

STATE OF
COLORADO

Musick - DNR, Jason <jason.musick@state.co.us>

Yoast Pond Reports

1 message

Watterson, Brian <BWatterson@peabodyenergy.com>

Wed, Jan 25, 2017 at 12:34 PM

To: "Musick - DNR, Jason <jason.musick@state.co.us> (jason.musick@state.co.us)" <jason.musick@state.co.us>

-----Original Message-----

From: twentymile@peabodyenergy.com [mailto:twentymile@peabodyenergy.com]

Sent: Wednesday, January 25, 2017 12:50 PM

To: Watterson, Brian

Subject: Scanned from Engineering Trailer

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492K



Seneca Coal Company
Peabody Energy
PO Box 670
36600 Routt County Road 27
Hayden, CO 81639

January 23, 2017

Janet Binns
Colorado Division of Reclamation, Mining and Safety
1313 Sherman Street
Denver, CO 80203

RE: Yoast Mine, Permit C-94-082, 4Q16 IIR

Dear Janet:

In accordance with Rule 4.05.9(17), please find enclosed the Yoast Mine Impoundment Inspection Report (IIR) and Impoundment Inspection Log (IIL) for Ponds: 010, 011, 011A, 012, 012A, 013, 014 and Stock Tank ST-1.

No maintenance is required at this time. Please contact me with any comments and/or questions.

Sincerely,

Brian Watterson
Geologist

TNS/*tns*
Enclosure: Yoast IIR

Mining Area Date Inspected Impoundment NPDES ID No Owner's Rep	Yoast Mine(Seneca Coal Co)	Facility Configuration Date Last Inspected Pond Location Site Location Inspector	Cross-Valley Pond	Quarterly Impoundment Inspection Form
	10/4/2016		8/1/2016	
	Pond# 010		NW¼ NE¼, Sec. 8, T5N, R87W	
	CO-0000221 D.P. 010		8.5 mi SE of Hayden, CO	
	Brian Watterson		Jason Herden	

Mark or Write in Appropriate Response:			
FEATURE	PROBLEM		COMMENTS
	YES (Above)	NO (Below)	
GENERAL			
Water Level (above or below principal spillway)	X		water level 0.06 feet above spillway
Existing Embankment Freeboard (10.1 ft)	10.1		
Outflow (gpm)	X		71.43
EROSION			
Rills & Gullies on Embankment		X	
Wave Erosion		X	
Spillway Erosion		X	
Burrows		X	
Other		X	
STRUCTURAL			
Differential Settling		X	
Cracks or Slides		X	
Seepage		X	
Other		X	
STRUCTURES			
Principal Spillway			
Clogged Orifice		X	Intake starting to rust out but still functional
Clogged or Damaged Culvert	X		
Damaged Headgate		NA	
Emergency Spillway			
Erosion		X	
Riprap		X	
Clogged or Damaged Culvert		X	
Other		X	
MAINTENANCE			
Maintenance Required	X		See comment above
Maintenance Performed		X	
Additional Comments		X	

Mining Area	Yoast Mine(Seneca Coal Co)	Facility Configuration	Cross-Vally Pond	Quarterly Impoundment Inspection Form
Date Inspected	10/5/2016	Date Last Inspected	8/1/2016	
Impoundment	Pond #011	Pond Location	NW¼ SW¼, Sec. 16, T5N, R87W	
NPDES ID No	CO-0000221 D.P.011	Site Location	8.5 mi SE of Hayden, CO	
Owner's Rep	Brian Watterson	Inspector	Jason Herden	

Mark or Write in Appropriate Response:			
FEATURE	PROBLEM		COMMENTS
	YES (Above)	NO (Below)	
GENERAL			
Water Level (above or below principal spillway)		X	Water level 1.9 feet below spillway
Existing Embankment Freeboard (5.1 ft)	5.2		
Outflow (gpm)		X	
EROSION			
Rills & Gullies on Embankment		X	
Wave Erosion		X	
Spillway Erosion		X	
Burrows		X	
Other		X	
STRUCTURAL			
Differential Settling		X	
Cracks or Slides		X	
Seepage		X	
Other		X	
STRUCTURES			
Principal Spillway			
Clogged Orifice		X	
Clogged or Damaged Culvert		X	
Damaged Headgate		NA	
Emergency Spillway			
Erosion		X	
Riprap		X	
Clogged or Damaged Culvert		X	
Other		X	
MAINTENACE			
Maintenance Required		X	
Maintenance Performed		X	
Additional Comments		X	

Mining Area Date Inspected Impoundment NPDES ID No Owner's Rep	Yoast Mine(Seneca Coal Co)	Facility Configuration Date Last Inspected Pond Location Site Location Inspector	Cross-Vally Pond	Quarterly Impoundment Inspection Form
	10/4/2016		8/3/2016	
	Pond #011A		SW¼ NW¼, Sec. 16, T5N, R87W	
	N/A		8.5 mi SE of Hayden, CO	
	Brian Watterson		Jason Herden	

Mark or Write in Appropriate Response:			COMMENTS
FEATURE	PROBLEM		
	YES (Above)	NO (Below)	
GENERAL			
Water Level (above or below principal spillway)		X	Water level 2.1 feet below spillway
Existing Embankment Freeboard (4.6 ft)	5.3		
Outflow (gpm)		X	
EROSION			
Rills & Gullies on Embankment		X	
Wave Erosion		X	
Spillway Erosion		X	
Burrows		X	
Other		X	
STRUCTURAL			
Differential Settling		X	
Cracks or Slides		X	
Seepage		X	
Other		X	
STRUCTURES			
Principal Spillway			
Clogged Orifice		X	
Clogged or Damaged Culvert		X	
Damaged Headgate		NA	
Emergency Spillway			
Erosion		X	
Riprap		X	
Clogged or Damaged Culvert		X	
Other		X	
MAINTENANCE			
Maintenance Required		X	
Maintenance Performed		X	
Additional Comments		X	

Top of Sediment Storage = 2.1 feet below top of pipe

Mining Area	Yoast Mine(Seneca Coal Co)	Facility Configuration	Cross-Vally Pond	Quarterly Impoundment Inspection Form
Date Inspected	10/3/2016	Date Last Inspected	8/1/2016	
Impoundment	Pond #012	Pond Location	NE¼ NW¼, Sec. 19, T5N, R87W	
NPDES ID No	CO-0000221 D.P. 012	Site Location	8.5 mi SE of Hayden, CO	
Owner's Rep	Brian Watterson	Inspector	Jason Herden	

Mark or Write in Appropriate Response:			COMMENTS
FEATURE	PROBLEM		
	YES (Above)	NO (Below)	
GENERAL			
Water Level (above or below principal spillway)	X		Water level 0.1 feet above spillway
Existing Embankment Freeboard (9.0 ft)	9		
Outflow (gpm)	X		67.57
EROSION			
Rills & Gullies on Embankment		X	
Wave Erosion		X	
Spillway Erosion		X	
Burrows		X	
Other		X	
STRUCTURAL			
Differential Settling		X	
Cracks or Slides		X	
Seepage		X	
Other		X	
STRUCTURES			
Principal Spillway			
Clogged Orifice		X	
Clogged or Damaged Culvert		X	
Damaged Headgate		NA	
Emergency Spillway			
Erosion		X	
Riprap		X	
Clogged or Damaged Culvert		X	
Other		X	
MAINTENANCE			
Maintenance Required	X		Erosion behind and underneath flume
Maintenance Performed		X	
Additional Comments		X	

Mining Area	Yoast Mine(Seneca Coal Co)	Facility Configuration	Cross-Vally Pond	Quarterly Impoundment Inspection Form
Date Inspected	10/3/2016	Date Last Inspected	8/1/2016	
Impoundment	Pond #012A	Pond Location	NE¼ NW¼, Sec. 19, T5N, R87W	
NPDES ID No	N/A	Site Location	8.5 mi SE of Hayden, CO	
Owner's Rep	Brian Watterson	Inspector	Jason Herden	
Mark or Write in Appropriate Response:				
FEATURE	PROBLEM		COMMENTS	
	YES (Above)	NO (Below)		
GENERAL				
Water Level (above or below principal spillway)		X	Water level 1.3 feet below spillway	
Existing Embankment Freeboard (4.6 ft)	6.2			
Outflow (gpm)		X		
EROSION				
Rills & Gullies on Embankment		X		
Wave Erosion		X		
Spillway Erosion		X		
Burrows		X		
Other		X		
STRUCTURAL				
Differential Settling		X		
Cracks or Slides		X		
Seepage		X		
Other		X		
STRUCTURES				
Principal Spillway				
Clogged Orifice		X		
Clogged or Damaged Culvert		X		
Damaged Headgate		NA		
Emergency Spillway				
Erosion		X		
Riprap		X		
Clogged or Damaged Culvert		X		
Other		X		
MAINTENANCE				
Maintenance Required		X		
Maintenance Performed		X		
Additional Comments		X		

Mining Area Date Inspected Impoundment NPDES ID No Owner's Rep	Yoast Mine(Seneca Coal Co)	Facility Configuration Date Last Inspected Pond Location Site Location Inspector	Cross-Vally Pond	Quarterly Impoundment Inspection Form
	10/3/2016		8/1/2016	
	Pond #013		SE¼ NW¼, Sec. 19, T5N, R87W	
	CO-0000221 D.P. 013		8.5 mi SE of Hayden, CO	
	Brian Watterson		Jason Herden	

Mark or Write in Appropriate Response:			
FEATURE	PROBLEM		COMMENTS
	YES (Above)	NO (Below)	
GENERAL			
Water Level (above or below principal spillway)		X	water level 1.3 feet below spillway
Existing Embankment Freeboard (4.0 ft)	4		
Outflow (gpm)		X	
EROSION			
Rills & Gullies on Embankment		X	
Wave Erosion		X	
Spillway Erosion		X	
Burrows		X	
Other		X	
STRUCTURAL			
Differential Settling		X	
Cracks or Slides		X	
Seepage		X	
Other		X	
STRUCTURES			
Principal Spillway			
Clogged Orifice		X	
Clogged or Damaged Culvert		X	
Damaged Headgate		NA	
Emergency Spillway			
Erosion		X	
Riprap		X	
Clogged or Damaged Culvert		X	
Other		X	
MAINTENANCE			
Maintenance Required		X	
Maintenance Performed		X	
Additional Comments		X	

Mining Area Date Inspected Impoundment NPDES ID No Owner's Rep	Yoast Mine(Seneca Coal Co)	Facility Configuration Date Last Inspected Pond Location Site Location Inspector	Cross-Vally Pond	Quarterly Impoundment Inspection Form
	10/3/2016		8/1/2016	
	Pond #014		NE¼ SW¼, Sec. 19, T5N, R87W	
	CO-0000221 D.P. 014		8.5 mi SE of Hayden, CO	
	Brian Watterson		Jason Herden	
Mark or Write in Appropriate Response:				
FEATURE	PROBLEM		COMMENTS	
	YES (Above)	NO (Below)		
GENERAL				
Water Level (above or below principal spillway)		X	water level 1.7 feet below spillway	
Existing Embankment Freeboard (6.8 ft)	6.8			
Outflow (gpm)		X		
EROSION				
Rills & Gullies on Embankment		X		
Wave Erosion		X		
Spillway Erosion		X		
Burrows		X		
Other		X		
STRUCTURAL				
Differential Settling		X		
Cracks or Slides		X		
Seepage		X		
Other		X		
STRUCTURES				
Principal Spillway				
Clogged Orifice		X		
Clogged or Damaged Culvert		X		
Damaged Headgate		NA		
Emergency Spillway				
Erosion		X		
Riprap		X		
Clogged or Damaged Culvert		X		
Other		X		
MAINTENANCE				
Maintenance Required		X		
Maintenance Performed		X		
Additional Comments		X		

Mining Area	Yeast Mine(Seneca Coal Co)	Facility Configuration	Stockpond	Quarterly Impoundment Inspection Form
Date Inspected	10/3/2016	Date Last Inspected	8/3/2016	
Impoundment	ST-1	Pond Location	SW¼ Sec. 20, T5N, R87W	
NPDES ID No	N/A	Site Location	8.5 mi SE of Hayden, CO	
Owner's Rep	Brian Watterson	Inspector	Jason Herden	

Mark or Write in Appropriate Response:			
FEATURE	PROBLEM		COMMENTS
	YES (Above)	NO (Below)	
GENERAL			
Water Level (above or below principal spillway)		X	Water level 2.4 feet below spillway
EROSION			
Rills & Gullies on Embankment		X	
Wave Erosion		X	
Spillway Erosion		X	
Burrows		X	
Other		X	
STRUCTURAL			
Differential Settling		X	
Cracks or Slides		X	
Seepage		X	
Other		X	
STRUCTURES			
Principal Spillway			
Clogged Orifice		NA	
Clogged or Damaged Culvert		NA	
Damaged Headgate		NA	
Emergency Spillway			
Erosion		X	
Riprap		X	
Clogged or Damaged Culvert		NA	
Other		X	
MAINTENANCE			
Maintenance Required		X	
Maintenance Performed		X	
Additional Comments		X	

IMPOUNDMENT INSPECTION LOG

JOB DATA

JOB NAME: PEC Hydrologic Support Services	CLIENT: Peabody	LOCATION: Routt County, CO
JOB(s): 2016-037 T1-SCC, T2-PSCM		

FLOW DATA

SITE ID	COMPANY	MINE	DATE	TIME	WATER LEVEL (FT)	OUTFLOW (GPM)	OBSERVATIONS	MAINTENANCE (Y/N)
002	Sage Creek	Sage Creek	10-3-16	13:00	0.28	92.9		N
003	Sage Creek	Sage Creek	10-3-16	12:30	0.12	8.3	Some burrows	N
004	Sage Creek	Sage Creek	10-4-16	07:30	0.13	36.1		N
Lower Sump	Sage Creek	Sage Creek	10-3-16	13:15	0.05	238.09		N
PECOCO	Sage Creek	Sage Creek	10-3-16	14:20	0.05	142		N
Portal Sump 1	Sage Creek	Sage Creek	10-3-16	13:40	0.02	4		N
Portal Sump 2	Sage Creek	Sage Creek	10-3-16	13:50	—	—		N
Spill Control 2	Sage Creek	Sage Creek	10-3-16	13:25	—	—	Dry	N
Truck Wash	Sage Creek	Sage Creek	10-3-16	12:45	—	—	Dry	N
Upper Sump	Sage Creek	Sage Creek	10-3-16	14:10	0.05	134		N
001	Seneca	Hayden Gulch	10-3-16	15:00	-2.3	—	No Flow	N
002	Seneca	Hayden Gulch	10-3-16	15:15	—	—	Dry	N
005	Seneca	Seneca II West	10-3-16	15:30	-1.6	—	No Flow	N
006	Seneca	Seneca II West	10-3-16	16:55	0.05	99.01	Big slyffon S. side, not affecting	Y
009	Seneca	Seneca II West	10-3-16	14:00	-2.5'	—	No Flow, possible seepage	N
015	Seneca	Seneca II West	10-4-16	14:40	0.06	6		N
016	Seneca	Seneca II West	10-4-16	11:15	0.03	28.6	placed bentonite under Flume	N
017	Seneca	Seneca II West	10-4-16	11:45	0.05	14.6	slyffon N. side armour is working	N
T-1	Seneca	Seneca II West	10-3-16	17:10	-1.2	—	No Flow, Dam removed	N
T-18	Seneca	Seneca II West	10-3-16	16:20	—	—	Dry	N
T-2	Seneca	Seneca II West	10-4-16	13:10	-2.4	—	No Flow	N
T-20	Seneca	Seneca II West	10-3-16	16:05	—	—	Dry	N
T-22	Seneca	Seneca II West	10-3-16	15:45	-0.8	—	No Flow	N
T-24	Seneca	Seneca II West	10-3-16	16:35	—	—	Dry	N
T-25	Seneca	Seneca II West	10-4-16	10:45	—	—	runoff control structure	N
T-26	Seneca	Seneca II West	10-4-16	12:20	-2.5	—	No Flow	N

008

10-4-16 08:30 0.09 34.43

N

