



Seneca Coal Company

Peabody Energy

PO Box 670

Hayden, CO 81639

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January 2, 2020

Robin Reilley  
Colorado Division of Reclamation, Mining and Safety  
1313 Sherman Street  
Denver, CO 80203

**RE: Yoast Mine, Permit C-94-082, 4Q19 IIR**

Dear Robin:

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: Pond #010, Pond #011, Pond #011A, Pond #012, Pond #012A, Pond #013, Pond #014 and Stock Tank ST-1. Please contact me with any comments and/or questions.

Sincerely,

Miranda Kawcak  
Environmental Manager

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
	10/23/2019		9/16/2019	
	Pond #010		NW¼ NE¼, Sec. 8, T5N, R87W	
	CO-0000221 D.P. 010		8.5 mi SE of Hayden, CO	
	Miranda Kawcak		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 0.1 feet above spillway
Existing Embankment Freeboard ( 10.1 ft)		10.1		
Outflow (gpm)		X		7.2
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	Outlet culvert 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	
MAINTENACE				
Maintenance Required		X		See comment above
Maintenance Performed			X	
Additional Comments			X	

<b>Mining Area</b>	Yeast Mine(Seneca Coal Co)	<b>Facility Configuration</b>	Cross-Vally Pond	<b>Quarterly Impoundment Inspection Form</b>
<b>Date Inspected</b>	10/24/2019	<b>Date Last Inspected</b>	9/16/2019	
<b>Impoundment</b>	Pond #011	<b>Pond Location</b>	NW¼ SW¼, Sec. 16, T5N, R87W	
<b>NPDES ID No</b>	CO-0000221 D.P.011	<b>Site Location</b>	8.5 mi SE of Hayden, CO	
<b>Owner's Rep</b>	Miranda Kawcak	<b>Inspector</b>	Jason Herden	
<b>Mark or Write in Appropriate Response:</b>				
<b>FEATURE</b>	<b>PROBLEM</b>		<b>COMMENTS</b>	
	<b>YES (Above)</b>	<b>NO (Below)</b>		
<b>GENERAL</b>				
Water Level (above or below principal spillway)		X	Water level 5.0 feet below spillway	
Existing Embankment Freeboard (5.1 ft)	8.5			
Outflow (gpm)		X		
<b>EROSION</b>				
Rills & Gullies on Embankment		X		
Wave Erosion		X		
Spillway Erosion		X		
Burrows		X		
Other		X		
<b>STRUCTURAL</b>				
Differential Settling		X		
Cracks or Slides		X		
Seepage		X		
Other		X		
<b>STRUCTURES</b>				
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		
<b>MAINTENACE</b>				
Maintenance Required		X		
Maintenance Performed		X		
Additional Comments		X		

<b>Mining Area</b> <b>Date Inspected</b> <b>Impoundment</b> <b>NPDES ID No</b> <b>Owner's Rep</b>	Yoast Mine(Seneca Coal Co)	<b>Facility Configuration</b> <b>Date Last Inspected</b> <b>Pond Location</b> <b>Site Location</b> <b>Inspector</b>	Cross-Vally Pond	<b>Quarterly Impoundment Inspection Form</b>
	10/23/2019		9/16/2019	
	Pond #011A		SW¼ NW¼, Sec. 16, T5N, R87W	
	N/A		8.5 mi SE of Hayden, CO	
	Miranda Kawcak		Jason Herden	
<b>Mark or Write in Appropriate Response:</b>				
FEATURE		PROBLEM		COMMENTS
		YES (Above)	NO (Below)	
<b>GENERAL</b>				
Water Level (above or below principal spillway)			X	Water level 2.3 feet below spillway
Existing Embankment Freeboard (4.6 ft)		6		
Outflow (gpm)			X	
<b>EROSION</b>				
Rills & Gullies on Embankment			X	
Wave Erosion			X	
Spillway Erosion			X	
Burrows			X	
Other			X	
<b>STRUCTURAL</b>				
Differential Settling			X	
Cracks or Slides			X	
Seepage			X	
Other			X	
<b>STRUCTURES</b>				
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	
<b>MAINTENANCE</b>				
Maintenance Required			X	Sediment level 2.5 feet below top of pipe (OK)
Maintenance Performed			X	
Additional Comments			X	

Top of Sediment Storage = 2.1 feet below top of pipe

<b>Mining Area</b> <b>Date Inspected</b> <b>Impoundment</b> <b>NPDES ID No</b> <b>Owner's Rep</b>	Yoast Mine(Seneca Coal Co)	<b>Facility Configuration</b> <b>Date Last Inspected</b> <b>Pond Location</b> <b>Site Location</b> <b>Inspector</b>	Cross-Vally Pond	<b>Quarterly Impoundment Inspection Form</b>
	10/23/2019		9/16/2019	
	Pond #012		NE¼ NW¼, Sec. 19, T5N, R87W	
	CO-0000221 D.P. 012		8.5 mi SE of Hayden, CO	
	Miranda Kawcak		Jason Herden	
<b>Mark or Write in Appropriate Response:</b>				
FEATURE		PROBLEM		COMMENTS
		YES (Above)	NO (Below)	
<b>GENERAL</b>				
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		77.3
<b>EROSION</b>				
Rills & Gullies on Embankment			X	
Wave Erosion			X	
Spillway Erosion			X	
Burrows			X	
Other			X	
<b>STRUCTURAL</b>				
Differential Settling			X	
Cracks or Slides			X	
Seepage			X	
Other			X	
<b>STRUCTURES</b>				
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	
<b>MAINTENANCE</b>				
Maintenance Required			X	
Maintenance Performed			X	
Additional Comments			X	

<b>Mining Area</b> <b>Date Inspected</b> <b>Impoundment</b> <b>NPDES ID No</b> <b>Owner's Rep</b>	Yoast Mine(Seneca Coal Co)	<b>Facility Configuration</b> <b>Date Last Inspected</b> <b>Pond Location</b> <b>Site Location</b> <b>Inspector</b>	Cross-Vally Pond	<b>Quarterly Impoundment Inspection Form</b>
	10/23/2019		9/16/2019	
	Pond #012A		NE¼ NW¼, Sec. 19, T5N, R87W	
	N/A		8.5 mi SE of Hayden, CO	
	Miranda Kawcak		Jason Herden	
<b>Mark or Write in Appropriate Response:</b>				
<b>FEATURE</b>		<b>PROBLEM</b>		<b>COMMENTS</b>
		<b>YES (Above)</b>	<b>NO (Below)</b>	
<b>GENERAL</b>				
Water Level (above or below principal spillway)			X	Water level 2.5 feet below spillway
Existing Embankment Freeboard (4.6 ft)		6.6		
Outflow (gpm)			X	
<b>EROSION</b>				
Rills & Gullies on Embankment			X	
Wave Erosion			X	
Spillway Erosion			X	
Burrows			X	
Other			X	
<b>STRUCTURAL</b>				
Differential Settling			X	
Cracks or Slides			X	
Seepage			X	
Other			X	
<b>STRUCTURES</b>				
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	
<b>MAINTENANCE</b>				
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
	10/23/2019		9/16/2019	
	Pond #013		SE¼ NW¼, Sec. 19, T5N, R87W	
	CO-0000221 D.P. 013		8.5 mi SE of Hayden, CO	
	Miranda Kawcak		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 1.5 feet below outlet	
Existing Embankment Freeboard (4.0 ft)	5.5			
Outflow (gpm)		X		
EROSION				
Rills & Gullies on Embankment		X		
Wave Erosion		X		
Spillway Erosion		X		
Burrows		X		
Other		X		
STRUCTURAL				
Differential Settling		X	Seep below toe of dam on south side is from a native spring. Not affecting dam embankment	
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		

<b>Mining Area</b> <b>Date Inspected</b> <b>Impoundment</b> <b>NPDES ID No</b> <b>Owner's Rep</b>	Yoast Mine(Seneca Coal Co)	<b>Facility Configuration</b> <b>Date Last Inspected</b> <b>Pond Location</b> <b>Site Location</b> <b>Inspector</b>	Cross-Vally Pond	<b>Quarterly Impoundment Inspection Form</b>
	10/23/2019		9/16/2019	
	Pond #014		NE¼ SW¼, Sec. 19, T5N, R87W	
	CO-0000221 D.P. 014		8.5 mi SE of Hayden, CO	
	Miranda Kawcak		Jason Herden	
<b>Mark or Write in Appropriate Response:</b>				
FEATURE		PROBLEM		COMMENTS
		YES (Above)	NO (Below)	
<b>GENERAL</b>				
Water Level (above or below principal spillway)			X	water level 1.5 feet below spillway
Existing Embankment Freeboard (6.8 ft)		8		
Outflow (gpm)			X	
<b>EROSION</b>				
Rills & Gullies on Embankment			X	
Wave Erosion			X	
Spillway Erosion			X	
Burrows			X	
Other			X	
<b>STRUCTURAL</b>				
Differential Settling			X	
Cracks or Slides			X	
Seepage			X	
Other			X	
<b>STRUCTURES</b>				
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	
<b>MAINTENANCE</b>				
Maintenance Required			X	
Maintenance Performed			X	
Additional Comments			X	



<b>Mining Area</b>	Yeast Mine(Seneca Coal Co)	<b>Facility Configuration</b>	Stockpond	<b>Quarterly Impoundment Inspection Form</b>
<b>Date Inspected</b>	10/23/2019	<b>Date Last Inspected</b>	9/16/2019	
<b>Impoundment</b>	Stock Tank ST-1	<b>Pond Location</b>	SW¼ Sec. 20, T5N, R87W	
<b>NPDES ID No</b>	N/A	<b>Site Location</b>	8.5 mi SE of Hayden, CO	
<b>Owner's Rep</b>	Miranda Kawcak	<b>Inspector</b>	Jason Herden	
<b>Mark or Write in Appropriate Response:</b>				
<b>FEATURE</b>	<b>PROBLEM</b>		<b>COMMENTS</b>	
	<b>YES (Above)</b>	<b>NO (Below)</b>		
<b>GENERAL</b>				
Water Level (above or below principal spillway)		X	Water level 3.0 feet below spillway	
<b>EROSION</b>				
Rills & Gullies on Embankment		X		
Wave Erosion		X		
Spillway Erosion		X		
Burrows		X		
Other		X		
<b>STRUCTURAL</b>				
Differential Settling		X		
Cracks or Slides		X		
Seepage		X		
Other		X		
<b>STRUCTURES</b>				
<b>Principal Spillway</b>				
Clogged Orifice		NA		
Clogged or Damaged Culvert		NA		
Damaged Headgate		NA		
<b>Emergency Spillway</b>				
Erosion		X		
Riprap		X		
Clogged or Damaged Culvert		NA		
Other		X		
<b>MAINTENACE</b>				
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): 2018-005 T1-SCC, 2018-006 T1-PSCM		

## FLOW DATA

SITE ID	COMPANY	MINE	DATE	TIME	WATER LEVEL (FT)	OUTFLOW (GPM)	OBSERVATIONS	MAINTENANCE (Y/N)
002	Sage Creek	Sage Creek	10-23-19	08:50	0.10	33.7	Seeping under flume	N
003	Sage Creek	Sage Creek	10-23-19	08:30	.03	7.7	culvert flume broken	Y
004	Sage Creek	Sage Creek	10-23-19	09:40	0.15	40.3		N
Lower Sump	Sage Creek	Sage Creek	10-24-19	10:00	.05	37		N
PECOCO	Sage Creek	Sage Creek	10-24-19	10:33	.06	58		N
Portal Sump 1	Sage Creek	Sage Creek	10-24-19	10:10	.02	2		N
Portal Sump 2	Sage Creek	Sage Creek	10-24-19	10:20	—	—	NOT pumping	N
Spill Control 2	Sage Creek	Sage Creek	10-24-19	09:45	—	—	Dry	N
Truck Wash	Sage Creek	Sage Creek	10-24-19	09:30	—	—	Dry	N
Upper Sump	Sage Creek	Sage Creek	10-24-19	10:45	.05	50		N
001	Seneca	Hayden Gulch	10-24-19	07:25	-3.5	—	no Flow	N
002	Seneca	Hayden Gulch	10-24-19	07:40	—	—	Dry	N
005	Seneca	Seneca II West	10-23-19	16:10	-2.0	—	spring @ dam no impact	N
006	Seneca	Seneca II West	10-23-19	14:15	0.15	74.3	stuff on S. side, no impact	N
009	Seneca	Seneca II West	10-23-19	11:30	-3.5	—	NO Flow	N
015	Seneca	Seneca II West	10-23-19	12:10	0.05	8.7		N
016	Seneca	Seneca II West	10-23-19	15:30	0.10	84.4	snow covered	N
017	Seneca	Seneca II West	10-24-19	10:15	0.10	3.7	armor working, snow covering	N
T-1	Seneca	Seneca II West	10-23-19	16:30	—	—	Dry	N
T-18	Seneca	Seneca II West	10-23-19	17:15	-1.5	—	NO Flow	N
T-2	Seneca	Seneca II West	10-23-19	16:45	—	—	Dry	N
T-20	Seneca	Seneca II West	10-23-19	17:20	-3.0	—	NO Flow	N
T-22	Seneca	Seneca II West	10-23-19	17:25	-1.1	—	NO Flow	N
T-24	Seneca	Seneca II West	10-23-19	17:40	—	—	Dry	N
T-25	Seneca	Seneca II West	10-23-19	18:00	—	—	Gone	N
T-26	Seneca	Seneca II West	10-23-19	17:25	-2.0	—	NO Flow	N

008

10-23-19 10:00 .10

outlet pipe broken/leaking  
down hill

Y

 **WWC** ENGINEERING

IMPOUNDMENT INSPECTION LOG

CLIMATIC CONDITIONS:	
FIELD PERSONNEL: 	FIELD PERSONNEL SIGNATURE: 

[illegible]