

November 18, 2020

Robin Reilley Colorado Division of Reclamation, Mining and Safety 1313 Sherman Street, Room 215 Denver, CO 80203

RE: Yoast Mine, Permit C-94-082, Fourth Quarter 2020 IIR

Dear Robin:

In accordance with Rule 4.05.9(17), please find enclosed the Yoast Mine (YM) Impoundment Inspection Report (IIR) and Impoundment Inspection Log (IIL). Please contact me with any comments and/or questions.

Sincerely,

Miranda Kawcak

Miranda Kawcak Environmental Manager Peabody, Colorado Operations

Enclosure: YM IIR

Mining Area	Yoast Mine(Seneca Coal Co)	Facility C	onfiguration	Cross-Valley Pond			
Date Inspected	10/22/2020	Date Las	t Inspected	9/2	24/2020		
Impoundment	Pond #010	Pond	Location	NW¼ NE¼, S	Sec. 8, T5N, R87W	Qua	rterly Impoundment Inspection Form
NPDES ID No	CO-0000221 D.P. 010	Site I	Location 8.5 m		8.5 mi SE of Hayden, CO		
Owner's Rep	Miranda Kawcak	Ins	pector	Jaso	Jason Herden		
			Mark or	r Write in	Appropriate l	Response:	
	FEATURE				BLEM		COMMENTS
			YES (Ab	ove)	NO (Below)		
GENERAL							
	pelow principal spillway)		Х				water level 0.1 feet above spillway
Existing Embankment F	Freeboard (10.1 ft)		10.1				
Outflow (gpm)			Х				1.1
EROSION					1		
Rills & Gullies on Emba	ankment	ļ			Х		
Wave Erosion		ļ			Х		
Spillway Erosion					Х		
Burrows		ļ			X		
Other					Х		
STRUCTURAL		1			·		
Differential Settling					Х		
Cracks or Slides			X				
Seepage			X				
Other					Х		
STRUCTURES							
Principal Spillway Clogged Orifice		1			Х		
Clogged or Damaged	1 Culvert		X		^		Outlet culvert starting to rust out but still functionable
Damaged Headgate	Curven	ŀ	^		NA		Outlet culvert starting to rust out but still functionable
Emergency Spillway					INA		
Erosion		1			Х		
Riprap		ŀ			X		
* *	orap ogged or Damaged Culvert				X		
Other	Current	ŀ			X		
MAINTENACE							
Maintenance Required			Х				See comment above
Maintenance Performed	I	ŀ			Х		
Additional Comments					X		

Mining Area	Yoast Mine(Seneca Coal Co)	Facility C	onfiguration	Cross	s-Vally Pond			
Date Inspected	10/22/2020	Date Las	st Inspected	9/	/24/2020			
Impoundment	Pond #011	Pond	Location	NW¼ SW¼,	Sec. 16, T5N, R87W	Ouai	rterly Impoundment Inspection Form	
NPDES ID No	CO-0000221 D.P.011	Site 1	Location 8.5 mi SE of I		of Hayden, CO		J P I I I I I I I I I I I I I I I I I I	
Owner's Rep	Miranda Kawcak	Ins	pector	Jaso	ason Herden			
			Mark o		n Appropriate F	Response:		
	FEATURE				BLEM		COMMENTS	
			YES (Ab	oove)	NO (Belo	w)		
GENERAL								
,	below principal spillway)				X		Water level 1.1 feet below spillway	
Existing Embankment	Freeboard (5.1 ft)		8.5					
Outflow (gpm)					Х		0	
EROSION								
Rills & Gullies on Em	bankment				Х			
Wave Erosion					Х			
Spillway Erosion					X			
Burrows					X			
Other					Х			
STRUCTURAL								
Differential Settling					Х			
Cracks or Slides			X					
Seepage			X					
Other			X					
STRUCTURES								
Principal Spillway								
Clogged Orifice	101				X			
Clogged or Damage					X			
Damaged Headgate	!				NA			
Emergency Spillway					V			
	Erosion				X X			
Riprap	d Culment				X			
Clogged or Damaged Culvert Other					X			
MAINTENACE								
Maintenance Required					Х			
Maintenance Performe				X		<del> </del>		
Additional Comments	A.				X			
raditional Comments					^			

Mining Area	Yoast Mine(Seneca Coal Co)	Facility C	Configuration	Cross	s-Vally Pond				
Date Inspected	10/22/2020	Date La	st Inspected	9/	/24/2020				
Impoundment	Pond #011A	Pond	Location	SW¼ NW¼, Sec. 16, T5N, R87W		Qua	Quarterly Impoundment Inspection Form		
NPDES ID No	N/A	Site 1	Location	8.5 mi SE of Hayden, CO			, I		
Owner's Rep	Miranda Kawcak	Ins	spector	Jaso	on Herden				
Mark or Write in Appropriate Response:									
	FEATURE			PRC	DBLEM		COMMENTS		
			YES (Ab	oove)	NO (Belo	w)			
GENERAL									
,	below principal spillway)				X		Water Level 1.2 feet below spillway		
Existing Embankment	Freeboard (4.6 ft)		9						
Outflow (gpm)					X		0		
EROSION									
Rills & Gullies on Eml	bankment				Х				
Wave Erosion					X				
Spillway Erosion					X				
Burrows				X					
Other					Х				
STRUCTURAL			I						
Differential Settling					X				
Cracks or Slides					X				
Seepage Other					X				
STRUCTURES					^				
Principal Spillway									
Clogged Orifice				Х					
Clogged of Damaged Culvert			X						
Damaged Headgate				NA NA					
Emergency Spillway			I		101				
Erosion Erosion					Х				
D'ana					· · ·				

Χ

Χ

Χ

Χ

X

Riprap

MAINTENACE
Maintenance Required

Other

Clogged or Damaged Culvert

Maintenance Performed
Additional Comments
Top of Sediment Storage = 2.1 feet below top of pipe

Mining Area			onfiguration		s-Vally Pond		
Date Inspected	10/22/2020		st Inspected	9/	/24/2020	_	
Impoundment	Pond #012		Location		Sec. 19, T5N, R87W	Qua	rterly Impoundment Inspection Form
NPDES ID No	CO-0000221 D.P. 012	Site I	Location	8.5 mi SE	E of Hayden, CO		
Owner's Rep	Miranda Kawcak	Ins	pector	Jason Herden			
			Mark		in Appropriate F	Response:	
	FEATURE				OBLEM		COMMENTS
			YES (Ab	ove)	NO (Belo	w)	
GENERAL							
	below principal spillway)		Х				Water level 0.1 feet above spillway
Existing Embankment	Freeboard (9.0 ft)		9				
Outflow (gpm)			Х				76.3
EROSION							
Rills & Gullies on Emb	ankment				X		
Wave Erosion					X		
Spillway Erosion					X		
Burrows					X		
Other					Х		
STRUCTURAL							
Differential Settling					X		
Cracks or Slides				X			
Seepage				X			
Other				X			
STRUCTURES							
Principal Spillway						1	
Clogged Orifice	101				X		
Clogged or Damage					X		
Damaged Headgate					NA		
Emergency Spillway Erosion					V		
					X		
Riprap	d Culment						
Clogged or Damageo	i Curvert				X		
MAINTENACE					<u> </u>		
Maintenance Required					Х		
Maintenance Required					X		
Additional Comments	u				X		
Additional Comments					^		

Mining Area	Yoast Mine(Seneca Coal Co)	acility Co	nfiguratio	Cross-	Vally Pond		
Date Inspected	10/22/2020	Date Last	_		24/2020		
Impoundment	Pond #012A		ocation		ec. 19, T5N, R87W	Onai	rterly Impoundment Inspection Form
NPDES ID No	N/A	Site L			of Hayden, CO	Quu	
Owner's Rep	Miranda Kawcak	Insp	ector		n Herden		
				k or Write	in Appropriat	e Respons	e:
	FEATURE				OBLEM	•	COMMENTS
			YES (	Above)	NO (Bel	ow)	
GENERAL			,				
Water Level (above or	below principal spillway)				Х		Water level 1.5 feet below spillway
Existing Embankment	Freeboard (4.6 ft)		6	5.1			
Outflow (gpm)					X		0
EROSION							
Rills & Gullies on Eml	bankment				X		
Wave Erosion					Х		
Spillway Erosion					Х		
Burrows					X		
Other					Х		
STRUCTURAL			•				
Differential Settling					Х		
Cracks or Slides			Х				
Seepage				X			
Other					Х		
STRUCTURES							
Principal Spillway			1				
Clogged Orifice					Х		
Clogged or Damage					Х		
Damaged Headgate				NA			
Emergency Spillway			ı				T
	Erosion			X			
Riprap	1.0-1				X		
Clogged or Damage Other	a Curvert				X		
MAINTENACE					Х		
Maintenance Required			l		V		
Maintenance Performe					X		

Χ

Χ

Maintenance Performed

Additional Comments

Mining Area	Yoast Mine(Seneca Coal Co)	Facility C	Configuration	Cross	-Vally Pond				
Date Inspected	10/22/2020	Date Las	st Inspected	9/2	24/2020				
Impoundment	Pond #013	Pond	Location	SE¼ NW¼, S	Sec. 19, T5N, R87W	Oua	rterly Impoundment Inspection Form		
NPDES ID No	CO-0000221 D.P. 013	Site 1	Location	8.5 mi SE	of Hayden, CO	•			
Owner's Rep	Miranda Kawcak	Ins	pector	Jason Herden					
_		•	Mark o	r Write ir	Appropriate	Response:			
	FEATURE					_	COMMENTS		
			YES (At	oove)	NO (Belo	ow)			
GENERAL									
Water Level (above or	below principal spillway)				Х		water level 2.0 feet below outlet		
Existing Embankment	Freeboard (4.0 ft)		6						
Outflow (gpm)					X		0		
EROSION									
Rills & Gullies on Eml	bankment				Х				
Wave Erosion					Х				
Spillway Erosion					Х				
Burrows					Х				
Other					Х				
STRUCTURAL									
Differential Settling			X			Seep below toe of dam on south side is from a native spring.			
Cracks or Slides			X			Not affecting dam embankment			
Seepage				X					
Other			X						
STRUCTURES									
Principal Spillway			ı		1				
Clogged Orifice					Х				
Clogged or Damage					Х				
Damaged Headgate					NA				
Emergency Spillway			ı		1				
Erosion					Х				
Riprap					X				
	or Damaged Culvert				Х				
Other					Х				
MAINTENACE			ı		ı				
Maintenance Required					Х				

Maintenance Performed Additional Comments

Mining Area	Yoast Mine(Seneca Coal Co)	Facility Configu	ıration	Cross-	Vally Pond			
Date Inspected	10/22/2020	Date Last Insp	ected	9/2	4/2020			
Impoundment	Pond #014	Pond Locat	ion	NE¼ SW¼, Se	ec. 19, T5N, R87W	Qua	rterly Impoundment Inspection Form	
NPDES ID No	CO-0000221 D.P. 014	Site Location	Location 8.5 mi SE of		of Hayden, CO			
Owner's Rep	Miranda Kawcak	Inspector		Jason Herden				
		I	Mark o		Appropriate I	Response:		
	FEATURE				BLEM		COMMENTS	
			YES (Al	bove)	NO (Bel	ow)		
GENERAL								
	below principal spillway)				Х		water level 1.2 feet below spillway	
Existing Embankment	Freeboard (6.8 ft)		8					
Outflow (gpm)					Х		0	
EROSION					ı			
Rills & Gullies on Emb	oankment				Х			
Wave Erosion					Х			
Spillway Erosion					Х			
Burrows					Х			
Other					Х			
STRUCTURAL		1			·			
Differential Settling					X			
Cracks or Slides			X					
Seepage			X					
Other STRUCTURES			X					
Principal Spillway								
Clogged Orifice		1			Х			
Clogged or Damage	od Culvert				X			
Damaged Headgate					NA NA			
Emergency Spillway		<u> </u>			INA			
Erosion					Х			
Riprap					X			
Clogged or Damageo	d Culvert				X			
Other					X			
MAINTENACE								
Maintenance Required					Х			
Maintenance Performe					Х			
Additional Comments					Х			

Mining Area	Yoast Mine(Seneca Coal Co)	Facility C	Configuration	Sto	Stockpond		
Date Inspected	10/22/2020	Date La	st Inspected	9/	24/2020		
Impoundment	Stock Tank ST-1	Pond	Location	SW¼ Sec	. 20, T5N, R87W	Quai	rterly Impoundment Inspection Form
NPDES ID No	N/A	Site Location		8.5 mi SE of Hayden, CO		•	
Owner's Rep	Miranda Kawcak	Ins	spector	Jason Herden			
			Mark or		Appropriate I	Response:	
	FEATURE				BLEM		COMMENTS
			YES (Ab	ove)	NO (Belo	ow)	
GENERAL							
	below principal spillway)				X		Water level is 3 feet below spillway
EROSION					1		
Rills & Gullies on Em	bankment				Х		
Wave Erosion					Х		
Spillway Erosion					X		
Burrows					X		
Other					Х		
STRUCTURAL			T		l ,		
Differential Settling Cracks or Slides					X X		
Seepage Other				X			
STRUCTURES					^		
Principal Spillway							
Clogged Orifice					NA		
Clogged or Damage	ed Culvert				NA		
Damaged Headgate					NA		
Emergency Spillway			L		ı		
Erosion					X		
Riprap					Х		
Clogged or Damage	logged or Damaged Culvert			NA			
Other				Х			
MAINTENACE						•	
Maintenance Required					X		
Maintenance Performe	ed				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**

SITEID	COMPANY	MINE	DATE	TIME	WATER LEVEL (FT)	OUTFLOW (GPM)	OBSERVATIONS	MAÏNTENANCE (Y/N)	
002	Sage Creek	Sage Creek	6-22-20	08:50	0.06	47.6	Flume unlevely most water gain	g woold	7
003	Sage Creek	Sage Creek	P-33-3	08:30	0,10	7.5	cabert Flume booken	γ	
004	Sage Creek	Sage Creek	10-55.50	09:20	0.19	46.7		N	
Lower Sump	Sage Creek	Sage Creek	10-2-2	07:10	0.06	70			
PECOCO	Sage Creek	Sage Creek	10-2-2	c7:2°	0.07	28			
Portal Sump 1	Sage Creek	Sage Creek	10-2-20	-7:30	-0,3	10			
Portal Sump 2	Sage Creek	Sage Creek	اندی ک	07:25	_	_	10T pumping		
Spill Control 2	Sage Creek	Sage Creek	10-2-60	1:45	_		Dry		
Truck Wash	Sage Creek	Sage Creek	10-22-20	07:00		_	00		
Upper Sump	Sage Creek	Sage Creek	19-2-60	08:00	0.1	33			
001	Seneca	Hayden Gulch	10-22-20	15:05	-1,5	_	NO Flow NO Flow Sluffon S, side no impact	N	
002	Seneca	Hayden Gulch	p-22-20	10000	-2.5	_	NO FLOW	N	
005	Seneca	Seneca II West	12-22-20	14:35	-23		NO FLOW	N	
006	Seneca	Seneca II West	10-25-20	12:45	0.1	78.9	sluftan S, side no impact	N	
009	Seneca	Seneca II West	b.22.20	11:20	-2,3	_	No Flow	N	
015	Seneca	Seneca II West	10-22.30	11:35	0.05	1.0		N	
016	Seneca	Seneca II West	10.2220	13:00	0.1	73,7		N	
017	Seneca	Seneca II West	6.222	13:20	0.04	1.6		N	
T-1	Seneca	Seneca II West	10-22-20	15:40	_		Dry	N	
T-18	Seneca	Seneca II West			-4		NO Flow	N	
T-2	Seneca	Seneca II West					Din	N	
T-20	Seneca	Seneca II West					NO Flow Dry	N	
T-22	Seneca	Seneca II West					No Flow Dry	N	
T-24	Seneca	Seneca II West					Dry	N	
T-25	Seneca	Seneca II West				_		~	
T-26	Seneca	Seneca II West			-3	~	no Flow	N	



SITEID	COMPANY	MINE	DATE	TIME	WATER LEVEL (FT)	OUTFLOW (GPM)	OBSERVATIONS	MAINTENANCE (Y/N)
T-27	Seneca	Seneca II West	p-22-23	13:59	-3		NO FLOW	N
T-3	Seneca	Seneca II West	10-22-20	12:50	<b>)</b>		Dry	
T-5	Seneca	Seneca II West	62220	خن: ٢٠١	-4		NO Flow	N
010	Seneca	Yoast	10-25-20	6:45	0.03	1.1	artlet pipe justed through	У
011	Seneca	Yoast	P-35-50	160	- 1, (	_	NO Flow	N
011A	Seneca	Yoast	10-22-20		-1,3	_	NO FLOW	N
012	Seneca	Yoast	10-22-30	12:00	6.1	76.7	cettils in pand	N
012A	Seneca	Yoast	P-55-9	13:10	-1,5	~		N
013	Seneca		10-55-5	12:15	-2	_	No Flow	N
014	Seneca	Yoast	10-55-9		~1.4	_	No Flow	N
ST-1	Seneca	Yoast	10.22.20		-3		NO Flow	N

CLIMATIC CONDITIONS:

FIELD PERSONNEL; JL	FIELD PERSONNEL SIGNATURE:
NOTES	
_	