

Phase II Bond Release Application
J19 and N11 Coal Resource Areas, Kayenta Mine

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SECTION 2. Phase II Bond Release Supporting Information

Soil and Suitable Material Data

Introduction

This Phase II bond release application for the J19 and N11 Coal Resource Areas (CRAs) is requesting release for topsoil replacement in one 3.0-acre parcel within the J19 CRA since it was not included with the Phase I bond release application that was submitted to the Office of Surface Mining Reclamation and Enforcement (OSMRE) in June 2020. Information is provided on topsoil and suitable material thickness sampling to document an adequate thickness of topsoil and mitigation material has been replaced in this part of the J19 CRA.

Soil and Suitable Material Thickness - J19

Topsoil and suitable material replacement on permanent program lands within the 3.0-acre parcel within the J19 CRA occurred during 2018. Topsoil and suitable material replacement status for the release area shown on Map 2.1 was previously reported to the regulatory authority on the Topsoil Down Map 2 (as of December 31, 2018) shown on the Southeast Sheet contained in the 2018 Reclamation Status and Monitoring Report, Black Mesa and Kayenta Mines (submitted June 2019). Soil was redistributed on final graded slopes from stockpiles or replaced directly from soil removal areas prior to ripping and contour discing. Pursuant to Chapter 22 of Permit AZ-0001F, the thickness of soil replaced shall exceed the minimum average of 1 foot.

The soil depth survey of the 3.0-acre parcel within the J19 permanent program reclaimed area was completed during August 2022 as shown on Map 2.1. Personnel from Peabody Western Coal Company (PWCC) observed one site in the J19 permanent program reclaimed area in order to verify suitable material and soil replacement thickness. A stratified grid sampling scheme using a random number generator program was used for the 2022 PWCC survey to locate 1 site prior to going into the field. A sampling density of about 1 site per 25 acres is typically used being like the density used and approved previously at Kayenta Mine for the N1/N2, N7/N8, N11, N14, J16, J19, and J21 soil and suitable material thickness evaluations. A Tremble GeoXT survey grade GPS unit was used to navigate to the site. One site was placed in the J19 area and observed by PWCC during 2022 to verify soil and suitable material thickness requirements. A 3 ½-inch bucket auger was used to verify the soil thickness by excavating to the contact with spoil. The results of the soil and suitable material thickness verification survey is shown in Table 2.1 and Map 2.1 shows the sampled site with the corresponding thickness value.

One (1) sample was collected over the 3.0-acre parcel of disturbed land within the release area. Soil and suitable material thickness at the one random profile placed in the J19 release area was 37 inches (Table 2.1).

The mean soil and suitable material thickness of 37 inches exceeds the minimum 1-foot average topsoil thickness requirement presented in the approved reclamation plan in Chapter 22 of Permit AZ-0001F. This mean thickness of 3.1 feet also exceeds the topsoil and mitigation material thickness of 1.0 feet as required by the spoil suitability mitigation requirements (spoil sample site J19-3060) discussed in the Phase I bond release application submitted to OSMRE in June 2020. In conclusion, PWCC has satisfied soil and suitable material thickness replacement requirements in conformance with the applicable regulatory requirements and as stipulated by the approved reclamation plan for the J19 Phase II release area shown on Map 2.1.

Table 2.1. Soil and Suitable Material Thickness Verification Site Sampled by PWCC at J19 During 2022 (See Map 2.1 for Site Location).			
Site ID	Soil Thickness (Inches)	Easting (Feet) ⁽¹⁾	Northing (Feet) ⁽¹⁾
48	37	58909	-41245
Mean	37		
⁽¹⁾ PWCC coordinate system.			

ATTACHMENT 2.1

CERTIFICATION

PEABODY WESTERN COAL COMPANY
KAYENTA MINE, N11 and J19 COAL RESOURCE AREAS, PHASE II BOND RELEASE APPLICATION
NAVAJO COUNTY, ARIZONA

I HEREBY CERTIFY that, to the best of my knowledge and belief, all applicable reclamation activities described in the attached Phase II Bond Release Application, dated August 17, 2022, have been accomplished in accordance with the reclamation requirements of the Act, the regulatory program, and the approved reclamation plan contained in the AZ-0001F Permit. The bond release parcel is free from enforcement actions.

Peabody Western Coal Company - Kayenta Mine

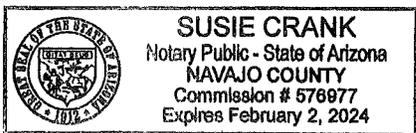
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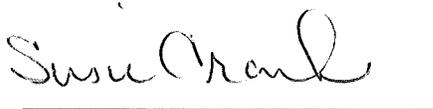
Randy Lehn
Director Operations Support - Kayenta Mine

STATE OF ARIZONA

COCONINO COUNTY

Signed or attested before me this 17 day of August 2022, by Randy Lehn, Director Operations Support of Kayenta Mine owned by Peabody Western Coal Company, a Delaware Corporation, on behalf of said Kayenta Mine.





Notary Public

My commission expires:

February 2, 2024

