

PERMIT INFORMATION

Permit Number: C-1981-041 Mine Name: Roadside Portals Operator: Snowcap Coal Company, Inc. Operator Address: Ms. Tonya Hammond P.O. Box 1430 Palisade, CO 81526 County: Mesa Operation Type: Underground Permit Status: Active Ownership: Private

Operator Representative Present:

Tonya Hammond Jim Stover

Operator Representative Signature: (Field Issuance Only)

INSPECTION INFORMATION

Inspection Start Date: August 10, 2021 Inspection Start Time: 10:00 Inspection End Date: August 10, 2021 Inspection End Time: 14:00			Inspection Type: Coal Partial Inspection Inspection Reason: 10 Day Notice Follow-up Weather: Clear	
Joint Inspection Agency:		Joint Inspection Contacts:		
None		Tom Medlin		
Post Inspection Agency:		Post Inspection Contacts:		
None		Tom Medlin		
Inspector(s):	Inspector	r's Sig	gnature:	Signature Date:
Clayton Wein	Clay	5	Wein	8/24/2021
Jason Musick				

Inspection Topic Summary

NOTE: Y=Inspected N=Not Inspected R=Comments Noted V=Violation Issued NA=Not Applicable

- ${\bf N}\,$ Air Resource Protection
- **N** Availability of Records
- **N** Backfill & Grading
- ${\bf N}\,$ Excess Spoil and Dev. Waste
- N Explosives
- N Fish & Wildlife
- ${\bf R}\,$ Hydrologic Balance
- ${\bf Y}\,$ Gen. Compliance With Mine Plan
- N Other
- Y Processing Waste

- Y Roads
- Y Reclamation Success
- Y Revegetation
- **R** Subsidence
- ${\bf N}\,$ Slides and Other Damage
- N Support Facilities On-site
- Y Signs and Markers
- ${\bf N}\,$ Support Facilities Not On-site
- N Special Categories Of Mining
- N Topsoil

COMMENTS

This inspection report contains the observations made by the Colorado Division of Reclamation, Mining and Safety (the Division) during the August 10, 2021 on the ground inspection of the Roadside Mine (permit no. C-1981-041). The inspection was conducted in response to the Division's receipt of a Ten Day Notice, dated July 7, 2021, from the Office of Surface Mining Reclamation and Enforcement (OSMRE). OSMRE issued the Ten Day Notice to the Division in response to a citizen's request for inspection letter from John R. Henderson, councel for Rudy Fontanari (surface landowner). The citizen's request for inspection was in regard to Mr. Fontanari's list of eight "Items Requested by Fontanari" identified in the request for inspection letter. Of the eight items requested by Fontanari in his request for inspection, only three items of the eight items listed could be partially addressed through an on-the ground inspection of the site; items listed as one, five and six. The remaining items will be addressed by the Division through: a C-1981-041 permit review, the Division's approved and issued Findings documents, and any other available mechanisms in order to address the concerns identified in the ten day notice.

The three items partially addressed through this on the ground inspection of the site are Item 1: "For a prompt inspection of the problem sites by Federal and Stae Inspectiors with appropriate qualifications accompanined by representative from Snowcap Coal (SCC), Fontanari, and any of his retained experts and consel"; Item 5: "For an integrated approach and evaluation of the effect of mine subsidence and mine interception of groundwater...."; and Item 6: "For a determination as to whether Snowcap remains in compliance, or has fallen out of compliance, with permit conditions and reclamation standards."

The Division was represented at the inspection by Clayton Wein and Jason Musick. OSMRE was represented by Tom Medlin. Snowcap Coal Company was represented by Tonya Hammond and Jim Stover accompanied by the company's attorney John Justus and his associate Jack Pryzgoda. Rudy Fontanari attended the inspection as was also accompanied by his attorneys John Henderson and John Buchanan. The inspection started at 10:00 AM at the Kokopelli Fruitstand. The Division discussed with Mr. Fontanari the locations where he would like to begin the inspection. Mr. Fontanari determined the outline of the areas of his concern and the Division conducted an inspection of each area identified by Mr. Fontanari. Each area of concern expressed by Mr. Fontanari was inspected and observed by the Division. Each individual stop will be numbered in this report in the sequence in

which each stop during the inspection was made. These locations are identified on Figure 1 attached with this report.

HYDROLOGIC BALANCE - Rule 4.05 Drainage Control 4.05.1, 4.05.2, 4.05.3; Siltation Structures 4.05.5, 4.05.6; Discharge Structures 4.05.7, 4.05.10; Diversions 4.05.4; Effluent Limits 4.05.2; Ground Water Monitoring 4.05.13; Surface Water Monitoring 4.05.13; Drainage – Acid and Toxic Materials 4.05.8; Impoundments 4.05.6, 4.05.9; Stream Buffer Zones 4.05.18:

During the inspection the Carey Pit was dry. There were no indications of recent water applications to the Carey pit. The trenches constructed by Mr. Fontanari located on the northeast portion of the Tract 70 Mesa were dry with no evidence of recent precipitation. There were no observed signs of recent application of water to the trenches at the time of the inspection.

Location #3

Discharge point 016 was the third stop on the inspection. Site 016 is the location of the NPDES discharge from the abondoned mine workings through a metered guage maintained by SCC and into the Colorado River below. Mr. Fontanari expressed his concern that the location of the discharge outlet may not be correct to properly record the amount of outflow from the "mine void." Mr. Fontanari indicated that he believed that due to the dip of the bedrock, the location of 016 is to far to the northwest. Mr. Fontanari expressed that he thought the discharge from the "mine void" should be recorded further to the east to match the direction of the northeastern dipping bedrock.

The gauge located on the outlet of 016 was inspected (Photo 3). The flow was recorded by the gauge at \sim 200 gpm. The gauge was fluctuating between numeric readings between 100 and 275 gpm and a recalibration of the guage may be required. As a maintenance note, the Division will require SCC to ensure that the guage is functioning as designed and recalibrated by the next on the ground coal regulatory inspection.

Location #4

The N1 well was the fourth stop of the inspection. The N1 well is utlized by SCC to determine the depth to water in the abandoned mine workings. Mr. Fontanari expressed concern about what the water level in the mine is. Mr. Fontanari used a 100' tape and a plastic water bottle as a measuring device to record the level of the water in the well (Photo 4). Fontanari's measurement was 76 feet from the well casing to the top of the water level. Tonya Hammond of SCC brought a Solinst Model 101 water level meter (Photo 5). Her device recorded the level of the water to be at 75.4 feet in the well.

SUBSIDENCE – *Rule* 4.20:

Location #1

The first location visited was the reclaimed mine portals. The reclaimed mine portals were Phase III released by the Division with the approval of bond release No. 6 (SL-6). The slope of the backfilled portals was stable with vegetative cover (Photo 1). There were no indications or observations of erosional features. Through a Divison approved french drain system, any water that potentially would back up behind the portals would be drained to a

diversion ditch. The diversion ditch was dry at the time of the inspection. There were no indications of seepage coming from the reclaimed portals at the time of the inspection.

Mr. Fontanari discussed an event in 2014 in which the reclaimed portals were seeping due to the application of a large amount of water over an unreclaimed vent shaft located on Tract 71. The unreclaimed vent shaft was later located by SCC and the Division. SCC submitted Technical Revision No. 69 (TR69) for the repair of the unreclaimed vent shaft. TR69 was approved by the Division on February 1, 2017 and issued on July 7, 2017 through a Mined Land Reclamation Board Order. Prior to the Order being issued by the MLRB, Fontanari contested and challenged TR69 at a MLRB hearing. The vent shaft was sealed by SCC in the fall of 2019 and the 0.4 acre disturbance was reclaimed. Mr. Fontanari expressed his concerns that future water application in the area of Tract 71 could lead to similar results and jepordize the stability of the reclaimed portals.

Location #2

The reclaimed refuse pile located on the south end of the main facilities area was the second stop during the inspection. The top of the pile where the upland diversion ditch is located was where Mr. Fontanari discussed his concern for the stability of the refuse pile. Mr. Fontanari was concerned that the application of water on Tract 71 could contribute more water to the diversion ditch and affect its operational capacity, thus impacting the stability of the reclaimed refuse pile.

The last reclaimed portions of the refuse pile were Phase III released with bond release No. 6 (SL-6) and the ditch was Phase III released with bond release No. 8 (SL-8). The upland diversion ditch was designed to handle flows of 8.83 cfs during a 100 yr 24 hour storm event (Appendix 14-6) at the time of the full Phase III bond release. The diversion ditch was dry at the time of the inspection (Photo 2). There were no indications or observations of downcutting or erosion of the reclaimed refuse pile embankments. There were no observed blockages in the diversion ditch. The reclaimed refuse pile was vegetated and stable. There were no erosional features identified or observed on the reclaimed refuse pile.

Location #5

This location was along the access road leading up to Tract 70 from the North Decline. The location was a road cut that exposes a stratigraphic profile from the top of the Tract to the access road (\sim 15'). The exposed stratigraphic profile illustrated an outcrop of sandstone with an overburden of colluvial material. Mr. Fontanari wanted to point out the cracks and fractures in the face of the outcrop (Photo 6). Mr. Fontanari stated that he believes these cracks and fractures in the face of the outcrop were created due to subsidence from mining. Mr. Fontanari claimed that he frequently has to pick up rock fall on this portion of the access road, further stating that he believes the rocks fall due to subsidence activity from mining.

Location #6

The inspection group stopped on top of the northern portion of the Tract 70 Mesa. Mr. Fontanari pointed out a feature on the west side of the access road. The feature was approximately three feet in length, a couple of inches wide and a couple of inches deep (Photo 7). Mr. Fontanari stated to the Division that he believes this feature to be a surface crack developed from mine subsidence. The feature was observed to generally be trending in an east/west direction. The feature did not appear to be a component of a larger feature. No other linear surface

feature was observed directly east or west of this location. The area of location #6 was Phase III released with the approval of bond release SL-11. The area is within the permit boundary

Location #7

Mr. Fontanari continued to the northern point of the Tract 70 Mesa. Mr. Fontanari expressed his concern for the stability of the outcrop. In July 2019, the outcrop expressed a large amount of water initiated from trenches constructed by Mr. Fontanari. The outcrop sloughed in sections along the northern face. The large amount of water applied by Fontanari initiated a rock fall event directly above and onto Colorado Interstate 70 (I-70). Mr. Fontanari expressed his opinion to the Division that he believed that mine subsidence had created cracks in the sandstone bedrock. Fontanari noted that he believes these cracks allowed water to weaken the face of the outcrop causing the rockfall. The sandstone layer in this outcrop is the same as the one inspected at Location #5. There was no water expressed from the face of the outcrop above I-70 during this inspection. Mr. Fontanari pointed out a small feature in this location. The feature appeared to be weathered (Photo 8). This location is within the area Phase III released with SL-11, however the location is within the permit boundary.

Location #8

The inspection party stopped at the location of the TR-69 repair area. The site was repaired by SCC in accordance with the plan outlined in TR-69. The site was backfilled and graded to the approximate original contour. The disturbed area was reseeded with the approved seed mix from the Permit Application Package. Mr. Fontanari told the inspection party his concerns of the potential for mine subsidence on Tract 71 to create pathways to the "mine void." The depth from the surface to the underground workings is approximately 100 feet in the area surrounding TR69. Mr. Fontanari spent time explaining his concern about the danger of water applied to this area finding its way into the workings, thus filling the "mine void" with water potentially causing another situation similar to that which happened in 2014. The 2014 event led to the discovery of the vent shaft and initiated the process that resulted in the approved TR-69 repair. The boundary of the area disturbed by the TR-69 activities is marked with metal T posts and a mine identification marker. The site was stable with vegetative cover (Photo 9). There were no indications of erosional features. During the traverse across the reclaimed area, a small animal burrow was discovered at the south east corner (Photo 10). Tailings at the entrance to the burrow were noted.

Location #9

Mr. Fontanari took the inspection party to the east of the TR-69 repair area to a section of his property set up for hemp farming. Mr. Fontanari stated that there was a feature in that area that he believed to have been created due to mine subsidence. Mr. Fontanari was unable to locate the feature. The inspection party fanned out to look for possible features. None were identified. Mr. Fontanari stated that he would have to come back with a shovel or apply water to the area to locate the feature again. The location is within the area Phase III released by SL-11. The land remains with in the mine permit boundary.

DOCUMENTS RECEIVED: None

OTHER (SPECIFY): None

ENFORCEMENT ACTIONS/COMPLIANCE

No enforcement actions were initiated as a result of this inspection, nor are any pending.

CCW

PHOTOGRAPHS



Photo 1: The reclaimed mine portals. No water was observed seeping from the reclaimed slope or flowing out of the French drain.



Photo 2: The upland diversion ditch for the reclaimed refuse pile.





Photo 3: The gauge for the 016 discharge monitoring point.



Photo 4:Mr. Fontanari using his measuring device at the N1 well.



Photo 5: Tonya Hammond using a Solinst Model 101 water level meter at te N1 Well.



Photo 6: The outcrop along the access road up the North Decline.



Photo 7: The feature Mr. Fontanari pointed out to the inspection party on top of the north end of the Tract 70 Mesa. A hat was used for scale.

CCW



Photo 8: The feature identified by Mr. Fontanari at the northern point of the Tract 70 Mesa. A hat was placed to the left of the feature for scale.



Photo 9: The TR-69 repair area, the photo was taken looking to the east.



Photo 10: The burrow located in the southeast corner of the TR-69 repair area. A hat was used for scale.

Figure 1



Each stop during the inspection is identified in figure 1 as a yellow pin. The pins are number in the order in which each location was visit