Musick - DNR, Jason <jason.musick@state.co.us>

2nd Quarter Pond Inspections

1 message

Blomquist, Miranda <MBlomquist@peabodyenergy.com> To: "Musick - DNR, Jason" <jason.musick@state.co.us> Mon, Aug 14, 2017 at 3:26 PM

Jason,

Attached are the 2nd quarter pond inspections for Hayden Gulch Loadout, Yoast Mine, and Seneca IIW. Let me know if you have any questions!

Thanks

Miranda Kawcak (Blomquist)

Engineering Technician - Environmental

Twentymile Coal, LLC

29515 Routt County Rd #27 Oak Creek, Colorado 80467

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Peabody

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3 attachments



2017 2QTR IIW Pond Insp.pdf 865K

2017 2QTR Yoast Pond Insp.pdf 525K



July 26, 2017

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

RE: Seneca II W Mine, Permit C-82-057, 2Q17 IIR

Dear Jason:

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.

Maintenance is required at Ponds: #015 (standpipe) and #016 (flume). Please contact me with any comments and/or questions.

Sincerely,

Muarde Kawak

Miranda Kawcak (Blomquist) TNS/*tns*

Mining Area	Seneca II West Mine	Facility Configuration	Cross-	Vally Pond			
Date Inspected	5/1/2017	Date Last Inspected		4/2017			
Impoundment	Pond #005	Pond Location	NW% SW%, S	Sec. 10, T5N, R88W	Quarterly Impoundment Inspection Form		
NPDES ID No	CMLRD Permit No. C-82-057	Site Location		f Hayden, CO	Xuarterry impoundment inspection Form		
Owner's Rep	Brian Watterson	Inspector		n Herden			
				n Appropriate	Response:		
	FEATURE		PRO	BLEM	COMMENTS		
		YES (At	oove)	NO (Belo	w)		
GENERAL				Carlo and a start			
Water Level (above o	r below principal spillway)	X			Water level 0.08 feet above spillway		
Existing Embankment	t Freeboard (7.4 ft)	7.4					
Outflow (gpm)		X			17.22		
EROSION				The carry 250			
Rills & Gullies on Em	ibankment			Х			
Wave Erosion				Х			
Spillway Erosion				Х			
Burrows				x			
Other				Х			
STRUCTURAL							
Differential Settling				Х			
Cracks or Slides				X			
Seepage				X			
Other				Х			
STRUCTURES							
Principal Spillway							
Clogged Orifice				X			
Clogged or Damag				X			
Damaged Headgat	e			NA			
Emergency Spillway							
Erosion				X			
Riprap				X			
Clogged or Damag	ed Culvert			X			
Other				Х			
MAINTENACE							
Maintenance Require				X			
Maintenance Perform				X			
Additional Comments	S			Х			

Mining Area	Seneca II West Mine	Facility Configuration	Cross	-Vally Pond		
Date Inspected	5/1/2017	Date Last Inspected	3/1	14/2017		
Impoundment	Pond #006	Pond Location	NW% NW%, 5	Sec. 22, T5N, R88W	Ouar	terly Impoundment Inspection Form
NPDES ID No	CO-0000221 D.P. 006	Site Location	8 mi. S of Hayden, CO		×	······································
Owner's Rep	Brian Watterson	Inspector		n Herden		
	a set of the Street	A	k or Write	in Appropriat	e Response	
····	FEATURE			BLEM		COMMENTS
		YES (A	oove)	NO (Belo	w)	
GENERAL						
Water Level (above o	or below principal spillw	/ay) X				water level 0.15 feet above spillway
Existing Embankmen		7.5	,			
Outflow (gpm)		X				118.02
EROSION						
Rills & Gullies on Er	nbankment			Х		
Wave Erosion				Х		
Spillway Erosion				Х		
Burrows				Х		
Other			X			
STRUCTURAL	and the international sector					
Differential Settling				Х		
Cracks or Slides				Х		
Seepage				X		
Other				Х		
STRUCTURES			and a set			
Principal Spillway						
Clogged Orifice				X		
Clogged or Dama	-			X		
Damaged Headga				NA		
Emergency Spillway						
Erosion				X		
Riprap				X		
Clogged or Damag	ged Culvert			X		
Other				X		
MAINTENACE						
Maintenance Require				X		Big sluff on S. side above pond on hill, currently not affecting pone
Maintenance Perform				X		
Additional Comment	ts	X				

Mining Area	Seneca II Mine	Facility Configura	ation	Cross-V	ally Pond		
Date Inspected	5/1/2017	Date Last Inspec	ted	3/14	/2017		
Impoundment	Pond #008	Pond Location		SE%SW%, Sec	. 7, T5N, R86W	Ouarte	rly Impoundment Inspection Form
NPDES ID No	CO-0000221 D.P.008	Site Location	and the second se		f Hayden, CO	2	
Owner's Rep	Brian Watterson	Inspector			Herden		
		termine in the second s	Mark		n Appropriat	e Response:	
	FEATURE			PROBI			COMMENTS
		Y	ES (Ab	ove)	NO (Bel	ow)	
GENERAL							
Water Level (above or	below principal spillw	ay)	Х				Water Level 0.35 above spillway
Existing Embankment			4.7				
Outflow (gpm)			Х				59.06
EROSION	5-21 BY - 54 Years			State of the			
Rills & Gullies on Em	bankment				Х		
Wave Erosion					Х		
Spillway Erosion					Х		
Burrows					Х		
Other				X			
STRUCTURAL						and the second second	
Differential Settling					Х		
Cracks or Slides					X		
Seepage					Х		
Other					Х		
STRUCTURES							
Principal Spillway							
Clogged Orifice					X		
Clogged or Damag					X		
Damaged Headgate	2				NA		
Emergency Spillway							
Erosion					X		
Riprap					X		
Clogged or Damage	ed Culvert				Х		
Other					Χ		
MAINTENACE							
Maintenance Required					X		
Maintenance Perform					Χ		
Additional Comments					X		

NO LONGER REQUIRED DUE TO FINAL BOND RELEASE

Mining Anto	Concer II March Mine	Facility Configuration	Course	tally Daned	
Mining Area	President and a second s	Facility Configuration		ally Pond	
Date Inspected	5/1/2017	Date Last Inspected	3/14/2017		
Impoundment	Pond #009	Pond Location		. 11, T5N, R88W	Quarterly Impoundment Inspection Form
NPDES ID No	CO-0000221 D.P. 009	Site Location		Hayden, CO	
Owner's Rep	Brian Watterspm	Inspector		Miller	· · · · · · · · · · · · · · · · · · ·
		Marl		n Appropriate	
	FEATURE		PROB		COMMENTS
		YES (At	oove)	NO (Belo	w)
GENERAL					
	r below principal spillwa			X	Water level 2.2 feet below top of pipe
Existing Embankmen	t Freeboard (6.9 ft)	8.9	·		
Outflow (gpm)				Х	
EROSION					
Rills & Gullies on En	nbankment			Х	
Wave Erosion				X	
Spillway Erosion				X	
Burrows				X	
Other				X	
STRUCTURAL					
Differential Settling				X	
Cracks or Slides				X	
Seepage				Х	
Other		1		X	
STRUCTURES					
Principal Spillway					
Clogged Orifice				X	
Clogged or Dama				X	
Damaged Headgat				NA	
Emergency Spillway					
Erosion				Х	
Riprap				X	
Clogged or Damag	ged Culvert			X	
Other				X	
MAINTENACE					
Maintenance Require				X	
Maintenance Perform				X	
Additional Comment	S			Х	

Mining Area	Seneca II West Mine	Facility Configuration	Cross-\	/ally Pond	
Date Inspected	5/1/2017	Date Last Inspected	3/14	4/2017	
Impoundment	Pond #015	Pond Location	NE¼ SE¼, Sec. 23, T5N, R88W		Quarterly Impoundment Inspection Form
NPDES ID No	CO-0000221 D.P. 015	Site Location	8 mi. S of	Hayden, CO	C
Owner's Rep	Brian Watterson	Inspector	Jason	Herden	
		Marl	or Write i	in Appropriat	e Response:
	FEATURE		PROE		COMMENTS
		YES (At	oove)	NO (Bel	ow)
GENERAL					
Water Level (above o	r below principal spillw	ay) X	1		water level 0.03 feet above spillway
Existing Embankmen	t Freeboard (4.0 ft)	4.0			
Outflow (gpm)		X			48.33
EROSION					
Rills & Gullies on Err	ıbankment			Х	
Wave Erosion				Х	
Spillway Erosion				Х	
Burrows				Х	
Other				X	
STRUCTURAL					
Differential Settling				Х	
Cracks or Slides				Х	
Seepage				X	
Other				X	
STRUCTURES			- Y, OELV		
Principal Spillway					
Clogged Orifice				X	
Clogged or Damag				X	
Damaged Headgat	e			NA	
Emergency Spillway		I			
Erosion				X	
Riprap				Х	
Clogged or Damag	ed Culvert			X	
Other				X	
MAINTENACE					
Maintenance Require		X			Standpipe is rusted through
Maintenance Perform				Х	
Additional Comment	S	X			

Mining Area	Seneca II West Mine	Facility Configuration	Cross-Vally Pond			
Date Inspected	5/1/2017	Date Last Inspected	3/14/2017			
Impoundment	Pond #016	Pond Location	NE% SE%, Sec. 27, T5N, R88W	Quarterly Impoundment Inspection Form		
NPDES ID No	CO-0000221 D.P. 016	Site Location	8 mi. S of Hayden, CO			
Owner's Rep	Brian Watterson	Inspector	Jason Herden			
		Mark	or Write in Appropr	ate Response:		
	FEATURE		PROBLEM	COMMENTS		
		YES (At	nove) NO (l	ielow)		
GENERAL						
	r below principal spillw	ay) X		water level 0.1 feet above spillway		
Existing Embankmen	t Freeboard (6.8 ft)	6.8				
Outflow (gpm)	B	X		132.8		
EROSION						
Rills & Gullies on En	nbankment			(
Wave Erosion				(
Spillway Erosion				(
Burrows				(
Other				(
STRUCTURAL						
Differential Settling				< <u> </u>		
Cracks or Slides				< <u> </u>		
Seepage				< <u> </u>		
Other				< <u> </u>		
STRUCTURES						
Principal Spillway						
Clogged Orifice				<u>(</u>		
Clogged or Damag						
Damaged Headgat	te			A		
Emergency Spillway Erosion		1		· · · · · · · · · · · · · · · · · · ·		
				<u><</u>		
Riprap Clogged or Damag	red Culuert					
Other	cu cuiven			K		
MAINTENACE						
Maintenance Require	d			X		
Maintenance Perform				X		
Additional Comment				X		

Mining Area	Seneca II West Mine	Facility Configuration	n Cross-Vall	v Pond		
Date Inspected	5/1/2017	Date Last Inspected				
Impoundment	Pond #017	Pond Location	n SW% NE%, Sec. 34, T5N, R88W		Quarterly Impoundment Inspection For	
NPDES ID No	CO-0000221 D.P. 017	Site Location			Quarterry impoundment inspection form	
Owner's Rep	Brian Watterson	Inspector	Jason He			
owner o hep	Dian watterson		'k or Write in A		Pagnonse	
	FEATURE		PROBLE		COMMENTS	
		YES (A	bove)	NO (Belo		
GENERAL						
	r below principal spillw	ay)			water level 0.1 feet above spillway	
Existing Embankmen		3.	1			
Outflow (gpm)	. ,)			199.36	
ROSION			101 - 102 - 104 - 104 - 104 - 104 - 104 - 104 - 104 - 104 - 104 - 104 - 104 - 104 - 104 - 104 - 104 - 104 - 104			
Rills & Gullies on En	nbankment			Х		
Wave Erosion				Х		
Spillway Erosion				Х		
Burrows				х		
Other				Х		
STRUCTURAL						
Differential Settling				Х		
Cracks or Slides				Х		
Seepage				X		
Other				X		
STRUCTURES						
Principal Spillway			· _ · · _ · · _ · · · · · · · · · · · ·			
Clogged Orifice	1.0.1			Х		
Clogged or Damag				X		
Damaged Headgat	te			NA		
Emergency Spillway Erosion						
				X		
Riprap Closed or Damag	ad Culurat			<u>X</u>		
Clogged or Damag Other	eu Cuiven			<u> </u>		
MAINTENACE				X		
Maintenance Require	d		· · · · · · · · · · · · · · · · · · ·	X	Sluff on North side, armour is working	
Maintenance Require				X	Sun on North Side, armour is Working	
Additional Comment		·····	<	^		

Mining Area	Seneca II West Mine	Facility Configuration	Stockpo	ond			
Date Inspected	5/1/2017	Date Last Inspected	3/15/20	017			
Impoundment	Stock Tank T-1	Pond Location	SE%SW%, Sec 16, T5N, R88W		Quarterly Impoundment Inspection For		
NPDES ID No	N/A	Site Location	8 mi S of Hay				
Owner's Rep	Brian Watterson	Inspector	Jason Her				
			or Write in A		Response:		
···	FEATURE	1	PROBLEM	M	COMMENTS		
		YES (At	ove)	NO (Belo	w)		
GENERAL							
Water Level (above or	r below principal spillw	ay)		Х	Dry		
EROSION							
Rills & Gullies on Em	ıbankment			Х			
Wave Erosion				Х			
Spillway Erosion				N/A			
Burrows				Х			
Other				Х			
STRUCTURAL				1.5			
Differential Settling				Х			
Tracks or Slides				Х			
Seepage				Х			
Other				Х			
STRUCTURES							
Principal Spillway							
Clogged Orifice				N/A			
Clogged or Damag				N/A			
Damaged Headgat	e			N/A			
Emergency Spillway							
Erosion				Х			
Riprap				Х			
Clogged or Damag	ed Culvert			N/A			
Other				Х			
MAINTENACE		185 875 Care					
Maintenance Require				Х			
Maintenance Perform				Х			
Additional Comment	S	X					

Mining Area	Seneca II West Mine	Facility Confi	guration	Sto	ckpond	
Date Inspected	5/1/2017	Date Last In	-	3/1	5/2017	
Impoundment	Stock Tank T-2	Pond Loc	ation	NW%SW%, S	ec 22, T5N, R88W	Quarterly Impoundment Inspection Form
NPDES ID No	N/A	Site Loca	tion		Hayden, CO	
Owner's Rep	Brian Watterson	Inspect	or		n Herden	
				or Write	in Appropriate	e Response:
	FEATURE				BLEM	COMMENTS
			YES (Ab	oove)	NO (Belo	ow)
GENERAL						
Water Level (above o	r below principal spillw	ay)			Х	Water level is 0.4 feet below spillway
EROSION	inter services in a					
Rills & Gullies on En	nbankment				Х	
Wave Erosion					Х	
Spillway Erosion					Х	
Burrows					Х	
Other					Х	
STRUCTURAL						
Differential Settling					Х	
Cracks or Slides					Х	
Seepage					Х	
Other					Х	
STRUCTURES			3463		Cardina and Cardina	
Principal Spillway						
Clogged Orifice					NA	
Clogged or Damag					NA	
Damaged Headgat	e				NA	
Emergency Spillway						
Erosion					X	
Riprap	1.0.1				X	
Clogged or Damag	ed Culvert				NA	
Other					X	
MAINTENACE		1				
Maintenance Require					X	
Maintenance Perform					X	
Additional Comment	s		X	· · · · ·		

Mining Area	Seneca II West Mine	Facility Configurat	ion	Stockpond	
Date Inspected	5/1/2017	Date Last Inspect		3/15/2017	
Impoundment	Stock Tank T-3	Pond Location		V%SE%, Sec 22, T5N, R88W	Quarterly Impoundment Inspection Form
NPDES ID No	N/A	Site Location		3 mi S of Hayden, CO	
Owner's Rep	Brian Watterson	Inspector		Jason Herden	
		1	ark or	Write in Appropriat	e Response:
	FEATURE			PROBLEM	COMMENTS
		YES	(Above)) NO (Bel)w)
GENERAL					
Water Level (above o	r below principal spillw	ay)		X	Water level is 0.9 feet below spillway
EROSION			1.518		
Rills & Gullies on En	nbankment			X	
Wave Erosion				X	
Spillway Erosion				X	
Burrows				X	
Other				X	
STRUCTURAL			a-11 2		
Differential Settling				X	
Cracks or Slides				X	
Seepage				X	
Other				X	
STRUCTURES					
Principal Spillway					
Clogged Orifice				NA	
Clogged or Damag				NA	
Damaged Headgat	ie			NA	
Emergency Spillway					
Erosion				X	
Riprap Classed or Damag	od Culuart			X	
Clogged or Damag Other	eu Cuiven			NA	
MAINTENACE				X	
Maintenance Require	d			x	
Maintenance Perform				× ×	
Additional Comment				^	
Additional Comment	3		^		

Mining Area	Seneca II West Mine	Facility C	onfiguration	Stockp	ond	
Date Inspected	5/1/2017	Date Las	t Inspected	3/15/2	2017	
Impoundment	Stock Tank T-5	Pond	Location	NE¼ Sec 22,	T5N, R88W	Quarterly Impoundment Inspection Form
NPDES ID No	N/A	Site I	ocation	8 mi S of Ha		Quarterry impoundment inspection I of m
Owner's Rep	Brian Watterson	Ins	pector	Jason H		
				or Write in	Appropria	ite Response:
	FEATURE			PROBL		COMMENTS
			YES (At	ove)	NO (Be	low)
GENERAL				2		
Water Level (above o	r below principal spilly	vay)			Х	Water level is 1.3 feet below spillway
EROSION						
Rills & Gullies on En	ıbankment				Х	
Wave Erosion					Х	
Spillway Erosion					Х	
Burrows					Х	
Other					Х	
STRUCTURAL				and the second		
Differential Settling					Х	
Cracks or Slides					X	
Seepage					Х	
Other					Χ	
STRUCTURES						
Principal Spillway						
Clogged Orifice					NA	
Clogged or Damag					NA	
Damaged Headgat	e		<u> </u>		NA	
Emergency Spillway						
Erosion					X	
Riprap					X	
Clogged or Damag	ea Culvert		ļ		NA	<u> </u>
Other MAINTENACE			l		X	
Maintenance Require			[V	
Maintenance Require					X X	
Additional Comment			X		. X	
Additional Comment	>		X			

Mining Area	Seneca II West Mine	Facility Configuration	Stockpon	d		
Date Inspected	5/1/2017	Date Last Inspected	3/15/201			
Impoundment	Stock Tank T-18	Pond Location	NW%NE%, Sec 15, T	5N, R88W	Quarterly Impoundment Inspection Form	
NPDES ID No	N/A	Site Location	8 mi S of Hayd			
Owner's Rep	Brian Watterson	Inspector	Jason Herd			
		has seen a seen here a	k or Write in Ap		Response:	
	FEATURE	1	PROBLEM		COMMENTS	
		YES (A	bove)	NO (Belo	w)	
GENERAL				10 March 10		
Water Level (above o	r below principal spillw	ay)		Х	Water level is 1.0 feet below spillway	
EROSION				A SHITZ		
Rills & Gullies on Em	nbankment			Х		
Wave Erosion				Х		
Spillway Erosion				Х		
Burrows				Х		
Other				Х		
STRUCTURAL	A CONTRACTOR OF THE REAL					
Differential Settling				Х		
Cracks or Slides				Х		
Seepage				Х		
Other				X		
STRUCTURES						
Principal Spillway						
Clogged Orifice				NA		
Clogged or Damag				NA		
Damaged Headgat	te			NA		
Emergency Spillway						
Erosion				X		
Riprap	and Cultured			X		
Clogged or Damag	ea Culvert			NA		
Other MAINTENACE				X		
Maintenance Require	d			W		
Maintenance Require				X X		
Additional Comment		,	,	X	i	
Additional Comments	3					

Mining Area	Seneca II West Mine	Facility Configuration	n	Stockpond	
Date Inspected	5/1/2017	Date Last Inspected		3/15/2017	
Impoundment	Stock Tank T-20	Pond Location		%, Sec 15, T5N, R88W	Quarterly Impoundment Inspection Form
NPDES ID No	N/A	Site Location		S of Hayden, CO	Quarterry impoundment inspection 1 orm
Owner's Rep	Jason Herden	Inspector	Jason Herden		
				ite in Appropriat	e Response:
FEATURE				ROBLEM	COMMENTS
		YES (Above)	NO (Belo	w)
GENERAL				The land is	
Water Level (above o	r below principal spillw	ay)		X	Water level is 0.7 feet below spillway
EROSION					
Rills & Gullies on En	ıbankment			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				NA	
Clogged or Damag				NA	
Damaged Headgat	e			NA	
Emergency Spillway					· · · · · · · · · · · · · · · · · · ·
Erosion				X	
Riprap				X	
Clogged or Damag	ed Culvert			NA	
Other				X	
MAINTENACE					
Maintenance Require				X	
Maintenance Perform				X	
Additional Comments	S		Х		

Mining Area	Seneca II West Mine	Facility Configuratio	n Sto	ckpond			
Date Inspected	5/1/2017	Date Last Inspected		5/2017			
Impoundment	Stock Tank T-22	Pond Location		c 10, T5N, R88W	Quarterly Impoundment Inspection For		
NPDES ID No	N/A	Site Location		Hayden, CO			
Owner's Rep	Brian Watterson	Inspector		n Herden			
				in Appropriat	te Response:		
	FEATURE			BLEM	COMMENTS		
		YES (/	Above)	NO (Bel	low)		
GENERAL			1991 (M. 184)				
	r below principal spillw	ay)		X	Water level is 1.3 feet below spillway		
EROSION							
Rills & Gullies on En	nbankment			Х			
Wave Erosion				Х			
Spillway Erosion				Х			
Burrows				Х			
Other				Х			
STRUCTURAL							
Differential Settling				X			
Cracks or Slides				Х			
Seepage				X			
Other				X			
STRUCTURES				1 100			
Principal Spillway		· · · · · · · · · · · · · · · · · · ·					
Clogged Orifice				NA			
Clogged or Damag			NA				
Damaged Headgat	e			NA			
Emergency Spillway Erosion							
Riprap				X			
	ad Culvert			X			
Clogged or Damag Other	εα υπνέπ			NA			
MAINTENACE				<u> </u>			
Maintenance Require	d			v v			
Maintenance Perform				X			
Additional Comments			<u> </u>	^			
r toontonar Comment	J		<u>`</u>	L			

Mining Area	Seneca II West Mine	Facility Co	nfiguration	Stoc	kpond	
Date Inspected	5/1/2017	Date Last			/2017	
Impoundment	Stock Tank T-24		Pond Location SW%NE%, Sec 9, Site Location 8 mi S of Hay			Quarterly Impoundment Inspection Form
NPDES ID No	N/A	Site Lo				Quarterry impoundment inspection I of m
Owner's Rep	Brian Watterson	Inspe	ector	Jason Herden		
		1 A.			n Appropriat	e Response:
FEATURE				PROBI		COMMENTS
			YES (Ab	ove)	NO (Bel	ow)
GENERAL						
Water Level (above o	r below principal spillw	ay)			х	Dry
EROSION				STR.		
Rills & Gullies on En	nbankment				Х	
Wave Erosion					Х	
Spillway Erosion					х	
Burrows					Х	
Other		_		X		
STRUCTURAL			M. Contraction			
Differential Settling					Х	
Cracks or Slides					Х	
Seepage					Х	
Other					X	
STRUCTURES		31 - 21 - 3 - 5 - 5 - 5 - 5 - 5 - 5 - 5 - 5 - 5	Num Voltage			
Principal Spillway						
Clogged Orifice		L			NA	
Clogged or Dama					NA	
Damaged Headga	te				NA	
Emergency Spillway						
Erosion		L			Х	
Riprap					Х	
Clogged or Damag	ed Culvert	L			NA	
Other				l	X	
MAINTENACE						
Maintenance Require					X	
Maintenance Perform					X	
Additional Comment	S		X			

Mining Area	Seneca II West Mine	Facility Co	onfiguration	Stock	pond			
Date Inspected	5/1/2017	Date Las	t Inspected	3/15/2017				
Impoundment	Stock Tank T-25	Pond Location		SW%NE%, Sec 34, T5N, R88W		Quarterly Impoundment Inspection Forn		
NPDES ID No	N/A	Site L	Site Location		layden, CO			
Owner's Rep	Brian Watterson	Insp	pector	Jason H	lerden			
			Mark	or Write in	Appropriat	Response:		
FEATURE				PROBL		COMMENTS		
		Γ	YES (Ab	ove)	NO (Bel	P)		
GENERAL			3. 3 Mars				172.25	
Water Level (above o	or below principal spillw	'ay)			N/A	Dry		
EROSION		terre and	1.72.53					
Rills & Gullies on En	nbankment				N/A		· · · · · · · · · · · · · · · · · · ·	
Wave Erosion					N/A			
Spillway Erosion					N/A			
Burrows					N/A			
Other					N/A			
STRUCTURAL								
Differential Settling		L			N/A			
Cracks or Slides					N/A			
Seepage					N/A			
Other					N/A			
STRUCTURES		Trix at 12			a filler strik		with the second	
Principal Spillway								
Clogged Orifice		ļ			N/A			
Clogged or Dama		ļ			N/A			
Damaged Headga				N/A				
Emergency Spillway		r						
Erosion					N/A			
Riprap					N/A			
Clogged or Damag	ged Culvert				N/A			
Other					N/A			
MAINTENACE								
Maintenance Require					X	DAM REMOVED FALL 2011, REBUILT IN		
Maintenance Perform					Х	CONTROL STURCURE (PM	11-A3)	
Additional Comment	ts		X					

Mining Area	Seneca II West Mine	Facility Configuration	Sto	ckpond	
Date Inspected	5/1/2017	Date Last Inspected	cation NE%NW%, Sec 35, T5N, R88W Quarter		
Impoundment	Stock Tank T-26	Pond Location			Quarterly Impoundment Inspection Form
NPDES ID No	N/A	Site Location			Quarterity impoundant of more inspection 1 of m
Owner's Rep	Brian Watterson	Inspector	Jasor	n Herden	
		Mark	or Write	in Appropriat	e Response:
			BLEM	COMMENTS	
		YES (Ab	oove)	NO (Bel	ow)
GENERAL					
	r below principal spillw	ay)		Х	Water level is 2.0 feet below spillway
EROSION					
Rills & Gullies on En	nbankment			Х	
Wave Erosion				X	
Spillway Erosion				X	
Burrows			X		
Other				X	
STRUCTURAL					
Differential Settling				<u>X</u>	
Cracks or Slides				X	
Seepage				X	
Other	THE REPORT OF LAND			X	
STRUCTURES				CHILL DAVIES	
Principal Spillway					
Clogged Orifice				NA	
Clogged or Damag				NA	
Damaged Headgat	te			NA	
Emergency Spillway					
Erosion				X X	
Riprap	and Cultured			X	
Clogged or Damag Other	jea Culvert			NA	
MAINTENACE				X	
Maintenance Require	d.		1.	v	
Maintenance Require				X	
Additional Comment		x		× ×	
Augunonai Comment	3	^			

Mining Area	Seneca II West Mine	Facility Configuration	Stockpond			
Date Inspected	5/1/2017	Date Last Inspected	3/15/2017			
Impoundment	Stock Tank T-27	Pond Location	NW%NW%, Sec 35, T5N, R88W	Quarterly Impoundment Inspection Form		
NPDES ID No	N/A	Site Location	8 mi S of Hayden, CO	Xunterry Impoundment Inspection For		
Owner's Rep	Brian Watterson	Inspector	Jason Herden			
		Mark	or Write in Appropria	e Response:		
	FEATURE		PROBLEM	COMMENTS		
		YES (Ab	ove) NO (Be	ow)		
SENERAL						
Vater Level (above o	r below principal spillw	vay)	N/A	Water Level 1.4 feet below spillway		
ROSION						
Cills & Gullies on En	nbankment		N/A			
Wave Erosion			N/A			
pillway Erosion			N/A			
lurrows			N/A			
Dther			N/A			
TRUCTURAL						
Differential Settling			N/A			
Cracks or Slides			N/A			
Seepage			N/A			
Other			N/A			
TRUCTURES						
rincipal Spillway			I			
Clogged Orifice			N/4			
Clogged or Dama	0		N/4			
Damaged Headga			N/#			
Emergency Spillway						
Erosion			N/4			
Riprap	- 1 Colored		N/4			
Clogged or Damag	gea Culvert		N//			
Other MAINTENACE			N//			
Maintenance Require			x	REBUILT IN 2012 AS A RUNOFF CONTROL STURCURE		
Maintenance Require			X X	REBUILT IN 2012 AS A KUNOFF CONTROL STURCURE		
Additional Comment		X	X			

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

SITE ID	COMPANY	B NIM	DATE	TIME	WATER LEVEL (FT)	OUTFLOW (GPM)	OBSERVATIONS	MAINTENANCE (Y/N)
002	Sage Creek	Sage Creek	5-1-17	15:55	.40	180.4		N
003	Sage Creek	Sage Creek	5-1-17	15:30	0,10	15.10	animal burrows on Dam	N
004	Sage Creek	Sage Creek	5-1-17	16:15	0,16	42		N
Lower Sump	Sage Creek	Sage Creek	5-1-17	18:15	0:09	111.5		N
PECOCO	Sage Creek	Sage Creek	5-1-17	19:10	0.1	155		N
Portal Sump 1	Sage Creek	Sage Creek	5-1-17	10:30	0.3	10		N
Portal Sump 2	Sage Creek	Sage Creek	5-1-17	18:45				N
Spill Control 2	Sage Creek	Sage Creek	5-1-17	18:05	~		Dia	N
Truck Wash	Sage Creek	Sage Creek	5-1-17	17:50	; <u>=</u>	~	Dry	N
Upper Sump	Sage Creek	Sage Creek	5-1-17	19:30	0,1	147		N
001	Seneca	Hayden Gulch	5-3-17	07:45	-13	~	NOFLOW	N
002	Seneca	Hayden Gulch	5-3-17	08:20	-	-	piy	N
005	Seneca	Seneca II West	5-1-17	11:30	0.08	17.22	spring @ dam, no problems	N
006	Seneca	Seneca II West	5-1-17	08:50	0.15	118.02	bigsluccon Siside no impact	N
009	Seneca	Seneca II West	5-1-17	12:40	-2,2		smill look in standpipe	N
015	Seneca	Seneca II West	5-1-1-	12:30	0.03	48,32	standpipe has hole	
016	Seneca	Seneca II West	5-1-17	09:30	0,1	132.80	Small legt under flume	У
017	Seneca	Seneca II West	54-17	10:00	0.1	199.36		N
T-1	Seneca	Seneca II West	5-1-17	11:20	-	-	Dry	N
T-18	Seneca	Seneca II West	5-1-17	11:00	~1.0	-	NOFLOW	N
T-2	Seneca	Seneca II West	5-1-17	09:05	4	-	NO Flow	N
T-20	Seneca	Seneca II West	5-1-17	11:15	7	-	NO FLOW	N
T-22	Seneca	Seneca II West	5-1-17	11:40	-1.3	_	NO FLOW	N
T-24	Seneca	Seneca II West	5-1-17	11:55		-	Dis	N
T-25	Seneca	Seneca II West	5-1-17	09:50	-	-	Dry	N
T-26	Seneca	Seneca II West	5-1-17	10:30	-2.0			N
208			5-1-17	17:20	0.35	59.06	Pipe slightly sticking up	N

WWCENGINEERING IMPOUNDMENT INSPECTION LOG

SITE ID	COMPANY	E MIN	DATE	TIME	WATER LEVEL (FT)	OUTFLOW (GPM)	OBSERVATIONS	MAINTENANCE (Y/N)
T-27	Seneca	Seneca II West	5-1-17	10:40	-1.4	~	NOFW	N
T-3	Seneca	Seneca II West	5-1-17	09:15	-,9	~	NO Flow	N
T-5	Seneca	Seneca II West	5-1-17	10:20	-13		NO FLOW	N
010	Seneca	Yoast	5-1-17	11:20	0.14	78.20	outlet is justed though	Y
011	Seneca	Yoast	5-1-17	17:35	0.04	19.08		N
011A	Seneca	Yoast	5-1-17	16:35	0.04	1.6		N
012	Seneca	Yoast	5-1-17	13:05	0.05	77.73	undercutting underst behind F	ume V
012A	Seneca	Yoast	5-1-17	13:20	-0,9	-	NO Flow	N
013	Seneca	Yoast	5-1-17	13:45	0.04	6.0		N
014	Seneca	Yoast	5-1-17	14:20	0.03	1.64		N
ST-1	Seneca	Yoast	5-1-17	17:15	-1.2		NOFOW	N

CLIMATIC CONDITIONS: 37°F_55°F	ind calm - 22 MPH variable	, clear-mostly chudy
FIELD PERSONNEL:	FIELD PERSONNEL SIGNATURE:	j

NOTES

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