



Moffat County Mining, LLC
29515 RCR 27
Oak Creek, CO 80467

October 23, 2018

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

RE: 3rd Quarter and Annual Pond Inspections – Williams Fork Mine (C 1981-044)

Ms. Reilley:

Enclosed are the 3rd quarter 2018 and Annual pond inspection reports for the Williams Fork Mine. Nicholas Aromando (P.E.) accompanied on the inspection and has 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,

A handwritten signature in black ink that reads "Miranda Kawcak". The signature is written in a cursive, flowing style.

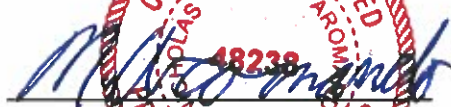
Miranda Kawcak
Environmental Engineer
Peabody, Colorado Operations

Attachments:

Professional Engineer Certification (Nicholas Aromando, P.E.)
Inspection Reports

CERTIFICATION

I, Nicholas V. Aromando, a registered engineer in the State of Colorado do hereby certify that I have reviewed the attached Williams Fork Mine Sediment Pond Reports covering the third quarter of 2018, and that they are true and correct to the best of my knowledge and belief.


Nicholas Vincent Aromando
CO P.E. No. 48238

10/23/2018
Date

OPERATOR: EMPIRE CORPORATION

MINE: EMPIRE NOS. 5 & 6 MINES

DATE OF INSPECTION: 9/20/2018

	1	2	3	4
POND INSPECTION	Spill Springs			
	<input checked="" type="checkbox"/>			

CDFS OUTFALL # 022 Site 1SP

OPERATIONAL STATUS AT TIME OF INSPECTION

Approximate water level: DRY
Sediment level (% total storage): 25%
Outflow (cfs): 0

FEATURES	PROBLEM		COMMENTS
	YES	NO	
EROSIONAL			
Rills & Gullies on Embankment		<input checked="" type="checkbox"/>	
Inadequate Vegetation		<input checked="" type="checkbox"/>	
Outlet Channel Erosion		<input checked="" type="checkbox"/>	
Burrows		<input checked="" type="checkbox"/>	
Other		<input checked="" type="checkbox"/>	
STRUCTURAL			
Differential Settling		<input checked="" type="checkbox"/>	
Cracks or slides		<input checked="" type="checkbox"/>	
Seepage		<input checked="" type="checkbox"/>	
Other		<input checked="" type="checkbox"/>	
APPURTENANT STRUCTURES			
Defective Spillways	<input checked="" type="checkbox"/>		
Dewatering Device Clogged		<input checked="" type="checkbox"/>	
Faulty Gates, Baffles, Pump		<input checked="" type="checkbox"/>	
Other		<input checked="" type="checkbox"/>	
ADDITIONAL COMMENTS: <u>Weir is showing rusted areas that have allowed water to seep when flowing</u>			
MAINTENANCE REQUIRED:			

NAME OF INSPECTOR: Nick Aramando

OPERATOR: EMPIRE CORPORATION

MINE: EMPIRE NOS. 5 & 6 MINES

DATE OF INSPECTION: 9/20/18

POND INSPECTION

1	2	3	4
5-P1 ✓	5-P2 ✓	5-P3 ✓	
SED. POND	SED. TRAP	SED. TRAP	

CDFS OUTFALL #

007

OPERATIONAL STATUS AT TIME OF INSPECTION

Approximate water level:

DRY

Sediment level (% total storage):

25%

Outflow (cfs):

0

FEATURES	PROBLEM		COMMENTS
	YES	NO	
EROSIONAL			
Rills & Gullies on Embankment		✓	
Inadequate Vegetation		✓	
Outlet Channel Erosion		✓	
Burrows		✓	
Other		✓	
STRUCTURAL			
Differential Settling		✓	
Cracks or slides		✓	
Seepage		✓	
Other		✓	
APPURTENANT STRUCTURES			
Defective Spillways		✓	
Dewatering Device Clogged		✓	
Faulty Gates, Baffles, Pump		✓	
Other		✓	
ADDITIONAL COMMENTS:			
MAINTENANCE REQUIRED: <u>None</u>			

NAME OF INSPECTOR: Nick Aromando

OPERATOR: EMPIRE CORPORATION

MINE: EMPIRE NOS. 5 & 6 MINES

DATE OF INSPECTION: 9/20/18

POND INSPECTION

1	2	3	4
5-P5 ✓	5-P6 ✓	5-P7 ✓	
SED. POND	SED. POND	SED. POND	

CDFS OUTFALL #

003 003 003

OPERATIONAL STATUS AT TIME OF INSPECTION

Approximate water level:

Dry

Sediment level (% total storage):

45%

Outflow (cfs):

0

FEATURES	PROBLEM		COMMENTS
	YES	NO	
EROSIONAL			
Rills & Gullies on Embankment		✓	
Inadequate Vegetation		✓	
Outlet Channel Erosion		✓	
Burrows		✓	
Other		✓	
STRUCTURAL			
Differential Settling		✓	
Cracks or slides		✓	
Seepage		✓	
Other		✓	
APPURTENANT STRUCTURES			
Defective Spillways		✓	
Dewatering Device Clogged		✓	
Faulty Gates, Baffles, Pump		✓	
Other		✓	
ADDITIONAL COMMENTS: <u>Scheduled for reclamation 4th Qtr 2018</u>			
MAINTENANCE REQUIRED:			

NAME OF INSPECTOR: Nick Armande

OPERATOR: EMPIRE CORPORATION

MINE: EMPIRE NOS. 5 & 6 MINES

DATE OF INSPECTION: 9/20/18

POND INSPECTION

1	2	3	4
9A-P1 ✓	9A-P2 ✓	9A-P3 ✓	9A-P4 ✓
SED. POND	SED. POND	SED. POND	SED. POND
018	019	020	021

CDFS OUTFALL #

OPERATIONAL STATUS AT TIME OF INSPECTION

Approximate water level:

Sediment level (% total storage):

Outflow (cfs):

DRY
25%
0

FEATURES	PROBLEM		COMMENTS
	YES	NO	
EROSIONAL			
Rills & Gullies on Embankment		✓	
Inadequate Vegetation		✓	
Outlet Channel Erosion		✓	
Burrows		✓	
Other		✓	
STRUCTURAL			
Differential Setting		✓	
Cracks or slides		✓	
Seepage		✓	
Other		✓	
APPURTENANT STRUCTURES			
Defective Spillways		✓	
Dewatering Device Clogged		✓	
Faulty Gates, Baffles, Pump		✓	
Other		✓	
ADDITIONAL COMMENTS: <u>Minor Burrows in the dams</u>			
MAINTENANCE REQUIRED:			

NAME OF INSPECTOR: Nick Armardo

OPERATOR: EMPIRE CORPORATION

MINE: EMPIRE NOS. 5 & 6 MINES

DATE OF INSPECTION: 9/20/18

POND INSPECTION	1	2	3	4
	9-P1	9-P2	9-P3	9-P4
	SED. POND	SED. POND	SED. POND	SED. POND

CDFS OUTFALL # 024 014

OPERATIONAL STATUS AT TIME OF INSPECTION

Approximate water level: DRY
Sediment level (% total storage): <5%
Outflow (cfs): Ø

FEATURES	PROBLEM		COMMENTS
	YES	NO	
EROSIONAL			
Rills & Gullies on Embankment	✓	✓	
Inadequate Vegetation		✓	
Outlet Channel Erosion		✓	
Burrows		✓	
Other		✓	
STRUCTURAL			
Differential Settling		✓	
Cracks or slides		✓	
Seepage		✓	
Other		✓	
APPURTENANT STRUCTURES			
Defective Spillways		✓	
Dewatering Device Clogged		✓	
Faulty Gates, Baffles, Pump		✓	
Other		✓	
ADDITIONAL COMMENTS: <u>monitoring rill @ 9-P1 inlet</u>			
MAINTENANCE REQUIRED: <u>None for 9-P2, P3, P4</u>			

NAME OF INSPECTOR: Nick Aramando

OPERATOR: EMPIRE CORPORATION

MINE: EMPIRE NOS. 5 & 6 MINES

DATE OF INSPECTION: 9/20/2018

POND INSPECTION

1	2	3	4
9-P5 ✓	9-P6 ✓	9-P7 ✓	9-P8 ✓
SED. POND	SED. POND	SED. POND	SED. POND
017	015	013	016

CDFS OUTFALL #

OPERATIONAL STATUS AT TIME OF INSPECTION

Approximate water level:

DRY

Sediment level (% total storage):

< 5%

Outflow (cfs):

0

FEATURES	PROBLEM		COMMENTS
	YES	NO	
EROSIONAL			
Rills & Gullies on Embankment		✓	
Inadequate Vegetation		✓	
Outlet Channel Erosion		✓	
Burrows		✓	
Other		✓	
STRUCTURAL			
Differential Settling		✓	
Cracks or slides		✓	
Seepage		✓	
Other		✓	
APPURTENANT STRUCTURES			
Defective Spillways		✓	
Dewatering Device Clogged		✓	
Faulty Gates, Baffles, Pump		✓	
Other		✓	
ADDITIONAL COMMENTS:			
MAINTENANCE REQUIRED: <u>None</u>			

NAME OF INSPECTOR: Nick Armando

OPERATOR: EMPIRE CORPORATION

MINE: EMPIRE NOS. 5 & 6 MINES

DATE OF INSPECTION: _____

POND INSPECTION

1	2	3	4
HR-P1A ✓	HR-P1B ✓		
SED. POND	SED. POND		

CDFS OUTFALL #

004

OPERATIONAL STATUS AT TIME OF INSPECTION

Approximate water level:

DRY

Sediment level (% total storage):

25%

Outflow (cfs):

0

FEATURES	PROBLEM		COMMENTS
	YES	NO	
EROSIONAL			
Rills & Gullies on Embankment		✓	
Inadequate Vegetation		✓	
Outlet Channel Erosion		✓	
Burrows		✓	
Other		✓	
STRUCTURAL			
Differential Settling		✓	
Cracks or slides		✓	
Seepage		✓	
Other		✓	
APPURTENANT STRUCTURES			
Defective Spillways		✓	
Dewatering Device Clogged		✓	
Faulty Gates, Baffles, Pump		✓	
Other		✓	
ADDITIONAL COMMENTS:			
MAINTENANCE REQUIRED: <u>None</u>			

NAME OF INSPECTOR: Nick Armando

OPERATOR: EMPIRE CORPORATION

MINE: EMPIRE NOS. 5 & 6 MINES

DATE OF INSPECTION: 9/20/18

POND INSPECTION

1	2	3	4
SH-P1 ✓	SH-P2 ✓		
SED. POND	SED. POND		

CDFS OUTFALL #

011

012

OPERATIONAL STATUS AT TIME OF INSPECTION

Approximate water level:

DRY

Sediment level (% total storage):

< 5%

Outflow (cfs):

0

FEATURES	PROBLEM		COMMENTS
	YES	NO	
EROSIONAL			
Rills & Gullies on Embankment		✓	
Inadequate Vegetation		✓	
Outlet Channel Erosion		✓	
Burrows		✓	
Other		✓	
STRUCTURAL			
Differential Settling		✓	
Cracks or slides		✓	
Seepage		✓	
Other		✓	
APPURTENANT STRUCTURES			
Defective Spillways		✓	
Dewatering Device Clogged		✓	
Faulty Gates, Baffles, Pump		✓	
Other		✓	
ADDITIONAL COMMENTS:			
MAINTENANCE REQUIRED: <u>None</u>			

NAME OF INSPECTOR: Nick Armando

OPERATOR: EMPIRE CORPORATION

MINE: EMPIRE NOS. 5 & 6 MINES

DATE OF INSPECTION: 9/20/2018

POND INSPECTION

	1	2	3	4
5A-P1	✓			
SED. POND				

CDFS OUTFALL #

009

OPERATIONAL STATUS AT TIME OF INSPECTION

Approximate water level:

DRY

Sediment level (% total storage):

25%

Outflow (cfs):

0

FEATURES	PROBLEM		COMMENTS
	YES	NO	
EROSIONAL			
Rills & Gullies on Embankment		✓	
Inadequate Vegetation		✓	
Outlet Channel Erosion		✓	
Burrows		✓	
Other		✓	
STRUCTURAL			
Differential Settling		✓	
Cracks or slides		✓	
Seepage		✓	
Other		✓	
APPURTENANT STRUCTURES			
Defective Spillways		✓	
Dewatering Device Clogged		✓	
Faulty Gates, Baffles, Pump		✓	
Other		✓	
ADDITIONAL COMMENTS:			
MAINTENANCE REQUIRED: <u>None</u>			

NAME OF INSPECTOR: Nick Aramando

OPERATOR: EMPIRE CORPORATION

MINE: EMPIRE NOS. 5 & 6 MINES

DATE OF INSPECTION: 9/20/2018

POND INSPECTION

	1	2	3	4
WASTEWATER				
TREATMENT				

CDFS OUTFALL #

023

OPERATIONAL STATUS AT TIME OF INSPECTION

Approximate water level:

Sediment level (% total storage):

Outflow (cfs):

FEATURES	PROBLEM		COMMENTS
	YES	NO	
EROSIONAL Rills & Gullies on Embankment Inadequate Vegetation Outlet Channel Erosion Burrows Other		N/A	
STRUCTURAL Differential Settling Cracks or slides Seepage Other			
APPURTENANT STRUCTURES Defective Spillways Dewatering Device Clogged Faulty Gates, Baffles, Pump Other			
ADDITIONAL COMMENTS: MAINTENANCE REQUIRED: Site In process of Being Reclaimed + Re-graded			

NAME OF INSPECTOR: Nick Armando