



# Soils and Revegetation

This course provides information that will help participants recognize the existence of soil or plant problems. This course does not apply to areas to be returned to forest land. The course will focus on soils and vegetation in four phases of mining and reclamation including pre-mining inventory, planning, operational considerations, and reclamation.

**Duration: 4 days**

## TOPICS COVERED

### Describing Soil

- ▼ Soil Characteristics

### Soil Survey

- ▼ SCS Manual (Components/Definitions)
- ▼ Profile (Monolith) (If Available)

### Soil Sampling and Analysis

- ▼ Importance of Sampling and Testing Methods
- ▼ Interpretation of Soil Test
- ▼ Physical Properties of Soil

### Plant Identification

- ▼ Vegetative Life Forms
- ▼ A Strategy for Plant Identification
- ▼ Problems in Plant Identification
- ▼ Identifying Characteristics in Reclamation Plant

### Evaluating Vegetation Success

- ▼ Purpose/Methods/Parameters

### Soil Environment

- ▼ Plant-Soil Environment
- ▼ Soil Environment
- ▼ Impacts of Mining

### Practices to Enhance Forest Development

- ▼ Natural Changes in Plant Community

### Species Selection

- ▼ Criteria for Species Selection
  - ◇ *Revegetation Goals*
  - ◇ *Site Conditions*
  - ◇ *Plant Adaptations and Availability*

### Soil Handling

- ▼ Soil Removal/Storage
- ▼ Soil Reconstruction
- ▼ Prime Farmland Soils
- ▼ Erosion Control

### Soil Amendments

- ▼ Soil Fertility/Liming
- ▼ Fertilizer Rate Exercise

### Seedbed Preparation

- ▼ Root Zone Penetration
- ▼ Seedbed Preparation
- ▼ Seedling/Mulching
- ▼ Vegetation Management

### Woody Plant Establishment

- ▼ Woody Species/Reclamation
- ▼ Methods of Establishment
- ▼ Assuring a Successful Planting
- ▼ Problems in Planting Woody Plants

### Vegetation Success (Field Exercise)

**WHO SHOULD ATTEND:** Inspectors, program and AML staff.

**COMMENTS:** Students need to bring the following to class:

△ calculator

**Field Exercise:** Hard hat, steel-toed boots, and safety glasses are required.

**National Technical Training Program: (202) 208-2769**