

July 11, 2022

Twentymile Coal Company Miranda Kawcak 29515 RCR #27 Oak Creek, CO 80467

Job Number: 99-3983

Subject: Quarterly Observation Report, Refuse Pile, Foidel Creek Mine, Routt County, Colorado.

Miranda,

As requested, NWCC, Inc. (NWCC) has prepared this report outlining our observations made during the second quarter of 2022 at the Refuse Pile located at Twentymile Coal Company's (TCC) Foidel Creek Mine in Routt County, Colorado. During this quarter, Timothy Travis of NWCC visited the project site on June 30, 2022 to provide the quarterly inspection/observations of the Refuse Pile.

At the time of our site visit on June 30, 2022, NWCC completed a site inspection of the existing refuse pile. Based on our observations made during this visit, it appeared that the contractor was presently stockpiling, grading and compacting refuse coal in the new Expansion Area. At the time of our site visit, the refuse coal had been placed and compacted to an elevation above the third bench situated along the east side of the stockpile.

Compaction testing in the new Expansion Area of the refuse pile was also completed on June 23, 2022. Six compaction tests (#629 to #632) were taken in Expansion Area during this quarter. All of the tests taken during this quarter met the minimum compaction requirement of 90% of the maximum standard Proctor density. Copies of the compaction test results and the daily field reports are attached. It should be noted that the abbreviations given in the Nuclear Density Test Results (Proctor Data) are as follows: Maximum DD = Maximum Dry Density and OMC = Optimum Moisture Content. Both of these values have been determined in accordance with ASTM D698.

The internal roadways in the new expansion area of the pile are in good condition. The upper haul road to Areas 2, 3 and 4 of the refuse pile was accessible at the time of our site visit and in good condition.

A seepage area at the toe of the northeast end of the refuse pile expansion area, approximately 30 feet northwest of the outlet of the underdrain, developed in fall 2014. At the time of our observations, the seepage was surfacing at the toe of the slope and flowing into the drainage from the undrain outlet then into the existing pond east of the Refuse Pile Expansion Area. The discharge was clear, with no evidence of sediment. No signs of washout, slumps or slope instability were observed at this time. The seepage area

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will be monitored during future inspections and noted in our inspection reports. Photographs of the seepage area taken at the time of our inspection on June 30, 2022 are attached.

Based on our observations, the surface drainage conditions, generally appeared to be adequate across the top and sides of the pile. Based on our observations, we did not observe any signs of instability, structural weakness or hazardous conditions at the refuse pile.

We were advised that the wash plant had produced approximately 92,321 tons of waste coal during the month of April 2022: approximately 87,593 tons during May 2022: and approximately 105,930 tons during June 2022. It is our understanding that the fines being produced at the wash plant, which consists of approximately 10 to 20 percent of the total materials being produced, are being pumped underground into the mine.

We were previously informed by Brian Watterson of TCC that all of the original monitor wells installed in the Refuse Pile were destroyed in July 2012. Two new monitor wells were constructed in Area 1 of the Refuse Pile in December 2013. NWCC was provided monthly monitor well readings for this quarter by Two Pines, Inc. The water level in the western monitor well (RW#1) was measured at 57.71 feet below the existing ground surface (bgs) on April 28th at 57.64 feet bgs on May 12th and at 57.75 feet bgs on June 16th of 2022. The water level in the eastern monitor well (RW#2) was measured at 56.58 feet bgs on April 28th, at 56.53 feet bgs on May 12th and at 56.61 feet bgs on June 16th of 2022. An additional monitor well (RW#3) was constructed at the southeast end of the 1st bench in new Expansion Area in June of 2014. The water level in the expansion area monitor well (RW#3) was dry when checked on April 28th, May 12th and June 16th of 2022.

Based on our observations, it appears that the pile is currently being constructed and maintained in general accordance with the project specifications and plans submitted under 2.05.3(8) and that the potential hazard to human life and property at the site in its present condition is minimal. This report fulfills the quarterly inspection requirements as specified by Rules 4.09.1(11)(a), 4.09.1(11)(b), 4.10.2(2)(a) and 4.10.2(2)(b).

If you have any questions regarding this report or our observations, please contact this office.

Sincerely,

NWCC, INC.,

Timothy S. Tray

Sr. Project

Reviewed by Brian D. Len,

Princip Engineer

cc: Tabethall vice Environmental Protection Specialist - CDRM&S

NORTHWEST COLORADO CONSULTANTS, INC.

Project: Refuse Pile Project No.: 99-3983 Date: 6/23/22

Location: Foidel Creek Mine Report No.: 104 Mileage: 45
Client: Twentymile Coal Co. Engr. / Tech: CR

Work Performed:

As requested, we visited the project site on today's date and conducted compaction test No's 629 through 632 on the fill materials being placed within the Refuse Pile.

Twentymile Coal Company crews placed and compacted processed waste coal in the Refuse Pile.

We also obtained a sample of material and returned it to our laboratory in Steamboat Springs, CO for standard checkpoint Proctor testing. The sample matched previously determined Proctor 12P for this project.

Remarks:

The material tested today generally met project specifications for compaction.

Please refer to attached sheet for results of today's testing.

Verbal Discussions:

Nick Aromando of Twentymile Coal Co. was notified of today's test results.

NUCLEAR DENSITY TEST RESULTS

Project:

Refuse Pile

Project No.: Report No.:

99-3983

Date:

6/23/2022

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Test No.	Location Northing/Easting	Depth Elev.	Proctor No.	Dry Density (pcf)	Water Content (%)	Actual Compaction	Required Compaction
629 630 631 632	31026.06 / 16513.69 31219.25 / 16714.81 31357.21 / 16936.61 31400.90 / 17192.10	7026.066 7027.069 7024.905 7021.455	12 12 12 12 12	101.3 103.4 102.7 105.0	5.1 4.9 5.0 4.5	92 94 94 96	90 90 90 90

PROCTOR DATA

No.	Maximum	Optimum	Relative	Relative Density	Soil Type
ł	Dry	Moisture	Density	Maximum	
	Density	Content	Minimum	Density (pcf)	
	(pcf)	(%)	Density (pcf)		
12	109.8	7.6			Processed Waste Coal
11	100.3	10.2			Processed Waste Coal
10	107.6	11.0			Processed Waste Coal

Comments:

BSG=	Below Subgrade Grade	NWC=	Northwest Corner
SG=	Subgrade Grade	NEC=	Northeast Corner
SBG=	Subbase Grade	SWC=	Southwest Corner
BSBG=	Below Subbase Grade	SEC=	Southeast Corner
BCG=	Base Course Grade	BFG=	Below Footing Grade
BBF=	Below Bottom of Footing	FG=	Footing Grade



June 30, 2022-Drain Outlet and Seepage Area



June 30, 2022-Seepage Area



June 30, 2022- Expansion Area from Areas 2, 3 and 4



June 30, 2022- SW End of Drain in Expansion Area



June 30, 2022- Areas 2, 3 and 4



June 30, 2022- Benches on East Side of Refuse Pile