ALABAMA SURFACE MINING COMMISSION ADMINISTRATIVE CODE

CHAPTER 880-X-3A INTERIM PROGRAM REGULATIONS CONTINUED OPERATION UNDER THE INTERIM PROGRAM

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880-X-3A-.01 Scope.

This Rule provides general introductory and applicability material for the regulatory program required by Section 502(a) of Public Law 95-87 and Section 12(c) and other sections of the Alabama Surface Mining Control and Reclamation Act of 1981, which allow the continued operation of validly permitted operations pursuant to the standards of the interim regulatory program. These regulations will be effective until permanent program permits are approved or the particular operations are otherwise terminated.
Author:
Statutory Authority: Code of Ala. 1975, §§9-16-71, 72, 73, 74, 75, 80, 81, 82.
History:

880-X-3A-.02 Authority.

The State Regulatory Authority will continue to regulate validly permitted surface coal mining operations pursuant to the interim standards by Section 506(a) of Public Law 95-87 and Executive Order No. 30 issued by Governor Fob James on June 4, 1980. The interim program regulations promulgated by the U. S. Secretary of Interior are hereby incorporated by reference with the exception of the modifications in Rules 880-X-3A-.05, 880-X-3A-.06, and 880-X-3A-.07.
Author:
Statutory Authority: Code of Ala. 1975, §§9-16-71, 72, 73, 74, 75, 80, 81, 82.

History:

880-X-3A-.03 Responsibility.

(1) It is the responsibility of the permittee to conduct its surface coal mining and reclamation operations in accordance with these regulations, permit conditions and all applicable laws.

(2) It is the responsibility of the permittee who wishes to continue surface coal mining and reclamation operations under these provisions after a period of eight months from the date of approval of the State Regulatory Program to submit a new permit application within two months of program approval in accordance with Rules 880-X-8B, 880-X-8D - 880-X-8J.

Author:
Statutory Authority: Code of Ala. 1975, §§9-16-71, 72, 73, 74, 75, 80, 81, 82.
History:

880-X-3A-.04 Applicability.

(1) The requirements of this Chapter apply to surface coal mining and reclamation operations validly permitted under the interim program until eight months after the date of approval of the State Regulatory Program.

(2) The requirements of this Chapter apply to surface coal mining and reclamation operations validly permitted under the interim program (for which the permittee has submitted a permit application within two months of the date of approval of the State Regulatory Program) until such time as a decision is rendered on the permit application.

(3) All reclamation provisions shall apply until complete bond release.

Author:
Statutory Authority: Code of Ala. 1975, §§9-16-71, 72, 73, 74, 75, 80, 81, 82.
History:

880-X-3A-.05 Use Of Explosives.

The following regulations are adopted in lieu of 30 CFR 715.19 of the Federal Interim Program.

(a) General.

1. The permittee shall comply with all applicable local, State, and Federal laws and regulations and the requirements of this rule in the storage, handling, preparation, and use of explosives.

2. Blasting operations that use more than the equivalent of 5 pounds of TNT shall be conducted according to a time schedule approved by the State Regulatory Authority.

3. All blasting operations shall be conducted by experienced, trained, and competent persons who understand the hazards involved. Persons working with explosive materials shall --

(i) Have demonstrated a knowledge of, and a willingness to comply with, safety and security requirements;

(ii) Be capable of using mature judgement in all situations;

(iii) Be in good physical condition and not addicted to intoxicants, narcotics, or other similar type of drugs;

(iv) Possess current knowledge of the local, State and Federal laws and regulations applicable to his work; and

(v) Have obtained a certificate of completion of training and qualification as required by State law or the State Regulatory Authority.

(b) Preblasting survey.

1. On the request to the State Regulatory Authority of a resident or owner of a manmade dwelling or structure that is located within one-half mile of any part of the permit area, the permittee shall conduct a preblasting survey of the dwelling or structure and submit a report of the survey to the State Regulatory Authority.

2. Personnel approved by the State Regulatory Authority shall conduct the survey to determine the condition of the dwelling or structure and to document any preblasting damage and other physical factors that could reasonably be affected by the blasting. Assessments of structures such as pipes, cables, transmission lines, and wells and other water systems shall be limited to surface condition and other readily available data. Special attention shall be given to the preblasting conditions of wells and other water systems used for human, animal, or agricultural purposes and to the quantity and quality of the water.

3. A written report of the survey shall be prepared and signed by the person or persons who conducted the survey and prepared the written report. The report shall include recommendations of any special conditions or proposed adjustments to the blasting procedures outlined in Paragraph (e) of this rule which should be incorporated into the blasting plan to prevent damage. Copies of the report shall be provided to the person requesting the survey and to the State Regulatory Authority.

(c) Public notice of blasting schedule. At least 10 days, but not more than 20 days before beginning a blasting program in which explosives that use more than the equivalent of 5 pounds of TNT are detonated, the permittee shall publish a blasting schedule in a newspaper of general circulation in the locality of the proposed site. Copies of the schedule shall be distributed by mail to local governments and the public utilities and to each residence within one-half mile of the blasting sites described in the schedule. The permittee shall republish and redistribute the schedule by mail at least every 3 months. Blasting schedules shall not be so general as to cover all working hours but shall identify as accurately as possible the location of the blasting sites and the time periods when blasting will occur. The blasting schedule shall contain at a minimum --

1. Identification of the specific areas in which blasting will take place. The specific blasting areas described shall not be larger than 300 acres with a generally contiguous border;

2. Dates and times when explosives are to be detonated expressed in not more than 4-hour increments;

3. Methods to be used to control access to the blasting areas;

4. Types of audible warnings and all-clear signals to be used before and after blasting; and

5. A description of possible emergency situations (defined in Paragraph (e) 1. (ii) of this rule), which have been approved by the State Regulatory Authority, when it may be necessary to blast at times other than those described in the schedule.

(d) Public notice of changes to blasting schedules. Before blasting in areas not covered by a previous schedule or whenever the proposed frequency of individual detonations are materially changed, the permittee shall prepare a revised blasting schedule in accordance with the procedures in Paragraph (c) of this rule. If the change involves only a temporary adjustment of the frequency of blasts, the permittee

may use alternate methods to notify the governmental bodies and individuals to whom the original schedule was sent.

(e) Blasting procedures.

1. General.

(i) All blasting shall be conducted only during the daytime hours defined as sunrise until sunset. Based on public request or other considerations, including the proximity to residential areas, the State Regulatory Authority may specify more restrictive time periods.

(ii) Blasting may not be conducted at times different from those announced in the blasting schedule except in emergency situations where rain, lightning, other atmospheric conditions, or operator or public safety requires unscheduled detonation.

(iii) Warning and all-clear signals of different character that are audible within a range of one-half mile from the point of the blast shall be given. All persons within the permit area shall be notified of the meaning of the signals through appropriate instructions and signs posted as required by Section 715.12.

(iv) Access to the blasting area shall be regulated to protect the public and livestock from the effects of blasting. Access to the blast area shall be controlled to prevent unauthorized entry at least 10 minutes before each blast and until the permittee's authorized representative has determined that no unusual circumstances such as imminent slides or undetonated charges exist and access to and travel in or through the area can safely resume.

(v) Areas in which charged holes are awaiting firing shall be guarded, barricaded and posted, or flagged against unauthorized entry.

(vi) Airblast shall be controlled such that it does not exceed 128 decibel linear-peak at any manmade dwelling or structure located within one-half mile of the permit area.

(vii) Except where lesser distances are approved by the State Regulatory Authority (based upon a preblasting survey or other appropriate investigations) blasting shall not be conducted within 500 feet of an underground mine not totally

abandoned except with the concurrence of the Mine Safety and Health Administration.

2. Blasting standards.

(i) Blasting shall be conducted to prevent injury to persons, damage to public or private property outside the permit area, adverse impacts on any underground mine, and change in the course, channel, or availability of ground or surface waters outside the permit area.

(ii) In all blasting operations, except as otherwise stated, the maximum peak particle velocity of the ground motion in any direction shall not exceed 1.4 inch per second at the immediate location of any dwelling, public building, school, church, or commercial or institutional building. The State Regulatory Authority may reduce the maximum peak particle velocity to as low as 1.0 inch per second if it determines that a lower standard is required because of density of population or land use, age or type of structure, geology or hydrology of the area, frequency of blasts or other factors.

(iii) The maximum peak particle velocity of ground motion does not apply to property inside the permit area that is owned or leased by the permittee.

(iv) An equation for determining the maximum weight of explosives that can be detonated within any 8 millisecond period is given in Paragraph (v). If the blasting is connected in accordance with this equation, the State Regulatory Authority will consider the vibrations to be within the 1 inch per second limit.

(v) The maximum weight of explosives to be detonated within any 8 millisecond period shall be determined by the formula

$$W = \frac{(d)^2}{(50)}$$

where W= the maximum weight of explosives, in pounds, that can be detonated in any 8 millisecond period, and D=distance, in feet, to the nearest dwelling, school, church, or commercial or institutional building.

For distances between 350 and 5,000 feet, solution of the equation results in the following maximum weight:

Distance in feet (D)	Maximum weight in pounds (W)
300	36
350	49
400	64
500	100
600	144
700	196
800	256
900	324
1,000	400
1,100	484
1,200	576
1,300	676
1,400	784
1,500	900
1,600	1,024
1,700	1,156
1,800	1,296
1,900	1,444
2,000	1,600
2,500	2,500
3,000	3,600
3,500	4,900
4,000	6,400
4,500	8,100

5,000.....10,000

(vi) If on a particular site the peak particle velocity continuously exceeds one-half inch per second after a period of 1 second following the maximum ground particle, velocity, the State Regulatory Authority shall require the blasting procedures to be revised to limit the ground motion.

3. Seismograph measurements.

(i) Where a seismograph is used to monitor the velocity of ground motion and the peak particle velocity limit of 1.4 inch per second is not exceeded, the equation in Paragraph (v) need not be used. However, if the equation is not being used, a seismograph record shall be obtained for every shot.

(ii) The use of a modified equation to determine maximum weight of explosives for blasting operations at a particular site may be approved by the State Regulatory Authority on receipt of a petition accompanied by reports including seismograph records of test blasting on the site. However, in no case shall the State Regulatory Authority approve the use of a modified equation where the peak particle velocity limit of 1.4 inch per second required in Paragraph (e) 2. (ii) of this rule would be exceeded.

(iii) The State Regulatory Authority may require a seismograph recording of any or all blasts in general; for all blasts within 300 feet of an occupied dwelling, seismograph recording is required.

4. Records of blasting operations. A record of each blast, including seismograph reports, shall be retained for at least 3 years and shall be available for inspection by the State Regulatory Authority and the public on request. The record shall contain the following data:

(i) Name of permittee, operator, or other person conducting the blast;

(ii) Location, date, and time of blast;

(iii) Name, signature, and license number of

blaster-in-charge;

(iv) Direction and distance, in feet, to nearest dwelling, school , church, or commercial or

institutional building neither owned or leased by the permittee;

(v) Weather conditions;

(vi) Type of material blasted;

(vii) Number of holes, burden, and spacing;

(viii) Diameter and depth of holes;

(ix) Type of explosives used;

(x) Total weight of explosives used;

(xi) Maximum weight of explosives detonated within any 8 millisecond period;

(xii) Maximum number of holes detonated within any 8 millisecond period;

(xiii) Methods of firing and type of circuit;

(xiv) Type and length of stemming;

(xv) If mats or other protections were used;

(xvi) Type of delay detonator used, and delay periods used;

(xvii) Seismograph records, where required including:

(I) Seismograph reading, including exact location of seismograph and the distance from the blast;

(II) Name of person taking the seismograph reading; and

(III) Name of person and firm analyzing the seismograph record.

Author:
Statutory Authority: Code of Ala. 1975, §§9-16-71, 72, 73, 74, 75, 80, 81, 82.
History:

880-X-3A-.06 Revegetation: Surface Coal Mine Operators.

The following regulations are adopted in lieu of 30CFR 715.20 of the Federal Interim Program.

(a) General.

1. The permittee shall establish on all land that has been disturbed, a diverse, effective, and permanent vegetative cover of species native to the area of disturbed land or species that will support the planned postmining land uses of the land approved according to 30 CFR 715.13. For areas designated as prime farmland, the reclamation procedures of 30 CFR 716.7 shall apply.

2. Revegetation shall be carried out in a manner that encourages a prompt vegetative cover and recovery of productivity levels compatible with approved land uses. The vegetative cover shall be capable of stabilizing the soil surface with respect to erosion. All disturbed lands, except water areas and surface areas of roads that are approved as a part of the postmining land use, shall be seeded or planted to achieve a vegetative cover of the same seasonal variety native to the area of disturbed land. If both the pre- and postmining land use is intensive agriculture, planting of the crops normally grown will meet the requirement. Vegetative cover will be considered of the same seasonal variety when it consists of a mixture of species of equal or superior utility for the intended land use when compared with the utility of naturally occurring vegetation during each season of the year.

3. On Federal lands, the surface management, agency shall be consulted for approval prior to revegetation regarding what species are selected, and following revegetation, to determine when the area is ready to be used.

(b) Use of introduced species. Introduced species may be substituted for native species only if appropriate field trials have demonstrated that the introduced species are of equal or superior utility for the approved postmining land use, or are necessary to achieve a quick, temporary, and stabilizing cover. Such species substitution shall be approved by the State Regulatory Authority. Introduced species shall meet applicable State and Federal seed or introduced species statutes, and shall not include poisonous or potentially toxic species.

(c) Timing of revegetation. Seeding and planting of disturbed areas shall be conducted during the first normal period for favorable planting conditions after final preparation. The normal period for favorable planting shall be that planting time generally accepted locally for the type of plant materials selected to meet specific site conditions and climate. Any disturbed areas, except water areas and surface areas of roads that are approved under 30 CFR 715.13 as part of the postmining land use, which have been graded shall be

seeded with a temporary cover of small grains, grasses, or legumes to control erosion until an adequate permanent cover is established. When rills or gullies, that would preclude the successful establishment of vegetation or the achievement of the postmining land use, form in regraded topsoil and overburden materials as specified in 30 CFR 715.14, additional regrading or other stabilization practices will be required before seeding and planting.

(d) Mulching. Mulch shall be used on all regraded and topsoiled areas to control erosion, to promote germination of seeds, and to increase the moisture retention of the soil. Mulch shall be anchored to the soil surface where appropriate, to ensure effective protection of the soil and vegetation. Mulch means vegetation residues or other suitable materials that aid in soil stabilization and soil moisture conservation, thus providing micro-climatic conditions suitable for germination and growth, and do not interfere with the postmining use of the land. Annual grains such as oats, rye, and wheat may be used instead of mulch when it is shown to the satisfaction of the State Regulatory Authority that the substituted grains will provide adequate stability and that they will later be replaced by species approved for the postmining use.

(e) Methods of vegetation.

1. The permittee shall use technical publications or the results of laboratory and field tests approved by the State Regulatory Authority to determine the varieties, species, seeding rates, and soil amendment practices essential for establishment and self-regeneration of vegetation. The State Regulatory Authority shall approve species selection and planting plans.

2. Where hayland, pasture, or range is to be the postmining land use, the species of grasses, legumes, browse, trees, or forbs for seeding or planting and their pattern of distribution shall be selected by the permittee to provide a diverse, effective, and permanent vegetative cover with the seasonal variety, succession, distribution, and regenerative capabilities native to the area. Livestock grazing will not be allowed on reclaimed land until the seedlings are established and can sustain managed grazing. The State Regulatory Authority, in consultation with the permittee and the landowner or in concurrence with the governmental land-managing agency having jurisdiction over the surface, shall determine when the revegetated area is ready for livestock grazing.

3. Where forest is to be the postmining land use, the permittee shall plant trees adapted for local site conditions and climate. Trees shall be planted in

combination with a herbaceous cover of grains, grasses, legumes, forbs, or woody plants to provide a diverse, effective, and permanent vegetation cover with the seasonal variety, succession, and regeneration capabilities native to the area.

4. Where wildlife habitat is to be included in the postmining land use, the permittee shall consult with appropriate State and Federal wildlife and land management agencies and shall select; those species that will fulfill the needs of wildlife, including food, water, cover and space. Plant groupings and water resources shall be spaced and distributed to fulfill the requirements of wildlife.

(f) Standards for measuring success of revegetation.

1. Success of revegetation shall be measured on the basis of "adequate vegetative cover" which shall be defined as a vegetative cover capable of self-regeneration and plant succession, and sufficient to control soil erosion. In establishing adequate vegetative cover, the permittee shall recommend as part of its reclamation plan, and the satisfactory reclamation plan shall prescribe, in the following conditions:

(i) A planting of the affected area upon completion of contouring and/or soil preparation at the earliest possible time within the next growing season appropriate to the vegetative plant species used.

(ii) The permanent planting of any of the plant species in the following table. Revegetation shall not be restricted to these species; where an operator desires to use other species, he shall so provide in his proposed reclamation plan or proposed amendment thereto. The suggested species table shall be:

Trees	Grasses
Longleaf pine	Tall fescue
(Pinus palustris)	(Festuca arundinacea)
Loblolly pine	Common bermuda
(Pinus taeda)	(Cynodon dactylon)
Virginia pine	Bahia
(Pinus virginiana)	(paspalum notatum)
(a) Sycamore	Weeping love grass

(Plantanus occidentalis) (Eragrostis curvula)

European black alder Redtop

(Alnus glutinosa) (Agrostis alba)

Sawtooth oak (a) Johnson grass

(Quercus acutissima) (Sorghum halepense)

Slash pine Deer tongue

(Pinus elliottii) (Panicum clandestinum)

(a) Dallisgrass

(Paspalum dilatatum)

Shrubs Cereals and Annuals

Autumn olive Abruzzi rye

(Elaeagnus umbellata) (Secale cereale)

Bristly locust Brown top

(Robinia fertilis) (Panicum ramosum)

(a) Wheat

(Triticum aestivum)

(a) Sorghum (Sorghum bicolor)

Legumes* (a) Sorghum-Sundangrass

Vulgar X S. sudanese

Bicolor lespedeza

(Lespedeza bicolor) (a) Sundangrass

(Sorghum sudanese)

Crimson clover

(Trifolium incarnatum)

Crownvetch (Coronilla varia)

Vetch (Vicia sativa)

Sericea (Lespedeza cuneata)

Kobe (Lespedeza striate)

(a) Sweet clover (Melilotus alba and

Melilotus officinalis)

(a) Alfalfa (Medicago sativa)

* All legumes must be treated with the proper inoculum.

(a) Suitable for alkaline soils

(iii) Permanent vegetation shall be deemed adequate vegetative cover if the vegetation has survived two growing seasons, and if the following standards are observed:

(I) Legumes and perennial grass must cover at least 80% of the affected soil surface. Areas of less than 80% cover shall not exceed one-fourth acre in size nor total more than 20% of the area planted.

(II) Tree and shrub species shall be at such a density to provide a minimum of 435 established seedlings per acre of mine soil. A minimum of 200 seedlings per acre will be allowed on one-half (1/2) acre within each five (5) acres of planting.

Additional seeding or planting must be performed to make up any deficiency.

(III) Where this provision relative to revegetation would be inconsistent with the proposed use, the reclamation plan shall be reviewed and acted upon in accordance with the approved use. In any event, the reclamation plan must provide for expeditious stabilization of the area.

2. Exceptions may be authorized by the State Regulatory Authority for --

(i) Previously mined areas that were not reclaimed to the standards required by this Chapter prior to the effective date of these regulations. The ground cover of living plants for such areas shall not be less than required to control erosion, and in no case less than that existing before redisturbance;

(ii) Areas to be developed immediately for industrial or residential use. The ground cover of living plants

shall not be less than required to control erosion. As used in this paragraph, immediately means less than 2 years after regrading has been completed for the area to be used; and

(iii) Areas to be used for agricultural cropland purposes. Success in revegetation of cropland shall be determined on the basis of crop production from the mined area compared to the reference area. Crop production from the mined area shall be equal to that of the approved reference area for a minimum of two growing seasons. Production shall not be considered equal if it is less than 90 percent of the production of the reference area for any significant portion of the mined area.

3. Species diversity, distribution, seasonal variety, and vigor shall be evaluated on the basis of the results which could reasonably be expected using the methods of revegetation approved under paragraph (e) of this rule.

(g) Seeding of stockpiled topsoil. Topsoil stockpiled in compliance with 30 CFR 715.16 must be seeded or planted with an effective cover of nonnoxious, quick growing annual and perennial plants during the first normal period for favorable planting conditions or protected by other approved measures as specified in 30 CFR 715.16.

Author:
Statutory Authority: Code of Ala. 1975, §§9-16-71, 72, 73, 74, 75, 80, 81, 82.
History:

880-X-3A-.07 Topsoil Handling and Revegetation: Underground Coal Mine Operations.

The following regulations are adopted in lieu of 30 CFR 717.20 of the Federal Interim Program.

(a) Topsoil shall be removed as a separate operation from areas to be disturbed by surface operations, such as roads and areas upon which support facilities are to be sited. Selected overburden materials may be used instead of, or as a substitute for topsoil where the resulting soil medium is determined by the State Regulatory Authority to be equal to or more suitable for revegetation. Topsoil shall be segregated, stockpiled, and protected from wind and water erosion, or contaminants. Disturbed areas no longer required for the conduct of mining operations shall be regraded, topsoil distributed, and revegetated.

(b) The permittee shall establish on all land that has been disturbed by mining operations a diverse, effective, and permanent vegetative cover capable of self-regeneration and plant succession, and adequate to control soil erosion. Introduced species may be substituted for native species if approved by the State Regulatory Authority. Introduced species shall meet applicable State and Federal seed or introduced species statutes, and may not include poisonous or potentially toxic species.

(c) Timing of revegetation. Seeding and planting of disturbed areas shall be conducted during the first normal period for favorable planting conditions after final preparation. The normal period for favorable planting shall be that planting time generally accepted locally for the type of plant materials selected to meet specific site conditions and climate. Any disturbed areas, except water areas and surface areas of roads that are approved under 30 CFR 715.13 as part of the postmining land use, which have been graded shall be seeded with a temporary cover of small grains, grasses, or legumes to control erosion until adequate permanent cover is established. When rills or gullies, that would preclude the successful establishment of vegetation or the achievement of the postmining land use, form in regraded topsoil and overburden materials as specified in 30 CFR 715.14 additional regrading or other stabilization practices will be required before seeding and planting.

(d) Mulching. Mulch shall be used on all regraded and topsoiled areas to control erosion, to promote germination of seeds, and to increase the moisture retention of the soil. Mulch shall be anchored to the soil surface where appropriate, to ensure effective protection of the soil and vegetation. Mulch means vegetation residues or other suitable materials that aid in soil stabilization and soil moisture conservation, thus providing micro-climatic conditions suitable for germination and growth, and do not interfere with the postmining use of the land. Annual grains such as oats, rye and wheat may be used instead of mulch when it is shown to the satisfaction of the State Regulatory Authority that the substituted grains will provide adequate stability and that they will later be replaced by species approved for the postmining use.

(e) Methods of revegetation.

1. The permittee shall use technical publications or the results of laboratory and field tests approved by the State Regulatory Authority to determine the varieties, species, seeding rates, and soil amendment practices essential for establishment and self-regeneration of vegetation. The State Regulatory Authority shall approve species selection and planting plans.

2. Where hayland, pasture, or range is to be the postmining land use, the species of grasses, legumes, browse, trees, or forbs for seeding or planting and their pattern of distribution shall be selected by the permittee to provide a diverse, effective, and permanent vegetative cover with the seasonal variety, succession, distribution, and regenerative capabilities native to the area. Livestock grazing will not be allowed on reclaimed land until the seedlings are established and can sustain managed grazing. The State Regulatory Authority, in consultation with the permittee and the landowner or in concurrence with the governmental land-managing agency having jurisdiction over the surface, shall determine when the revegetated area is ready for livestock grazing.

3. Where forest is to be the postmining land use, the permittee shall plant trees adapted for local site conditions and climate. Trees shall be planted in combination with a herbaceous cover of grain, grasses, legumes, forbs, or woody plants to provide a diverse, effective, and permanent vegetation cover with the seasonal variety, succession, and regeneration capabilities native to the area.

4. Where wildlife habitat is to be included in the postmining land use, the permittee shall consult with appropriate State and Federal wildlife and land management agencies and shall select those species that will fulfill the needs of wildlife, including food, water, cover, and space. Plant groupings and water resources shall be spaced and distributed to fulfill the requirements of wildlife.

(f) Standards for measuring success of revegetation.

1. Success of vegetation shall be measured on the basis of "adequate vegetative cover" which shall be defined as a vegetative cover capable of self-regeneration and plant succession, and sufficient to control soil erosion. In establishing adequate vegetative cover, the permittee shall recommend as part of its reclamation plan, and the satisfactory reclamation plan shall prescribe, in the following conditions:

(i) A planting of the affected area upon completion of contouring and/or soil preparation at the earliest possible time within the next growing season appropriate to the vegetative plant species used.

(ii) The permanent planting of any of the plant species in the following table. Revegetation shall not be restricted to these species; where an operator desires to use other species, he shall so provide in

his proposed reclamation plan or proposed amendment thereto. The suggested species table shall be:

Trees	Grasses
Longleaf pine	Tall fescue
(Pinus palustris)	(Festuca Arundinacea)
Loblolly pine	Common bermuda
(Pinus taeda)	(Cynodon dactylon)
Virginia pine	Bahia
(Pinus Virginiana)	(Paspalum notatum)
(a) Sycamore	Weeping love grass
(Platanus occidentalis)	(Eragrostis curvula)
European black alder	Redtop
(Alnus glutinosa)	(Agrostis alba)
Sawtooth oak	(a) Johnson grass
(Qurecus acutissima)	(Sorghum halepense)
Slash pine	Deer tongue
(Pinus elliottii)	(Panicum clandestinum)
	(a) Dallisgrass
	(Paspalum dilatatum)

Shrubs	Cereals and Annuals
Autumn olive	Abrizzi rye
(Elaeagnus umbellata)	(Secale cerale)
Bristly locust	Brown top
(Robinia fertilis)	(Panicum ramosum)
	(a) Wheat
	(Triticum aestivum)
	(a)Sorghum (Sorghum bicolor)

(a) Sorghum-Sundangrass

Vulgare X S. sudanese

Sundangrass (Sorghum Sudanese)

Legumes*

Bicolor lespedeza

(Lespedeza bicolor)

Crimson clover

(Trifolium incarnatum)

Crownvetch

(Coronilla varia)

Vetch

(Vicia sativa)

Sericea

(Lespedeza cuneata)

Kobe

(Lespedeza striate)

(a) Sweet clover

(Melilotus alba and

Melilotus officinalis)

(a) Alfalfa

(Medicago sativa)

* All legumes must be treated with the proper inoculm.

(a) Suitable for alkaline soils

(iii) Permanent vegetation shall be deemed adequate vegetative cover if the vegetation has survived two growing seasons, and if the following standards are observed:

(I) Legumes and perennial grass must cover at least 80% of the affected soil surface. Areas of less than 80% cover shall not exceed one-fourth acre in size nor total more than 20% of the area planted.

(II) Tree and shrub species shall be at such density to provide a minimum of 435 established seedlings per acres of mine soil. A minimum of 200 seedlings per acre will be allowed on one-half (1/2) acre within each five (5) acres of planting. Additional seeding or planting must be performed to make up any deficiency.

(III) Where this provision relative to vegetation would be inconsistent with the proposed use, the reclamation plan shall be reviewed and acted upon in accordance with the approved use. In any event, the reclamation plan must provide for expeditious stabilization of the area.

2. Exceptions may be authorized by the State Regulatory Authority for --

(i) Previously mined areas that were not reclaimed to the standards required by this Chapter prior to the effective date of these regulations. The ground cover of living plants for such areas shall not be less than required to control erosion, and in no case less than that existing before redisturbance;

(ii) Areas to be developed immediately for industrial or residential use. The ground cover of living plants shall not be less than required to control erosion. As used in this paragraph, immediately means less than 2 years after regrading has been completed for the area to be used; and

(iii) Areas to be used for agricultural cropland purposes. Success in revegetation of cropland shall be determined on the basis of crop production from the mined area compared to the reference area. Crop production from the mined area shall be equal to that of the approved reference area for a minimum of two growing seasons. Production shall not be considered equal if it is less than 90 percent of the production of the reference area for any significant portion of the mined area.

3. Species diversity, distribution, seasonal variety, and vigor shall be evaluated on the basis of the results which could reasonably be expected using the methods of revegetation approved under paragraph (e) of the rule.

(g) Seeding of stockpiled topsoil. Topsoil stockpiled in compliance with 30 CFR 715.16 must be seeded or planted with an effective cover of nonnoxious, quick growing annual and perennial plants during the first normal period for favorable planting conditions or protected by other approved measures as specified in 30 CFR 715.16.

Author:

Statutory Authority: Code of Ala. 1975, §§9-16-71, 72, 73, 74, 75, 80, 81, 82.

History: