

# COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF MINING PROGRAMS

## REVEGETATION 08/2021

#### Soil Test Plan [§87.68]

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

A soil test conducted by Penn State Laboratories will be used to determine fertilizer rates required to establish vegetation and achieve the approved postmining land use. The results of the soil test will be submitted to the Department as part of the initial Stage 2 Bond Release.

In the event a soil test is not available at the time of topsoil replacement, 3-tons/acre of lime and 400 lb/acre 10-10-10 fertilizer will be applied, as specified in in 5600-FM-BMP0466.

**Cover** [§§ 87.68, 87.147, 87.150-87.153, 87.155, 87.156]

A. Provide the following information for each seed mixture to be used for cover:

Temp or perm cover	Seed Mixture No.	Seed Mixture (Species)	Rate of Appl 100% PLS* (Lbs./ac)	Seeding Dates (months)
Permanent	1	Indian Grass Turf Perennial Rye Redtop Empire/Viking Trefoil Alsike Clover	30 10 3 10 4	Disturbed area shall be planted when weather and planting conditions permit. Normal periods are Early Spring until May 30 and August 10 until September 15
Temporary	2	Perennial Ryegrass Empire Birdsfoot Trefoil	40 5	Disturbed area shall be planted when weather and planting conditions permit.

<sup>\*</sup>PLS means pure live seed. PLS is the product of the percentage of pure seed times percentage germination divided by 100.

B. Describe use of each Seed Mixture (Species) (Examples: soil stabilization, agricultural, wildlife forage, wildlife habitat, etc.)

Seed mixtures No. 1 and No. 2 will primarily be used for soil stabilization.

C. Explain the method(s) of seeding.

**Drill or Broadcast.** 

D. Describe how seedbed will be prepared for planting.

The seedbed will be disked or harrowed three to six inches deep along the contour.

E. Explain what type(s) of mulch are to be used and at what rate(s) of application.

A minimum of 3 tons/acre of hay mulch will be used.

#### **Woody Plants** [§87.155]

A. For areas that will also be planted with woody plants, provide the following:

Woody Plant Mixture No	Woody Plant Species	No./Ac	Description/Comments
1	Red Pine Scotch Pine Japanese Larch European White Birch White Pine Norway Spruce Red Maple Black Cherry Sawtooth Oak Flowering Dogwood	680/Ac.	Woody plant species to be used will depend on availability and cost at the time of planting. A minimum of four (4) woody plant species with no one species comprising more than 50% of the total mixture will be planted. Seed Mixture No. 1 will be planted in all areas requiring woody plant species. Other native woody plant species may be substituted as necessary to meet woody plant species planting requirements.

B. Describe method of planting.

Woody plant species will be planted either by hand or a mechanical planter.

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

In areas to be planted as wildlife habitat the woody plant species will be planted in clusters and not in straight lines to created varied habitats across the revegetated areas. The number of woody plant species will be reduced to 100 per acre and will be grouped in varied species.

### **Measurement Techniques** [§87.156]

Specify the technique to be used to evaluate the success of revegetation. If cropland or pastureland is the proposed postmining land use, specify the technique for determining crop yields.

The standards for successful revegetation shall be determined by ground cover. A minimum of 70% ground cover of permanent plant species shall be established with not more than 1% of the area having less than 30% ground cover with no single or contiguous area having less than 30% ground cover exceeding 3,000 square feet. Visual inspection and site measurement, if necessary, will be used to determine if the revegetation requirements have been met.

When woody species are planted in mixture with herbaceous species, the standards the revegetation shall be met and a minimum of 400 woody plants per acre shall be established except: On slopes greater than 20 degrees, the minimum number of woody plants shall be 600 per acre.

Neither cropland nor pastureland is a proposed land use.