

Module 23: Revegetation
[§77.456(5)]

23.1 Soil Test Plan

Provide a soil test plan for determining plant nutrients and soil amendments required to establish vegetation and achieve the approved postmining land use.

Example: Soil samples will be collected using a soil auger. A composite sample will be obtained from individual core samples from each type of existing land use. These samples will be analyzed by Blank Laboratory using "Soil Mailing Kits", or another accredited laboratory.

Soil tests will be performed on the site in order to determine the proper nutrients necessary for the post-mining land use of unmanaged natural habitat. When the first cut of topsoil is removed, it will be sampled and analyzed; this will indicate the preliminary soil amendments that will be needed.

23.2 Temporary Cover. Provide the following information for each seed mixture to be used for temporary cover:

a)

Seed Mixture No.	Seed Mixture (Species)	Rate of Appl. 100% PLS* (lbs./acre)	Seeding Dates (Months)
B	Annual Ryegrass	40	Early Spring to Late Fall
	<i>If storage areas are to be left for more than one growing season, the following will be used:</i> Perennial Ryegrass	10	

Seed Mixture No.	Seed Mixture (Species)	Rate of Appl. 100% PLS* (lbs./acre)	Seeding Dates (Months)
1	Ryegrass <i>or</i>	40	Mar-Sept
	Winter Rye <i>or</i>	168	Fall
	Winter Wheat	180	Fall
	Spring Oats	64	Spring

*PLS means pure live seed. PLS is the product of the percentage of pure seed times percentage germination divided by 100.

b) Use.

Seed Mixture #1 will be used for areas that need temporary erosion control and will be re-disturbed or sprayed with herbicide. (soil piles, ditches, etc.).

c) Method(s) of seeding.

Conventional and/or hydroseeding methods will be used in the application of the seed mixture

d) How seedbed will be prepared for planting.

The seedbed will be graded and/or scarified prior to planting. The soils will be loosened by spiking and/or by the use of farm equipment, this will allow for proper seed germination.

e) Type(s) of mulch to be used and rate(s) of application.

Example: Hay or straw at a rate of 2 ½ tons per acre.

Straw mulch, or equivalent material at a rate of 2.5 to 3 tons per acre, will be used in areas not seeded immediately following final grading.

23.3 Permanent Cover. [Insert standard seed mixture option(s)] Provide the following information for each seed mixture to be used for permanent cover: (Note: Key to Exhibit 18)

a)

Seed Mixture No.	Seed Mixture (Species)	Rate of Appl. 100% PLS* (lbs./acre)	Seeding Dates (Months)
2	Deertongue or Switchgrass	10	Apr-May
	Virginia wildrye	5	Aug-Oct
	Autumn bentgrass	5	Aug-Oct
	Partridge Pea	2	Apr-May
	Cover Crop	30	Mar-Sept

* PLS means pure live seed. PLS is the product of the percentage of pure seed times percentage germination divided by 100.

b) Use.

The permanent mixture will be used on the areas that are disturbed and reclaimed within the permit boundaries (See Exhibit 18 Map).

c) Method(s) of seeding.

Conventional agricultural farm drill and/or hydroseeding or broadcasting methods will be used in the application of the seed mixtures.

d) How seedbed will be prepared for planting.

The seedbed will be graded and/or scarified following topsoil replacement by means of farm equipment. The soils will be loosened sufficiently so that germination and revegetation is enhanced. Compaction of the soils prior to seeding will be avoided; this inhibits germination. Proper loosening by spiking and/or use of farm equipment will be done prior to reseeding.

e) Type(s) of mulch to be used and rate(s) of application.

Hay or straw at a rate of 2 ½ tons per acre.

Any prime farmland soil areas will be mulched with 3 tons/acre of straw or hay.

Hay, straw mulch, or equivalent material, at a rate of 2.5 to 3 tons per acre to control erosion, promote germination of seeds and increase the moisture retention of the soil. Mulch will not be used in areas seeded using a conventional agricultural farm drill or areas seeded immediately following final grading resulting in a quick vegetative cover.

23.4 Woody Plants. [Insert standard stocking species option(s)] For areas that will also be planted with woody plants, provide the following: (Note: Key to Exhibit 18)

a)

N/A

b) Method of planting.

N/A

c) If the area is to be planted for wildlife habitat, identify the grouping and distribution of the plants.

N/A

23.5 Cropland. For areas that will be planted to crops (agronomic or horticultural), identify the crops to be grown and the management plans to achieve the crop yield standards. (Note: Key to Exhibit 18: Land Use and Reclamation Map)

N/A