



STATE OF
COLORADO

Ridley - DNR, Hunter <hunter.ridley@state.co.us>

Inspection Report, Foidel Creek Mine, C-1982-056

1 message

Ridley - DNR, Hunter <hunter.ridley@state.co.us>

Tue, Sep 26, 2023 at 1:57
PM

To: "Kawcak, Miranda" <mkawcak@peabodyenergy.com>

Miranda,

Please find attached the Division's report for the September coal complete inspection of Foidel Creek Mine. Let me know if you have any questions.

Kind regards,
Hunter Ridley (she/her/hers)
Environmental Protection Specialist



COLORADO
Division of Reclamation,
Mining and Safety
Department of Natural Resources

P 720.868.7757 | F 303.832.8106

Physical: 1313 Sherman Street, Room 215, Denver, CO 80203

Mailing: DRMS Room 215, 1001 E 62nd Ave, Denver, CO 80216

hunter.ridley@state.co.us | <https://drms.colorado.gov>



Sept_CC_Foidel.pdf
6159K



PERMIT INFORMATION

Permit Number: C-1982-056 Mine Name: Foidel Creek Mine Operator: Twentymile Coal, LLC Operator Address: Ms Miranda Kawcak 29515 Routt County Road No. 27 Oak Creek, CO 80467	County: Routt Operation Type: Underground Permit Status: Active Ownership: Private
	Operator Representative Present:
Operator Representative Signature: (Field Issuance Only)	

INSPECTION INFORMATION

Inspection Start Date: September 12, 2023 Inspection Start Time: 09:00 Inspection End Date: September 12, 2023 Inspection End Time: 12:30		Inspection Type: Coal Complete Inspection Inspection Reason: Normal I&E Program Weather: Clear	
Joint Inspection Agency: None		Joint Inspection Contacts:	
Post Inspection Agency: None		Post Inspection Contacts:	
Inspector(s): Hunter Ridley	Inspector's Signature: <i>Hunter Ridley</i>		Signature Date: 9/26/2023

Inspection Topic Summary

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

N - Air Resource Protection

R - Availability of Records

N - Backfill & Grading

R - Excess Spoil and Dev. Waste

N - Explosives

Y - Fish & Wildlife

R - Hydrologic Balance

R - Gen. Compliance With Mine Plan

N - Other

N - Processing Waste

R - Roads

R - Reclamation Success

N - Revegetation

N - Subsidence

N - Slides and Other Damage

Y - Support Facilities On-site

R - Signs and Markers

N - Support Facilities Not On-site

N - Special Categories Of Mining

R - Topsoil

COMMENTS

This was a complete inspection of the Foidel Creek Mine; DRMS Permit No. C-1982-056, operated by Twentymile Coal, LLC. (TC). This inspection was conducted by Hunter Ridley with the Colorado Division of Reclamation, Mining, and Safety (Division). Miranda Kawcak of TC accompanied an initial the inspection. **Please address the Bold items below.**

In an effort to ensure that all reclamation tasks are appropriately bonded for, the Division is currently in the process of collecting field data in an effort to ground truth and update on-site conditions at the Foidel Creek Mine. Data collection began during this inspection and will continue to be collected over a number of inspections. Final data collection and recalculation of the financial warranty will be completed by July of 2024.

Permit Renewal 8 (RN-08) was issued by the Division on 9/9/2023. The next renewal will not be due to the Division until 2028.

AVAILABILITY OF RECORDS – Rule 5.02.4(1): Records were checked at the mine office. See details at the end of report. Records can be made available to the public through paper or electronic copy. Currently, records located at the mine office are in both forms. However, in the event that the computer which holds the files is not accessible, e.g. the operator is not present to login and access records, Rule 5.02.4 would not be able to be followed. **Therefore, the Division requests that all records be made available in paper form.** Exceptionally large reports and records, delineated by three asterisks on the records form, have been allowed to be kept digitally. **Please update items highlighted on the attached records form.**

SIGNS AND MARKERS—Rule 4.02

Mine identification markers were observed throughout the site (Photo 1). All information for compliance was present across all signs.

ROADS – Rule 4.03 Construction 4.03.1(3)/4.03.2(3), Drainage 4.03.1(4)/4.03.2(4), Surfacing and Maintenance 4.03.1(5) and (6)/4.03.2(5) and (6), Reclamation 4.03.1(7)/4.03.2(7):

Number of Partial Inspection this Fiscal Year: 2

Number of Complete Inspections this Fiscal Year: 1

Haul roads across the site were maintained and water trucks were noted in the main facilities area. MR322 was issued by the Division on 10/25/2022 and approved the relocation of an internal road. The construction of this new road continues in the 6MN area (Photo X). Construction here is mostly completed, with only final grading and seeding of the topsoil pile left to be done.

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:

All ponds were checked for discharge and culverts were inspected for function. Most main culverts appear to be functioning, however culverts in some of the less used areas, such as the Fish Creek Borehole and Tipple Area, are in need of cleaning (Photos 16). Continue to clean out culverts when vegetation and sediment hinders function. Ponds and discharge points are represented in Photos 2, 6 - 8, 10, 13, 15 and 20.

Location	Holding water	discharging	source	goes to	notes
6MN Reservoir	Y	N	mine water	Recirculates mine water. Does not have a discharge pt.	
6MN ventilation shaft sed pond	Y	N	pad runoff		Usually not flowing
6MN wetlands	Y	Y	Underground dewatering	6MN reservoir	Water from ponds is pumped to the 6MN reservoir, no discharge is currently approved at this site. Wetlands do not operate in Winter months
Fish Creek Tipple pond	Y	Y	Reclaimed tipple	Fish creek	Usually always flowing
Fish Creek Borehole	Y	N	mine water (w/ flock added)	Fish creek (site 115)	3 cell pond, discharge at site 115 triggers additional sampling requirements.
18LT vent shaft ponds	N	N	pad		Pad is not active
Pond F	Y	N	runoff from facilities	Foidel creek	
Pond G	Y	N	Surface Runoff from laydown Area	Foidel creek	Generally dry except in the Spring

Number of Partial Inspection this Fiscal Year: 2

Number of Complete Inspections this Fiscal Year: 1

Pond E	Y	Y	Facilities and roads	Foidel creek	Stoker building will drain here after it has been sealed
Area No. 1 Pond (Pit Pond)	Y	N	mine, sumps, diversion ditch	Pond D	
Pond D	Y	Y	Wash plant facilities, pit pond	Foidel creek	Catches overflow from adjacent Pit Pond, is a discharge point for mine water
Pond B	Y	Y	Bob pile, road	Foidel creek	Cleaned Fall 2022
Pond C	Y	N	facilities		Generally dry
Pond T	N	N	laydown area	Foidel creek	v-notch weir, culvert under railway always trickling
Facility Treatment ponds	Y	N	facilities water	GW discharge	Currently approved to go to the million gallon tank. Revision is needed to update PAP.
Stream buffer zone @ train load-out	NA	NA	Buffer marked by barrels and sign.		Buffer zone was being maintained at Feb 2023 inspection. Buffer zone needs to continue to be protected from winter plowing, mag chloride, and coal overflow from train.

Main Facilities Area

Several ponds across the main facilities area are in in need of cleanout in order to maintain long-term proper function. The Operator stated that these ponds are scheduled to be cleaned out the week of 9/18/2023. Only culverts directly connected to ponds in the main facilities area were checked during this inspection. A representative sample of all main facilities culverts will be checked during a future inspection.

In the inspection report dated 8/23/23 the Division requested that BMPs around the stoker coal loadout facility be repaired and added to areas which are still having issues with sediment control and erosion down the northwestern slope behind the facility (Photo 3). The Division requires that these tasks be completed by 9/30/23 and that photos of the new and repaired BMPs be submitted to the Division by this date. The Operator stated that the stoker building was scheduled to be sprayed with a leak proof liner the week of 9/18/23 and that photos of this and the improved BMPs would be sent to the Division by the 9/30/23 due date. The stoker loadout area was free of coal spills at the time of inspection.

Number of Partial Inspection this Fiscal Year: 2

Number of Complete Inspections this Fiscal Year: 1

The buffer zone for Foidel Creek is being maintained at the train loadout facility (Photos 4-7). Berms here are well maintained and buffer zone signs are in place. As noted in the 6/28/23 report, CDPHE has restricted the use spraying of de-icer on incoming trains in the winter season in an effort to mitigate runoff to the nearby Foidel Creek buffer zone. TC is still working with the Town of Hayden and CDPHE to address the situation.

6MN and Passive Treatment System Project Areas

Facilities and ponds in the 6MN area were noted to be functioning properly and as usual (Photo 13). The weather station set up near the 6MN Reservoir was still present. Culverts in this area were clean and functioning (Photos 11 and 12).

The Passive Treatment System Project in this area was fully vegetated and functioning at the time of inspection (Photo 14). This water does not currently discharge to Foidel Creek. Instead it is circled back to the 6MN reservoir. This wetland area will be closed during the winter season.

Western Boreholes

Boreholes located in the western portion of the permit boundary, including the Fish Creek Borehole, were inspected and found to be free of any issues.

The 18L Area (Photo 19) is currently unused. Two ponds, which are mostly dry throughout the year except for in snowmelt, are located in this area as well (Photo 20). This area has not yet been reclaimed as TC will use the area's facilities to tie into Peabody Sage Creek Mine operations in the future.

Tipple Area

The Tipple Area is generally unused with some areas having already been reclaimed. Roads and the Tipple Pond were maintained and free of erosion (Photo 15). Several culverts in this area are in need of cleanout (Photo 16). **In order to maintain proper function, please ensure that cleanout is completed before the winter season.**

The 9 East Exhaust Blower Pad and reclaimed 18 Right borehole were also inspected in this area and found to be free of any issues. (Photos 17 and 18).

TOPSOIL – Rule 4.06

Topsoil piles were checked for proper vegetation, stability, and appropriate markers. All piles are properly vegetated and free of disturbance.

EXCESS SPOIL AND DEV. WASTE – Rule 4.09 Placement; Drainage Control; Surface Stabilization:

Compaction of refuse material piled throughout the winter continues (Photos 9 and 21). Lifts three and four are under construction, with plans to face and seed these two lifts in the current season. Lifts are built facing downslope to encourage proper drainage into Pond D. Clay overburden material is then taken from the

Number of Partial Inspection this Fiscal Year: 2

Number of Complete Inspections this Fiscal Year: 1

southern portion of the refuse area to cover the pile before adding topsoil from the nearby stockpile to the northeast.

Compaction reports are conducted quarterly. As per the last inspection request (dated April 25, 2023), the Division received the most recent compaction report (1st Q 2023) and the compaction report prior to that (4th Q 2022). These were received May 10, 2023. Before this submittal, the last noted compaction report received by the Division was for the 4th Quarter 2016. **In order to complete the public record, please submit all missing compaction reports through e-permitting from 1st Quarter 2017 to 3rd Quarter 2022 to the Division and continue to submit these reports on a timely basis.**

RECLAMATION SUCCESS and REVEGETATION - Rule 4.15, Rule 3:

The 13 Left Outby Gate Road Utility Borehole has been nearly fully reclaimed. This reclaimed area is scheduled to be seeded in the fall of 2023.

GENERAL MINE PLAN COMPLIANCE:

Cattle grazing, which occurs annually across several locations of the Foidel Creek Mine permit area, has mostly ended for the season. Fences and topsoil piles will need to continue to be protected from cattle in the next season.

Ongoing Maintenance Items:

- Repair silt fence located behind the stoker loadout building
- Protect topsoil piles from cattle
- Spray weeds and Reseed the waste pile topsoil pile
- Protect topsoil piles along the 6MN road during maintenance and snow plowing activities during the winter months
- Seal support building near Wash Plant (2023)

ENFORCEMENT ACTIONS/COMPLIANCE

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

Number of Partial Inspection this Fiscal Year: 2

Number of Complete Inspections this Fiscal Year: 1

PHOTOGRAPHS



Photo 1: Appropriate signage located at the mine entrance.



Photo 2: Discharge and water sampling collection point for Pond D.

Number of Partial Inspection this Fiscal Year: 2

Number of Complete Inspections this Fiscal Year: 1



Photo 3: View north of the stoker coal loadout facility. Foidel Creek is located downslope to the west.



Photo 4: Train loadout facility.

Number of Partial Inspection this Fiscal Year: 2

Number of Complete Inspections this Fiscal Year: 1



Photo 5: Buffer zone signage and berms are in place.



Photo 6: Water sampling collection point for Ponds B.

Number of Partial Inspection this Fiscal Year: 2

Number of Complete Inspections this Fiscal Year: 1



Photo 7: View south of Ponds B and rail line.



Photo 8: Eastern half of Pond D, currently at a low water level.

Number of Partial Inspection this Fiscal Year: 2

Number of Complete Inspections this Fiscal Year: 1



Photo 9: View south of the refuse pile from Pond D.



Photo 10: Pond G, nearly completely dry.

Number of Partial Inspection this Fiscal Year: 2

Number of Complete Inspections this Fiscal Year: 1



Photo 11: Example of two culverts located near the 6MN Reservoir.



Photo 12: Example of two culverts located near the NW Mains Ventilation Shaft.

Number of Partial Inspection this Fiscal Year: 2

Number of Complete Inspections this Fiscal Year: 1



Photo 13: View west of the 6MN reservoir.



Photo 14: View northwest of the Passive Treatment System area.

Number of Partial Inspection this Fiscal Year: 2

Number of Complete Inspections this Fiscal Year: 1



Photo 15: View east of the Tipple Pond and Culvert 6.



Photo 16: Culvert 5 in the northwestern Tipple Area, in need of cleanout.

Number of Partial Inspection this Fiscal Year: 2

Number of Complete Inspections this Fiscal Year: 1



Photo 17: View south of the 9E Exhaust Blower Pad.



Photo 18: View west of the reclaimed 18R borehole.

Number of Partial Inspection this Fiscal Year: 2

Number of Complete Inspections this Fiscal Year: 1



Photo 19: View west of the unused 18L borehole area.



Photo 20: Two ponds, mostly dry year round, are located in the 18L area.

Number of Partial Inspection this Fiscal Year: 2

Number of Complete Inspections this Fiscal Year: 1



Photo 21: View south of the refuse pile from CR 27.

Number of Partial Inspection this Fiscal Year: 2

Number of Complete Inspections this Fiscal Year: 1

AVAILABILITY OF RECORDS**PERMIT RECORDS**

DRMS Permit	Exp 5/23/2028??
Permit Application w/Revisions	Update with MR323
Findings Document	***Update with RN8
Insurance Certificate	Exp 08/01/2024
Bond Document	***\$13,260,344
Phased Bond Release Documents/Findings	SL1 RN7
Air Emission Permits	*93RO1204
County Special Use Permits	Exp 8/26/2024
UG Mining Landowner Notification	05/10/2016 (Rule 4.20.2)
Subsidence Monitoring Reports	3Q2021 next due Annual on 3/1
Subsidence Monitoring Data	3Q2021 next due Annual on 3/1
Rill & Gully Survey	NA
Vegetation Monitoring Data	NA
Specific Variance Approvals	NA
Annual Reclamation Reports	2021
Midterm Review Documents	***MT8
DRMS/OSM Inspection Reports/Enforcement Actions (3 Years)	Through March 2022
Transfers/Succession of Operator	NA
Temporary Cessation Notification	NA
Reclamation Cost Estimate	TR96, please update with most recent MR322

CERTIFICATIONS

Pond Certifications	***3Q 2022
Annual Certifications for Large Impoundments	4Q2022
Fill Certifications for Excess Spoil or Underground Development Waste	4Q2022
• Quarterly Inspections	4Q2022
• Compaction Testing	4Q2022

HYDROLOGIC RECORDS

NPDES Permit	**In review, OK
NPDES Records	*** August 2022
Stormwater Management Plan	2013 (will be updated w/new discharge permit)
SPCC Plan	2021
MSHA Pond Inspections	3Q 2021
State Engineer's Pond Inspection	NA
Quarterly Pond Inspections	***4Q2022
Annual Hydrology Reports	***2021
• Ground Water Monitoring	AHR
• Surface Water Monitoring	AHR
• Spring & Seep Monitoring	AHR
• Mine Water Discharge Monitoring	AHR
• Mine Inflow Study	AHR
• Water Consumption Records	AHR
Well Permits	OK, wells not permanent

BLASTING RECORDS

Blasting Publication	NA
Blasting Records (3 years)	NA
ATFE Explosives Permit	Exp 9/1/2023
Blasting Variances	NA
Pre-Blast Surveys	NA

ADDITIONAL RECORDS (specify)

Colo. 811-02 CO Radioactive Materials license	Exp. 10/31/23
Stormwater Annual CLR permit	Feb 2022 (due 2/15/2023)

Number of Partial Inspection this Fiscal Year: 2Number of Complete Inspections this Fiscal Year: 1

• Final Certification	NA	County special use permit	Exp. 8/2024
Coal Processing Waste Banks	4Q2022	PP2014-035	
Haul Road Certifications	***OK		
Access Road Certifications	NA		

COMMENTS:

* – Air Emissions Permit is issued dated January 31st 2019 and expires in 5 years from date (2024) APEN received by the CDPHE.

** - Discharge Permits – COG850051 exp 6/30/2013, COG850054 exp 6/30/2013, COG0042161 exp 6/30/2012, CO0027154 exp 8/31/2012, CO0036684 exp 4/30/2012 New permits (2022 updates) comments in CDPHE review

***A majority of larger records documents are kept digitally in a publically available computer at the site office.

Number of Partial Inspection this Fiscal Year: 2

Number of Complete Inspections this Fiscal Year: 1