

July 23, 2019

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

RE: Yoast Mine, Permit C-94-082, 2Q19 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.

Maintenance is required at Pond #010. 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-\	/alley Pond				
Date Inspected	6/11/2019	Date La	st Inspected	3/1	.1/2019				
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	Inspector		n 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)			X				186.2		
EROSION									
Rills & Gullies on Emb	oankment				X				
Wave Erosion					X				
Spillway Erosion					X				
Burrows					X				
Other					X				
STRUCTURAL			1						
Differential Settling					Х				
Cracks or Slides					X				
Seepage			X						
Other			X						
STRUCTURES									
Principal Spillway			1						
Clogged Orifice					X				
Clogged or Damage			Х				Intake starting to rust out but still functionable		
Damaged Headgate					NA				
Emergency Spillway			T		.,	Г			
Erosion					X				
Riprap	101				X				
Clogged or Damage	d Culvert				X				
Other					Х				
MAINTENACE									
	Maintenance Required X			.,		See comment above			
Maintenance Performed Additional Comments					X				
Additional Comments					Х				

Mining Area	Yoast Mine(Seneca Coal Co)	Facility Co	onfiguration	Cross	Cross-Vally Pond				
Date Inspected	6/11/2019	Date Las	t Inspected	3/	11/2019				
Impoundment	Pond #011	Pond 1	Location	NW¼ SW¼,	Sec. 16, T5N, R87W	Quai	rterly Impoundment Inspection Form		
NPDES ID No	CO-0000221 D.P.011	Site I	ocation 8.5 mi SE		of Hayden, CO	_			
Owner's Rep	Miranda Kawcak	Insj	pector	Jaso	son Herden				
			Mark o		n Appropriate F	Response:			
	FEATURE				BLEM		COMMENTS		
			YES (At	ove)	NO (Belo	w)			
	GENERAL GENERAL								
,	below principal spillway)	-	Х				Water level 0.1 feet above spillway		
Existing Embankment	Freeboard (5.1 ft)	-	10.1						
Outflow (gpm)			X				45.4		
EROSION									
Rills & Gullies on Em	bankment	_			Х				
Wave Erosion					Х				
Spillway Erosion		-			X				
Burrows		-			X				
Other					X				
STRUCTURAL		ı							
Differential Settling		-			X				
Cracks or Slides		-			X				
Seepage Other		-			X X				
STRUCTURES									
Principal Spillway									
Clogged Orifice					Х				
Clogged or Damage	ed Culvert	-			X				
Damaged Headgate					NA NA				
Emergency Spillway	·				INA.				
Erosion					Х				
Riprap					X		†		
Clogged or Damage	d Culvert				X				
Other		j			X				
MAINTENACE									
Maintenance Required					Х				
Maintenance Performe	ed	j			Х				
Additional Comments					Х				

Mining Area	Yoast Mine(Seneca Coal Co)		Configuration	Cross	-Vally Pond			
Date Inspected	6/11/2019	Date La	st Inspected	3/	11/2019			
Impoundment	Pond #011A	Pond	Location SW¼ NW½		¼ NW¼, Sec. 16, T5N, R87W		rterly Impoundment Inspection Form	
NPDES ID No	N/A	Site	Location	8.5 mi SE	of Hayden, CO	_	. 1	
Owner's Rep	Miranda Kawcak	Ins	spector	Jaso	on Herden			
				or Write in	n Appropriate F	Response:		
	FEATURE				BLEM	•	COMMENTS	
			YES (Ab	ove)	NO (Belo	w)		
GENERAL								
Water Level (above or	below principal spillway)				Х		Water level 0.4 feet below spillway	
Existing Embankment	Freeboard (4.6 ft)		6.6					
Outflow (gpm)					X			
EROSION								
Rills & Gullies on Emb	oankment			X				
Wave Erosion					X			
Spillway Erosion				X				
Burrows				X				
Other					X			
STRUCTURAL								
Differential Settling					Х			
Cracks or Slides				Х				
Seepage					X			
Other					Х			
STRUCTURES								
Principal Spillway			1		Х			
Clogged Orifice								
Clogged or Damaged Culvert			X					
Damaged Headgate					NA			
Emergency Spillway			1			-		
Erosion			X					
Riprap	101			X				
Clogged or Damage	d Culvert				X			

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X

Other

MAINTENACE Maintenance Required

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

Mining Area	Yoast Mine(Seneca Coal Co)	Facility C	onfiguration	Cross	s-Vally Pond		
Date Inspected	6/10/2019	Date Las	st Inspected	3/	11/2019		
Impoundment	Pond #012	Pond	Location	NE¼ NW¼,	Sec. 19, T5N, R87W	Qua	rterly Impoundment Inspection Form
NPDES ID No	CO-0000221 D.P. 012	Site I	Location	8.5 mi SE of Hayden, CO		_	
Owner's Rep	Miranda Kawcak	Ins	pector	Jaso	Jason Herden		
			Mark	or Write i	n Appropriate F	Response:	
	FEATURE			PRC	DBLEM		COMMENTS
			YES (Ab	oove)	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				206.3
EROSION							
Rills & Gullies on Em	oankment				X		
Wave Erosion					Х		
Spillway Erosion					X		
Burrows					X		
Other					X		
STRUCTURAL							
Differential Settling					X		
Cracks or Slides					X		
Seepage				X			
Other				Х			
STRUCTURES							
Principal Spillway					T		
Clogged Orifice					X		
Clogged or Damage					Х		
	Damaged Headgate			NA			
Emergency Spillway			T		T		
Erosion					Х		
Riprap					X		
Clogged or Damage	d Culvert				X		
Other					Х		
MAINTENACE							
Maintenance Required					Х		
Maintananaa Darfarma	1		ı		V		

Maintenance Performed Additional Comments

Mining Area	Yoast Mine(Seneca Coal Co)	acility Co	nfiguratio	Cross-	Vally Pond		
Date Inspected	6/12/2019	Date Last	Inspected	3/1	11/2019		
Impoundment	Pond #012A	Pond L	ocation	NE¼ NW¼,Sec. 19, T5N, R87W		Oua	rterly Impoundment Inspection Form
NPDES ID No	N/A	Site Lo	ocation	8.5 mi SE	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	Insp	ector	Jaso	n Herden		
•			Mark	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 0.2 feet below spillway
Existing Embankment	Freeboard (4.6 ft)		7	.1			
Outflow (gpm)					Х		
EROSION							
Rills & Gullies on Em	bankment				Х		
Wave Erosion					Х		
Spillway Erosion				X			
Burrows					Х		
Other				Х			
STRUCTURAL							
Differential Settling					Х		
Cracks or Slides					Х		
Seepage					Х		
Other					Х		
STRUCTURES							
Principal Spillway							
Clogged Orifice					Х		
Clogged or Damage					Х		
Damaged Headgate				NA			
Emergency Spillway							
Erosion					Х		
Riprap					Х		
Clogged or Damage	d Culvert				Х		
Other					Х		
MAINTENACE							
Maintenance Required					Х		
Maintananaa Darfarma	A				V		

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Maintenance Performed

Additional Comments

Mining Area	Yoast Mine(Seneca Coal Co)	Facility Co	onfiguration	Cross-	-Vally Pond		
Date Inspected	6/14/2019	Date Las	t Inspected	3/2	11/2019		
Impoundment	Pond #013	Pond l	Location	SE¼ NW¼, S	ec. 19, T5N, R87W	Qua	rterly Impoundment Inspection Form
NPDES ID No	CO-0000221 D.P. 013	Site L	Location 8.5 mi S		of Hayden, CO	_	
Owner's Rep	Miranda Kawcak	Insp	oector	Jason Herden			
			Mark o	r Write in	Appropriate l	Response:	
	FEATURE				BLEM		COMMENTS
			YES (Ab	ove)	NO (Belo	ow)	
GENERAL							
	below principal spillway)				X		water level 0.2 feet below outlet
Existing Embankment	Freeboard (4.0 ft)		4				
Outflow (gpm)					Х		
EROSION	•	-			Γ		
Rills & Gullies on Emb	oankment	-			X		
Wave Erosion		-			X		
Spillway Erosion		-			X		
Burrows Other		-			X		
STRUCTURAL					Х		
Differential Settling					Х		
Cracks or Slides		-			X		
Seepage		-	X				
Other			X				
STRUCTURES		<u> </u>					
Principal Spillway							
Clogged Orifice					Х		
Clogged or Damage	ed Culvert				Х		
Damaged Headgate					NA		
Emergency Spillway		•					
Erosion					Х		
Riprap				X			
Clogged or Damage	Clogged or Damaged Culvert			·	X	<u> </u>	
Other					X		
MAINTENACE							
Maintenance Required					Х		
Maintenance Performed				Х			
Additional Comments					Х		

Mining Area	Yoast Mine(Seneca Coal Co)		onfiguration	Cross-	Vally Pond		
Date Inspected	6/14/2019	Date Las	t Inspected	3/1	1/2019		
Impoundment	Pond #014	Pond	Location NE% SW%, Se		ec. 19, T5N, R87W	Qua	rterly Impoundment Inspection Form
NPDES ID No	CO-0000221 D.P. 014	Site I	Location	ocation 8.5 mi SE of Hayden, CO		_	
Owner's Rep	Miranda Kawcak	Ins	pector	Jason	Jason Herden		
		•	Mark o		Appropriate I	Response:	
	FEATURE				BLEM		COMMENTS
			YES (At	oove)	NO (Bel	ow)	
GENERAL							
	below principal spillway)	-			Х		water level 0.2 feet below spillway
Existing Embankment	Freeboard (6.8 ft)		6.8				
Outflow (gpm)					X		
EROSION		ı					
Rills & Gullies on Emb	ankment				Х		
Wave Erosion		-			X		
Spillway Erosion		-			X		
Burrows		-	X				
Other STRUCTURAL					X		
Differential Settling							
Cracks or Slides		-			X		
Seepage			X				
Other		-	X				
STRUCTURES					Α		
Principal Spillway							
Clogged Orifice					Х		
Clogged or Damage	d Culvert	-			X		
Damaged Headgate		•			NA		
Emergency Spillway							
Erosion					Х		
Riprap				Х			
Clogged or Damaged	or Damaged Culvert			X			
Other		•			Х		
MAINTENACE							
Maintenance Required					Х		
	Maintenance Performed				Х		
Additional Comments					Х		

Mining Area	Yoast Mine(Seneca Coal Co)	Facility C	Configuration	Stockpond			
Date Inspected	6/12/2019	Date La	st Inspected	3/	11/2019		
Impoundment	Stock Tank ST-1	Pond	Pond Location		SW¼ Sec. 20, T5N, R87W		rterly Impoundment Inspection Form
NPDES ID No	N/A	Site	Location	8.5 mi SE	8.5 mi SE of Hayden, CO		
Owner's Rep	Miranda Kawcak	Ins	spector	Jaso	on Herden		
			Mark or		Appropriate I	Response:	
	FEATURE				BLEM		COMMENTS
			YES (Ab	ove)	NO (Belo	ow)	
GENERAL			1		1		
	below principal spillway)				Х		Water level 1.0 feet below spillway
EROSION			T		T		
Rills & Gullies on Em	bankment				X		
Wave Erosion					X		
Spillway Erosion Burrows					X		
Other					X		
STRUCTURAL					^		
Differential Settling			I		Х		
Cracks or Slides				X			
Seepage				X			
Other				X			
STRUCTURES			•				
Principal Spillway							
Clogged Orifice					NA		
Clogged or Damage					NA		
Damaged Headgate	:				NA		
Emergency Spillway			T		T		
Erosion					Х		
Riprap				Х			
Clogged or Damage	naged Culvert			NA			
Other					Х		
MAINTENACE			ı		l		
Maintenance Required Maintenance Performe					X		
Additional Comments					X		
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	IA			1	ř –		1	
SITE ID	COMPANY	MINE	DATE	TIME	WATER LEVEL (FT)	OUTFLOW (GPM)	OBSERVATIONS	MAINTENANCE (Y/N)
002	Sage Creek	Sage Creek	6-11-19	14:45	0.43	207.3		N
003	Sage Creek	Sage Creek	6-11-19	14:15	0.10	२५.छ	Culvertflume broken	Y
004	Sage Creek	Sage Creek	6-11-19	16:15	0.15	191,3		N
Lower Sump	Sage Creek	Sage Creek	6-13-19	56:20	0.08	108.7		N
PECOCO	Sage Creek	Sage Creek	6-12-19	11:30	0.1	139		N
Portal Sump 1	Sage Creek	Sage Creek	6-13-19	00:00	0.1	3		N
Portal Sump 2	Sage Creek	Sage Creek	6-13-19	07:15	_	1	NOT Pumpins	N
Spill Control 2	Sage Creek	Sage Creek	6-13-19	06:40			Pry	N
Truck Wash	Sage Creek	Sage Creek	6-12-19	06:05			Dry	N
Upper Sump	Sage Creek	Sage Creek	6-13-19	07:46	0.1	147		N
001	Seneca	Hayden Gulch	6-13-17	09:40	-2.0		No 760	N
002	Seneca	Hayden Gulch	4-13-9	07:50	-25		NOTION	N
005	Seneca	Seneca II West	6-6-19	11:00	0.05	78.8	spring @ dam no impact	N
006	Seneca	Seneca II West	6-10-19	08:50	0.1	190,5	big sluftons side no impact	N
009	Seneca	Seneca II West	6-10-19	(11:35	-2.0	_	No Flow	N
015	Seneca	Seneca II West	6-6-19	11:50	0.10	76.4		N
016	Seneca	Seneca II West	6-10-19	09:05	0.1	154.3	Small seep under flume	Ϋ́
017	Seneca	Seneca II West	6-10-19	10:00	0.1	151.1	allumber running asmulflump	У
T-1	Seneca	Seneca II West	6-13-19	09:40			015	N
T-18	Seneca	Seneca II West	6-13-19	12:45	-1.0	_	NO Flow	
T-2	Seneca	Seneca II West	6-13-19	10:30	-75	_	NO Flow	N
T-20	Seneca	Seneca II West	6-13-19	13:10	-3		No Flow	~
T-22	Seneca	Seneca II West	6-13-19	13:30	0.1	12.7		N
T-24	Seneca	Seneca II West	6-13-19	14:10		_	Dia	N
T-25	Seneca	Seneca II West	6-6-19	10:10			Dis	N
T-26	Seneca	Seneca II West			-1.5		No flow	N

008

6-12-19 13:00 0:1 1

117 outletpipe has risen Y
Cleantologinte + patweights on
WWCENGINEERING
IMPOUNDMENT INSPECTION LOG

SITE ID	COMPANY	MINE	DATE	TIME	WATER LEVEL (FT)	OUTFLOW (GPM)	OBSERVATIONS	MAINTENANCE (Y/N)
T-27	Seneca	Seneca II West	6-13-19	1	-1,3		NOFION	N
T-3	Seneca	Seneca II West	6-13-19	JG:35	-3ø	_	NO Flow	N
T-5	Seneca	Seneca II West	6-13-19	10'.50	- 2.5	_	NoFlow	N
010	Seneca	Yoast	6-11-19	12:45	0.1	186.3	ontlet pipe justed through	У
011	Seneca	Yoast	6-11-19	07:10	0.1	45.4		N
011A	Seneca	Yoast	6-11-19	18:30	4		NO Flow	N
012	Seneca	Yoast	6-10-19	12:20	0.08	204,3	NO Flow	N
012A	Seneca	Yoast		06:40	1	~	No Flow	N
013	Seneca	Yoast	6-14-19	06:30	1	_	NGFlow	N
014	Seneca	Yoast		07:15	-,1	_	NO Flow	N
ST-1	Seneca	Yoast	4-17-19	15:15	-1.0	_	NO Flow	N

CLIMATIC CONDITIONS:	
FIELD PERSONNEL: JH	FIELD PERSONNEL SIGNATURE:
NOTES	
NOTES	