MINED LAND INTERPRETATIONS

GENERAL

Soil reconstruction of areas drastically disturbed, as in surface mining, is the process of replacing layers of soil material or unconsolidated geologic material, or both, in a vertical sequence of such quality and thickness that a favorable medium for plant growth is provided. In West Virginia, state surface mine programs emphasize that the land surface be restored to about its natural configuration or better and the soil to be reconstructed to maintain or improve its suitability for the intended use. Therefore, knowledge of the soil and underlying material is needed to plan proper reconstruction operations of mined land. It may be necessary to rate the topsoil, subsoil, and substratum separately to determine the suitability of each segment for reconstruction. If they all rate "Good", there may be little justification for keeping them separate. If the topsoil is rated better than the subsoil or substratum, then it should be kept separate depending upon its thickness and the anticipated use of the land.

This guide does not cover areas of quarry, pit, dredge, and older surface mine operations that require an offsite source of soil material. The guide "*Daily Cover for Sanitary Landfill*" is useful to evaluate the material used in restoration for these operations.

RATING

When soil materials are properly used in reconstruction, a rating of "Good" means vegetation is relatively easy to establish and maintain the surface is stable and resists erosion, and the reconstructed soil has good potential productivity. Material rated "Fair" can be vegetated and stabilized by modifying one or more properties. Topdressing with better material or application of soil amendments may be necessary for satisfactory performance. Material rated "Poor" has such severe problems that re-vegetation and stabilization are very difficult and costly. Topdressing with better material is necessary to establish and maintain vegetation. Interpretations for mined land reclamation, re-vegetation, and maintenance are locally developed. These interpretations should be placed in this subsection. Reference should be made to any existing state or local guides for reclamation, re-vegetation, and maintenance of mined lands.

REFERENCES

(1) National Soil Survey Handbook, Part 620.
http://soils.usda.gov/technical/handbook/contents/part620.html#00

(2) Soil Data Mart
http://soildatamart.nrcs.usda.gov/Survey.aspx?State=WV

(3) Web Soil Survey
http://websoilsurvey.nrcs.usda.gov/app/