

Seneca Coal Company

April 24, 2019

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

RE: Seneca II W Mine, Permit C-82-057, 1Q19 IIR

Dear Robin:

In accordance with Rule 4.05.9(17), please find enclosed the Seneca II West Mine Impoundment Inspection Reports (IIR) and Impoundment Inspection Log (IIL) for Ponds:

• Pond #005, Pond #006, Pond #008, Pond #009, Pond #015, Pond #016, Pond #017

and Stock Tanks:

• Stock Tank T-1, Stock Tank T-2, Stock Tank T-3, Stock Tank T-5, Stock Tank T-18, Stock Tank T-20, Stock Tank T-22, Stock Tank T-24, Stock Tank T-25, Stock Tank T-26 and Stock Tank T-27.

No maintenance is required at this time. Please contact me with any comments and/or questions.

Sincerely,

Miranda Kawcak Environmental Engineer

Enclosure: Seneca II W IIR

Mining Area	Seneca II West Mine	Facility C	onfiguration	Cross	-Vally Pond		
Date Inspected	3/11/2019	Date Las	t Inspected	10,	/16/2018		
Impoundment	Pond #005	Pond 1	Location NW¼ SW¾, Sec. 10, T5N, R88W			Oua	rterly Impoundment Inspection Form
NPDES ID No	CMLRD Permit No. C-82-057	Site L	ocation	8 mi. S o	of Hayden, CO	_	v i
Owner's Rep	Miranda Kawcak	Insp	pector	Jaso	on Herden		
			Mark		in Appropriate	Response	:
	FEATURE				BLEM		COMMENTS
			YES (At	oove)	NO (Belo	ow)	
GENERAL							
,	below principal spillway)				X		Water level 1.3 feet below spillway
Existing Embankment	Freeboard (7.4 ft)		10.4	1			
Outflow (gpm)					Х		0
EROSION							
Rills & Gullies on Em	bankment				X		
Wave Erosion		-			X		4
Spillway Erosion		-			X		4
Burrows Other		-			X		4
STRUCTURAL					Х		
Differential Settling		Ī			Х		
Cracks or Slides					X		-
Seepage					X		1
Other		F			X		+
STRUCTURES							
Principal Spillway							
Clogged Orifice					Х		
Clogged or Damage	ed Culvert				Х		1
Damaged Headgate					NA		1
Emergency Spillway		•					
Erosion					Х		
Riprap		Ī			X]
Clogged or Damage	d Culvert		<u> </u>		X		
Other					Х		
MAINTENACE							
Maintenance Required					X		Snow Covered
Maintenance Performe	d	<u> </u>			Х		_
Additional Comments					X		

Mining Area	Seneca II West Mine	Facility C	onfiguration	Cross	s-Vally Pond						
Date Inspected	3/11/2019	Date Las	st Inspected	10,	/16/2018						
Impoundment	Pond #006	Pond	Location	ion NW¼ NW¼, Sec. 22, T5N, R88W		Quai	rterly Impoundment Inspection Form				
NPDES ID No	CO-0000221 D.P. 006	Site I	Location	8 mi. S d	of Hayden, CO						
Owner's Rep	Miranda Kawcak	Ins	pector	Jaso	on Herden						
Mark or Write in Appropriate Response:											
	FEATURE				DBLEM		COMMENTS				
			YES (Al	oove)	NO (Belo	w)					
GENERAL											
1	r below principal spillw	ay)	X				water level 0.1 feet above spillway				
Existing Embankment	Freeboard (7.5 ft)		7.5								
Outflow (gpm)			X				29.5				
EROSION					1						
Rills & Gullies on Em	bankment				Х						
Wave Erosion					Х						
Spillway Erosion					Х						
Burrows					Х						
Other					Х						
STRUCTURAL					1						
Differential Settling					Х						
Cracks or Slides					Х						
Seepage					Х						
Other					Х						
STRUCTURES											
Principal Spillway					T						
Clogged Orifice	101				Х						
Clogged or Damag					X						
Damaged Headgate	e				NA						
Emergency Spillway		1		1	I	1					
Erosion					X						
Riprap	1 C-1				X						
Clogged or Damage	ea Cuivert				X						
Other					Х						
MAINTENACE	1						Cluff an areath side above good on hill assessable 1 (ff. 1)				
Maintenance Required Maintenance Perform					X		Sluff on south side above pond on hill, currently not affecting				
			V		X		pond. Will continue to monitor. Snow Covered				
Additional Comments			X								

Mining Area	Seneca II Mine	Facility Configuration		-Vally Pond							
Date Inspected	3/11/2019	Date Last Inspecte	d 10,	/1/2018							
Impoundment	Pond #008	Pond Location	SE¼SW¼, S	SE%SW%, Sec. 7, T5N, R86W		rterly Impoundment Inspection Form					
NPDES ID No	CO-0000221 D.P.008	Site Location	7.1 mi SE	of Hayden, CO							
Owner's Rep	Miranda Kawcak	Inspector		n Herden							
Mark or Write in Appropriate Response:											
	FEATURE			BLEM		COMMENTS					
		YES	(Above)	NO (Bel	ow)						
GENERAL											
Water Level (above or		* '	Χ			Water Level 0.3 above spillway					
Existing Embankment	Freeboard (4.7 ft)		4.7								
Outflow (gpm)			Х			15.8					
EROSION											
Rills & Gullies on Em	bankment			X							
Wave Erosion				Х							
Spillway Erosion				Х							
Burrows				X							
Other				X							
STRUCTURAL				1							
Differential Settling				X							
Cracks or Slides				Х							
Seepage				X							
Other				X							
STRUCTURES											
Principal Spillway				T							
Clogged Orifice				Х							
Clogged or Damage				Х							
Damaged Headgate	;			NA							
Emergency Spillway				T	1						
Erosion				X							
Riprap	101			X							
Clogged or Damage	d Culvert			X							
Other				X							
MAINTENACE				1							
Maintenance Required				X		Snow Covered					
Maintenance Performe	d			X							
Additional Comments	DUE TO FINAL BOND			X							

NO LONGER REQUIRED DUE TO FINAL BOND RELEASE

Mining Area	Seneca II West Mine	Facility C	Configuration	Cross-	-Vally Pond		
Date Inspected	3/11/2019		st Inspected		16/2018		
Impoundment	Pond #009		Location	SE¼ SW¼, Sec. 11, T5N, R88W		Onai	rterly Impoundment Inspection Form
NPDES ID No	CO-0000221 D.P. 009		Location		of Hayden, CO	Qua	terry impoundment inspection form
Owner's Rep	Miranda Kawcak	Ins	pector		n Herden		
o where sixep	manaa namaa		1		in Appropriat	e Resnons	se:
	FEATURE		1.24.2		BLEM	e rrespons	COMMENTS
			YES (Ab	oove)	NO (Bel	ow)	
GENERAL			,		, , ,	,	
Water Level (above or	r below principal spillw	ay)			х		Water level 3.5 feet below top of pipe
Existing Embankment		• /	11.4	ļ			
Outflow (gpm)	` ,				Х		
EROSION							
Rills & Gullies on Em	bankment				Х		
Wave Erosion					Х		
Spillway Erosion					Х		
Burrows					Х		
Other					Х		
STRUCTURAL							
Differential Settling					X		
Cracks or Slides					Х		
Seepage					Х		
Other					Х		
STRUCTURES							
Principal Spillway							
Clogged Orifice					Х		
Clogged or Damag					Х		
Damaged Headgate	e				NA		
Emergency Spillway			1		ı		
Erosion					Х		
Riprap					Х		
Clogged or Damaged Culvert			Х				
Other					Х		
MAINTENACE			ı		ı		
Maintenance Required					Х		Snow Covered
Maintenance Perform	ed				X		

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Additional Comments

Mining Area	Seneca II West Mine	Facility C	Configuration	Cross-	Vally Pond		
Date Inspected	3/11/2019	Date La	st Inspected	10/	16/2018		
Impoundment	Pond #015	Pond	Location NE% SE%, Sec. 23, T5		ec. 23, T5N, R88W	Oua	rterly Impoundment Inspection Form
NPDES ID No	CO-0000221 D.P. 015	Site 1	Location	8 mi. S o	f Hayden, CO	C · · · ·	J P
Owner's Rep	Miranda Kawcak	Ins	pector	Jaso	n Herden		
_			Mark	or Write	in Appropriat	e Respons	se:
	FEATURE			PRO	BLEM		COMMENTS
			YES (Ab	oove)	NO (Belo	ow)	
GENERAL							
Water Level (above or	r below principal spillwa	ıy)	X				water level 0.01 feet above spillway
Existing Embankment	Freeboard (4.0 ft)		4.8				
Outflow (gpm)			X				1
EROSION							
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			T	1		1	
Clogged Orifice					X		
Clogged or Damag					X		
Damaged Headgate	2				NA		
Emergency Spillway			ı				
Erosion					X		
Riprap	10.1				X		1
Clogged or Damage	ed Culvert				X		1
Other			<u> </u>		Х		
MAINTENACE	1		1		v		Carry Carry and
Maintenance Required					X		Snow Covered
Maintenance Performe					X X		
Additional Comments					Х		

Mining Area	Seneca II West Mine	Facility (Configuration	Cross-V	ally Pond		
Date Inspected	3/11/2019	Date La	st Inspected	10/1	6/2018		
Impoundment	Pond #016	Pond	Location	NE¼ SE¼, Sec	¼ SE¼, Sec. 27, T5N, R88W		rterly Impoundment Inspection Form
NPDES ID No	CO-0000221 D.P. 016	Site	Location	8 mi. S of	Hayden, CO	-	
Owner's Rep	Miranda Kawcak	Ins	spector	Jason	Herden		
			Mark	or Write i	n Appropria	te Respoi	nse:
	FEATURE			PROB	LEM		COMMENTS
			YES (A)	bove)	NO (Be	elow)	
GENERAL							
Water Level (above o	r below principal spillw	/ay)	Х				water level 0.09 feet above spillway
Existing Embankmen	t Freeboard (6.8 ft)		6.8	}			
Outflow (gpm)			Х				20.7
EROSION							
Rills & Gullies on En	nbankment				X		
Wave Erosion					X		
Spillway Erosion					X		
Burrows				X			
Other					Х		
STRUCTURAL							
Differential Settling					Х		
Cracks or Slides					Х		
Seepage				X			
Other					Х		
STRUCTURES							
Principal Spillway			T			1	
Clogged Orifice					Х		
Clogged or Damag					Х		
Damaged Headgat	e				NA	ı	
Emergency Spillway			T				
Erosion					X		
Riprap	- 1 C-14				X		
Clogged or Damag	ea Culvert				X		

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Snow Covered

Other

MAINTENACE

Maintenance Required

Maintenance Performed Additional Comments

Mining Area	Seneca II West Mine	Facility C	Configuration	Cross-	-Vally Pond						
Date Inspected	3/11/2019	Date La	st Inspected	10/	16/2018						
Impoundment	Pond #017	Pond	Location	Location SW% NE%, Sec. 34, T5N, R88W		Quai	rterly Impoundment Inspection Form				
NPDES ID No	CO-0000221 D.P. 017	Site	Location	8 mi. S c	of Hayden, CO						
Owner's Rep	Miranda Kawcak	Ins	pector	Jaso	n Herden						
Mark or Write in Appropriate Response:											
	FEATURE				BLEM		COMMENTS				
			YES (Ab	ove)	NO (Belo	ow)					
GENERAL											
`	r below principal spillw	ay)	X				water level 0.03 feet above spillway				
Existing Embankment	Freeboard (3.1 ft)		3.1								
Outflow (gpm)			Х				2.1				
EROSION						-					
Rills & Gullies on Em	bankment				Х						
Wave Erosion					X						
Spillway Erosion					Х						
Burrows					Х						
Other					Х						
STRUCTURAL						ı					
Differential Settling					X						
Cracks or Slides					X						
Seepage					Х						
Other					X						
STRUCTURES											
Principal Spillway					•	1					
Clogged Orifice					X						
Clogged or Damag					X						
Damaged Headgate	e				NA						
Emergency Spillway											
Erosion					Х						
Riprap	101				X						
Clogged or Damaged Culvert				Х							
Other					X						
MAINTENACE	1					- 1					
Maintenance Required			X				Flume shows some undercutting, need to place bentonite in				
Maintenance Perform					X		Spring 2019.				
Additional Comments			X								

Mining Area	Seneca II West Mine	Facility C	onfiguration	Sto	ckpond		
Date Inspected	3/11/2019	Date Las	st Inspected	10/1	16/2018		
Impoundment	Stock Tank T-1	Pond	Location	SE¼SW¼, Sec 16, T5N, R88W		Qua	rterly Impoundment Inspection Form
NPDES ID No	N/A	Site I	Location	8 mi S of	Hayden, CO		V I
Owner's Rep	Miranda Kawcak	Ins	pector	Jasor	n Herden		
			Mark	or Write	in Appropriat	e Respon	
F	FEATURE			PROF	BLEM		COMMENTS
			YES (At	oove)	NO (Bel	ow)	
GENERAL							
Water Level (above or b	elow principal spillwa	ay)			X		Dry
EROSION							
Rills & Gullies on Emba	ankment				Х		
Wave Erosion					Х		
Spillway Erosion					N/A		
Burrows					X		
Other					Х		
STRUCTURAL							
Differential Settling					Х		
Cracks or Slides					X		
Seepage					Х		
Other					Х		
STRUCTURES							
Principal Spillway					1		
Clogged Orifice					N/A		
Clogged or Damaged	l Culvert				N/A		
Damaged Headgate					N/A		
Emergency Spillway							
Erosion					Х		
Riprap					X		
Clogged or Damaged	Culvert				N/A		
Other					Х		
MAINTENACE							
Maintenance Required					Х		DAM REMOVED SPRING 2012, ROCK IN CHANNEL NOW.
Maintenance Performed					Х		
Additional Comments			Х				

Mining Area	Seneca II West Mine	Facility C	Configuration	Sto	Stockpond		
Date Inspected	3/11/2019	Date La	st Inspected	10/	16/2018		
Impoundment	Stock Tank T-2	Pond	Location NW4SW4, S		Sec 22, T5N, R88W	Qua	rterly Impoundment Inspection Form
NPDES ID No	N/A	Site 1	Location	8 mi S o	f Hayden, CO		
Owner's Rep	Miranda Kawcak	Ins	pector	Jaso	n Herden		
			Marl	or Write	in Appropriat	e Respons	se:
	FEATURE				BLEM		COMMENTS
			YES (Ab	ove)	NO (Bel	ow)	
GENERAL							
Water Level (above or	below principal spillwa	ay)			X		Dry
EROSION							
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					Х		
Other					Х		
STRUCTURES							
Principal Spillway							
Clogged Orifice					NA		
Clogged or Damage					NA		
Damaged Headgate	;				NA		
Emergency Spillway			Ī				
Erosion					Х		
Riprap					Х		
	Clogged or Damaged Culvert			NA			
Other					Х		
MAINTENACE							
Maintenance Required					Х		No access due to winter conditions
Maintenance Performe	ed .				Х		
Additional Comments			X				

Mining Area	Seneca II West Mine	Facility C	Configuration	Sto	ckpond					
Date Inspected	3/11/2019	-	st Inspected		16/2018					
Impoundment	Stock Tank T-3		Location	NW¼SE¼, Sec 22, T5N, R88W		Onar	rterly Impoundment Inspection Form			
NPDES ID No	N/A	Site	Location		f Hayden, CO	Quu	terry impoundment inspection i orm			
Owner's Rep	Miranda Kawcak	Ins	spector		n Herden					
				or Write	in Appropriat	e Respons	se:			
FEATURE PROBLEM COMMENTS										
			YES (Ab	ove)	NO (Bel	ow)				
GENERAL										
Water Level (above or	r below principal spillwa	ay)			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				X						
Other					Х					
STRUCTURES										
Principal Spillway			1							
Clogged Orifice	10.1				NA					
Clogged or Damag					NA					
Damaged Headgate	e		1		NA					
Emergency Spillway Erosion			1		Х					
Riprap					X					
Clogged or Damage	ed Culvert			NA NA						
Other	A Curvert				X					
MAINTENACE					^					
Maintenance Required	1		1		Х		No access due to winter conditions			
Maintenance Performe					X		The decess due to Whiter conditions			
Additional Comments			Х		, , , , , , , , , , , , , , , , , , ,					

Mining Area	Seneca II West Mine	Facility Configuration	n Stoc	kpond		
Date Inspected	3/11/2019	Date Last Inspected	10/1	6/2018		
Impoundment	Stock Tank T-5	Pond Location	NE¼ Sec 2	2, T5N, R88W	Quai	rterly Impoundment Inspection Form
NPDES ID No	N/A	Site Location	8 mi S of	Hayden, CO	_	
Owner's Rep	Miranda Kawcak	Inspector	Jason	Herden		
		Mark	or Write i	n Appropri	ate Respon	nse:
	FEATURE		PROB			COMMENTS
		YES (A	Above)	NO (B	elow)	
GENERAL				,		
	r below principal spillw	vay)		Х		
EROSION				1		
Rills & Gullies on En	nbankment			Х		
Wave Erosion				Х		
Spillway Erosion				Х		
Burrows				Х		
Other				Х		
STRUCTURAL						
Differential Settling				X		
Cracks or Slides				X		
Seepage Other				X		
STRUCTURES				X		
Principal Spillway						
Clogged Orifice				l NA		
Clogged or Damag	red Culvert			N/		
Damaged Headgat				N/		
Emergency Spillway	<u> </u>			147	1	
Erosion Erosion				Х		
Riprap				X		
Clogged or Damage	ed Culvert			N/		
Other				X		
MAINTENACE						
Maintenance Require	d			Х		No access due to winter conditions
Maintenance Perform				Х		
Additional Comments	3	,	(

Mining Area	Seneca II West Mine	Facility C	Configuration	Sto	ckpond			
Date Inspected	3/11/2019	Date La	st Inspected	10/	16/2018			
Impoundment	Stock Tank T-18	Pond	Location	NW%NE%, Sec 15, T5N, R88W		Qua	rterly Impoundment Inspection Form	
NPDES ID No	N/A		Location	8 mi S of	f Hayden, CO		. 1	
Owner's Rep	Miranda Kawcak	Ins	pector	Jasoi	n Herden			
			Mark		in Appropriat	e Respons	se:	
	FEATURE				BLEM		COMMENTS	
			YES (Ab	ove)	NO (Bel	ow)		
GENERAL								
Water Level (above or	below principal spillw	ay)			Х			
EROSION								
Rills & Gullies on Em	bankment				Х			
Wave Erosion					Х			
Spillway Erosion					Х			
Burrows					Х			
Other					Х			
STRUCTURAL			T		ı			
Differential Settling					Х			
Cracks or Slides					Х			
Seepage					Х			
Other					Х			
STRUCTURES								
Principal Spillway			T		T			
Clogged Orifice					NA			
Clogged or Damage					NA			
Damaged Headgate	;				NA			
Emergency Spillway			I	1	T	1		
Erosion					X			
Riprap	101				X			
Clogged or Damage	a Cuivert				NA V			
Other MAINTENACE					X			
			I		Х		No pages due to winter condition-	
Maintenance Required Maintenance Performe							No access due to winter conditions	
Additional Comments	cu		X		Х			
Auditional Comments			X					

Mining Area	Seneca II West Mine	Facility C	onfiguration	Sto	ockpond					
Date Inspected	3/11/2019	Date La	st Inspected	10/	16/2018					
Impoundment	Stock Tank T-20	Pond	Location	NW¼NE¼, S	Sec 15, T5N, R88W	Qua	rterly Impoundment Inspection Form			
NPDES ID No	N/A	Site 1	Location	8 mi S o	f Hayden, CO					
Owner's Rep	Miranda Kawcak	Ins	pector	Jaso	n Herden					
			Mark	or Write	in Appropriat	e Respon	se:			
	FEATURE			PRO	BLEM		COMMENTS			
			YES (At	ove)	NO (Bel	ow)				
GENERAL										
	below principal spillwa	ay)			Х					
EROSION										
Rills & Gullies on Em	bankment				X					
Wave Erosion					X					
Spillway Erosion					Х					
Burrows					Х					
Other					Х					
STRUCTURAL			1		1					
Differential Settling					Х					
Cracks or Slides					Х					
Seepage					Х					
Other					X					
STRUCTURES										
Principal Spillway			T	1	T					
Clogged Orifice	101				NA					
Clogged or Damage					NA					
Damaged Headgate	;				NA					
Emergency Spillway			1		I					
Erosion					X					
Riprap	1 C-1				X NA					
Clogged or Damage	a Curvert									
Other MAINTENACE			<u> </u>		Х					
MAINTENACE Maintenance Required			I		l v		No access due to winter conditions			
Maintenance Required					X		No access due to winter conditions			
Additional Comments	cu		X		Х					
Additional Comments			X							

Mining Area	Seneca II West Mine	Facility C	Configuration	Sto	ckpond		
Date Inspected	3/11/2019	Date La	st Inspected	10/1	16/2018		
Impoundment	Stock Tank T-22	Pond	Location	SE¼SW¼, Se	ec 10, T5N, R88W	Qua	rterly Impoundment Inspection Form
NPDES ID No	N/A	Site 1	Location	8 mi S of	8 mi S of Hayden, CO		, i
Owner's Rep	Miranda Kawcak	Ins	pector	Jasor	Jason Herden		
			Mark	or Write	in Appropria	te Respons	se:
	FEATURE			PROI	BLEM		COMMENTS
			YES (At	oove)	NO (Bel	ow)	
GENERAL							
Water Level (above or	below principal spillwa	ay)			Х		
EROSION							
Rills & Gullies on Em	bankment				Х		
Wave Erosion					Х		
Spillway Erosion					Х		
Burrows					Х		
Other					Х		
STRUCTURAL			T				
Differential Settling					Х		
Cracks or Slides					Х		
Seepage					Х		
Other					Х		
STRUCTURES							
Principal Spillway			1				
Clogged Orifice					NA		
Clogged or Damage					NA		
Damaged Headgate	1				NA		
Emergency Spillway			ı				
Erosion					X		
Riprap	101				Х		
Clogged or Damage	d Culvert				NA		
Other					X		
MAINTENACE			ı				
Maintenance Required					Х		No access due to winter conditions
Maintenance Performe	d				Х		
Additional Comments			Х				

Mining Area	Seneca II West Mine	Facility (Configuration	Sto	ckpond		
Date Inspected	3/11/2019		st Inspected		16/2018		
Impoundment	Stock Tank T-24	-1	Location		ec 9, T5N, R88W	Onai	rterly Impoundment Inspection Form
NPDES ID No	N/A		Location		Hayden, CO	Qua	terry impoundment inspection form
Owner's Rep	Miranda Kawcak		spector		n Herden		
o where strep	Timanaa Kawaak		1		in Appropriat	e Respons	se:
	FEATURE		1,242,2	PROE		e respon	COMMENTS
			YES (Ab	ove)	NO (Bel	ow)	
GENERAL			,	,	<u> </u>	,	
Water Level (above or	below principal spillw	ay)			Х		Dry
EROSION	• • • •		•				<u>, </u>
Rills & Gullies on Em	bankment				Х		
Wave Erosion					Х		
Spillway Erosion					Х		
Burrows					X		
Other					Х		
STRUCTURAL							
Differential Settling					Х		
Cracks or Slides					X		
Seepage					Х		
Other					X		
STRUCTURES							
Principal Spillway							
Clogged Orifice					NA		
Clogged or Damage					NA		
Damaged Headgate	;				NA		
Emergency Spillway							
Erosion					Х		
Riprap					Х		
Clogged or Damage	d Culvert				NA		
Other			L		X		
MAINTENACE							
Maintenance Required					X		No access due to winter conditions
Maintenance Performe	ed				Х		
Additional Comments			Х				

Mining Area	Seneca II West Mine	Facility C	Configuration	Sto	ckpond		
Date Inspected	3/11/2019	Date La	st Inspected	10/3	16/2018		
Impoundment	Stock Tank T-25	Pond	Location	SW¼NE¼, Se	ec 34, T5N, R88W	Qua	rterly Impoundment Inspection Form
NPDES ID No	N/A	Site	Location	8 mi S of	8 mi S of Hayden, CO		
Owner's Rep	Miranda Kawcak	Ins	spector	Jasor	n Herden		
			Mark	or Write	in Appropriat	e Respons	se:
	FEATURE			PROI	BLEM		COMMENTS
			YES (Ab	oove)	NO (Bel	ow)	
GENERAL							
	r below principal spillw	ay)			N/A		
EROSION							
Rills & Gullies on Em	bankment				N/A		
Wave Erosion					N/A		
Spillway Erosion					N/A		
Burrows					N/A		
Other					N/A		
STRUCTURAL			T				
Differential Settling					N/A		
Cracks or Slides					N/A		
Seepage					N/A		
Other					N/A		
STRUCTURES							
Principal Spillway			ı				
Clogged Orifice	101				N/A		
Clogged or Damag					N/A		
Damaged Headgate	2				N/A		
Emergency Spillway			I		N1 / A		
Erosion					N/A		
Riprap Clogged or Damage	od Culvant				N/A N/A		
Other	cu Cuiveri				N/A N/A		
MAINTENACE					IN/A		
Maintenance Required	1		I		Х		DAM REMOVED FALL 2011, REBUILT IN 2012 AS A RUNOFF
Maintenance Performe					X		CONTROL STURCURE (PM1-A3)
Additional Comments			Х		^		CONTROL STORCORE (FINIT-AS)
ridarional Comments							

Mining Area	Seneca II West Mine			Sto	ockpond		
Date Inspected	3/11/2019	Date La	st Inspected	10/	16/2018		
Impoundment	Stock Tank T-26	Pond	Location	NE¼NW¼, S	ec 35, T5N, R88W	Qua	rterly Impoundment Inspection Form
NPDES ID No	N/A	Site 1	Location	8 mi S of	of Hayden, CO		
Owner's Rep	Miranda Kawcak	Ins	pector	Jaso	n Herden		
			Marl	or Write	in Appropriat	e Respons	se:
	FEATURE			PRO	BLEM		COMMENTS
			YES (At	oove)	NO (Bel	ow)	
GENERAL							
	below principal spillw	ay)			Х		
EROSION							
Rills & Gullies on Em	bankment				Х		
Wave Erosion					Х		
Spillway Erosion					Х		
Burrows					Х		
Other					Х		
STRUCTURAL			ı		1		
Differential Settling					Х		
Cracks or Slides					Х		
Seepage					Х		
Other					Х		
STRUCTURES							
Principal Spillway			ı		ı		
Clogged Orifice					NA		
Clogged or Damag					NA		
Damaged Headgate					NA		
Emergency Spillway			ı		T		
Erosion					X		
Riprap	101						
Clogged or Damage	ed Cuivert				NA		
Other MAINTENACE					Х		
	1				v		No googe due to winter condition-
Maintenance Required Maintenance Performe					X		No access due to winter conditions
Additional Comments			Х		X		
Additional Comments			X				

Mining Area	Seneca II West Mine	Facility C	Configuration	Sto	ockpond		
Date Inspected	3/11/2019	Date La	st Inspected	10,	/16/2018		
Impoundment	Stock Tank T-27	Pond	Location	NW%NW%,	Sec 35, T5N, R88W	Qua	rterly Impoundment Inspection Form
NPDES ID No	N/A	Site	Location	8 mi S of Hayden, CO		_	
Owner's Rep	Miranda Kawcak	Ins	pector	Jaso	Jason Herden		
			Marl		in Appropriat	e Respons	se:
	FEATURE				BLEM		COMMENTS
			YES (At	oove)	NO (Belo	ow)	
GENERAL							
	r below principal spillw	ay)			N/A		Water Level 1.6 feet below spillway
EROSION							
Rills & Gullies on Em	bankment				N/A		
Wave Erosion					N/A		
Spillway Erosion					N/A		
Burrows					N/A		
Other					N/A		
STRUCTURAL			T				
Differential Settling					N/A		
Cracks or Slides					N/A		
Seepage					N/A		
Other					N/A		
STRUCTURES							
Principal Spillway			Г		21/2		T
Clogged Orifice	. 1 C-1				N/A N/A		
Clogged or Damag Damaged Headgate					N/A N/A		
Emergency Spillway	e				N/A		
Erosion					N/A		
Riprap					N/A N/A		
Clogged or Damage	ed Culvert				N/A		
Other	ou Cuiveit				N/A		
MAINTENACE					IN/A		
Maintenance Required	4				Х		REBUILT IN 2012 AS A RUNOFF CONTROL STRUCTURE. No access
Maintenance Perform					X		due to winter conditions
Additional Comments			Х		Α		due to writter conditions
			1				

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					12	
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	~	~		_		
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	ПМЕ	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	N
011	Seneca	Yoast	3-11-19	13:30	- 3,6	_	Show covered	N
011A	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		3-11-19	12:20	9	_	snow Covered	N
014	Seneca	Yoast	3-11-19	12:40	-1.7		snow covered	N
ST-1	Seneca	Yoast					•	

NOTES FIELD PERSONNEL SIGNATURE: 1 NOTES
NOTES

