

OPERATOR: EMPIRE CORPORATION

MINE: EMPIRE NOS. 5 & 6 MINES

DATE OF INSPECTION: 10/30/18

POND INSPECTION

1	2	3	4
Spoil Springs			

CDFS OUTFALL #

022 Site 1SP

**OPERATIONAL STATUS AT TIME OF INSPECTION**

Approximate water level:

Sediment level (% total storage):

Outflow (cfs):

Dry  
25%  
0 cfs

FEATURES	PROBLEM		COMMENTS
	YES	NO	
<b>EROSIONAL</b>			
Rills & Gullies on Embankment			
Inadequate Vegetation			
Outlet Channel Erosion			
Burrows			
Other			
<b>STRUCTURAL</b>			
Differential Setting			
Cracks or slides			
Seepage			
Other			
<b>APPURTENANT STRUCTURES</b>			
Defective Spillways			Weir needs repair...
Dewatering Device Clogged			
Faulty Gates, Baffles, Pump			
Other			
<b>ADDITIONAL COMMENTS:</b>			
MAINTENANCE REQUIRED: Weir is rusted out + needs replaced.			

NAME OF INSPECTOR: M. Kawcak



OPERATOR: EMPIRE CORPORATION

MINE: EMPIRE NOS. 5 & 6 MINES

DATE OF INSPECTION: 10/30/18

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:

Sediment level (% total storage):

Outflow (cfs):

All Dry  
25%  
0

FEATURES	PROBLEM		COMMENTS
	YES	NO	
<b>EROSIONAL</b>			
Rills & Gullies on Embankment	✓	<del>✓</del>	erosion at inlet of 9-P1
Inadequate Vegetation		✓	
Outlet Channel Erosion		✓	
Burrows		✓	
Other		✓	
<b>STRUCTURAL</b>			
Differential Setting		✓	
Cracks or slides		✓	
Seepage		✓	
Other		✓	
<b>APPURTENANT STRUCTURES</b>			
Defective Spillways		✓	
Dewatering Device Clogged		✓	
Faulty Gates, Baffles, Pump		✓	
Other		✓	

**ADDITIONAL COMMENTS:**

**MAINTENANCE REQUIRED:**

None

**NAME OF INSPECTOR:**

M. Kawcak

OPERATOR: EMPIRE CORPORATION

MINE: EMPIRE NOS. 5 & 6 MINES

DATE OF INSPECTION: 10/30/18

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):

All Dry  
25%  
0

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

NAME OF INSPECTOR: M. Kaurah

OPERATOR: EMPIRE CORPORATION

MINE: EMPIRE NOS. 5 & 6 MINES

DATE OF INSPECTION: 10/30/18

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:

Sediment level (% total storage):

Outflow (cfs):

Ponds Reclaimed Oct 2019

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

NAME OF INSPECTOR: M. Kawcak

OPERATOR: EMPIRE CORPORATION

MINE: EMPIRE NOS. 5 & 6 MINES

DATE OF INSPECTION: 10/30/18

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):

< 5%

Outflow (cfs):

0

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

NAME OF INSPECTOR: M. Kawrak

OPERATOR: EMPIRE CORPORATION

MINE: EMPIRE NOS. 5 & 6 MINES

DATE OF INSPECTION: 10/30/18

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:

Sediment level (% total storage):

Outflow (cfs):

All Dry  
< 10%  
0 cfs

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

NAME OF INSPECTOR: M. Kawcale

OPERATOR: EMPIRE CORPORATION

MINE: EMPIRE NOS. 5 & 6 MINES

DATE OF INSPECTION: 10/30/18

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):

<5%

Outflow (cfs):

0 cfs

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

NAME OF INSPECTOR: M. Kawcak

OPERATOR: EMPIRE CORPORATION

MINE: EMPIRE NOS. 5 & 6 MINES

DATE OF INSPECTION: 10/30/18

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:

Sediment level (% total storage):

Outflow (cfs):

Dry  
25%  
0 cfs

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

NAME OF INSPECTOR: M. Kawcale

OPERATOR: EMPIRE CORPORATION

MINE: EMPIRE NOS. 5 & 6 MINES

DATE OF INSPECTION: 10/30/18

POND INSPECTION

	1	2	3	4
5A-P1	<input checked="" type="checkbox"/>			
SED. POND				

CDFS OUTFALL #

009

**OPERATIONAL STATUS AT TIME OF INSPECTION**

Approximate water level:

Dry

Sediment level (% total storage):

65%

Outflow (cfs):

0 cfs

FEATURES	PROBLEM		COMMENTS
	YES	NO	
<b>EROSIONAL</b>			
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"/>	
<b>STRUCTURAL</b>			
Differential Setting		<input checked="" type="checkbox"/>	
Cracks or slides		<input checked="" type="checkbox"/>	
Seepage		<input checked="" type="checkbox"/>	
Other		<input checked="" type="checkbox"/>	
<b>APPURTENANT STRUCTURES</b>			
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"/>	
<b>ADDITIONAL COMMENTS:</b>			
MAINTENANCE REQUIRED: <u>None</u>			

NAME OF INSPECTOR: M. Kawach

OPERATOR: EMPIRE CORPORATION

MINE: EMPIRE NOS. 5 & 6 MINES

DATE OF INSPECTION: 10/30/18

POND INSPECTION

	1	2	3	4
WASTEWATER	<input checked="" type="checkbox"/>			
TREATMENT				

CDFS OUTFALL #

023

**OPERATIONAL STATUS AT TIME OF INSPECTION**

Approximate water level:

Sediment level (% total storage):

Outflow (cfs):

Reclamation in progress  
N/A

FEATURES	PROBLEM		COMMENTS
	YES	NO	
<b>EROSIONAL</b>			
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"/>	
<b>STRUCTURAL</b>			
Differential Setting		<input checked="" type="checkbox"/>	
Cracks or slides		<input checked="" type="checkbox"/>	
Seepage		<input checked="" type="checkbox"/>	
Other		<input checked="" type="checkbox"/>	
<b>APPURTENANT STRUCTURES</b>			
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"/>	
<b>ADDITIONAL COMMENTS:</b> <u>Reclamation To be finished spring 2019</u>			
<b>MAINTENANCE REQUIRED:</b>			

NAME OF INSPECTOR: M. Hawco



## WILLIAMS FORK MINE WASTE PILE INSPECTION FORM

PILE I.D. NO. 1211-CO-09-01370-01 (SURFACE WASTE PILE)

PILE I.D. NO. 1211-CO-09-01370-02 (OLD NO. 9 EXCAVATION)

DATE/TIME: 10/30/18

INSPECTOR SIGNATURE: Murade Kawrak

INSPECTOR TITLE: Environmental Engineer

This inspection was conducted to comply with DMG Rule 4.09.1(11).

This inspection was conducted to evaluate:

☒ A. Stability of fill (quarterly inspection)

☒ B. Critical construction periods:

☐ 1. Removal of all organic material/topsoil

☐ 2. Placement of underdrainage system

☐ 3. Installation of surface drainage system

☒ 4. Placement and compaction of fill materials

☐ 5. Revegetation

NOTES:

Fill material and black material from  
coal yard is in the process of being place on  
the Refuse pile. Final cap + Top Soil will be  
placed spring 2019

