

Module 21: Topsoil / Subsoil

[§77.456(4)]

21.1 Topsoil Characteristics

- a) **Identify the thickness of topsoil present at the site. If the thickness of the topsoil varies, key the thickness of the topsoil to Exhibit 18.**

The thickness of the topsoil on site ranges from 4-8 inches and the subsoil onsite ranges from 36-72 inches. The values stated were taken from the USDA Web Soil Survey for Somerset County. The B and C horizons, where available, will be replaced as subsoil. All site topsoil and subsoil will be saved and spread in an evenly distributed layer on the affected area for reclamation as unmanaged natural habitat. The success of vegetation on reclaimed surface mines in this area of Somerset County show that these soils can support revegetation.

- b) **Provide a 8 ½" x 11" copy of USDA Soil Survey Map delineating the proposed permit area.**

See the attached Soils Map.

21.2 Operations Plan

- a) **Provide a plan for removal, storage and redistribution of topsoil and subsoil.**

This area will be reclaimed as unmanaged natural habitat which will not require traditional reclamation methods common to cropland or pastureland. Best available soils will be placed on the surface to promote vegetation. All topsoil encountered will be segregated and saved as per following steps.

Removal

Topsoil and any subsoil will be removed and stockpiled separately on the areas shown on the exhibits prior to mining or other surface disturbance. The topsoil will be removed first, followed by the subsoil. The piles will be seeded with seed mixture #1 to protect the pile(s) from erosion (if they are not redistributed on the backfilled areas by the end of the next growing season).

Storage

Soils will be stockpiled only when it is impractical to promptly redistribute such material on the regraded areas. Soils will not be mixed with other materials at the site and will be stockpiled within the permit area only. Stockpiled material will be protected from wind and water erosion by seeding with seed mixture #1 as per above.

Redistribution

Prior to the redistribution of soils, the regraded area will be scarified/spiked to promote root penetration and successful revegetation. The subsoil will be replaced first in an even, stable thickness. Topsoil will then be replaced in an evenly distributed layer. The topsoil will be loosened sufficiently so that germination and revegetation is enhanced. Compaction of soils prior to seeding will be avoided, since this inhibits germination. Proper loosening by spiking and/or scarifying will be done prior to reseeding. Revegetation procedures will then be initiated (See Module 23).

Over compaction of the soils will be prevented by:

1. Track equipment will be used to spread soils, as opposed to rubber tire equipment, which tends to over compact soils.
2. As per Module 23.2, soils will be spiked/loosened prior to seeding. This enhances germination and promotes vegetation.
3. The soil will be replaced when the soil moisture is low to prevent excess compaction. Timely seeding/mulching will then occur.

- b) **If the B and C horizons will be segregated and replaced as subsoil, identify the thickness in inches of the B and C horizons to be removed, segregated and replaced.**

The B and C horizons will be removed and replaced as the subsoil. The thickness of the B and C horizons on this site are approximately 56" as per Web Soil Survey. Actual depths and occurrence may vary across the site. The subsoils will be replaced prior to topsoil spreading and revegetation. See soils handling plan above for details.

- c) **If material other than the B and C horizons will be replaced as subsoil, identify the material and include test results demonstrating that this material will insure revegetation and soil productivity consistent with the postmining land use. Provide the name(s), address(es) and telephone number(s) of the individual(s) responsible for the collection and analysis of this data and a description of the methodologies used to collect and analyze this data**

N/A – The subsoils on the site will be used at reclamation.

21.3 Previously Affected Areas

If an area has been previously affected by mining and no topsoil or subsoil is present, identify the material that will be used as the final surface layer and provide a demonstration, including chemical analysis, that the material is capable of supporting the vegetation of the postmining land use.

N/A

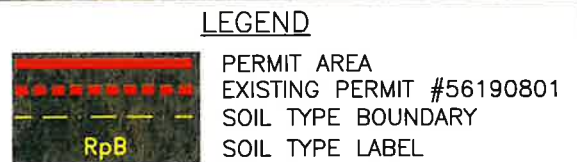
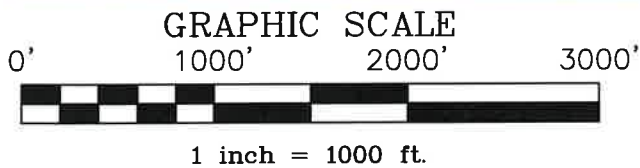


EXHIBIT 21.1b: SOILS MAP

**ROCKWOOD STONE, LLC
ROCKWOOD QUARRY**

BLACK TOWNSHIP, SOMERSET COUNTY, PA

FILE NAME:
Rockwood Quarry 2024.dwg

SCALE:
1" = 1000'

DATE:
01-31-2025

DWN. BY:
SIP

CHK. BY:
RDS



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