



October 11, 2024

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 third quarter of 2024 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 September 30, 2024 to provide the quarterly inspection/observations of the Refuse Pile.

At the time of our site visit on September 30, 2024, 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. Cover materials were being stockpiled on the third bench to be spread over the slope below the third bench

Compaction testing in the new Expansion Area of the refuse pile was also completed on June 30, 2024. Thirteen compaction tests (#671 to #683) 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 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 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 28, 2024 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 111,224 tons of waste coal during the month of July 2024: approximately 123,187 tons during August 2024: and approximately 103,839 tons during September 2024. 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 TCC. The water level in the western monitor well (RW#1) was measured at 57.65 feet below the existing ground surface (bgs) on July 31<sup>st</sup> at 57.75 feet bgs on August 30<sup>th</sup> and at 57.50 feet bgs on September 30<sup>th</sup> of 2024. The water level in the eastern monitor well (RW#2) was measured at 56.80 feet bgs on July 31<sup>st</sup>, at 56.90 feet bgs on August 30<sup>th</sup> and at 57.00 feet bgs on September 30<sup>th</sup> of 2024. An additional monitor well (RW#3) was constructed at the southeast end of the 1<sup>st</sup> bench in the new Expansion Area in June of 2014. The water level in the expansion area monitor well (RW#3) was dry when checked on July 31<sup>st</sup>, August 30<sup>th</sup> and September 30<sup>th</sup> of 2024.

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. Travis, P.E.  
Sr. Project Engineer

Reviewed by Brian D. Len, P.E.  
Principal Engineer



## **NORTHWEST COLORADO CONSULTANTS, INC.**

|                  |                     |                     |         |                     |         |
|------------------|---------------------|---------------------|---------|---------------------|---------|
| <b>Project:</b>  | Refuse Pile         | <b>Project No.:</b> | 99-3983 | <b>Date:</b>        | 9/30/24 |
| <b>Location:</b> | Foidel Creek Mine   | <b>Report No.:</b>  | 113     | <b>Time:</b>        | 2.5     |
| <b>Client:</b>   | Twentymile Coal Co. |                     |         | <b>Mileage:</b>     | 45      |
|                  |                     |                     |         | <b>Engr. /Tech:</b> | TT      |

### **Work Performed:**

As requested, we visited the project site on today's date and conducted compaction test No's 671 through 683 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.:** 99-3983

**Date:** 9/30/2024

**Report No.:** 113

| Test No. | Location<br>Northing/Easting | Depth<br>Elev. | Proctor<br>No. | Dry<br>Density<br>(pcf) | Water<br>Content<br>(%) | Actual<br>Compaction | Required<br>Compaction |
|----------|------------------------------|----------------|----------------|-------------------------|-------------------------|----------------------|------------------------|
| 671      | 31246.915 / 17314.219        | 7032.180       | 12             | 101.6                   | 3.6                     | 93                   | 90                     |
| 672      | 31181.782 / 16907.728        | 7034.421       | 12             | 105.1                   | 5.4                     | 96                   | 90                     |
| 673      | 31048.658 / 16513.021        | 7039.294       | 12             | 108.8                   | 5.7                     | 99                   | 90                     |
| 674      | 31057.408 / 16716.595        | 7037.789       | 12             | 103.6                   | 5.3                     | 94                   | 90                     |
| 675      | 31146.212 / 17162.191        | 7032.514       | 12             | 107.3                   | 4.4                     | 98                   | 90                     |
| 676      | 31059.376 / 17567.305        | 7022.008       | 12             | 101.5                   | 4.6                     | 92                   | 90                     |
| 677      | 30727.481 / 17407.223        | 7022.529       | 12             | 102.8                   | 5.4                     | 94                   | 90                     |
| 678      | 30381.459 / 17133.106        | 7021.103       | 12             | 101.7                   | 4.5                     | 93                   | 90                     |
| 679      | 30036.614 / 16924.007        | 7017.915       | 12             | 105.6                   | 4.8                     | 96                   | 90                     |
| 680      | 30476.242 / 17328.916        | 7019.351       | 12             | 99.7                    | 6.1                     | 91                   | 90                     |
| 681      | 30916.597 / 17302.029        | 7030.430       | 12             | 100.1                   | 5.4                     | 91                   | 90                     |
| 682      | 30595.538 / 17082.290        | 7027.503       | 12             | 99.4                    | 6.6                     | 91                   | 90                     |
| 683      | 30025.978 / 16754.410        | 7027.573       | 12             | 100.7                   | 5.9                     | 92                   | 90                     |
|          |                              |                |                |                         |                         |                      |                        |

### PROCTOR DATA

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

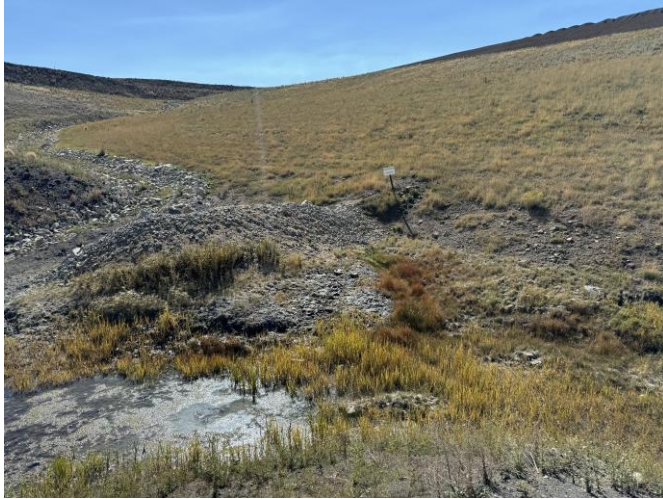
**Comments:**

|  |   |
|--|---|
| <b>BSG=</b> Below Subgrade Grade<br><b>SG=</b> Subgrade Grade<br><b>SBG=</b> Subbase Grade<br><b>BSBG=</b> Below Subbase Grade<br><b>BCG=</b> Base Course Grade<br><b>BBF=</b> Below Bottom of Footing | <b>NWC=</b> Northwest Corner<br><b>NEC=</b> Northeast Corner<br><b>SWC=</b> Southwest Corner<br><b>SEC=</b> Southeast Corner<br><b>BFG=</b> Below Footing Grade<br><b>FG=</b> Footing Grade |
|--|---|



## TCC Refuse Pile-Quarterly Inspection

## Photos



September 30, 2024-Drain Outlet and Seepage Area



September 30, 2024-Seepage Area



September 30, 2024- Areas 2, 3 and 4



September 30, 2024- Expansion Area



September 30, 2024- Expansion Area



September 30, 2024- East End of Expansion Area