

April 24, 2019

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

RE: Yoast Mine, Permit C-94-082, 1Q19 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 #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,

Miranda Kawcak Environmental Engineer

Enclosure: Yoast IIR

Mining Area	Yoast Mine(Seneca Coal Co)		Configuration	Cross-\	Valley Pond				
Date Inspected	3/11/2019	Date La	st Inspected	10,	/1/2018				
Impoundment	Pond #010	Pond	Location	NW¼ NE¼, S	Sec. 8, T5N, R87W	Quai	rterly Impoundment Inspection Form		
NPDES ID No	CO-0000221 D.P. 010	Site 1	Location	8.5 mi SE of Hayden, CO					
Owner's Rep	Miranda Kawcak	Ins	pector	Jaso	Jason Herden				
			Mark o		Appropriate I	Response:			
	FEATURE				BLEM		COMMENTS		
			YES (At	ove)	NO (Belo	ow)			
GENERAL									
	below principal spillway)		X				water level 0.1 feet above spillway		
Existing Embankment	Freeboard (10.1 ft)		10.5	5					
Outflow (gpm)			Х				1.4 gpm		
EROSION									
	Rills & Gullies on Embankment				X				
Wave Erosion					X				
*	Spillway Erosion				X				
Burrows					X				
Other					Х				
STRUCTURAL			T			ı			
Differential Settling					Х				
Cracks or Slides			X				_		
Seepage			X						
Other			X						
STRUCTURES									
Principal Spillway									
Clogged Orifice	1.0-1		X		Х		to be the second of the country of the second of the second of the		
Clogged or Damage					NI A		Intake starting to rust out but still functionable		
Damaged Headgate Emergency Spillway					NA				
Erosion					Х	I			
Riprap					X				
* *	d Culvert				X				
Other	Clogged or Damaged Culvert			X X					
MAINTENACE					^				
Maintenance Required			Х				See comment above		
Maintenance Performe					Х		See comment above		
Additional Comments	u				X				
Taattona Comments			l .		Λ				

Mining Area Date Inspected	Yoast Mine(Seneca Coal Co) 3/11/2019		Configuration st Inspected		Cross-Vally Pond 10/1/2018		
Impoundment	Pond #011	Pond	Location	NW¼ SW¼,	NW¼ SW¼, Sec. 16, T5N, R87W		rterly Impoundment Inspection Form
NPDES ID No	CO-0000221 D.P.011	Site 1	Location	8.5 mi SE of Hayden, CO		Z	- · · · · · · · · · · · · · · · · · · ·
Owner's Rep	Miranda Kawcak	Ins	pector	Jaso	Jason Herden		
			•	or Write i	n Appropriate R	esponse:	
	FEATURE				DBLEM	-	COMMENTS
			YES (Al	oove)	NO (Belo	w)	
GENERAL							
Water Level (above or	below principal spillway)				X		Water level 3.6 feet below spillway
Existing Embankment	Freeboard (5.1 ft)		10.3	1			
Outflow (gpm)					Х		
EROSION							
Rills & Gullies on Eml	bankment				Х		
Wave Erosion					Х		
Spillway Erosion					Х		
Burrows					Х		
Other					Х		
STRUCTURAL							
Differential Settling			X				
Cracks or Slides					Х		
Seepage					Х		
Other			X				
STRUCTURES							
Principal Spillway							
Clogged Orifice					X		
Clogged or Damage					X		
Damaged Headgate	1				NA		
Emergency Spillway			ı		T		
Erosion					Х		
Riprap					Х		
	l or Damaged Culvert				X		
Other					Х		
MAINTENACE			T				
Maintenance Required					Х		Snow Covered
Maintenance Performe	ed				X		
Additional Comments			X				

Mining Area	Yoast Mine(Seneca Coal Co)		onfiguration	Cross-Vally Pond				
Date Inspected	3/11/2019	Date Las	t Inspected	10)/1/2018			
Impoundment	Pond #011A	Pond I	Location	SW¼ NW¼,	Sec. 16, T5N, R87W	Qua	rterly Impoundment Inspection Form	
NPDES ID No	N/A	Site L	Location 8.5 mi SE of		of Hayden, CO	_		
Owner's Rep	Miranda Kawcak	Insp	oector		on Herden			
Mark or Write in Appropriate Response:								
	FEATURE		PROBLEM				COMMENTS	
			YES (Ab	ove)	NO (Belo	w)		
GENERAL								
	below principal spillway)				Х			
Existing Embankment	Freeboard (4.6 ft)		6.6					
Outflow (gpm)					X			
EROSION	1							
Rills & Gullies on Emb Wave Erosion	pankment	_			X			
		-			X			
Spillway Erosion Burrows			X X					
Other	X							
STRUCTURAL					^			
Differential Settling					Х			
Cracks or Slides		-	X					
Seepage		-	X					
Other			X					
STRUCTURES								
Principal Spillway								
Clogged Orifice			Х					
Clogged or Damage	d Culvert				Х			
Damaged Headgate					NA			
Emergency Spillway								
Erosion					Х			
Riprap					Х			
	Clogged or Damaged Culvert			X				
	Other			X				
MAINTENACE		1			1			
Maintenance Required		-			Х		No access due to winter conditions	
Maintenance Performe	d	-			X			
Additional Comments	ro = 2.1 foot holow ton of n		X					

Top of Sediment Storage = 2.1 feet below top of pipe

Mining Area			Configuration		-Vally Pond		
Date Inspected	3/11/2019		st Inspected	10,	/16/2018	_	
Impoundment	Pond #012		Location	NE¼ NW¼,	Sec. 19, T5N, R87W	Qua	rterly Impoundment Inspection Form
NPDES ID No	CO-0000221 D.P. 012	Site l	Location	8.5 mi SE of Hayden, CO			
Owner's Rep	Miranda Kawcak	Ins	pector		on Herden		
		-	Mark	or Write i	n Appropriate F	Response:	
	FEATURE			PRC	BLEM		COMMENTS
			YES (At	oove)	NO (Belo	w)	
GENERAL							
Water Level (above or	below principal spillway)		Х				Water level 0.1 feet above spillway
Existing Embankment	Freeboard (9.0 ft)		9				
Outflow (gpm)			X				25
EROSION							
Rills & Gullies on Emb	ankment				Х		
Wave Erosion					Х		
Spillway Erosion				X			
Burrows					Х		
Other	ther			Х			
STRUCTURAL							
Differential Settling				X			
Cracks or Slides			X				
Seepage			X				
Other			X				
STRUCTURES							
Principal Spillway							
Clogged Orifice					Х		
Clogged or Damage	ed Culvert				Х		
Damaged Headgate					NA		
Emergency Spillway							
Erosion					Х	_	
Riprap	Riprap				X		
Clogged or Damage	Clogged or Damaged Culvert			X			
Other					Х		
MAINTENACE							
Maintenance Required					Х		Snow covered
Maintenance Performe	d				Х		

Additional Comments

Mining Area	Yoast Mine(Seneca Coal Co)	acility Co	nfiguratio	Cross-	-Vally Pond				
Date Inspected	3/11/2019	Date Last	Inspected	10/	16/2018				
Impoundment	Pond #012A	Pond L	ocation	NE¼ NW¼,S	ec. 19, T5N, R87W	Quai	rterly Impoundment Inspection Form		
NPDES ID No	N/A	Site Lo	ocation	ion 8.5 mi SE of Hayden, CO			7 1		
Owner's Rep	Miranda Kawcak	Insp	ector	r Jason Herden					
	Mark or Write in Appropriate Response:								
	FEATURE			PR	OBLEM		COMMENTS		
			YES (Above)	NO (Bel	ow)			
GENERAL									
	below principal spillway)				X		Water level 1.4 feet below spillway		
Existing Embankment	Freeboard (4.6 ft)		7	.1					
Outflow (gpm)					Х				
EROSION			ı						
Rills & Gullies on Emb	oankment				X				
Wave Erosion					Х				
Spillway Erosion					X				
Burrows	vs				Х				
Other					Х				
STRUCTURAL									
Differential Settling				X					
Cracks or Slides				X			_		
Seepage				Х					
Other				X					
STRUCTURES									
Principal Spillway			ı	1					
Clogged Orifice					Х				
Clogged or Damage					Х				
Damaged Headgate					NA				
Emergency Spillway			1	1	.,	-			
Erosion					X				
Riprap	101				X				
Clogged or Damaged Culvert				X					
Other X									
MAINTENACE					· ·		Construction		
Maintenance Required	1			X			Snow covered		
Maintenance Performe Additional Comments	α		,	,	X				
Additional Comments			<u> </u>	Κ					

Date Inspected 3/11/2019 Date Last Inspected 10/16/2018 SE½ NW%, Sec. 19, TSN, R87W NPDES ID No Owner's Rep Miranda Kawcak Inspector Jason Herden	Form					
NPDES ID No Owner's Rep Miranda Kawcak Inspector Mark or Write in Appropriate Response: FEATURE PROBLEM YES (Above) NO (Below) GENERAL Water Level (above or below principal spillway) Existing Embankment Freeboard (4.0 ft) Outflow (gpm) EROSION Site Location Inspector Jason Herden On Write in Appropriate Response: PROBLEM NO (Below) X water level 0.9 feet below outlet X EROSION	Form					
NPDES ID No Owner's Rep Miranda Kawcak Inspector Mark or Write in Appropriate Response: FEATURE PROBLEM YES (Above) NO (Below) GENERAL Water Level (above or below principal spillway) Existing Embankment Freeboard (4.0 ft) Outflow (gpm) EROSION Site Location Inspector Jason Herden On Write in Appropriate Response: PROBLEM NO (Below) X water level 0.9 feet below outlet X EROSION						
Mark or Write in Appropriate Response: FEATURE PROBLEM COMMENTS						
FEATURE PROBLEM COMMENTS YES (Above) NO (Below) GENERAL Water Level (above or below principal spillway) X water level 0.9 feet below outlet Existing Embankment Freeboard (4.0 ft) 4 Outflow (gpm) X EROSION						
Water Level (above or below principal spillway) Existing Embankment Freeboard (4.0 ft) Outflow (gpm) EROSION VES (Above) NO (Below) X water level 0.9 feet below outlet X EROSION						
GENERAL Water Level (above or below principal spillway) Existing Embankment Freeboard (4.0 ft) Outflow (gpm) A V V V V V V V V V V V V						
Water Level (above or below principal spillway) Existing Embankment Freeboard (4.0 ft) Outflow (gpm) X water level 0.9 feet below outlet X EROSION						
Existing Embankment Freeboard (4.0 ft) 4 Outflow (gpm) X EROSION						
Outflow (gpm) X EROSION						
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 of Damaged Culvert X						
Damaged Headgate NA						
Emergency Spillway						
Erosion X						
Riprap X	ļ					
Clogged or Damaged Culvert X	ļ					
Other X						
MAINTENACE						
Maintenance Required X Snow covered						
Maintenance Performed X						
Additional Comments X						

Mining Area	Yoast Mine(Seneca Coal Co)		Configuration		Vally Pond			
Date Inspected	3/11/2019		st Inspected		16/2018			
Impoundment	Pond #014		Location	NE¼ SW¼, Sec. 19, T5N, R87W		Qua	rterly Impoundment Inspection Form	
NPDES ID No	CO-0000221 D.P. 014	Site Location		8.5 mi SE of Hayden, CO				
Owner's Rep	Miranda Kawcak	Ins	spector		n Herden			
			Mark o		Appropriate F	Response:		
	FEATURE				BLEM		COMMENTS	
			YES (A)	bove)	NO (Bel	ow)		
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 Emb	oankment				X			
Wave Erosion					X			
Spillway Erosion	lway Erosion				X			
Burrows	Burrows							
Other					X			
STRUCTURAL								
Differential Settling					X			
Cracks or Slides					X			
Seepage					Х			
Other			Х					
STRUCTURES								
Principal Spillway								
Clogged Orifice					X			
Clogged or Damage					X			
Damaged Headgate					NA			
Emergency Spillway							,	
Erosion					X X			
Riprap	Riprap							
	gged or Damaged Culvert			X				
Other					X			
MAINTENACE								
Maintenance Required					Х		Snow covered	
Maintenance Performe	d				X			
Additional Comments			Х					

Mining Area	Yoast Mine(Seneca Coal Co)	Facility Co	onfiguration	Stockpond			
Date Inspected	3/11/2019	Date Las	t Inspected	10/	16/2018		
Impoundment	Stock Tank ST-1	Pond 1	Pond Location		SW¼ Sec. 20, T5N, R87W		rterly Impoundment Inspection Form
NPDES ID No	N/A	Site L	ocation	8.5 mi SE of Hayden, CO		_	
Owner's Rep	Miranda Kawcak	Insp	pector	Jaso	n Herden		
			Mark or		Appropriate I	Response:	
	FEATURE				BLEM		COMMENTS
			YES (Ab	ove)	NO (Belo	ow)	
GENERAL							
	below principal spillway)				Х		
EROSION		1					
Rills & Gullies on Em	bankment	-			X		
Wave Erosion		-			X		
Spillway Erosion		-			X		
Other	Burrows			X			
STRUCTURAL					^		
Differential Settling					Х		
Cracks or Slides		-			X		
Seepage		-		X			
Other		-		X			
STRUCTURES		<u> </u>					
Principal Spillway							
Clogged Orifice					NA		
Clogged or Damage	ed Culvert				NA		
Damaged Headgate	1				NA		
Emergency Spillway							
Erosion					X		
Riprap					Х		
	Clogged or Damaged Culvert			NA			
Other					Х		
MAINTENACE		-					
Maintenance Required				X			No access due to winter conditions
Maintenance Performe	d	-			Х		
Additional Comments			Х				

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

FLOW DA		r					1	
SITEID	COMPANY	MINE	DATE	TIME	WATER LEVEL (FT)	OUTFLOW (GPM)	OBSERVATIONS	MAINTENANCE (Y/N)
002	Sage Creek	Sage Creek	3-11-19	08:30	0.15	30,8	Show covered	N
003	Sage Creek	Sage Creek	3-11-19	07:45	0.08	1.1	Snow Covered	N
004	Sage Creek	Sage Creek	3-11-19	09:00	0,08	39,2	Snow Covered	N
Lower Sump	Sage Creek	Sage Creek	3-11-19	08:15	0,2	174	Snow Covered	N
PECOCO	Sage Creek	Sage Creek	3-11-19	(4:55	0,2	139	Snow covered	N
Portal Sump 1	Sage Creek	Sage Creek	3-11-19	14:15	0,1	1.0	Fiozen	N
Portal Sump 2	Sage Creek	Sage Creek	3-11-19	14:30	_	*	Flozen	N
Spill Control 2	Sage Creek	Sage Creek	3-11-19	14:00	_	<u> </u>	Snow covered	N
Truck Wash	Sage Creek	Sage Creek	3-11-19	08:35	~		Dis	N
Upper Sump	Sage Creek	Sage Creek	3-11-19	14:45	0,3	97	Snow Covered	N
001	Seneca	Hayden Gulch	3-11-19	13:00		'	Snow Covered	N
002	Seneca	Hayden Gulch	3-11-19	13:6	_	_	Shaw Covered	N
005	Seneca	Seneca II West	3-11-19	11:00	-1,3		NO Flow, Snowcovered	N
006	Seneca	Seneca II West	3-11-19	09:45	0.1	295	snow covered slufts, side	N
009	Seneca	Seneca II West	3-11-19	11:15	-3.5		Snow Covered	N
015	Seneca	Seneca II West	3-11-19	11:20	0.01	1,0	Snow covered	N
016	Seneca	Seneca II West	3-11-19	10:15	0.09	20,7	Show Covered	N
017	Seneca	Seneca II West	3-11-19	ю:35	0,03	2.1	Snow Covere	N
T-1	Seneca	Seneca II West)			_		
T-18	Seneca	Seneca II West		_	-	_		
T-2	Seneca	Seneca II West	-	_	_	_		
T-20	Seneca	Seneca II West	-		_	_		
T-22	Seneca	Seneca II West	~	J	_	_		
T-24	Seneca	Seneca II West	_	~		_		
T-25	Seneca	Seneca II West	_	_	_	_		
T-26	Seneca	Seneca II West	~		_	_		

008

3-11-19 09:30 0.3

15,8 51

Show C-veled

N

SITEID	COMPANY	MINE	DATE	ТІМЕ	WATER LEVEL (FT)	OUTFLOW (GPM)	OBSERVATIONS	MAINTENANCE (Y/N)
T-27	Seneca	Seneca II West	_	_	-	_		
T-3	Seneca	Seneca II West	_	_	_	_		
T-5	Seneca	Seneca II West				~		
010	Seneca	Yoast	3-11-19	12:10	0,1	1.4	Snow covered	<i>N</i>
011	Seneca	Yoast	3-11-19	13:30	- 3,6		Show covered	N
011 A	Seneca	Yoast						
012	Seneca	Yoast	3-11-19	11:40	0.1	250	Show covered	N
012A	Seneca	Yoast	2-11-19	15:00	-1,4	~	Snow Covered	N
013	Seneca	Yoast	3-11-19	12:20	9	_	snow Covered	N
014	Seneca	Yoast	3-11-19	12:40	-17	-	snow Covered	N
ST-1	Seneca	Yoast						

CLIMATIC CONDITIONS:	
FIELD PERSONNEL: 3H	FIELD PERSONNEL SIGNATURE:
NOTES	

