly	No less than monthly for previous 6 months prior to application for Phase II Bond release **

** For the Increment within which the respective basin is bonded, or the respective basin's drainage area is located.

B. Reporting:

Reports shall be submitted with application for Phase II Bond Release indicating: sample location number, monitoring period and analysis results and date for each sample, plus sampling and analytical data. A map showing location of the sample sites should be included.

V. Groundwater Monitoring:

List Monitoring Sites and indicate type of site	Parameters	Frequency	Duration of Monitoring

If, according to the results of the PHC, it is determined that groundwater monitoring may not be necessary, the applicant shall submit with the permit application sufficient documentation, including geologic and hydrologic relations, to enable the Commission to make a decision regarding a waiver of the monitoring of the groundwater.

HYDROLOGIC MONITORING PLAN (continued)

A. Reporting and Recording:

Reports to be filed with ASMC quarterly supplying the following information: company name, mine name, permit number, and for each monitoring site, the date and sample results for each parameter. Include sampling and analytical information for all samples.

VI. Maintenance of records and Availability for Inspection:

A. Active Mining - copies of all monitoring records shall be maintained at the mine office.

B. During periods of temporary cessation of operations and after active mining, all monitoring records will be kept at:

_____ (Office)

_____ (Address)

_____ (City, State, Zip)

_____ (Custodian of Records)

C. All monitoring records will be made available upon request to ASMC Personnel for inspection.

- VII. Describe how the data obtained from the performance monitoring may be used to determine the impacts of the operation upon the hydrologic balance. Describe how parameters to be monitored relate to the suitability of the surface and groundwater for current and approved post-mining land use.
- VIII. PLEASE NOTE: ALL PERFORMANCE MONITORING REPORTS should be submitted in duplicate. For companies with multiple permits, each permit should have a corresponding monitoring report. Sites serving multiple permits should be included in all pertinent monitoring reports.
- IX. If a waiver is requested for a particular water-bearing stratum, give details.

X. Plans for Recording and Reporting Data:

Describe how surface and groundwater quantity and quality data will be collected, recorded, and reported to the Regulatory Authority.

PART IV - RECLAMATION PLAN

A. POSTMINING LAND USE:

(1) Describe the proposed post-mining land use(s) for the permit area. If more than one land use is proposed, show on a map and give acreage for each use. Include comments from the legal owner of record concerning the proposed land use.

(2) Is the proposed land use different from the current land use?

() Yes () No

If yes, complete the following:

(a) Is the area zoned for the proposed land use?

() Yes () No () N/A

(b) Is the proposed use compatible with adjacent land uses and applicable local and state land use policies?

() Yes () No

(c) Explain the feasibility of the proposed land use as related to land use trends, and explain how the land use will be developed, achieved, and sustained.

(d) Include letters of commitment from outside parties ensuring the provision of any necessary public facilities and any state and local governmental agencies which have to initiate, implement, approve or authorize the proposed land use.

(e) Enclose design plans for the proposed post-mining land use, if applicable.

B. Grading and Contouring

- (1) Enclose detailed plans with appropriate cross sections or maps.
- (2) Complete the following timetable.

<u>Increment</u> <u>(if applicable)</u>	<u># months after</u> <u>operation begins</u>	<u>% of increment or</u> <u>permit which will be</u> <u>graded and contoured</u>
	3 months	%
	6 months	%
	9 months	%
	12 months	%
	15 months	%
	18 months	%

<u>Increment</u> <u>(if applicable)</u>	<u># months after</u> <u>operation begins</u>	<u>% of increment or</u> <u>permit which will be</u> <u>graded and contoured</u>
	3 months	%
	6 months	%
	9 months	%
	12 months	%
	15 months	%
	18 months	%

<u>Increment</u> <u>(if applicable)</u>	<u># months after</u> <u>operation begins</u>	<u>% of increment or</u> <u>permit which will be</u> <u>graded and contoured</u>
	3 months	%
	6 months	%
	9 months	%
	12 months	%
	15 months	%
	18 months	%

<u>Increment (if applicable)</u>	<u># months after operation begins</u>	<u>% of increment or permit which will be graded and contoured</u>
	3 months	%
	6 months	%
	9 months	%
	12 months	%
	15 months	%
	18 months	%

<u>Increment (if applicable)</u>	<u># months after operation begins</u>	<u>% of increment or permit which will be graded and contoured</u>
	3 months	%
	6 months	%
	9 months	%
	12 months	%
	15 months	%
	18 months	%

(3) On appropriate map(s), show representative values for the following:

- (a) Percent of slope before mining; and
- (b) Proposed post-mining slope including slope of the highwall(s) in percent.

C. Revegetation

(1) Outline procedures for soil testing required to determine type and amount of soil amendments to be applied and to evaluate results of topsoil handling and replacement.

(2) Are selected overburden materials to be used as a supplement or substitute for topsoil? () Yes () No

If yes, provide results of analysis, trials, and tests required.

(3) Are commercial or introduced species to be used?

() Yes () No

If yes, give a narrative with supporting references which show that the species meet the requirements.

(4) Is the area to be reclaimed for fish and wildlife habitat?

() Yes () No

If yes, list the species of plants to be used with a brief description of how they meet the criteria.

(5) Complete the following schedules for each increment or sub-area of the permit area.

VEGETATION SCHEDULE

Increment _____
Temporary Vegetation

<u>Species</u>	<u>Planting rate</u>	<u>Planting methods</u>	<u>Planting dates</u>	<u>Areas to be planted</u>
----------------	----------------------	-------------------------	-----------------------	----------------------------

VEGETATION SCHEDULE

Increment
Temporary Vegetation

<u>Species</u>	<u>Planting</u> <u>rate</u>	<u>Planting</u> <u>methods</u>	<u>Planting</u> <u>dates</u>	<u>Areas to be</u> <u>planted</u>
----------------	--------------------------------	-----------------------------------	---------------------------------	--------------------------------------

PART V - BONDING

A. Site Conditions

(1) Briefly describe the site conditions within the increment which you are currently proposing to mine by answering the following:

- (a) Average pre-mining slope _____
- (b) Percent sandstone _____
- (c) Final highwall slope (average) _____
- (d) Acres Prime Farmland _____
- (e) Acres Abandoned Land _____
- (f) Average pH of topsoil or topsoil substitute _____

* Note: If pH range over the increment area is greater than one pH unit (units 1 thru 14), give approximate number of acres which fall within each unit.

(g) Overburden acid-base account (expressed as tons of calcium carbonate per 1,000 tons material) _____
(only if total sulfur exceeds 0.5%).

B. Estimate of Reclamation Cost

Give a detailed estimate of your cost of reclamation for the increment you are currently proposing to mine. Give individual cost estimates for grading, highwall elimination, topsoil (or topsoil substitute) replacement, revegetation and any other cost which may be applicable (prime farmland, hydrologic factors, etc.) Show Calculations.

VEGETATION SCHEDULE

Increment _____

Temporary Vegetation

Species	<u>Planting rate</u>	<u>Planting methods</u>	<u>Planting dates</u>	<u>Areas to be planted</u>
---------	--------------------------	-----------------------------	---------------------------	--------------------------------

Permanent Vegetation

Species	<u>Planting rate</u>	<u>Planting methods</u>	<u>Planting dates</u>	<u>Areas to be planted</u>
---------	--------------------------	-----------------------------	---------------------------	--------------------------------

VEGETATION SCHEDULE

Increment _____

Temporary Vegetation

Species	<u>Planting rate</u>	<u>Planting methods</u>	<u>Planting dates</u>	<u>Areas to be planted</u>
---------	--------------------------	-----------------------------	---------------------------	--------------------------------

Permanent Vegetation

Species	<u>Planting rate</u>	<u>Planting methods</u>	<u>Planting dates</u>	<u>Areas to be planted</u>
---------	--------------------------	-----------------------------	---------------------------	--------------------------------

VEGETATION SCHEDULE

Increment _____

Temporary Vegetation

Species	<u>Planting rate</u>	<u>Planting methods</u>	<u>Planting dates</u>	<u>Areas to be planted</u>
---------	--------------------------	-----------------------------	---------------------------	--------------------------------

Permanent Vegetation

Species	<u>Planting rate</u>	<u>Planting methods</u>	<u>Planting dates</u>	<u>Areas to be planted</u>
---------	--------------------------	-----------------------------	---------------------------	--------------------------------

(6) Describe, in detail, proposed husbandry practices to be used.

(7) Describe, in detail, the measures and sampling methods to be used to determine and demonstrate success of revegetation; or methods to demonstrate the productive capacity of reconstructed prime farmland.

VEGETATION SCHEDULE

Increment _____

Temporary Vegetation

<u>Species</u>	<u>Planting rate</u>	<u>Planting methods</u>	<u>Planting dates</u>	<u>Areas to be planted</u>
----------------	--------------------------	-----------------------------	---------------------------	--------------------------------

Permanent Vegetation

<u>Species</u>	<u>Planting rate</u>	<u>Planting methods</u>	<u>Planting dates</u>	<u>Areas to be planted</u>
----------------	--------------------------	-----------------------------	---------------------------	--------------------------------