

Peabody Sage Creek Mining, LLC

Peabody Sage Creek Mine PO Box 250 36600 Routt County Road 27 Hayden, CO. 81639

October 13, 2023

Tabetha Lynch Colorado Division of Reclamation, Mining and Safety 1313 Sherman St., Room 215 Denver, CO 80203

RE: 3rd Quarter and Annual Pond Inspections – Sage Creek Mine (C 2009-087)

Ms. Ridley:

Enclosed are the 3<sup>rd</sup> quarter 2023 and Annual pond inspection reports for the Peabody Sage Creek Mine. I personally inspected each pond and have provided a Professional Engineer's Statement on the following page of this letter to accompany the inspection reports. Please contact me if there are any questions or if you need any additional information.

Best Regards,

Miranda Kawcak

**Environmental Manager** 

Peabody, Colorado Operations

Mirarda Kouveall

Attachments:

Professional Engineer Certification (Miranda Lynn Kawcak, P.E.) Inspection Reports

## **CERTIFICATION**

I, Miranda Lynn Kawcak, a registered engineer in the State of Colorado do hereby certify that I have reviewed the attached Sage Creek Mine Sediment Pond Reports covering the third quarter of 2023, and that they are true and correct to the best of my knowledge and belief.

Miarda Kawak

10-13-23

Miranda Lynn Kawcak CO P.E. No. 59419 Date



	PERIODIC INSPECTION FORM: Water, Sediment, or Slurry Impoundments					
INS	PECTOR'S NAME: Miranda Kawcak	DATE: 9/20/23				
NPI	DES I.D. NO.: CO-0048275 D.P. 002					
FAC	CILITY CONFIGURATION: Incised Pond	DATE LAST INSPECTION: 6/2	26/23			
SITI	NAME: Wadge Impoundment #002	LOCATION: NW¼ NE¼, Sec.	2, T5N, F	R87W		
MII	NE NAME: Peabody Sage Creek Mine	LOCATION: 7.1 mi. SE of Ha	yden, CO	)		
MII	NE I.D. NO.: CMLRD Permit No. C-2009-087	OWNER'S REP.: Miranda Ka	wcak			
	CIRCLE OR WRITE IN APPROPRIATE RESI	PONSE:	YES	NO	N/A	
1	Foundation preparation (removal of vegetation, stumps, tops	oil:			х	
2	Lift thickness:				х	
3	Compaction according to approved plan:				х	
4	Burning (specify extent and location):				х	
5	Angle of slope:upstream,downstream		To	tal = N/A	١	
6	*Seepage (specify location, color, and approximate volume)					
	From underdrain pipes				х	
	At isolated points on embanckement slopes				х	
	At natural hillside:				х	
	Over widespread areas:				х	
	From downstream foundation area:				х	
	"Boils" beneath stream or ponded water:			х		
7	Cracks or scarps on crest:				х	
8	Cracks or scarps on slope:				х	
9	Sloughing or bulging on slope:				х	
10	*Major erosion problems:			х		
11	Surface movements in valley bottom or on hillside:			х		
12	*Erosion of toe:				х	
13	*Water impounded against toe:				х	
14	Existing embankment freeboard = <b>0 feet</b>					
15	Increase Decrease in water level:	<u>Same</u>				
	Cracks, bulging, or erosion on upstream face:				х	
	Visible sumps or sinkholes in slurry surface:				х	
18	*Clogging					
	Spillway channels and pipes:			х		
	Decant system:				х	
	Diversion ditches:			x		
19	*Cracking or crushing of pipes				•	
	Spillway pipes:				х	
	Decant system:				х	
20	Trash racks clear and in place:				х	
21	Discharge rate (gpm) = <b>45 GPM</b>					
ana	ajor adverse changes in these items could cause instability and I Mine Superintendent for further evaluation. Adverse conditio cribed (extextent, location, volume, etc.) here: <b>Flume needs r</b>	ons noted in these items shou	-		ger	

	PERIODIC INSPECTION FORM: Water, Sediment, or Slurry Impoundments					
INS	PECTOR'S NAME: Miranda Kawcak	DATE: 9/20/23				
NPI	DES I.D. NO.: CO-0048275 D.P. 003					
FAC	CILITY CONFIGURATION: Diked Pond	DATE LAST INSPECTION: 6/2	26/23			
SITI	E NAME: Wadge Impoundment #003	LOCATION: SE¼ SW¼, Sec. 2	27, T6N, F	R87W		
MIN	NE NAME: Peabody Sage Creek Mine	LOCATION: 7.1 mi. SE of Hay	yden, CO	1		
MIN	NE I.D. NO.: CMLRD Permit No. C-2009-087	OWNER'S REP.: Miranda Ka	wcak			
	CIRCLE OR WRITE IN APPROPRIATE RESP	ONSE:	YES	NO	N/A	
1	Foundation preparation (removal of vegetation, stumps, topsoil:					
2	Lift thickness = 12 inches					
3	Compaction according to approved plan:		х			
4	Burning (specify extent and location):			х		
5	Angle of slope: 2:1 upstream, 3:1 downstream		To	tal = 5:1	ı	
6	*Seepage (specify location, color, and approximate volume)					
	From underdrain pipes				х	
	At isolated points on embanckement slopes			х		
	At natural hillside:			х		
	Over widespread areas:			х		
	From downstream foundation area:			х		
	"Boils" beneath stream or ponded water:			х		
7	7 Cracks or scarps on crest:			х		
8	8 Cracks or scarps on slope:			х		
9	9 Sloughing or bulging on slope:			х		
10	0 *Major erosion problems:			x		
	Surface movements in valley bottom or on hillside:			x		
12	*Erosion of toe:			x		
13	*Water impounded against toe:			x		
14	Existing embankment freeboard (4.9' is normal) = 4.9'					
15	Increase Decrease in water level: <u>Same</u>					
	Cracks, bulging, or erosion on upstream face:			x		
	Visible sumps or sinkholes in slurry surface:				х	
18	*Clogging					
	Spillway channels and pipes:			х		
	Decant system:				х	
	Diversion ditches:			х		
19	*Cracking or crushing of pipes					
	Spillway pipes:				х	
	Decant system:				х	
20	Trash racks clear and in place:		x			
21	Discharge rate (gpm) = <b>5 GPM</b>					
	ajor adverse changes in these items could cause instability and		_		ier	
	and Mine Superintendent for further evaluation. Adverse conditions noted in these items should normally be lescribed (extextent, location, volume, etc.) here: <b>Rodent Burrows need ongoing Maintenance.</b>					

INS	PERIODIC INSPECTION FORM: Water, Se PECTOR'S NAME: Miranda Kawcak	ediment, or Slurry Impoundn DATE: 9/20/23	nents		
	DES I.D. NO.: N/A	DATE: 3/20/23			
	CILITY CONFIGURATION: Incised Pond	DATE LAST INSPECTION: 6/2	9/2023		
	E NAME: Spill Control Pond #2	LOCATION: NW¼ NE¼, Sec.	_	R87\M	
	NE NAME: Peabody Sage Creek Mine	LOCATION: 7.1 mi. SE of Ha			
	NE I.D. NO.: CMLRD Permit No. C-2009-087	OWNER'S REP.: Miranda Ka	-		
	CIRCLE OR WRITE IN APPROPRIATE RESP		YES	NO	N/A
1	Foundation preparation (removal of vegetation, stumps, tops		X	NO	IN/A
	Lift thickness = <b>N/A</b>	011.	^		1
	Compaction according to approved plan:				х
	Burning (specify extent and location):				x
	Angle of slope:upstream,downstream			N/A	^
	*Seepage (specify location, color, and approximate volume)			14,74	
Ŭ	From underdrain pipes				х
	At isolated points on embanckement slopes			х	<del>  ^</del>
	At natural hillside:			X	
2   3   4   5   7   8   9   10   11   12   13   14   15   16   17   18   18   18   18   18   18   18	Over widespread areas:			X	
	From downstream foundation area:			X	<del> </del>
	"Boils" beneath stream or ponded water:			X	
7	Cracks or scarps on crest:			X	
	Cracks or scarps on slope:			X	
	Sloughing or bulging on slope:			X	
	*Major erosion problems:			X	
	Surface movements in valley bottom or on hillside:			х	
	*Erosion of toe:			х	
	*Water impounded against toe:			х	<del> </del>
	Existing embankment freeboard (7.0' is normal) = <b>7.0'</b>				1
	IncreaseDecrease in water level: DRY				
	Cracks, bulging, or erosion on upstream face:			х	
	Visible sumps or sinkholes in slurry surface:				х
	*Clogging	l			
	Spillway channels and pipes:			х	
	Decant system:				х
	Diversion ditches:				х
19	*Cracking or crushing of pipes				
	Spillway pipes:				х
	Decant system:				х
20	Trash racks clear and in place:				х
21	Discharge rate (gpm) = 0 GPM				
ana	ajor adverse changes in these items could cause instability and I Mine Superintendent for further evaluation. Adverse conditio cribed (extextent, location, volume, etc.) here:		_		ger

INIC	PERIODIC INSPECTION FORM: Water, Se		nents		
	PECTOR'S NAME: Miranda Kawcak	DATE: 9/20/2023			
	DES I.D. NO.: N/A	DATE LACT INCRECTIONS C	20/2022		
	CILITY CONFIGURATION: Final Pit Impoundment	DATE LAST INSPECTION: 6/2		20714	
	NAME: Pecoco Reservoir	LOCATION: SW% NW%, Sec			
	MINE NAME: Peabody Sage Creek Mine LOCATION: 7.1 mi. SE of Hay				
IVIII	NE I.D. NO.: CMLRD Permit No. C-2009-087	OWNER'S REP.: Miranda Ka			
	CIRCLE OR WRITE IN APPROPRIATE RESP		YES	NO	N/A
	Foundation preparation (removal of vegetation, stumps, tops	OII:	Х		
	Lift thickness = None - Pit Impoundment				
	Compaction according to approved plan:		Х		Х
	Burning (specify extent and location):		Tai	X	
	Angle of slope: <u>5:1</u> upstream, <u>2:1</u> downstream		10	tal = 7:1	
6	*Seepage (specify location, color, and approximate volume)				1
	From underdrain pipes				Х
	At isolated points on embanckement slopes			х	
	At natural hillside:			Х	
	Over widespread areas:			х	
	From downstream foundation area:			Х	
_	"Boils" beneath stream or ponded water:			Х	
	Cracks or scarps on crest:			Х	
	Cracks or scarps on slope:		-	Х	
	Sloughing or bulging on slope:			х	
	*Major erosion problems:		-	х	
	Surface movements in valley bottom or on hillside:		-	х	
	*Erosion of toe:		-	х	
	*Water impounded against toe:			х	
	Existing embankment freeboard (6.1' is normal) = <b>6.1'</b>				
15	Increase Decrease in water level: Consistant disc	harge elev.			ı
	Cracks, bulging, or erosion on upstream face:		-	х	
	Visible sumps or sinkholes in slurry surface:				Х
18	*Clogging				1
	Spillway channels and pipes:		-	х	
	Decant system:				Х
10	Diversion ditches:				Х
19	*Cracking or crushing of pipes				ı
	Spillway pipes:		-	х	
	Decant system:		-		Х
	Trash racks clear and in place:				Х
	Discharge rate (gpm) =~40 GPM				
ana	ajor adverse changes in these items could cause instability and Mine Superintendent for further evaluation. Adverse condition Cribed (extextent, location, volume, etc.) here:				ier

	PERIODIC INSPECTION FORM: Water, Sediment, or Slurry Impoundments					
INS		DATE: 9/20/2023				
NPI	DES I.D. NO.: N/A					
FAC	CILITY CONFIGURATION: Diked Pond	DATE LAST INSPECTION: 6/2	29/2023			
SITI	E NAME: Lower Sump	LOCATION: SE¼, Sec. 34, T6	N, R87W	<i>y</i>		
MIN	NE NAME: Peabody Sage Creek Mine	LOCATION: 7.1 mi. SE of Ha	yden, CC	)		
MIN	NE I.D. NO.: CMLRD Permit No. C-2009-087	OWNER'S REP.: Miranda Ka	wcak			
	CIRCLE OR WRITE IN APPROPRIATE RESP	ONSE:	YES	NO	N/A	
1	Foundation preparation (removal of vegetation, stumps, tops	oil:	Х			
2	Lift thickness =					
3	Compaction according to approved plan:		Х			
4	Burning (specify extent and location):			х		
5	Angle of slope:upstream,downstream			N/A		
6	*Seepage (specify location, color, and approximate volume)					
	From underdrain pipes				х	
	At isolated points on embanckement slopes			х		
	At natural hillside:			х		
	Over widespread areas:			х		
	From downstream foundation area:			х		
	"Boils" beneath stream or ponded water:			х		
7	Cracks or scarps on crest:			х		
	· · ·			х		
9	9 Sloughing or bulging on slope:			х		
	0 *Major erosion problems:			х		
	Surface movements in valley bottom or on hillside:			х		
12	*Erosion of toe:			х		
13				х		
14	Existing embankment freeboard = 0 FT					
15						
	Cracks, bulging, or erosion on upstream face:			х		
	Visible sumps or sinkholes in slurry surface:				х	
18	*Clogging	Ţ				
	Spillway channels and pipes:			х		
	Decant system:				х	
	Diversion ditches:			х		
19	*Cracking or crushing of pipes	T		<del> </del>		
	Spillway pipes:				х	
	Decant system:				х	
	Trash racks clear and in place:		X			
	Discharge rate (gpm) = ~30 GPM					
	*Major adverse changes in these items could cause instability and should be reported to the Engineering Manager					
	and Mine Superintendent for further evaluation. Adverse conditions noted in these items should normally be described (extextent, location, volume, etc.) here:					

	PERIODIC INSPECTION FORM: Water, Sediment, or Slurry Impoundments					
INS	PECTOR'S NAME: Miranda Kawcak	DATE: 9/20/2023				
NPI	DES I.D. NO.: N/A					
FAC	CILITY CONFIGURATION: Incised Pond	DATE LAST INSPECTION: 6/2	29/2023			
SITE	E NAME: Truck Wash Settling Pond	LOCATION: NW% NE%, Sec.	34, T6N	, R87W		
MINE NAME: Peabody Sage Creek Mine LOCATION: 7.1 mi. SE of Have			yden, CC	)		
MINE I.D. NO.: CMLRD Permit No. C-2009-087 OWNER'S REP.: Miranda Ka			wcak			
	CIRCLE OR WRITE IN APPROPRIATE RESP	ONSE:	YES	NO	N/A	
1	Foundation preparation (removal of vegetation, stumps, tops	oil:	х			
2	Lift thickness = N/A					
3	Compaction according to approved plan:				х	
4	Burning (specify extent and location):				х	
5	Angle of slope: upstream, downstream			N/A		
6	*Seepage (specify location, color, and approximate volume)					
	From underdrain pipes				х	
	At isolated points on embanckement slopes				х	
	At natural hillside:				х	
	Over widespread areas:				х	
	From downstream foundation area:				х	
	"Boils" beneath stream or ponded water:			Х		
7	Cracks or scarps on crest:				х	
	·				х	
9	9 Sloughing or bulging on slope:				х	
	0 *Major erosion problems:			х		
	Surface movements in valley bottom or on hillside:				х	
	*Erosion of toe:				х	
_	*Water impounded against toe:				х	
	Existing embankment freeboard (5.0' is normal) = Dry					
15	Increase Decrease in water level: No Change			1		
	Cracks, bulging, or erosion on upstream face:				х	
	Visible sumps or sinkholes in slurry surface:				х	
18	55 5			1	1	
	Spillway channels and pipes:			х		
	Decant system:				х	
	Diversion ditches:				х	
19	0 0 11			ı	T	
	Spillway pipes:			Х		
	Decant system:				х	
	Trash racks clear and in place:		X			
	Discharge rate (gpm) = <b>0 GPM</b>					
ana	*Major adverse changes in these items could cause instability and should be reported to the Engineering Manager and Mine Superintendent for further evaluation. Adverse conditions noted in these items should normally be described (extextent, location, volume, etc.) here:					

	PERIODIC INSPECTION FORM: Water, Sediment, or Slurry Impoundments						
	PECTOR'S NAME: Miranda Kawcak	DATE: 9/20/2023					
NPI	DES I.D. NO.: N/A						
FAC	CILITY CONFIGURATION: Diked Pond	DATE LAST INSPECTION: 6/2	29/2023				
SITI	E NAME: Upper Sump	LOCATION: NW¼, Sec. 3, T5	N, R87V	V7W			
MI	MINE NAME: Peabody Sage Creek Mine LOCATION: 7.1 mi. SE of Ha			)			
MI	MINE I.D. NO.: CMLRD Permit No. C-2009-087 OWNER'S REP.: Miranda Ka						
	CIRCLE OR WRITE IN APPROPRIATE RESP	PONSE:	YES	NO	N/A		
1	Foundation preparation (removal of vegetation, stumps, tops	oil:	х				
2	Lift thickness =						
3	Compaction according to approved plan:		х				
4	Burning (specify extent and location):			х			
5	Angle of slope:upstream,downstream			N/A			
6	*Seepage (specify location, color, and approximate volume)						
	From underdrain pipes				х		
	At isolated points on embanckement slopes			х			
	At natural hillside:			x			
	Over widespread areas:			х			
	From downstream foundation area:		х				
	"Boils" beneath stream or ponded water:			х			
7	Cracks or scarps on crest:			х			
8	Cracks or scarps on slope:			х			
9	Sloughing or bulging on slope:			х			
10	*Major erosion problems:			х			
11	Surface movements in valley bottom or on hillside:			х			
12	*Erosion of toe:			х			
13	*Water impounded against toe:			х			
14	Existing embankment freeboard = Discharging at spillway ele	V.					
15	IncreaseDecrease in water level: No Change						
16	Cracks, bulging, or erosion on upstream face:			х			
17	Visible sumps or sinkholes in slurry surface:				х		
18	*Clogging						
	Spillway channels and pipes:			х			
	Decant system:				х		
	Diversion ditches:				х		
19	*Cracking or crushing of pipes						
	Spillway pipes:			х			
	Decant system:				х		
20	Trash racks clear and in place:		х				
21	Discharge rate (gpm) = ~40 GPM						
ana	ajor adverse changes in these items could cause instability and I Mine Superintendent for further evaluation. Adverse condition cribed (extextent, location, volume, etc.) here:	-	-	_	ger		

	PERIODIC INSPECTION FORM: Water, Se	ediment, or Slurry Impoundn	nents		
INS		DATE: 9/20/2023			
NPE	DES I.D. NO.: N/A				
FAC	CILITY CONFIGURATION: Diked Pond	DATE LAST INSPECTION: 6/2	9/2023		
SITE	E NAME: Portal Sump #1 (upper north)	LOCATION: NW¼, Sec. 3, T5	N, R87V	v	
MIN	NE NAME: Peabody Sage Creek Mine	LOCATION: 7.1 mi. SE of Ha	yden, CC	<u> </u>	
MIN	NE I.D. NO.: CMLRD Permit No. C-2009-087	OWNER'S REP.: Miranda Kav	wcak		
	CIRCLE OR WRITE IN APPROPRIATE RESP	ONSE:	YES	NO	N/A
1	Foundation preparation (removal of vegetation, stumps, tops	oil:	Х		
2	Lift thickness = 12"				_
3	Compaction according to approved plan:		х		
4	Burning (specify extent and location):			х	
5	Angle of slope:upstream,downstream			N/A	
6	*Seepage (specify location, color, and approximate volume)				
	From underdrain pipes				х
	At isolated points on embanckement slopes				х
	At natural hillside:				х
	Over widespread areas:				х
	From downstream foundation area:				х
	"Boils" beneath stream or ponded water:			х	
7	Cracks or scarps on crest:				х
8	Cracks or scarps on slope:				х
9	9 Sloughing or bulging on slope:				х
10	LO *Major erosion problems:			х	
11	1 Surface movements in valley bottom or on hillside:			х	
12	*Erosion of toe:				х
13	*Water impounded against toe:				х
14	Existing embankment freeboard = No Change				
15	IncreaseDecrease in water level:				
16	Cracks, bulging, or erosion on upstream face:				х
17	Visible sumps or sinkholes in slurry surface:				х
	Spillway channels and pipes:			х	
	Decant system:				х
	Diversion ditches:				х
19	*Cracking or crushing of pipes				
	Spillway pipes:			х	
	Decant system:				х
20	Trash racks clear and in place:				х
21	Discharge rate (gpm) = <b>0 GPM</b>				
	ajor adverse changes in these items could cause instability and		_		ger
	Mine Superintendent for further evaluation. Adverse condition	ns noted in these items shoul	ld norma	ılly be	
desi	cribed (extextent, location, volume, etc.) here:				

PERIODIC INSPECTION FORM: Water, Sediment, or Slurry Impoundments					
INS	PECTOR'S NAME: Miranda Kawcak	DATE: 9/20/2023			
NPE	DES I.D. NO.: N/A				
FAC	CILITY CONFIGURATION: Diked Pond	DATE LAST INSPECTION: 6/2	29/2023		
SITE	E NAME: Portal Sump #2 (Lower South)	LOCATION: NW¼, Sec. 3, T5	N, R87W	V	
MIN	NE NAME: Peabody Sage Creek Mine	LOCATION: 7.1 mi. SE of Ha	yden, CC	)	
MIN	NE I.D. NO.: CMLRD Permit No. C-2009-087	OWNER'S REP.: Miranda Kav	wcak		
	CIRCLE OR WRITE IN APPROPRIATE RESP	ONSE:	YES	NO	N/A
1	Foundation preparation (removal of vegetation, stumps, tops	oil:	Х		
2	Lift thickness = 12"				
3	Compaction according to approved plan:		х		
4	Burning (specify extent and location):			х	
5	Angle of slope:upstream,downstream			N/A	
6	*Seepage (specify location, color, and approximate volume)				
	From underdrain pipes				х
	At isolated points on embanckement slopes				х
	At natural hillside:				х
	Over widespread areas:				х
	From downstream foundation area:				х
	"Boils" beneath stream or ponded water:			х	
7	7 Cracks or scarps on crest:				х
8	Cracks or scarps on slope:				х
9	Sloughing or bulging on slope:				х
10	0 *Major erosion problems:			х	
11	Surface movements in valley bottom or on hillside:			х	
12	*Erosion of toe:				х
13	*Water impounded against toe:				х
14	Existing embankment freeboard = No Change				
15	IncreaseDecrease in water level:				
_	Cracks, bulging, or erosion on upstream face:				х
	Visible sumps or sinkholes in slurry surface:				х
18	*Clogging		_		
	Spillway channels and pipes:			х	
	Decant system:				х
	Diversion ditches:				х
19	*Cracking or crushing of pipes				_
	Spillway pipes:			х	
	Decant system:				х
	Trash racks clear and in place:			<u> </u>	х
	Discharge rate (gpm) = <b>0 GPM</b>				
	ajor adverse changes in these items could cause instability and		-		ger
	Mine Superintendent for further evaluation. Adverse condition				
	cribed (extextent, location, volume, etc.) here: <b>Pumps not rur</b> at to power on and off to control level.	ining at time of inspection b	ut are in:	stailea o	n a
jiou	it to power on and ojj to control level.				