

Seneca Coal Company

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

April 21, 2017

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

RE: Yoast Mine, Permit C-94-082, 1Q17 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: Pond #010, Pond #011, Pond #011A, Pond #012A, Pond #013, Pond #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	Yoast Mine(Seneca Coal Co)	Facility Co	nfiguration	Cross-V	Valley Pond				
Date Inspected	3/14/2017		Inspected		/4/2016	Quarterly Impoundment Inspection Form			
Impoundment	Pond #010		Location		Sec. 8, T5N, R87W				
NPDES ID No	CO-0000221 D.P. 010	Committee of the street of the	Committee of the contract of t		8.5 mi SE of Hayden, CO		Angreer's unboundment meshection borm		
Owner's Rep	Brian Watterson	_	ector		Jason Herden		4		
Owner sitep	Dilaii Watterson	1 Ilish			Appropriate	Dasnansa			
	FEATURE		WINIKU	PRO	BLEM	Kesponse:	COMMENTS		
		-	YES (Al		NO (Bel	(vzol	COMMENTS		
GENERAL			125 (11		110 (26)	011)			
Water Level (above or	below principal spillway)		Х				water level 0.11 feet above spillway		
	Existing Embankment Freeboard (10.1 ft)			1			Tracer rever order rece above springer		
Outflow (gpm)	( ,	- t	X				58.7		
EROSION									
Rills & Gullies on Em	bankment				X				
Wave Erosion					х				
Spillway Erosion					X				
Burrows		T I			Х				
Other					X				
STRUCTURAL			District			4,2,000			
Differential Settling					X				
Cracks or Slides		Ī			Х				
Seepage					Х				
Other				X					
STRUCTURES									
Principal Spillway									
Clogged Orifice					X				
Clogged or Damag			X				Intake starting to rust out but still functionable		
Damaged Headgate	3				NA				
Emergency Spillway									
Erosion					Х				
Riprap		1			Х				
Clogged or Damage	d Culvert				X				
Other					X				
MAINTENACE			TVI - VI-V			TWITE OF			
Maintenance Required			Х				See comment above		
Maintenance Performe		[			Х				
Additional Comments		1			V		I .		

Additional Comments

Mining Area	Yoast Mine(Seneca Coal Co)	Facility Confi	guration	Cross-Vally Pond					
Date Inspected	3/14/2017	Date Last In	spected	10	/5/2016				
Impoundment	Pond #011	Pond Location		NW% SW%, Sec. 16, T5N, R87W		Quarterly Impoundment Inspection Form			
NPDES ID No	CO-0000221 D.P.011	Site Loca	tion	8.5 mi SE	of Hayden, CO	Zan 11. 1 xiiloniimiinii iiilohoeiloii i oi i			
Owner's Rep	Brian Watterson	Inspect	or	Jaso	n Herden				
			Mark	or Write in	Appropriate F	esponse:			
	FEATURE				BLEM		COMMENTS		
	YES (Abo		ove)	NO (Belo	w)				
GENERAL									
	r below principal spillway)				Х		Water level 4.3 feet below spillway		
Existing Embankment	Freeboard (5.1 ft)		5.2						
	Outflow (gpm)				X				
EROSION		1, 1/4T = 1,107E1							
Rills & Gullies on Em	ibankment				Х				
Wave Erosion		<u> </u>			Х				
Spillway Erosion			_	X					
Burrows				X					
Other				X					
STRUCTURAL									
Differential Settling					X				
Cracks or Slides		<u> </u>		X					
Seepage Other		<u> </u>		X					
TRUCTURES				Х					
Principal Spillway		VIII.							
Clogged Orifice					Х				
Clogged or Damag	red Culvert				X				
Damaged Headgat		-		NA NA					
Emergency Spillway					IVA				
Ei									

Erosion Riprap

Other MAINTENACE

Maintenance Required

Maintenance Performed Additional Comments

Clogged or Damaged Culvert

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Mining Area	Yoast Mine(Seneca Coal Co)	<b>Facility Configuration</b>	Cross-Vally Pond	-		
Date Inspected	3/14/2017	Date Last Inspected	10/4/2016			
Impoundment	Pond #011A	Pond Location	SW¼ NW¼, Sec. 16, T5N, R87W	Quarterly Impoundment Inspection Form		
NPDES ID No	N/A	Site Location	8.5 mi SE of Hayden, CO			
Owner's Rep	Brian Watterson	Inspector	Jason Herden	ii ii		
		Mark	or Write in Appropriate l	Response:		
	FEATURE		PROBLEM	COMMENTS		
		YES (Ab	ove) NO (Belo	ow)		
GENERAL						
	below principal spillway)		X			
xisting Embankment	Freeboard (4.6 ft)	5.3				
Outflow (gpm)			X			
ROSION						
tills & Gullies on Em	bankment		X			
Vave Erosion			X			
Spillway Erosion			X			
Burrows			X			
ther			X			
TRUCTURAL						
Differential Settling			Х			
Cracks or Slides			Х			
Seepage			X			
Other			Х			
TRUCTURES						
rincipal Spillway						
Clogged Orifice			Х			
Clogged or Damag			Х			
Damaged Headgate	e		NA			
Emergency Spillway						
Erosion			X			
Riprap			X			
Clogged or Damaged Culvert			X			
Other			Х			
MAINTENACE						
Maintenance Required			X	No access due to winter conditions		
Maintenance Perform			Х			
Additional Comments X						

Mining Area	Yoast Mine(Seneca Coal Co)	Facility C	Configuration	n Cross-Vally Pond				
Date Inspected	3/14/2017		st Inspected		/3/2016			
Impoundment	Pond #012	Pond Location		NE¼ NW¼,Sec. 19, T5N, R87W Qual		Quarterl	arterly Impoundment Inspection Form	
NPDES ID No	CO-0000221 D.P. 012	Site I	Site Location		of Hayden, CO	£ 1111 1011		
Owner's Rep	Brian Watterson	Ins	pector		n Herden			
					n Appropriate I	Response:		
	FEATURE		1		BLEM		COMMENTS	
	YES (Abo		ove)	NO (Belo	w)			
GENERAL								
Water Level (above or	below principal spillway)		Х				Water level 0.12 feet above spillway	
Existing Embankment	Freeboard (9.0 ft)		9					
Outflow (gpm)			Х				44.96	
EROSION			10 2 20					
Rills & Gullies on Eml	oankment				Х			
Wave Erosion					Х			
Spillway Erosion				X				
Burrows				X				
Other					X			
STRUCTURAL			and the second					
Differential Settling					X			
Cracks or Slides					X			
Seepage					X			
Other				X				
STRUCTURES								
Principal Spillway								
Clogged Orifice					X			
Clogged or Damage					X			
Damaged Headgate				NA NA				
Emergency Spillway								
Erosion					X			
Riprap					X			
Clogged or Damage	d Culvert				Х			
Other					X			
MAINTENACE								
Maintenance Required			X				Erosion behind and underneath flume	
Maintenance Performe	ed				X			
Additional Comments					X			

Mining Area	Yoast Mine(Seneca Coal Co)	acility Co	nfiguratio	Cross-	Vally Pond		(Control 100)
Date Inspected	3/14/2017	Date Last	Inspected	10/	3/2016		
Impoundment	Pond #012A	Pond L	ocation	NE¼ NW¼,Se	c. 19, T5N, R87W	Ouai	rterly Impoundment Inspection Form
NPDES ID No	N/A	Site Lo	cation	8.5 ml SE of Hayden, CO		~	,
Owner's Rep	Brian Watterson	Insp	ector	Jasor	Herden		
			Mark	or Write i	in Appropriate	Response	
	FEATURE				DBLEM		COMMENTS
			YES (A	Above)	NO (Belo	ow)	
GENERAL	Certific Statements						
	below principal spillway)				Х		Water level 0.6 feet below spillway
Existing Embankment	Freeboard (4.6 ft)		6.	.2			
Outflow (gpm)					Х		
EROSION			W-31-31-5				
Rills & Gullies on Em	bankment				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					Х		
Clogged or Damag					Х		
Damaged Headgate			<u> </u>		NA.		
Emergency Spillway							
Erosion					Х		
Riprap					X		
Clogged or Damage	ed Culvert				Х		
Other					X		
MAINTENACE							
Maintenance Required					X		
Maintenance Perform					X		
Additional Comments					X		<u> </u>

Mining Area	Yoast Mine(Seneca Coal Co)	Facility C	onfiguration	Cross-	-Vally Pond				
Date Inspected	3/14/2017		st Inspected		/3/2016				
Impoundment	Pond #013			SE% NW%, S	ec. 19, T5N, R87W	Quai	rterly Impoundment Inspection Form		
NPDES ID No	CO-0000221 D.P. 013	Site I	Site Location		8.5 mi SE of Hayden, CO		Zam toril mithorinament mobietion Lorin		
Owner's Rep	Brian Watterson	Ins	pector 1		n Herden				
				r Write in	Appropriate I	Response:			
	FEATURE				BLEM		COMMENTS		
			YES (Al	oove)	NO (Belo	ow)			
GENERAL		He was the							
Water Level (above or	below principal spillway)		Х				water level 0.03 feet above spillway		
Existing Embankment	Freeboard (4.0 ft)		4						
Outflow (gpm)			X				13.57		
EROSION									
Rills & Gullies on Emb	ankment				Х				
Wave Erosion					X				
Spillway Erosion					Х				
Burrows					X				
Other					Х				
STRUCTURAL				A READ E					
Differential Settling					X				
Cracks or Slides					X				
Seepage					Х				
Other					X				
STRUCTURES									
Principal Spillway									
Clogged Orifice					X				
Clogged or Damage					Х				
Damaged Headgate	· -·				NA NA				
Emergency Spillway			1				-		
Erosion					X				
Riprap	101				X				
Clogged or Damage	d Culvert				X				
Other					X				
MAINTENACE			T						
Maintenance Required					X				
II.	Maintenance Performed			X					
Additional Comments			ļ		1 x				

Mining Area	Yoast Mine(Seneca Coal Co)	Facility Configu	ıration	Cross-	Vally Pond				
Date Inspected	3/14/2017	Date Last Insp	ected	10/	3/2016				
Impoundment	Pond #014	Pond Location		NE% SW%, Se	NE% SW%, Sec. 19, T5N, R87W		<b>Quarterly Impoundment Inspection Form</b>		
NPDES ID No	CO-0000221 D.P. 014	Site Location	on	8.5 mi SE of Hayden, CO		Z			
Owner's Rep	Brian Watterson	Inspector		Jason Herden					
				r Write in	Appropriate F	esponse:			
	FEATURE			PROF	BLEM		COMMENTS		
			YES (A	bove)	NO (Bel	ow)			
GENERAL									
Water Level (above or	r below principal spillway)				Х		water level 0.2 feet below spillway		
Existing Embankment	Freeboard (6.8 ft)		6.8	3					
Outflow (gpm)					Х				
EROSION									
Rills & Gullies on Em	bankment				X				
Wave Erosion					Х				
Spillway Erosion					Х				
Burrows					Х				
Other					Х				
STRUCTURAL									
Differential Settling					Х				
Cracks or Slides					X				
Seepage					Х				
Other			X						
STRUCTURES						STATE III			
Principal Spillway									
Clogged Orifice					X				
Clogged or Damag	-			X					
Damaged Headgat	e				NA				
Emergency Spillway					1				
Erosion					X				
Riprap	101	<u> </u>			X				
	Clogged or Damaged Culvert			X		-			
Other					X				
MAINTENACE	1								
Maintenance Require					X		-		
Maintenance Perform	led				Х				

Additional Comments

Mining Area	Yoast Mine(Seneca Coal Co)	Facility Configuration	Stockpond				
Date Inspected	3/14/2017	Date Last Inspected	10/3/2016	- 1			
Impoundment	Stock Tank ST-1	Pond Location	on SWX Sec. 20, T5N, R87W		Quarterly Impoundment Inspection Form		
NPDES ID No	N/A	Site Location			Against Ambaguament mabecular Lorm		
Owner's Rep	Brian Watterson	Inspector	Jason Herden				
	511011111111111111111111111111111111111		Write in Appropri	ate Resp	nonse.		
	FEATURE		PROBLEM	ate Itesp	COMMENTS		
		YES (Ab	ove) NO	(Below)			
GENERAL	and the life of the last of th		TO MULTINA THE				
Water Level (above or	below principal spillway)			Х			
EROSION		Marie Salara (m.)					
Rills & Gullies on Em	bankment			Х			
Wave Erosion				Х			
Spillway Erosion				Χ			
Burrows				Х			
Other				X			
STRUCTURAL		E I Estable Mental Committee					
Differential Settling				Χ			
Cracks or Slides				Х			
Seepage			X				
Other				Х			
STRUCTURES							
Principal Spillway							
Clogged Orifice	101			NA			
Clogged or Damag				NA			
Damaged Headgate	e			NA			
Emergency Spillway Erosion							
				X			
11 ' '	Riprap			X	<del> </del>		
Other	Clogged or Damaged Culvert		NA X				
MAINTENACE				^			
Maintenance Required	1			X	No access due to winter conditions		
Maintenance Performe				X	IND access use to writer conditions		
Additional Comments		X		^			
	<u> </u>						

## **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** 

IA					T		
COMPANY	MINE	рате	TIME	WATER LEVEL (FT)	OUTFLOW (GPM)	OBSERVATIONS	MAINTENANCE (Y/N)
Sage Creek	Sage Creek	3-14-17	08:35	0.19	139,6		N
Sage Creek	Sage Creek	3-14-17	08:20	0.10	12.3	some bullous	N
Sage Creek	Sage Creek	3-14-17	09:00	0,03	31,3	outlet pipepartially charget	У
Sage Creek	Sage Creek	3-15-17	07:30	0.3	317		N
Sage Creek	Sage Creek	3-15-17	09:00	0,2	152		N
Sage Creek	Sage Creek	3-15-17	1016	412	-	not digining	У
Sage Creek	Sage Creek	3-15-17	09:50			not sumping, full	ACO Y
Sage Creek	Sage Creek	3-15-17	08:20	~2.3		Flozen	N
Sage Creek	Sage Creek	3-15-17	08:40		'	015	N
Sage Creek	Sage Creek	3-15-17	10,20	0.3	136	3	N
Seneca	Hayden Gulch	3-15-17	07:30	-1,4			N
Seneca	Hayden Gulch	3-15-17	07:50	-2.5			N
Seneca	Seneca II West	3-14-17	11:50	0.02	16.4		N
Seneca	Seneca II West	3-14-17	10:00	0.04	39,9	Big sluff on 5, side noteffection	N
Seneca	Seneca II West	3-14-17	12135	-3.0		NO Flow	N
Seneca	Seneca II West	3-14-17	14:25	0,03	6.26	standpipe is justed through	У
Seneca	Seneca II West	3-14-17	10:10	0.05	25,7		N
Seneca	Seneca II West	3-14-17	10:30	0.07	12.7	Slight Slukean Niside armor is working	N
Seneca	Seneca II West		_		_		
Seneca	Seneca II West	_	_	_	_		
Seneca	Seneca II West	~					
Seneca	Seneca II West	_		~	_		
Seneca	Seneca II West	-			_		
Seneca	Seneca II West						
Seneca	Seneca II West	~			_		
Seneca	Seneca II West			_			
	Sage Creek	Sage Creek	Sage Creek	Sage Creek   Sag	Sage Creek   Sag	Sage Creek	Sage Creek   Sag

008

3-14-17 09:45 0.4

37,7

WWCENGINEERING
IMPOUNDMENT INSPECTION LOG

SITE ID	COMPANY	MINE	DATE	TIME	WATER LEVEL (FT)	OUTFLOW (GPM)	OBSERVATIONS	MAINTENANCE (Y/N)
T-27	Sепеса	Seneca II West	-	_				
T-3	Seneca	Seneca II West	1	-	_			
T-5	Seneca	Seneca II West	~	_		_	,	
010	Seneca	Yoast	3-14-17	08.55	0.01	58,7	outlet Pipe is justed through	У
011	Seneca	Yoast	3-14-17	16:55	~ 4.3		No Flow	N
011A	Seneca	Yoast		_				
012	Seneca	Yoast	3-14-17	13:50	0113	44.46	erosion behind tunderneith flune	У
012A	Seneca	Yoast	3-14-17	14:10	-016		NO Flow	N
013	Seneca	Yoast	3-14-17	15:05	0.03	13,57		N
014	Seneca	Yoast	3-14-17	15:50	-0.2		NO Flow	N
ST-1	Seneca	Yoast		_				

CLIMATIC CONDITIONS: 340 - 66 win	d Calm-22MPH variable, clear-nostly cloudy
FIELD PERSONNEL: JH	FIELD PERSONNEL SIGNATURE:

NOTES					
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				107-1	
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