



December 9, 2022

Mr. Zach Trujillo
Environmental Protection Specialist
Colorado Division of Reclamation, Mining & Safety
Department of Natural Resources
1313 Sherman Street, Room 215
Denver, CO 80203

RE: Colowyo Coal Mine
Permit No. C-1981-019
Valley Fill Monitoring Certifications
Fourth Quarter 2022

Dear Mr. Trujillo:

Tri-State Generation and Transmission Association Inc. (Tri-State), is the parent company to Axial Basin Coal Company, which is the general partner to Colowyo Coal Company L.P. (Colowyo). Therefore, Tri-State on behalf of Colowyo is submitting the South Taylor Fill Construction Certifications for the fourth quarter of 2022.

If you should have any additional questions regarding the South Taylor Fill certifications, please feel free to contact Tony Tennyson at (970) 824-1232.

Sincerely,

DocuSigned by:
A blue ink signature of Chris Gilbreath.
D250C711D0BF450...

Chris Gilbreath
Senior Manager
Remediation and Reclamation

CG:TT:der

Enclosure

cc: Tony Tennyson (via email)
File: CF 24.20.03
G471-11.3(21)h-4

South Taylor Fill Inspection Certification

On December 6, 2022, I inspected the South Taylor Fill areas, which includes the East Taylor Fill and the West Taylor Fill, identified on Map 23 and Map 45 of the approved permit. The purpose of this inspection was to observe the status of the fill placement. This inspection is necessary to satisfy the requirements of CDRMS Rule 4.09.1(1)(c) and Rule 4.09.1(11). Weather conditions at the time of inspection were approximately 30°F and overcast.

West Taylor Fill with A-A' and B-B' Underdrain Area The East Tributary of the West Taylor fill has rip-rap installed up to the 7840' elevation. The West Tributary of the West Taylor fill has rip-rap installed up to the 7820' elevation.

Six survey monuments were established and a baseline location survey on each one was performed on May 21st 2021. A quarterly comparison survey was performed on October 19th 2022. The survey showed no significant change from baseline. Tables of the survey results are attached below.

The West Taylor Fill underdrain was flowing at the time of inspection.

No structural weakness, signs of instability, or other hazards were noted at the time of inspection.

East Taylor Fill with C-C' Underdrain Area: Reclamation activity including truck/excavator removal of material from the top of the fill area as well as dozer's cleaning various benches as the top surface is lowered has taken place within the East Taylor fill during this quarter.

No structural weakness, signs of instability, or other hazards were noted at the time of inspection.

Design requirements for the spoil pile are addressed in Volume 13, Exhibit 21, Item 1, Introductory Letter. Inspection requirements during construction are further detailed in Volume 12, Section 4.09.

I am a Registered Professional Engineer in the State of Colorado. Being familiar with the Colowyo operation, and relying on the information provided to me by Colowyo Personnel, the construction activities related to the West and East Taylor Fill are in conformance, to the best of my knowledge and experience, as specified in the Introductory pages and the associated report found in Volume 13, Exhibit 21, Item 1, and other applicable requirements of the approved permit documents, a portion of CDRMS Permit C-1981-019.



INSPECTION REPORT ~ SOUTH TAYLOR FILL
(Including Both the East Taylor and West Taylor Fill Segments)

INDICATE QUARTER → 1ST ☐ 2ND ☐ 3RD ☐ 4TH ☒ 2022
YEAR

* ALL QUARTERS NEED TO BE CERTIFIED *

THE FOLLOWING ITEMS ARE TO BE INSPECTED AND REPORTED AS NOTED:

- 1) Has any significant change been noted in the survey monuments on the fill?
No X Yes _____
If yes, explain: _____
Date of Survey: 10/19/22
Reviewed By: Trevor Ragsdale

- 2) Has any significant change been noted in the water level found in the fill monitoring well?
No NA Yes _____ Measured Level NA If yes, explain: _____
Date of Measurement: NA
Measured By: NA

- 3) Has there been any evidence of surficial slope failure on the face of the fill?
No X Yes _____
If yes, explain: _____
Date of P.E. Inspection: 12/6/22
Inspected By: Trevor Ragsdale, Thomas Fry

- 4) Has there been any formation of springs or seeps on the face of the fill?
No X Yes _____
If yes, explain: _____
Date of Inspection: 12/6/22
Inspected By: Trevor Ragsdale, Thomas Fry



I am a Registered Professional Engineer in the State of Colorado. Being familiar with the Colowyo operation and relying on the information provided to me by Colowyo Personnel, the West and East Taylor Fill are observed to be stable, at the time of inspection. Construction activities related to the West and East Taylor Fill are in conformance, to the best of my knowledge and experience, as specified in the Introductory pages and the associated report found in Volume 13, Exhibit 21, Item 1, and other applicable requirements of the approved permit documents, a portion of CDRMS Permit C-1981-019.

West Taylor FILL - 7590 Mid MONUMENT

	DATE	ELEV.	NORTHING	EASTING	DeltaH
BASELINE SURVEY	05/21/21	7591.73	337028.63	1344201.88	
Difference	06/15/21	-0.007	-0.005	0.035	0.035
Difference	09/20/21	0.006	-0.002	-0.006	0.006
Difference	10/07/21	0.004	0.006	-0.012	0.013
Difference	03/25/22	0.005	0.006	0.017	0.018
Difference	06/10/22	0.006	0.005	0.018	0.019
Difference	08/10/22	0.002	0.004	0.004	0.006
Difference	10/19/22	0.000	0.004	-0.009	0.010

West Taylor FILL - 7670 East MONUMENT

	DATE	ELEV.	NORTHING	EASTING	DeltaH
BASELINE SURVEY	05/21/21	7669.07	336769.27	1344339.66	
Difference	06/15/21	-0.015	0.008	0.042	0.043
Difference	09/20/21	-0.009	0.011	-0.015	0.019
Difference	10/07/21	-0.003	0.022	-0.031	0.038
Difference	03/25/22	0.007	0.028	0.003	0.028
Difference	06/10/22	-0.009	0.024	0.009	0.026
Difference	08/10/22	-0.011	0.031	-0.016	0.035
Difference	10/19/22	-0.019	0.026	-0.030	0.040

West Taylor FILL - 7670 West MONUMENT

	DATE	ELEV.	NORTHING	EASTING	DeltaH
BASELINE SURVEY	05/21/21	7671.33	336791.55	1344032.85	
Difference	06/15/21	-0.014	-0.012	0.038	0.040
Difference	09/20/21	-0.005	-0.003	-0.002	0.004
Difference	10/07/21	-0.004	0.009	-0.012	0.015
Difference	03/25/22	0.000	0.013	0.018	0.022
Difference	06/10/22	-0.007	0.009	0.013	0.016
Difference	08/10/22	-0.011	0.013	0.009	0.016
Difference	10/19/22	-0.021	0.006	-0.003	0.007

West Taylor FILL - 7730 Mid MONUMENT

	DATE	ELEV.	NORTHING	EASTING	DeltaH
BASELINE SURVEY	05/21/21	7728.08	336570.24	1344181.69	
Difference	06/15/21	-0.020	0.001	0.055	0.055
Difference	09/20/21	-0.040	0.007	-0.001	0.007
Difference	10/07/21	-0.036	0.023	-0.013	0.026
Difference	03/25/22	-0.063	0.027	0.047	0.054
Difference	06/10/22	-0.080	0.031	0.059	0.067
Difference	08/10/22	-0.101	0.038	0.035	0.052
Difference	10/19/22	-0.115	0.035	0.026	0.044

West Taylor FILL - 7800 EAST MONUMENT

	DATE	ELEV.	NORTHING	EASTING	DeltaH
BASELINE SURVEY	05/21/21	7803.62	336294.60	1344496.79	
Difference	06/15/21	-0.030	0.013	0.064	0.065
Difference	09/20/21	-0.059	0.005	-0.018	0.019
Difference	10/07/21	-0.046	0.023	-0.046	0.051
Difference	03/25/22	-0.062	0.044	-0.013	0.046
Difference	06/10/22	-0.118	0.037	0.005	0.037
Difference	08/10/22	-0.141	0.047	-0.019	0.051
Difference	10/19/22	-0.167	0.042	-0.046	0.062

West Taylor FILL - 7800 West MONUMENT

	DATE	ELEV.	NORTHING	EASTING	DeltaH
BASELINE SURVEY	05/21/21	7803.60	336342.73	1343942.01	
Difference	06/15/21	-0.020	-0.001	0.050	0.050
Difference	09/20/21	-0.031	0.018	-0.017	0.025
Difference	10/07/21	-0.019	0.038	-0.028	0.047
Difference	03/25/22	-0.032	0.035	0.042	0.055
Difference	06/10/22	-0.044	0.034	0.043	0.055
Difference	08/10/22	-0.059	0.050	0.024	0.055
Difference	10/19/22	-0.078	0.048	0.014	0.050