



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>

Fri, Jul 7, 2023 at 2:10
PM

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

Miranda,

Please see the attached inspection report for Foidel Creek Mine (C-1982-056) from the June complete inspection. Let me know if you have any questions or concerns.

Kind regards,
Hunter Ridley
Environmental Protection Specialist



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

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Foidel_June_CC.pdf
7952K



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: Miranda Kawcak
Operator Representative Signature: (Field Issuance Only) Miranda Kawcak, Kevin Copeland, Mike Howard	

INSPECTION INFORMATION

Inspection Start Date: June 28, 2023 Inspection Start Time: 08:45 Inspection End Date: June 28, 2023 Inspection End Time: 13:30		Inspection Type: Coal Complete Inspection Inspection Reason: Normal I&E Program Weather: Clear	
Joint Inspection Agency:		Joint Inspection Contacts:	
Post Inspection Agency: None		Post Inspection Contacts:	
Inspector(s): Hunter Ridley	Inspector's Signature: 		Signature Date: 7/7/2023

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

Y - Backfill & Grading

R - Excess Spoil and Dev. Waste

N - Explosives

R - Fish & Wildlife

R - Hydrologic Balance

R - Gen. Compliance With Mine Plan

N - Other

N - Processing Waste

R - Roads

R - Reclamation Success

R - Revegetation

N - Subsidence

N - Slides and Other Damage

N - 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). Kevin Copeland and Mike Howard of TC accompanied an initial portion of the inspection while Miranda Kawcak of TC accompanied the rest. **Please address the Bold items below.**

MR322 was issued by the Division on 10/25/2022 and approved the relocation of an internal road. This new road is set to be constructed in 2023 in the 6MN area. Hay bales put in place as a temporary remedy to the winter season fog issues in this area are still in place (Photo 7). RN-08 is currently in progress with the Division and has been extended to a decision date of July 21, 2023.

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. The missing phone number information on mine signs for HG Loadout (see related inspection reports dated March 30, 2023, April 25, 2023 and May 2, 2023) has been amended.

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):

Water trucks were seen running in the main facilities area. Haul roads across the site are well maintained. The Operator discussed the possibility of an incoming MR which would create a new haul road that extends from the

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foot of Pond D up to the refuse pile. The new road would connect with the refuse pile haul road currently in place and create a loop. This would ease wear and tear on haul trucks which currently have to make a tight turn near the refuse conveyor to load up on refuse material (Photo 37).

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. All culverts appear to be functioning. Continue to clean out culverts when vegetation and sediment hinders function. Ponds and discharge points are seen in Photos 11, 15 – 17, 19 – 20, 24 – 29, and 31.

Location	Holding water	discharging	source	goes to	notes
6MN Reservoir	Y	Y	mine water	Recirculates mine water. Does not have a discharge pt.	
6MN ventilation shaft sed pond	Y	Y	pad runoff		Usually not flowing
6MN wetlands	Y	N	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	Y	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
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	Y	mine, sumps, diversion dich	Pond D	

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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	Y	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

The stoker coal loadout facility has not yet been sealed following a note made in a DRMS inspection report last fall which pointed out that the wash plant facility was leaking water behind the building (Photos 21 - 23). The building was scheduled for sealing in the spring of this year, but difficulty in finding a contractor has pushed back this date. DRMS encouraged the operator to make this task a priority. **Please supply the Division with a firm date of completion when one becomes available.** In the meantime, the Operator has been using straw bales (Photo 23) and a silt fence, which is in need of repair, behind the building to protect Foidel Creek from drainage and sediment from this facility. The filter fabric between the fence's posts has fallen and is now laying on the ground instead of being attached to the poles (Photo 38). **This repair has been listed as an ongoing maintenance item.** After sealing the building, water from the facility will continue to report to Pond E through a pump system to be installed behind the stoker loadout building.

All ponds across the site are scheduled for cleanup in July of this year. This gives the ground around ponds ample time to dry out from the wet spring conditions so that machinery can move efficiently throughout an area when performing pond cleanout.

Waste water treatment ponds appear to be functioning properly. These ponds report to groundwater at the pond site itself and report to surface water at the Emerald Springs pump house (Photo 16).

Berms near the main facilities storage area are well maintained to prevent runoff to Ditch E below which runs to Pond E (Photo 18).

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The main train loadout facility which deposits coal directly into train cars is located near Pond C. This area is currently under review by TC and CDPHE. 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 may need to build new rail containment building to eliminate any runoff from this facility. TC is currently working with town of Hayden and CDPHE to address the situation. The appropriate revisions will be submitted to the Division in the event that a new plan for this area is finalized.

6MN and Passive Treatment System Project Areas

The Passive Treatment System Project Area (PTSPA) was accessible for the first time this year after an unusually wet spring (Photo 10 and 13). Located in the northern portion of the site's permitted acreage and just west of the 6 Main North Ventilation Shaft, the PTSPA is an experimental system which uses a system of rocks and wetland vegetation to filter mine water. While the systems functionality is being tested and adjusted, the system is currently a closed loop. Once functionality is at an approved level, the system will work to remove mine water from underground reservoirs, filter it, and discharge the cleaned water to nearby Foidel Creek. The million gallon tank in the 6MN area (Photo 9) holds a majority of mine water while the system is turned off. The system is completely fenced off to protect from cattle which graze in nearby areas. The system is made up of four ponds, each sitting at a slightly lower elevation than the last. Water is pumped up from underground reservoirs and into the 6MN reservoir (Photos 11 and 14) located to the southwest of the PTSPA. Water is then piped from the 6MN Reservoir up to the PTSPA where it enters the first pond. As water flows downhill, Iron (Fe) and sulfites are captured by thick wetland vegetation while limestone rock in-between each pond reduces oxidation. Each pond is designed with deep ends on both sides and a shallower portion in the middle where vegetation grows (Photo 12). Gates within each pond allow the water level to be adjusted based on the size of flow. The system was turned off at the time of inspection, but was scheduled to be turned on in the next week. A small weather station has been set up near the 6MN reservoir and is utilized by an academic research group to collect climate data (Photo 14).

Western Boreholes

All borehole area sites were in good condition with proper storage of materials, fencing, topsoil piles, and drainage. The 16 L is a utility borehole which is not frequently utilized as the Wadge Seam in this area has been mostly mined out (Photos 3 and 4). 18 LT is a dewatering borehole and is in frequent use (Photo 5).

TOPSOIL – Rule 4.06

Topsoil piles around the entire site were checked for proper vegetation, stability, and appropriate markers. While all piles are properly vegetated and free of disturbance (Photos 2 and 8), some have missing or broken signs. Please ensure that all piles remain properly marked with signage at all times and broken signage is replaced in a timely manner. Topsoil piles were all appropriately reseeded approximately 1 month ago.

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

Compaction of refuse material piled throughout the winter has begun (Photos 33 - 36). Drainage is functioning properly in this area with no standing water atop the pit. 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

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into Pond D. Clay overburden material is then taken from the 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. The end of the access road was being filled in at the time of inspection (Photo 6). This reclaimed area is scheduled to be seeded in the fall of 2023.

Evidence of weed spraying was seen in the main facilities area.

Cattle grazing occurs annually across several locations of the Foidel Creek Mine permit area. This begins at the start of summer each year. This year, grazing began in early June. Fences and cattle guards are consistently maintained during summer months to keep cattle from disturbing topsoil piles and other sensitive areas throughout the site.

PROTECTION OF FISH, WILDLIFE, AND RELATED ENVIRONMENTAL VALUES – Rule 4.18:

Pronghorn were seen during the inspection in the western half of the site, near boreholes 16, 17, and 18. A herd of Elk was also seen to the south of the Run-of-Mine (ROM) pile around Pond T.

GENERAL MINE PLAN COMPLIANCE:

A small pile of coal has been spilled at the stoker loadout facility (Photo 22), please clean up the coal that has been spilled and ensure that the berm is adequate height to contain spills.

The three bunkers containing explosive materials for the mining operation are being maintained and inventoried on a monthly basis as required (Photo 32).

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

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

PHOTOGRAPHS



Photo 1: Mine sign is located at the entrance to the main facilities off Highway 40.

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Photo 2: Example of an appropriately marked and vegetated topsoil pile, located at the 17 Left TUF borehole.



Photo 3: 16 LT utility borehole fencing and topsoil pile.

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Photo 4: 16 LT utility borehole.



Photo 5: 18 LT Dewatering borehole

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Photo 6: 13 Left Outby Gate Road Utility Borehole is nearly fully reclaimed. Photos shows access road being filled in.



Photo 7: NW Mains Ventilation Shaft, area will be the site of new haul road construction as per MR322.

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Photo 8: Topsoil pile and storage in the 6 Main North Vent Shaft area.



Photo 9: View east of the million gallon tank which holds mine water for used underground in dust supression. Located in the 6MN area.

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Photo 10: Passive Treatment System Project Area, located west of the 6MN Vent Shaft area.



Photo 11: View northeast of the 6 MN Reservoir (background) and livestock pond (foreground) in the 6MN area.

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Photo 12: View north of the first pond of the Passive Treatment System Project Area, pond inlet is located to the west.



Photo 13: View north of the three other ponds within the Passive Treatment System Project Area.

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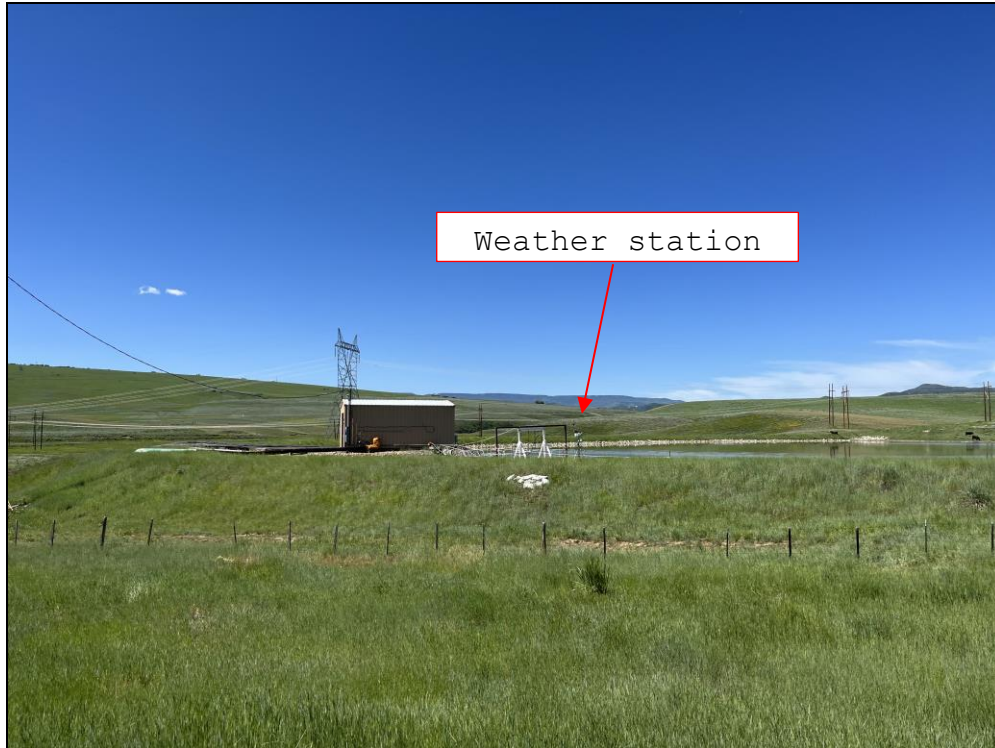


Photo 14: View west of the 6MN Reservoir.



Photo 15: View northeast of Pond G.

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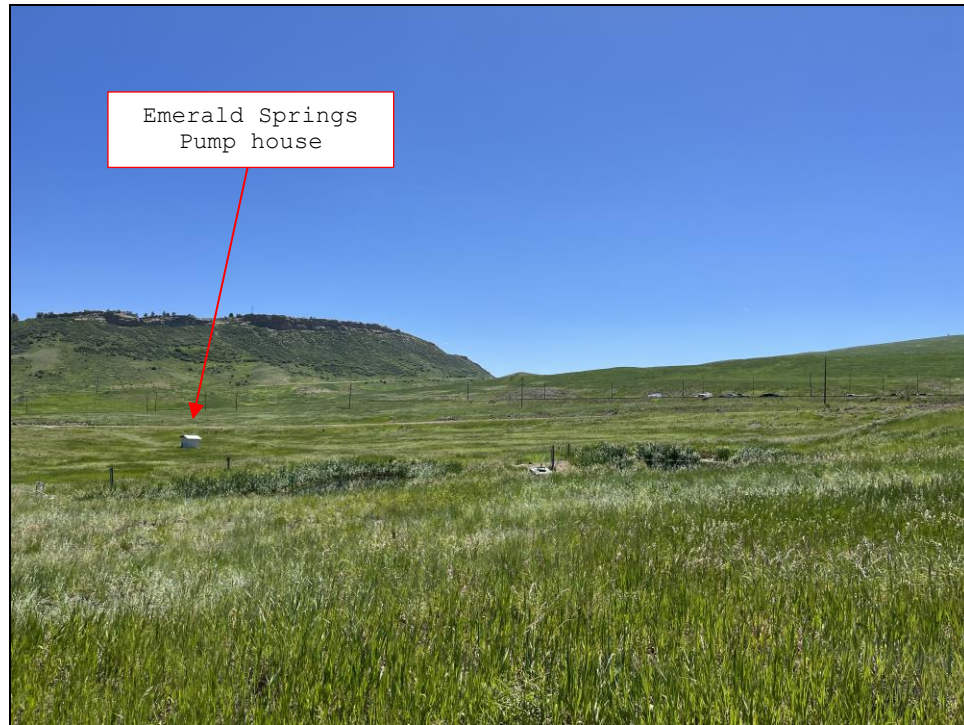


Photo 16: View east of wastewater treatment ponds, report to both surface and groundwater through the Emerald Springs pump house to the east.



Photo 17: View southeast of Pond F and culvert.

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Photo 18: View north of a storage area, berms around this area are being maintained to prevent sediment deposit into the ditch below.



Photo 19: Shows the northern end of Pond E, is scheduled to be cleaned this season.

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Photo 20: Shows the southern end of Pond E, is scheduled to be cleaned this season.



Photo 21: Shows the back of the Stoker Coal Loadout facility, sediment from this side of the building is still eroding down the hill.

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Photo 22: A small spill of coal is noted in front of the stoker building.



Photo 23: Back of the coal loadout facility, still awaiting construction, straw bales control erosion.

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Photo 24: Weir which discharge from Pond D flows through.



Photo 25: Pond D discharge culvert.

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Photo 26: View north of Foidel Creek buffer zone, area is frequently cleared of debris brought in by beavers.



Photo 27: Discharge culvert into Foidel Creek is clear of vegetation.

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Photo 28: Pond C discharge location.



Photo 29: Discharge culvert for Pond B.

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Photo 30: View northeast of ROM coal storage area from above.



Photo 31: Pond T, has been dry for several years.

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Photo 32: View east of three explosives storage locations, inventory is taken monthly of each building.



Photo 33: View south of the recently compacted refuse pile area.

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Photo 34: View southeast of compacted refuse pile.



Photo 35: View north of refuse pile, compaction has begun this season.

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Photo 36: View north of the dozer path up to the refuse pile.



Photo 37: View south of refuse pile from the foot of Pond D, the site of a proposed future MR which will construct a haul road up to the refuse pile.

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Photo 38: Inspection photo from a previous inspection report dated 5/2/2023 which shows the silt fence behind the stoker loadout building which is in need of repair.

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AVAILABILITY OF RECORDS**PERMIT RECORDS**

DRMS Permit	Exp 5/23/2023
Permit Application w/Revisions	RN-08 (in progress) PR12
Findings Document	***RN7
Insurance Certificate	Exp 08/01/2023
Bond Document	***\$10,862,794
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)

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• 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.

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